Evaluating the constitutionality of the National School Nutrition Programme guideline for Secondary Schools during breaks

By

LEBOHANG VICTORIA MULAUDZI

2010132799

EDLW 8900

Submitted in partial fulfilment of the
requirements for the master's degree in
Education Law

in the
Faculty of Education

Supervisor: Prof Reyneke

Co-Supervisor: Dr Gcelu

UNIVERSITY OF THE FREE STATE
2022

UNIVERSITY OF THE
FREE STATE
UNIVERSITEIT VAN DIE
VRYSTAAT
YUNIVESITHI YA
FREISTATA

UFS
EDUCATION

DECLARATION

I, **MULAUDZI LEBOHANG VICTORIA**, declare that the dissertation entitled *Evaluating the constitutionality of the National School Nutrition Programme Guideline for Secondary Schools during breaks*, submitted for the qualification of M.Ed. (Masters) in Education Law at the University of the Free State is my independent work.

All the references I have used have been indicated and acknowledged utilising the Harvard reference method.

A Turnitin report on the work produced is included in Appendix C.

L.V Mulaudzi **29 Nov. 22**

……. **…….**

SIGNED **DATE**

ACKNOWLEDGEMENTS

My appreciation and gratitude go to my first supervisor, Prof Mariette Reyneke, for her marvellous supervision and guidance that I will never forget. I extend sincere gratitude to her generous participation in guiding, constructive feedback, and advice during my master's degree. Thank you very much, Prof Reyneke, for all the opportunities and workshops you sent my way, which enabled me to develop an understanding of my study.

Furthermore, I extend my sincere gratitude to my second supervisor, Dr Gcelu, for her extensive feedback and whose encouragement I will never forget. Dr Gcelu has been an inspiration throughout my study. She is a true leader and a role model to many of her students. Thank you, Dr Gcelu, for your guidance from the first step of the research. I am grateful for the eternal experiences and opportunities she provided for me to grow in my study. It was an honour to work with both you and prof Reyneke.

My gratitude also goes to all the members of the study group who are under the guidance of both my supervisors and Dr Makhasane. Thank you, colleagues, for your encouragement, time, advice, and moral support during my masters. Special thanks to Nomase Majong, Sera Moipone, Phumelele and Nopi for your continuous support. Your contribution never went unnoticed. Thank you.

I am grateful for my husband, Given Rofhiwa Mulaudzi, whose constant love and support keep me motivated and confident. My accomplishments and success are because he believed in me. Deepest thanks to my husband, who keeps me grounded, reminds me of what is essential in life, and always supports my adventures. I owe my deepest gratitude to you, my love. I am forever thankful for the unconditional love and support throughout the entire dissertation process and every day.

ABSTRACT

This study aims to evaluate the constitutionality of the National School Nutrition Programme (NSNP) guideline, which does not make provision for food for learners during school closures. Good health and nutrition are essential for a learner's development and growth; thus, it is the government's responsibility to participate in that development and growth. The government and the NSNP play a vital role in ensuring that learners in schools are provided with proper nutrition, enabling them to live healthy lifestyles and prevent non-communicable diseases. Section 27((b) of the *Constitution* of South Africa of 1996 provides everyone with the right to access sufficient food and water. Furthermore, the *Constitution* of South Africa stipulates that every child has the right to basic nutrition (1996a: 28 (1)(b))).

The study is hinged on the Interest Theory of Rights (IToR), which seeks to safeguard a person's rights, especially those of children, against the violation of their rights, by other individuals or the government (Anyadike, Nwachukwu &Wogu, 2021). The study utilises the interpretive paradigm as it relies on secondary qualitative data. The interpretive paradigm allows the researcher to interpret the truth and reality of individuals by making sense rather than creating a hypothesis (Romani, Barmeyer, Primecz & Pilhofer, 2018).

A qualitative approach was undertaken to evaluate the constitutionality of the NSNP's guideline on the non-provision of food during school breaks. The study utilises a literature study which relies on a thorough discussion of the existing knowledge from academic resources such as books, journals, articles, publications, and legal documents such as the Constitution, legislation, case law and international instruments, dissertations, and theses (Nayak & Singh, 2021). A single technique that requires perusing documents and records, known as secondary data collection, was used to collect data.

The study's sampling involves systematic sampling/review, as it requires me to only select documents that respond to constitutional imperatives and the provisions of the NSNP guideline and where applicable implementation practices that falls within the current five (5) years of publication (Ibid). To analyse the data, I used both document and thematic analysis. Document analysis relies on readily available data, enabling me to analyse data from secondary sources such as books, documents, policies, publications, and legal documents such as the Constitution, legislation, case law and international instruments, (Myers, 2019). Additionally, the study

utilises thematic analysis, which involves reading over a data set and looking for meaningful patterns to identify themes (Lochmiller, 2021).

The findings of this study were centred on themes regarding the research questions. The main finding for the study reveals that the NSNP guideline for secondary schools is not constitutional during school breaks. The study reveals that the NSNP plays an important role in preventing malnutrition by ensuring that it provides meals for learners while at school. But the meals or diet provided by the NSNP lacks adequate variety, which can contribute to Non-Communicable Diseases (NCDs). The study further reveals that a diet that is heavily reliant on carbohydrates does not prevent NCDs. Additionally, the NSNP aims to at least fulfil 30% of learners' dietary needs. The NSNP meals do provide calories, but the nutritional value is questionable and can be improved. Nevertheless, the NSNP in most schools provides learners with only one meal for many learners. Furthermore, when learners are at home, the NSNP guideline does not offer guidance on how qualifying learners of the NSNP should continue to receive daily nutritional needs, which prevents them from malnutrition and NCDs, resulting in death.

I, therefore, recommend that feeding of learners should be extended to all quantiles and all deserving learners should be fed. Learners who are already sick and have to exclude other food groups should be offered alternative diets. The study recommends that all qualifying learners, in all quantiles, should be provided with meals. Copying from the Western Cape and Gauteng provinces, it is advised that learners receive two meals per day during school hours. Furthermore, the study recommends that schools provide food parcels. Additionally, schools are encouraged to provide qualifying learners with food vouchers that will sustain them on days off or during school breaks. Learners who are already sick and have to exclude other food groups should be offered alternative diets.

LIST OF ACRONYMS

ACHPR- African Charter on Human and Peoples' Rights

ACRWC- African Charter on the Rights and Welfare of the Child

AU- African Union

CC- Constitutional Court

CESRC- Covenant on Economic, Social and Cultural Rights

CGF- Central Grant Funding

COVID-19- Coronavirus Disease of 2019

CRC- Convention on the Rights of the Child

DBE – Department of Basic Education

DoH- Department of Health

DPME- Department of Planning, Monitoring & Evaluations

EE- Equal Education

FAO- The Food and Agriculture Organization

ICESCR- International Covenant on Economic, Social and Cultural Rights

LTSM- Learning and Teaching Support Material

NCDs- Non-communicable Diseases

NEPA- National Education Policy Act

NSNP- National School Nutrition Programme

OHCHR- Office of the High Commissioner for Human Rights

PED- Provincial Education District

RDA- Recommended Dietary Allowances

SAHRC - South African Human Rights Commission

SASA- South African Schools Act, 1996

SASSA- South African Social Security Agency

SDGs- Sustainable Development Goals

SFP- School Feeding Programmes

SGB- School Governing Body

UDHR- The Universal Declaration of Human Rights

UN- United Nations

UNCRC- United Nations Convention on the Rights of the Child

UNESCO- United Nations Educational, Scientific and Cultural Organization

UNICEF- United Nations Children's Fund

UNSA- United Nations Student Alliance

VFH- Volunteer Food Handlers

WFP- The World Food Programme

WHO- World Health Organization

TABLE OF CONTENTS

CHAPTER ONE

INTRODUCTION AND SCOPE OF STUDY

In this chapter, the researcher gave a brief explanation of how my study unfolds by providing the introduction, background of the study, problem statement, research interest, research questions which include the main research question together with the sub-questions, the rational and aim of the study, the objectives of the study, the value of the study and the definitions of the operational terms and the conclusion of the chapter.

1.1 Introduction

According to section 27 (1) and (2) of the *Constitution of the Republic of South Africa* (*Constitution)* (1996) , everyone has the right to have access to healthcare services (s 27(1)(a)); sufficient food and water (s 27(1)(b)); in line with section 27(2) of the Constitution, "the state must take reasonable legislative and other measures, within its available resources", to ensure the realisation of the right to adequate food and water. Due to that provision, the government drafted the NSNP (Department of Basic Education (DBE), 2009). The fact that there can be justification for the failure to provide food during breaks can be substantiated by the government in terms of section 21 of the Constitution of the right to food and water which states that its provision must be reasonable within available resources (Constitution, 1996).

Furthermore, healthy nutrition is a prerequisite for the essential promotion of safety, health, education, sport, social commitments, and the fulfilment of other rights contained in the South African Constitution of 1996. These rights include, among others, basic nutrition (s 28(1)(c), health care facilities (s 27(1)(a)), life (s 10), dignity (s 11) protection from harm and bodily integrity (s 12(2)), and equal education (s 29(1)(a)).

Before the advent of the COVID-19 pandemic, learners did not receive school meals when schools break. However, stakeholders in education, excluding parents, knew that when schools break, learners would be at home and would not be receiving meals provided by the school, and they did nothing about it. As a result of the potentially fatal danger of the COVID-19 pandemic, schools had to close for extended periods, which led to the realisation that learners' constitutional right to nutrition might be violated during school holidays because the National School Nutrition Programme (NSNP) is not operational during school breaks. The dependence

on meals in schools was further exacerbated by parents who could not afford meals as they had lost their jobs because of the pandemic. School breaks refers to days in which schools are closed, days including holidays and weekends (Backhaus, 2022).

There is no explicit authority to say that non provision of food during breaks is unconstitutional. Arguably, in light of the Constitutional court, the failure to provide food to learners during the closure of schools during the pandemic raises the question whether the current system of no food during breaks is not perhaps also unconstitutional. Thus, the researcher had to argue by way of an analogy using the court's arguments in *Equal Education and Others v Minister of Basic Education and Others* (EE vs DBE, 2020), to investigate the NSNP (DBE, 2009) guideline to determine the constitutionality of not providing learners with food during school breaks now that the pandemic is over.

The NSNP (2009) informs nutrition in South African schools. According to the NSNP (DBE, 2009), its aim, among others, is to enhance the quality of education by promoting a healthy lifestyle that is embedded in healthy nutritional programmes for learners and the surrounding communities. The NSNP aims to improve the learning capacity of learners by providing them with nutritious food, which helps activate their neural functions to effectively perform mental and physical activities.

In addition, the NSNP promotes healthy eating habits at schools by encouraging learners to develop school gardens and other production initiatives to reach a state of self-sufficiency (DBE, 2009). These initiatives are prioritised by the NSNP, which envisages the promotion of school gardens to cascade into the home environment, boost a healthy lifestyle, and eradicate poor health conditions associated with malnutrition. A diet lacking in basic nutrients is a breeding ground for the development of non-communicable diseases (NCD) such as diabetes, respiratory disorders, cancer, and cardiovascular diseases, among others (The Food and Agriculture Organization [FAO], 2015). The NSNP, which focuses on providing nutritious meals for learners, by implication, associates the lack of proper nutrition with the possible spread of diseases (DBE, 2009).

1.2 Background of the study

According to Cannon (2019), school feeding in Britain was necessitated by the infringement of the right to life caused by extreme hunger for learners, which increased death rates. As a result, school feeding schemes were implemented worldwide in countries such as Finland,

Sweden, Latin America (Brazil, Honduras, Bolivia, Paraguay, El Salvador, Cuba, and Ecuador), and Japan. Mindzaeva, Neustroev, Ivanova & Zimnyukova (2019) postulate that the implementation of feeding schemes in schools caters for the nutritional needs of learners while reducing hunger. Additionally, feeding schemes are a global tool that protects children, keeps learners in school, teaches learners the importance of growing their food, and reduces parents' financial burden (Cannon, 2019). Thus, most developing countries like India provide learners with school meals ensuring that every learner's right to be free from hunger is protected while promoting the learner's capacity to study and develop healthy eating habits (Mindzaeva, Neustroev, Ivanova &Zimnyukova, 2019).

According to the World Food Program [WFP] (2020), millions of learners globally attend school in a hungry state, affecting their ability to concentrate and learn. Moreover, learners are more likely to drop out of school in less developed countries and developing countries due to hunger. Therefore, the WFP supports more than 100 countries with sustainable feeding schemes, such as the NSNP (WFP, 2020). Moreover, the WFP, through the school feeding schemes, aims to invest in the potential of children to simultaneously boost the human capital of the learner and the community (WFP, 2020). In this regard, school gardens promote healthy eating at school and encourage a healthy lifestyle in children and the community.

However, school breaks compromise the investment of the WFP and deprive learners of nutrition for their development and growth, especially for those who depend heavily on school feeding schemes for basic nourishment. This lack of access to the NSNP during school breaks compromises learners' health, thus making them vulnerable to NCDs. This violation of learners' right to life, survival, development, and dignity precipitated several debates among all role players focusing on the lack of nutrition during school breaks (UNESCO, 2020).

Global statistics indicate that 14 million children worldwide suffer from severe malnutrition, with only 25% having access to lifesaving treatment (UNESCO, 2021). Currently, part of nearly 13 million learners in American households suffer from extreme hunger during school breaks, with 5 out of 6 kids who rely on school meals not receiving meals during school holidays. Additionally, 12.8 million children are acutely malnourished across East Africa (UNESCO, 2021). Countries such as Ethiopia, Somalia, Sudan, South Sudan, Kenya, and Uganda recorded 1.2 million children suffering from extreme hunger (UNESCO, 2021). Alarmingly, 9.6 million learners in South Africa do not receive meals at school when schools are closed for holidays, and part of them suffer extreme hunger as a result (Nkosi, 2020).

It should be considered that nutrition is synonymous with nourishment. Newman (2020) highlights the notion of nourishment as the provision of nutrition or food to the body. Therefore, nutrition is the thread that knits together the components of food, health, and diseases. Education is inextricably linked with nutrition because education acts as an agent for enabling knowledge, skills, and behavioural patterns.

The *Constitution* (RSA, 1996a) echoes what is contained in the Convention on the Rights of the Child (CRC) (1989), the International Covenant on Economic, Social and Cultural Rights [ICESCR] (1996) and the Universal Declaration of Human Rights [UDHR] (1948). However, providing all qualifying learners with a balanced diet at schools is challenging. References to ensuring the right to life include obligations to ensure that adequate nutritional food is accessible for all children as enshrined in the Constitution.

1.2.1 Constitutional Framework for nutrition

Nutrition is of paramount importance, and as such, the deprivation of food that offers nutrition often culminate in the contraction of NCDs, which may lead to the degradation of the quality of human life (Irmak, 2020). For a child to fully grow developmentally and psychologically and survive with dignity, there should be a consistent provision of food with proper nutritional value. Thus, the *Constitution* guarantees everyone access to adequate food (RSA, 1996a: s 27(1)) and children the right to basic nutrition (RSA, 1996a: s28(1)(c)). Therefore, the government of South Africa is obligated to provide basic nutrition for learners through the NSNP to alleviate hunger caused by poverty.

Hence, various guidelines, such as the NSNP, among others, capture the measures that should be implemented to ensure the realisation of the rights in the South African *Constitution*. In addition, the best interests of children are of paramount importance in all matters that concern them, such as their education (RSA, 1996a: s28(2) and 29)). Additionally, the Convention on the Rights of the Child (CRC) guarantees the rights of all children in challenging environments and prescribes feeding schemes (CRC, 1989).

The CRC is the global instrument overseeing constitutional rights. South Africa also acknowledges the constitutional privileges of each child to safety and guarantees social care with appropriate support to youngsters in challenging environments (Theobald, 2019). The CRC and the African Charter on the Rights and Welfare of the Child (ACRWC, 1990) obligate

state parties to respect, protect, and promote the child's best interest. The SA *Constitution* provisions are aligned with those of international law.

According to section 7(2) of the *Constitution*, "[t]he states must respect, protect, promote and fulfil the rights in the Bill of Rights". Section 39(1) of the *Constitution* determines that when a court of law or tribunal interprets the Bill of Rights, it must promote the values based on human dignity, equality and freedom and must consider international laws such as the CRC and the ACRW and may also consider foreign law (RSA, 1996a). While the South African Constitution may not explicitly state the government's obligation to respect, protect, promote and fulfil the provision of food in schools, it establishes the principles of social justice, equality, and the right to access sufficient food. These principles imply that the government has a role in actively promoting and taking steps to fulfil individuals' access to nutritious food, including through initiatives such as the NSNP for learners.

1.3 Theoretical Framework

The structure that can hold or support a research study's theory is known as the theoretical framework. The theory that explains why the research problem under study occurs is introduced and explained in the theoretical framework. An existing theory that is utilised for a specific study is comprised of concepts, together with their definitions and references to pertinent scholarly literature. The theoretical framework demonstrates an understanding of ideas and concepts related to the research issue and the more extensive fields of knowledge being taken into consideration (Philipsen, 2018). In this section, the theory of interest was discussed.

1.3.1 The Interest Theory of Rights

According to McBride (2020), the interest theory of rights was first established by Bentham in 1987. Bentham in McBride argues that all individuals have rights as humans and others have the responsibility to protect those rights in that individual's interest. Bentham in McBride further argues that our humanity contributes to our well-being, thus making individuals vulnerable to the actions taken by others. The interest theory aims to protect individuals against violations of their rights by other individuals and the government. Kramer (2010) adds that those individual rights can either be moral or legal. Therefore, the responsibility lies with both the individual and the government to ensure that the rights of another individual are not infringed.

Similarly, the Interest Theory of Rights entails the duties of others, such as the Government, to protect a person's interest. Hence, the Interest Theory of Rights safeguards a person's rights, especially those of children, against wrongdoing, violation of rights, and negligence (Anyadike, Nwachukwu, & Wogu, 2021). This study focused on learners' rights, such as the right to basic nutrition during school closures. Therefore, the Interest Theory of Rights is relevant to the intended study as it focuses on the interest of the learners' nutrition. All children hold rights endorsed by the legal framework, but the realisation often lies in the execution of functions by the organs of the state. This study utilised the Interest Theory in two forms: first, the basic interest of the child at a national level where the government has the responsibility to ensure that the children's rights are respected, protected, promoted, fulfilled; and secondly, the child's developmental interest calls for the realisation of the child's rights by maximising the available resources to develop children's capabilities to their maximum advantage (Te One, 2007).

While it is the government's responsibility to simultaneously ensure that the children's rights are, respected, protected, promoted, fulfilled, and realised by maximising the available resources to their best interest, it should be noted that it is also imperative that the government should not realise the needs and interest of the child in a group but as individuals. As seen in the case *Centre for Child Law v Minister of Justice and Constitutional Development 2009(2) SACR 477 (CC)2009(6) SA 632 (CC)BCLR 1105 (CC)* (*Centre for Child Law v Minister of Justice and Constitutional Development 2009*), the court held that children's right does not apply "indifferently" to children by category. This means that a child's needs and interests are not capable of legislative determination by a group but by individualisation of the children's needs and interests.

1.4 Problem statement

The introduction of the NSNP in South African schools brought relief to hungry learners. The *Constitution* stipulates that every child has the right to basic nutrition (1996a: 28 (1)(b)), but the extended school closures due to the COVID-19 pandemic exposed how the learners struggled to get proper food during school breaks; hence their right to nutrition was violated. Literature indicates that 232.9 million learners globally suffer from malnutrition-related complications and NCDs (FAO, 2020; Harris, Drimie, Roopnaraine & Covic, 2017). Alarmingly, in less developed and developing countries, up to 45% of the children suffering from malnutrition die from NCDs (WHO, 2021).

School breaks exacerbate malnutrition challenges in Africa. Studies indicate that 15 million acute malnutrition cases are expected in West and Central Africa if timeous measures are not put in place (UNICEF, 2020c). In South Africa, 27% of all children suffer from malnutrition-related illnesses (Stoltz, 2021: Online). Children need food every day, even when school breaks. But they only receive food at school when schools are open. Unfortunately, for many children, the meal they receive is the only meal they receive for that day. For this reason, the researcher explores and dissects the constitutionality of the NSNP guideline for secondary schools during breaks.

Furthermore, learners only receive fruits inconsistently on a Monday, and vegetables are also not consistent as they receive them sometimes if they are available. Thus, the food is insufficient and encourages learners to come to school but fails to make them stay in school. Learners either leave school before time or completely drop out. Similarly, it reduces school attendance and increases drop-out as most learners feel the need to look for jobs to feed themselves or join gangs that give them food security in exchange for anything they require them to do. There is, however, also research that some children go to school basically just to get some food, indicating that school attendance increases when there is food at school (Prangthip, Soe & Signar, 2019).

1.5 Research Interest

The researcher is currently working at a public comprehensive school located in the township in the Free State province. The school is in a low socio-economic community and falls under quintile three under the quintile system. All public ordinary schools in South Africa are divided into five groups, or quintiles, mostly for the purpose of allocating financial resources. The poorest quintile is quintile 1, while the least poor quintile is quintile 5. These poverty rankings are computed nationally based on the level of poverty in the neighbourhood surrounding the school and a few infrastructure-related variables. Nationally, 20% of all learners are represented by each quintile, but not 20% from each province. Quintiles 1, 2, and 3 have been designated as fee-free schools, whilst quintiles 4 and 5 require students to pay fees.

Therefore, because the school is in the third quartile, it is also a beneficiary of the NSNP, with many parents being unemployed and dependent on meagre social grants to care for their children. The researcher has observed with concern and even discussed with colleagues the phenomenon of most learners arriving at school in a hungry state and how they return home famished and close to fainting.

The school has no vegetable garden to supplement the learners' daily meals and only depends on the department's money. According to the South African Schools Act (SASA) (RSA, 1996b), "the State must fund public schools from public revenue on an equitable basis to ensure the proper exercise of the rights of learners to education and the redress of past inequalities in education provision" (RSA, 1996: 34).

However, our school receives R3.27 for each learner for food per day to provide for the nutritional needs of the learners in terms of the NSNP, which is inadequate. Hence, the current allocation needs supplementation. Due to lack of supplementation, the school can only provide learners with one meal a day at 10 a.m. and leftovers at quarter to one in the afternoon for those still hungry.

The school concludes its activities at three o'clock in the afternoon, and grade 12 learners are expected to be in extra classes until four without any additional food. The school's one meal consists of pap and milk on Monday, samp and beans on Tuesday, tin fish, pap and cabbage on Wednesday, rice and lentils on Thursday and soya mince with pap on Fridays. The menu does not include a lot of vegetables and fruits.

The school plays a vital role in curbing some of the challenges of under-nutrition and keeping learners in the classrooms through the NSNP working together with the community members who serve food to the learners. School breaks (weekends and holidays) exacerbate learners' challenges due to under-nutrition and food insecurity and put poor parents and learners in disarray. Furthermore, school breaks disrupt the operation of the NSNP, leaving learners without food, which is a vital source of nutrition for vulnerable learners (Alderman and Bundy, 2012).

As a teacher the researcher feels a sense of concern and responsibility for the well-being of my learners. Witnessing the effects of undernutrition on our students' health and academic performance is emotionally draining. the researcher also experiences frustration or helplessness due to the limitations the researcher face in providing immediate solutions to address the nutritional needs of their students. Additionally, the researcher find myself having to take on additional roles beyond my instructional responsibilities, such as identifying and referring undernourished learners to appropriate support services or advocating for school-based interventions to address food insecurity and improve access to nutritious meals. These added responsibilities increase my workload and stress levels.

Hence, the research focuses on the fact that failing to provide food during school breaks probably infringes on learners' right to basic nutrition. The study further addresses the methodological gaps in research design and data collection methods as this study utilises a desktop approach using secondary data. In addition, the study closes the practical gap by providing practical insights for program implementation, impact assessment, and policy recommendations, a desktop study on NSNP at schools can contribute to filling important gaps in both the methodological and practical aspects of research in this area. For this reason, the researcher explores and dissect the constitutionality of the guidelines provided by the Department of Basic Education (DBE) for the National School Nutrition Programme for secondary schools (2009).

1.6 Research Questions

In this section, the researcher indicates the study's primary research question and the sub-research question of the study.

1.6.1 Main Research Question

What is the constitutional status of the National School Nutrition Programme guideline for Secondary Schools during breaks?

In response to the research question, the following questions are addressed:

- What is the extent of malnutrition among school-going children?
- What do the NSNP guidelines for secondary schools (RSA DBE, 2009) determine in general and with specific reference to school breaks?
- Which constitutional rights of secondary school learners should the NSNP guidelines (RSA DBE, 2009) fulfil, protect, promote, and respect?
- How does the failure to provide food to learners during school breaks and the provisions outlined in the NSNP guidelines (RSA DBE, 2009) amount to a violation of constitutional principles?

1.7 Aim of the study

The aim of the study is to evaluate the constitutionality of the National School Nutrition Programme guideline for Secondary Schools during breaks.

1.7.1 Objectives of the study

The study considers the following objectives:

- To determine the extent of malnutrition among school-going children.
- To evaluate how the NSNP guides secondary schools in general and during breaks.
- To explore the constitutional rights of secondary school learners that the NSNP guidelines (RSA DBE, 2009) should respect, protect, promote, and fulfil.
- To evaluate whether the failure to provide food to learners during school breaks and the provisions of the NSNP guidelines in this regard (RSA DBE, 2009) constitute a constitutional violation.

1.8 Value of study

The intended study is envisaged to be of value, importance, and relevance to improve the lives of impoverished and hungry learners (Suwandi, Utami, Fitriyani & Wulung, 2021). It stands out as an example of advocacy for social justice in that it may benefit those who need assistance the most (Myers, 2019). This study is of value to the Department of Basic Education (DBE) and the NSNP. It draws urgent attention to feeding programmes in public schools most affected by school breaks and exacerbated by lockdown restrictions during the COVID-19 pandemic.

The study envisages improving the provision and quality of food provided through the NSNP. Furthermore, the study serves to assist in combating NCDs and promoting the development of vegetable gardens through nutritional education, which will possibly become embedded in the school curricula. Simultaneously, it provides relevant, appropriate, and effective interventions and strategies in teaching-learning environments to agitate for social justice concerning learners' constitutional rights, especially when it concerns nutrition.

1.9 Research method and design

In the section below, the researcher provides a brief explanation of the research methodology. The research methodology entails the description of the research paradigm, the research approach, the research design, population and sampling, the data collection techniques, and the analysis. The section is also followed by the two research methods that the researcher employed to evaluate the constitutionality of the national school nutrition program (RSA DBE, 2009) during school breaks. Furthermore, the chapter gives a brief overview of the framework for analysis and ethical considerations.

1.9.1 Research methodology

The research methodology guides or directs the research processes. It guides how the researcher designs the study to address the research problem or interest and to realise the aims and objectives of the study (Nayak & Singh, 2021). In addition, it ensures that the results are valid and reliable. Maree (2010) also acknowledges that the research methodology aims to understand the process of research.

Research methodology also involves adhering to methodological choices and providing reasons for such choices (Snyder, 2019). Methodological choices include selecting appropriate techniques for data collection, data analysis, data interpretation, and reporting of the results (Snyder, 2019). Thus, how the researcher thinks about the study enables the researcher to choose relevant tools to use when undertaking the study (Mampai, 2008). Leedy & Ormrod (cited in Mampai, 2008) concur that research methodology refers to the researcher's means and techniques in conducting the research.

1.9.2 Research paradigm

According to Perreira (2018), a research paradigm refers to the shared problems in research and how they should be understood and solved. Research paradigms refer to combined concepts or problems with methodological approaches that correspond with them (Romani, Barmeyer, Primecz & Pilhofer, 2018). For this study, the researcher uses the interpretivist paradigm. Interpretivism is a paradigm that refers to realities being multiple and not singular and realities that are created by human experiences and not merely discovered. Perreira (2018) further indicate that an interpretivist study phenomenon that apply research techniques to understand peoples lived-experiences, interactions, and interpretations within a specific context.

Hence, human realities are best studied in the social context of the participants. In accordance, the chosen interpretivist paradigm is appropriate for the intended study as it relies on qualitative secondary data. Additionally, it allows the researcher to interpret the truth and reality of individuals by making sense rather than creating a hypothesis. This is because interpretivists believe that the reality of humans is contextually embedded (Romani, Barmeyer, Primecz & Pilhofer, 2018).

1.9.3 Research approach

Research approaches are plans to involve a series of actions (methods) to collect, analyse, and interpret data (Ishtiaq, 2019). There are three research approaches: firstly, the qualitative approach studies data that is textual, whether written or spoken; secondly, the quantitative approach deals with measuring numerical data; and thirdly, the mixed method approach, which combines both the qualitative and quantitative approaches (Myers, 2019). For this proposed study, the researcher uses a qualitative research approach linked to the interpretive paradigm.

Qualitative research facilitates the understanding and describing of social phenomena by analysing people's experiences through their lived stories, thus providing an in-depth and comprehensive perspective of the phenomenon under investigation (Nayak & Singh, 2021). It also involves analysing documents such as texts and traces people's experiences rather than measuring them or using mathematical models (Flick, 2018). Further, qualitative research assists the researcher in understanding the context in which people make their decisions, in addition to explaining the conduct of people (Myers, 2019). Moreover, qualitative research presents a general overview of a phenomenon in order to create new theories that require the conducting of new research (Ishtiaq, 2019).

As such, the study is initiated by the researcher's interest in evaluating the constitutionality of the national school nutrition program during breaks. Therefore, to answer the research questions, the researcher deemed a qualitative approach as appropriate. According to Maree (2010), it deals with meaning and interpretations. Mestry (2017) also attests that qualitative research aims to understand meanings and interpretations of phenomena rather than explaining them. To access and gather information, the researcher used data generated through the interpretation of documentation (Mestry, 2017).

As mentioned, a qualitative approach entails the interpretation of documents. The relevancy of the qualitative methodology for the study pertains to the researcher interest in the evaluation of the constitutionality of the Guidelines for the NSNP during breaks. The researcher contend that a qualitative approach would shed light on my study.

1.9.4 Research methods/Design

According to Myers (2019), a research design is a plan to explore a particular phenomenon. It is a guide with timeframes that tells us what the researcher did. It also includes the selection of research instruments to apply to the research project. A research design provides the proposed

study with a roadmap (Myers, 2019) which the researcher follows, commencing with the literature review.

A literature review can be defined as a thorough discussion of the existing knowledge from academic resources such as books, journals, articles, publications, dissertations, and a thesis (Nayak & Singh, 2021). Denzin & Lincoln (2011) refer to a literature review as the availability of relevant recent information, as found in different scholarly articles or books about a particular topic. Berg (2004) concurs that a literature review gives an overview of the already available information in the field of study. Apart from books and articles, this study also focuses on the provisions of the *Constitution*, legislation, and case law to determine whether the NSNP and the guideline on this programme complies with the constitutional imperatives during school breaks.

A literature review's advantages include the fact that it is based on existing information related to the study that the researcher can gather over a short period. A literature review can therefore be suitable for a researcher with little or no budget is required to conduct a study (Krippendrof, 2004). Though a literature review has advantages, it also has disadvantages. The information available on a specific topic is based on other people's perception and interest. After gathering all the available data, the researcher must organise and make sense of it, which is a slow and time-consuming process. Due to this somewhat slow and time-consuming process, the researcher may be conditioned to sources that have unreasonable and unfair perspective (Creswell, 2007).

A literature review is also a way of combining different previous research to create new research. A literature review is a more relevant design because it can assist in identifying the gaps within the previously conducted studies and uncover new areas or components that need more research (Snyder, 2019). Furthermore, a literature review assisted the researcher to narrow the research direction and highlight the theories that already exist on the research topic (Nayak & Singh, 2021). As such, the intended dissecting of previous literature assisted the researcher in critically analysing a diversity of viewpoints that has already been written on the topic.

1.9.5 Data Collection Techniques.

A data collection technique is a strategy of eliciting data related to a research study, and this includes analysing documents and records (secondary data), conducting interviews, utilising

questionnaires, and field observations. These techniques can be used in combination, or singly (Myers, 2019). However, for this intended study, the researcher applies a single technique that requires perusing documents and records (secondary data). According to Suwandi, Utami, Fitriyani, & Wulung (2021), secondary data collection is suitable for a qualitative study because it provides evidence from documents.

A secondary data collection instrument assisted me to gather existing data that has been previously collected by someone else for a different purpose. It gave the researcher the means of collecting data that has already been recorded or documented by primary sources. A secondary data collection technique assists the researcher to connect already existing relevant theories on the topic to be investigated (Nayak & Singh, 2021).

In other words, the engagement with secondary data collection assists the researcher in reading and understanding what has already been written on the topic. It also provides the researcher with the opportunity to identify gaps in other researchers' studies and hence may possibly provide opportunities to unearth new evidence. This intended study gleans data from books, reports, journals, policies, legal sources, and other academic references (Abramov, 2021).

1.9.6 Sampling of Secondary Data

Population and sampling include deciding who to select to elicit the required and relevant data in relation to the aim and objectives of the intended study (Flick, 2018). It also refers to the selection of materials that the researcher has decided to use in the study to access the required data, such as books, documents, cases, or people (Flick, 2018).

The 'population' of the study entails all relevant previous literature from different web-based academic search engines such as Google Scholar, Kovsie Cat, and LibGuides that deal with the phenomenon under study (Haddaway, Collins, Coughlin & Kirk, 2015).

The sampling of the study involves systematic sampling/review, where the researcher only deals with selecting documents that respond to constitutional imperatives and the NSNP. The systematic sampling method is suitable for the proposed study as it screens the first 50 to 100 research items within Google Scholar, Kovsie Cat, and LibGuides, compared to other sources which screen thousands of items. Also, it restricts the search for titles and content of studies to only what interests the researcher instead of full texts. In other words, systematic sampling allows the researcher to narrow the population down to only what is significant and relevant to the study. Since the intended study is based in a legal context, systematic sampling within legal

data bases such as Juta Law and LexisNexis are useful as it allows the researcher to search for legislations and case law relevant to the NSNP.

1.9.7 Data Analysis

Data analysis is a process that the researcher uses to dissect and interpret collected information (Myers, 2019). The method of analysing data depends on whether the study is qualitative or quantitative in nature (Nayak & Singh, 2021). For this study, the researcher undertakes a document analysis approach because it relies on readily available data, which enables the researcher to analyse data from secondary data sources such as books, documents, and policies (Myers, 2019). According to Onwuegbuzie, Leech and Collins (2012), document analysis involves selecting representative segments of documents such as sections of literature, academic texts, and legal articles.

The researcher also employs a textual analysis. A textual analysis focuses on texts that are based on existing and recurring information, such as those with a specific discourse like the *Constitution* (Fairclough, 2003). McKee (2003) further states that textual analysis is a method of gathering information by researchers who have an interest in understanding how people make sense of who they are and how they fit in the country in which they belong. Additionally, by also trying to see different ways in which people can interpret the text (McKee, 2003), the study analyses the provisions of the *Constitution* and policy documents mentioned above with the aim of determining whether the NSNP complies with the constitutional imperatives.

A textual analysis is advantageous because it provides insight that is valuable over time. It also looks at how texts can be used as a form of communication which builds on social interaction (Burrows, 2004). Hence it can be used for purposes such as improving and developing things. Like a literature review, the disadvantages of a textual analysis include the fact that it can be time-consuming. It is also easy to make errors and interpret the text out of the context in which it was produced, especially when rational analysis is used as a form of interpreting the text (Burrows, 2004).

Additionally, the researcher engages in policy analysis. The analysis of policy involves utilising relevant theoretical or methodological approaches to the problem that the researcher is investigating (Codd, 2008). Policy analysis is a type of query and discipline that provides information on forming a new policy or the review of an existing policy. Dror (in De Coning & Wissink, 2011) indicates that policy analysis is done to explore solutions to certain policy

issues or improve policy decisions through a variety of methods. Dunn (in De Coning & Wissink, 2011) also confirms that policy analysis uses a range of methods or techniques to acquire information.

The policy analysis consists of both the analysis ***for*** policy and the analysis ***of*** policy (Codd, 2008). Analysis ***for*** policy entails policy advocacy with the aim of making recommendations. A policy ***of*** analysis focuses on making remarks on how a policy was constructed and the transformation of policy contents based on values, beliefs, and principles underlying that policy's process (Codd, 2008). The policy analysis should be practical and considerate of all stakeholders (Simmons, Olssen & Peters, 2009). As the researcher focus on analysing existing policies (cf. section 3), I engaged in analysing policy to gain an overview thereof (Ritchie and Spencer, 1994).

Furthermore, to engage in the analysis of policy, the researcher saw it imperative to engage in the framework for analysis. A framework for analysis helps make postulations and correlations of how things relate in words (Henning, 2004). A framework provides a helpful link with the literature review. Simultaneously, it makes the researcher's study clear (Harrington, 2005). To analyse policies, the researcher constructed a legal framework that enabled me to foreground my study, as the *Constitution* is the standard against which the researcher measured the provisions of the NSNP and the related policies. The construction of the framework was based on the literature review that I undertook. Based on my understanding of the literature review, the researcher formulated themes that constituted the framework to guide the analysis, which assisted the researcher in evaluating my topic, thereby undertaking a thematic data analysis as thematic analysis involves reading over a data set and looking for patterns in meaning to identify themes (Lochmiller, 2021).

1.9.8 Ethical Considerations

Ethics refers to principles that govern how a person behaves when conducting research (Myers, 2019). Israel and Hay (cited in Ntsoane, 2017) agree that ethics revolve around researching correctly. If research is not conducted ethically, people may lose trust in both the study and the researcher. Thus, ethical behaviour promotes the process of improving society (Ntsoane, 2017). During this intended study, ethical considerations include the researcher engaging in professional conduct to avoid plagiarism in that all sources consulted were respectfully acknowledged in-text and included in the list of references.

Further, the study adhered to the ethical requirement of gathering authentic information and interpreting such information correctly, without any bias. To ensure that ethical requirements are met, the researcher applied for ethical clearance from the Faculty of Education's Ethics Committee at the University of the Free State (UFS) (cf. Appendix A), which was granted, with the following ethical clearance number: **UFS-HSD2021/1778/21/22**.

1.10 Definition of Terms

In this section, the researcher defines the terms in two ways. First, the researcher defines the terms in general then, as used in the study.

- National School Nutrition Program (NSNP) - the program introduced by the government, responsible for the feeding of learners in quantile 1-3 public schools (RSA DBE, 2009). The provided definition for the NSNP is used as-is for the study.

- Non-Communicable diseases (NCDs) – untransmissible diseases related to morbidity and mortality, such as cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes (Kluge, Wickramasinghe, Rippin, Mendes, Peters, Kontsevaya, & Breda, 2020). For the study, NCDs are defined as diseases that are not transmissible directly from one person to another, including heart diseases, cancers, and diabetes. Some of these are a result of lifestyle habits.

- Nutrition - A balanced diet is essential for health, development, and the prevention of NCDs (UNICEF, 2020b). In the study, the term is used as the body's nourishment through food provided by the NSNP to attain maximum growth, development, and health.

- Malnutrition is the state in which the body lacks the nourishment or nutrients necessary to be healthy (Newman, 2020). The term is used as the condition suffered by learners due to poor nutrition.

- A healthy lifestyle - is a way of living that prevents the risk of getting NCDs and increases the chances of longevity (Ringeval, Wagner, Denford, Paré & Kitsiou, 2020). The term is used as a way in which the NSNP promotes healthy eating, such as promoting food gardens.

- School breaks are when learners are not attending school due to school holidays (Isphording, Lipfert, & Pestel, 2020). The study uses the term as any other inevitable condition that renders school attendance impossible, such as pandemics like the COVID 19. It is also used as the closing of schools for a myriad of reasons, such as the end of the school term.

- School holidays – the mentioned term is used interchangeably with the term "school break" & weekends.

- State - the term is used interchangeably with government, which can be defined as authorities that govern the country or a certain office (Hale, Petherick, Phillips, & Webster, 2020). The DBE is used interchangeably with both the terms government and state for the study.

- *Constitution* - legal principles that govern a country (Amery, 2021). In the study, the term is used as the legal principles governing South Africa pertaining to children's rights, particularly those at school. It also refers to chapter 2 of the *Constitution*, namely the Bill of Rights.

- COVID-19 - an infectious disease caused by the SARS-Cov-2 virus (Isphording et al., 2020). The term is used as the virus that caused schools to remain closed for the longest time in the modern world.

- Lockdown - a state of isolation or restricted access instituted as a security measure. A good example is the incessant lockdowns the country, in particular, and the world, in general, has been experiencing because of the COVID 19 pandemic (Isphordinget al, 2020). The term is used to indicate a security measure that resulted in school attendance being banned for a prolonged period.

- Child - a young human being below the age of puberty or the legal age of majority (Baron, Goldstein, & Wallace, 2020). In terms of the *Constitution*, a child is anybody below 18 years of age (s 28(3)). For the study, a child is seen as any learner at a school receiving education and depends on the NSNP for feeding.

1.11 Outline of the chapters

In this section, the researcher discuss the outlines of the chapter that composes the study. The study consist of six chapters as follows:

Chapter 1: This chapter presents the introduction, scope of the study and the research method and design.

The first chapter of the study focused on the following components: the introduction and conceptual background, the legal framework, problem statement, the theoretical framework, research interest, research questions, the rational aim of the study, objectives of the study, value of the study. Furthermore, the first chapter covers the research methods and design which covers the research methodology, data collection, sampling techniques and data analysis. The chapter also covers the definitions of operational terms and the first chapter's summary.

Chapter 2: The malnutrition among South African learners is dissected in this chapter.

The second chapter of the study gave a general overview of the study by reviewing the necessity of proper nutrition for school-going children and the consequences of malnutrition from various scholars' perspectives. Furthermore, it reviews the extent of malnutrition among school-going children in general and during school breaks.

Chapter 3*:* The National School Nutrition Programme in secondary school is dissected in this chapter.

The third chapter of the study considered the second sub-research question, which is the NSNP guidelines for secondary schools (RSA DBE, 2009) and what the NSNP entails (cf. ch 1 par 1.6.1). The chapter provides the following: The background of the NSNP, how the NSNP currently guides secondary schools with regards to its three objectives, the functioning of the NSNP, the evaluation and monitoring of the NSNP, the upscaling of the NSNP, which looks at the NSNP sponsorship and extension, the advantages, and challenges of the NSNP.

Chapter 4: This chapter focuses on the legal framework for basic nutrition.

The fourth chapter of the study focused the legal framework, which is the third sub-research question: the constitutional rights that the NSNP guidelines (RSA DBE, 2009) should respect, protect, promote, and fulfil (cf. ch 1 par 1.6.1). The legal framework discussed in chapter 4 investigates the international and national law on the right to food and the right to education.

The chapter covers the overview of food security and the 2030 development Goals as a broad background, international law concerning nutrition and education captured in the ICESCR and relevant General Comments, the UNCRC and the relevant General Comments and the ACRW of the State, the South African law, namely, the *Constitution*, legislation such as the National Education Policy Act, SASA, Children's Act and relevant case law.

Chapter 5: The study's findings derived from the evaluation of the NSNP guideline are outlined in this chapter.

The fifth chapter of the study focused on the meaning of the data presented and discussed in Chapter four. Thus, chapter five gives the results of what was found from the analysis of the secondary data collection process undertaken from the literature review and the NSNP guideline using a qualitative tabular presentation.

Chapter 6: Conclusion and recommendations are explained here.

The sixth chapter of the study focused on the conclusion of the whole study and making recommendations on the findings of the NSNP guideline in relation to the problem statement and the research questions.

1.12 Chapter Summary

The first chapter of the study dwelt on the conceptual background, the legal framework, problem statement, the theoretical framework, research interest, research questions, the rational aim of the study, objectives of the study, value of the study, the definitions of operational terms and the first chapter's summary. Furthermore, the section of the study covered the research methods and designs, including the research methodology, data collection techniques, population and sampling, data analysis, the framework for analysis, and ethical considerations.

CHAPTER TWO

MALNUTRITION AMONG SOUTH AFRICAN LEARNERS

2.1 Introduction

Chapter 1 of the study presented the introduction and the scope of the study with eleven components. In this section, the researcher first give the general background of the study by reviewing the necessity of proper nutrition for school-going children and the consequences of malnutrition from various scholars' perspectives. Against my understanding of the importance of nutrition and the consequences, the researcher review the extent of malnutrition among school-going children in general and during school breaks (cf. Ch. 1 par 1.6.1).

2.2 The necessity of proper nutrition

Before the researcher review the extent of malnutrition among school-going children in general and during school breaks, it is imperative to review the necessity of proper nutrition as proper nutrition plays an important role in the development of children and the prevention of non-communicable diseases (NCDs). Since this project was aimed at evaluating the constitutionality of the National School Nutrition Program (NSNP) (RSA DBE, 2009) during school breaks, reviewing proper nutrition is thus important.

2.2.1 Development of children

Nutrition is the foundation of a person's health and overall life. Compromised health often compromises the entire life span of a person (WHO, 2000). During the early stages of development of children and teenagers, nutrition plays a vital role in growth, development, learning, general performance, well-being, and survival (WHO, 2000). Therefore, nutrition plays an essential role in the growth of bodies, brains, and social development. Brain development is crucial in learning. As nutrients such as Vitamins A, Bs, C-E and K as discussed later on plays a crucial role if administered and received in the early stages of the life of a learner.

Therefore, by ensuring continuous access of food in schools, the NSNP have a significant impact on the development of learners by addressing their nutritional needs, promoting physical and cognitive development, enhancing academic performance, improving behaviour and mental health, fostering social interaction, and providing health education. By ensuring that children have access to nutritious meals, the NSNP contribute to the overall well-being and future success of learners.

2.2.2 Prevention of non-communicable diseases

According to Irmak (2020), nutrition through a proper diet is essential to lead a healthy life. Good nutrition is essential as it assists in maintaining a healthy weight and inhibits the risks of NCDs, thereby promoting overall health. An NCD, is a medical condition or disease that is not contagious and hence cannot be spread from one person to another. NCDs can be long-term illnesses that advance slowly, or they can cause mortality more quickly, such as a stroke.

The four primary categories of non-communicable diseases, according to the World Health Organization (WHO, 2021), are cardiovascular diseases (such as heart attacks and strokes), cancer, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma), and diabetes. Literature indicates that 232.9 million learners globally suffer from malnutrition-related complications and NCDs (FAO, 2020; Harris, Drimie, Roopnaraine & Covic, 2017).

Alarmingly, in less developed and developing countries, up to 45% of the children suffering from malnutrition die from NCDs (WHO, 2021). More than 15 million people between the ages of 30 and 69 die each year from an NCD, with 85 % of these premature deaths occurring in low- and middle-income countries. High blood pressure is a significant risk factor for cardiovascular disease and chronic renal disease, as well as diabetes.

In 2015, the global age-standardised prevalence of high blood pressure was 241% for men and 201% for women. According to the 2016 South African Demographic and Health Survey, hypertension affects 46 % of women and 44 % of men aged 15 and older in South Africa. This is nearly double the global average. While hypertension rates in South Africa peak in adults over 65, with elevated blood pressure in 84 % of both men and women, hypertension among youth aged 15-24 is high and expanding.

Women in this age range have a hypertension rate of 17%, while men have a rate of 20% (Freeman, Simmonds & Parry, 2020). Thus, NCDs can be seen as a growing problem. According to Palmer, Monaco, Kivipelto, Older, Maggi, Michel, Prieto, Sykara & Donde (2020), the impact on people, especially children with NCDs over time is significant. It could undermine the long-term viability of healthcare systems by deteriorating the condition of chronically ill learners. NCDs may have an influence on Quality Adjusted Life Years. The quality-adjusted life year (QALY) is a general indicator of disease burden that considers both length and quality of life. In order to determine the worth of medical procedures, it is employed

in economic evaluation (Engel, Bryan & Whitehurst, 2021). Hence, NCDs worsens the socioeconomic, clinical, and economic burden of students from low-income families.

Unhealthy eating habits have been associated with obesity for adults and is escalating for children and teenagers as more children and teenagers are diagnosed with obesity and eventually NCDs. Even if a person has a healthy weight, lack of nutrition and an unbalanced diet can also lead to NCDs (Irmak, 2020). A person may be eating enough calories but insufficient nutrients (Burchi, Fanzo, &Frison, 2011). El Ghoch & Valerio (2020) concurs that nutrition plays a vital role in preventing NCDs. Thus, NCDs must be prevented as they increase the cost of treatment, impact a person's health system, the affordability of healthcare systems or medical aids, and impact the productivity of a person as people who are affected with NCDs are affected often at work or schools.

NCDs can also lead to loss of life and impact society in general if loss of life occurs at an early age. Freeman, Simmonds & Parry, (2020), concurs that the importance of having healthy individuals and populations, as well as countries taking coordinated efforts to improve health, is mainly self-evident and is backed up by solid worldwide evidence. This is a pressing need in South Africa due to rising disease prevalence and associated burdens, particularly from NCDs. Social and community cohesion is deeply obstructed by financial, care and relationship pressures caused by mental and physical ill-health. A financial burden is also put on families where a member has a chronic disease. Poverty drives people into poor health, while poor health drives people into poverty.

Furthermore, according to Esakov & Vally (2010) the importance of nutrition for children with HIV and AIDS cannot be overstated. Children become more susceptible to sickness as a result of inadequate nourishment, which lowers their already feeble immune systems (Esakov & Vally, 2010). For children on antiretroviral medications (ARVs), a healthy diet is especially crucial because it increases the effectiveness of medication and minimizes adverse effects, boosts the immune system, and guards against opportunistic infections (Esakov & Vally, 2010). The main point is that children with HIV/AIDS or other diseases require a healthy diet (Esakov & Vally, 2010).

As such, the NSNP have the potential to positively influence the prevention of non-communicable diseases by providing access to nutritious meals, promoting healthy eating habits, raising awareness, and collaborating with healthcare professionals. By addressing the

root causes of NCDs, such as unhealthy diets and sedentary lifestyles, the NSNP can make a significant impact on improving the health and well-being of learners.

Since the development of children, quality of life and the prevention of NCDs are linked to proper nutrition it is necessary to investigate what constitutes proper nutrition.

2.3 Importance of a balanced diet

A balanced diet with essential nutrients plays a role in achieving optimum health. In general, a daily diet that lacks nutrients compromises overall health.

2.3.1 Physiological activities

Nutrients are essential for performing various physiological activities such as growth, movement, responsiveness, and psychological functions such as mental development, thinking and understanding (Burchi *et al*. 2011). Such functions are essential components in education for learning, especially in the early stages of the development of a child. Therefore, without proper nutrition, a person suffers from malnutrition with imbalances in how a person absorbs necessary nutrients (Irmak, 2020).

2.3.2 Early childhood development

Nutrition is critical for the growth and operation of children's brains, as well as for focus and learning. Although all nutrients are necessary for brain growth and function, the nutrients listed below are particularly crucial for early childhood development (Burchi *et al*. 2011). As a result, foods like eggs, fatty salmon, and vegetables contain nutrients that are essential for early childhood development. A low-glycaemic index (low-GI) foods can also help with brain function by controlling blood sugar levels (Burchi *et al*. 2011).

2.3.3 Early brain development

Foos with low-GI can help students focus and concentrate at school (Burchi *et al*. 2011). One method to maximize early brain development is through nutrition. Dietary habits of children may have an impact on their behaviour and focus. According to a 2019 systematic review and meta-analysis, a diet heavy in refined sugars and saturated fat may raise the risk of heart disease and hyperactivity and attention deficit hyperactivity disorder (ADHD) in children (Russell, Croker & Viner, 2019).

2.4 Proper nutrition

Burchi, Fanzo, & Frison (2011) attest that ensuring that a person receives adequate nutrients such as vitamins and other minerals means that the diet should also be of high quality. The nutrients in the food that people eat make up a person's diet. Hence, the foundation of health, healthy development, and resilience against NCDs is eating a balanced diet with enough nutrients and calories (Irmak, 2020). A balanced diet, especially for children, comprises three meals per day with at least three healthy snacks daily.

2.4.1 Whole foods

The best foods are whole, fresh, and unprocessed—fresh fruits and vegetables, whole grains, dairy, and meats (Namgung & Hong, 2019). Section 28(1)(c) of the *Constitution* provides that children have the right to basic nutrition. An acceptable meal consisting of basic nutrients in one sitting would consist of 50% of healthy non starchy colourful vegetables and 25% of healthy protein such as beans, poultry, and fish. The plate should also consist of 25% of healthy carbohydrates, such as whole grains, whole-wheat bread, and brown rice (Koo, Poh & Abd Talib, 2018).

2.4.2 Fruits and vegetables (Vitamin A to E)

Additionally, a healthy plate should be supplemented by lots of fruits and drinking a lot of water (Namgung & Hong, 2019). We cannot survive without water. It is essential to numerous bodily processes. These include delivering nutrients to cells, controlling body temperature, clearing bacteria from the bladder, assisting with digestion, and avoiding constipation (Namgung & Hong, 2019).

Fruits and vegetables are essential as they have vitamins and minerals vital for children's growth. Vitamins such as A, B, C, D and E are vital as they assist learners' vision. **Vitamin A** is essential for proper learning; **Vitamin B**: calcium absorption; **Vitamin D**: membrane protection; **Vitamin E and C** for growth. Vitamins can be administered through food groups such as fruits and vegetables, whole grains, beans and legumes, low-fat protein, and dairy products (Nhlapo, Lues, Kativu & Groenewald, 2015).

2.4.3 Vitamin Bs: 1-7, 9, & 12

All vitamin Bs: 1-7, 9, & 12 can be sourced from a variety of foods such as: **Vitamin B-1:** ham, soymilk, watermelon, acorn squash; **Vitamin B-2:** milk, yoghurt, cheese, whole and enriched grains, and cereals; **Vitamin B-3:** meat, poultry, fish, fortified and whole grains,

mushrooms, potatoes; **Vitamin B-5:** chicken, whole grains, broccoli, avocados, mushrooms; **Vitamin B-6:** meat, fish, poultry, legumes, tofu and other soy products, bananas; **Vitamin B-7:** whole grains, eggs, soybeans, fish; **Vitamin B-9:** fortified grains and cereals, asparagus, spinach, broccoli, legumes (black-eyed peas and chickpeas), orange juice; **Vitamin B-12:** meat, poultry, fish, milk, cheese, fortified soymilk and cereals (Nhlapo *et al*. 2015).

2.4.5 Vitamins A, C-E and K

Vitamins A, C-E and K can be sourced from foods such as: **Vitamin A:** beef, liver, eggs, shrimp, fish, fortified milk, sweet potatoes, carrots, pumpkins, spinach, mangoes; **Vitamin C:** citrus fruit, potatoes, broccoli, bell peppers, spinach, strawberries, tomatoes, brussels sprouts; **Vitamin D:** fortified milk and cereals, fatty fish; **Vitamin E:** vegetable oils, leafy green vegetables, whole grains, nuts; Vitamin K: cabbage, eggs, milk, spinach, broccoli, kale (Tardy, Pouteau, Marquez, Yilmaz & Scholey, 2020).

2.4.6 Major minerals

Major minerals can be sourced as follows: **Calcium:** yoghurt, cheese, milk, salmon, leafy green vegetables; **Chloride:** salt; **Magnesium:** spinach, broccoli, legumes, seeds, whole-wheat bread; **Potassium:** meat, milk, fruits, vegetables, grains, legumes; (Sodium) salt, soy sauce, vegetables; **Chromium:** meat, poultry, fish, nuts, cheese; **Copper:** shellfish, nuts, seeds, whole-grain products, beans, prunes ; **Fluoride:** fish, teas ; **Iodine:** iodized salt, seafood ; **Iron:** red meat, poultry, eggs, fruits, green vegetables, fortified bread ; **Manganese:** nuts, legumes, whole grains, tea ; **Selenium:** organ meat, seafood, walnuts **; Zinc:** meat, shellfish, legumes, whole grains (Khalili Tilami & Sampels, 2018).

Since proper nutrition for children is essential for the quality of life, child growth and the prevention of NCDs it is necessary to investigate what constitutes the quality of nutrition in school nutrition programmes. It is also imperative to emphasise not only the quantity of food received but the quality as well.

2.5 Indicators of quality nutrition in school nutrition programmes

Given that NCD rates have continued to climb unabated for years while dietary quality has remained low, a large-scale remedy is required. Focusing on nutrition makes sense because a poor diet is a big contributor to chronic diseases. Considering that more than 9 million SA pupils engage in the school NSNP on a daily basis, continuing to enhance the quality of their diets through the NSNP might have a significant impact on child and adult health, particularly

obesity. Hence, this section discusses two indicators of quality nutrition, namely access to a wide variety of foods and ideal calorie consumption.

2.5.1 Access to a wide variety of food

It is evident from the abovementioned information that to maintain a healthy diet one needs to have access to a wide variety of food. In contrast, the diet of poor learners in South African schools consist mainly of carbohydrates and poor-quality oils and processed meats such as soya mince. According to a study conducted by Nhlapo et al. (2015), most meals provided by the schools in South Africa do not meet the nutritional standards, especially for secondary school learners aged between 12 and 18 years.

The researcher concur with the study conducted by Nhlapo et al. (2015) because, in most schools, the additional meal offered by schools relied heavily on starches such as pap or samp, which makes up 50% to 75% of the plate with little protein and vegetables, with a supplement of fruits once a week or none. In my own experience, a daily plate for most poor learners at home consists of only starch groups such as pap (maize meal) and potato stew.

In most cases, the same meal is repeated regularly with no variety. The meals received at home is also similar to the meals received at school. El Ghoch & Valerio (2020) attest to the fact that those learners from poor backgrounds mostly consume food both at home and in schools that are of large portions that are nutritionally inadequate and unbalanced.

The highly represented food groups were those high in energy, carbs, and salt, with insufficient fruits and vegetables, dietary fibre, and representation of nutrients mentioned above, including pantothenic acid. The heavy reliance on carbohydrates could be considered a recipe for NCDs, potentially supress the immunity due to under-representing other food groups such as vegetables, fruit, and healthy protein (Koo, Poh & Abd Talib, 2018). A poor diet puts people at a greater risk of undernutrition, resulting in NCDs (El Ghoch & Valerio, 2020).

2.5.2 Ideal calorie consumption

A child, especially those in secondary school, should ideally consume about 1800 to 2300 kcal/day with 25 to 45 grams of protein per day, which is impossible for poor learners (Nhlapo et al. 2015). In many instances they receive no food at home or only one meal a day that are mostly carbohydrates. Hence, the extra meal provided in schools by the NSNP is essential.

Though pap and other starches may assist to reach the daily calorie intake, most of the calories consumed are devoid of nutrients such as protein and vitamins; thus, making it unacceptable based on the international standards of basic nutrition (Nhlapo et al. 2015). The international standards of basic nutrition indicate that a healthy diet consists of five portions of fruit and vegetables per day, less than 10% of total energy intake from free sugars, less than 30% of total energy intake from fats, and less than 5g of salt (Koo, Poh & Abd Talib, 2018).

2.6 The consequences of malnutrition

Malnutrition is a broad term that is universal and can be described as the imbalance of nutrients within a person's body, which directly affects how the body composes itself and functions (Saunders & Smith, 2010). It affects the ability of the body to allow all functions of the body to function to its best capacity and how the body recovers. Additionally, it impacts a person's overall quality of health, especially children, regarding health and education. In less developed and developing countries, malnutrition diminishes people's ability to achieve their physical and mental potential (WHO, 2021).

2.7 Forms of malnutrition

Malnutrition comes in three broad forms: undernutrition, micronutrient-related malnutrition, overweight/obesity and diet-related NCDs (WHO, 2021). As mentioned, this section discusses various forms of malnutrition.

2.7.1 Undernutrition

Firstly, the form of malnutrition is undernutrition, which is evident from wasting, stunting and underweight. Undernutrition is also known or referred to as chronic malnutrition. Chronic malnutrition, also known as stunting and wasting. Stunting relates to where children do not receive sufficient nutrients, is the cause of almost half of children's death worldwide (The United Nations Children's Fund (UNICEF), 2020a).

Undernourished children are much more at risk of serious illness. Wasting relates to the loss of weight due to insufficient food. Stunting relates to chronic undernutrition specifically associated with low socio-economic standards and poor nutrition, which prevents children from reaching their highest cognitive and physical capacity. Underweight children are either wasting, stunting or have both the conditions of wasting and stunting (WHO, 2021).

2.7.1.1 Causes of undernutrition

This section discusses various causes of undernutrition which is referred to as chronic malnutrition which is also known as stunting and wasting.

2.7.1.1.1 Poor nutrition (little food)

According to Borkowski, Ortiz-Correa, Bundy, Burbano, Hayashi, Lloyd-Evans, Neitzel, & Reuge (2021), malnutrition is one of the dominant social issues that affect people's health, especially those in developing countries such as South Africa. The life expectancy in developing countries has declined compared to the global life expectancy due to NCDs which are exacerbated by poor diets. Poor nutrition for learners from poor backgrounds is mainly due to lack of or little quantities of food received. Poor nutrition is not only about too little food and NCDs are mostly due to the wrong food groups and the quality of food – school feeding programmes can exacerbate this problem.

2.7.1.1.2 Level of physical activity

The long walk to reach schools plays a huge role in the malnourishment of the learners as they potentially can burn more calories than they receive, which exacerbate the loss of weight resulting in wasting and stunting (Fitch, Rhemtulla & Handy, 2019). One can conclude that leaners in rural areas in quantile 1-3 experience worse forms of malnutrition which is undernutrition, than the learners in urban areas in quantile 4-5 due to the physical activity of travelling long distances to the school.

2.7.1.2 Extent of undernutrition in the world and in SA

In this section, the researcher discuss the extent of undernutrition in the world and in South Africa Respectively discussion the numbers and types of people who suffer mostly form undernutrition.

2.7.1.2.1 In the world

According to the WHO (2021), NCDs kills almost 71% of the global population annually. Undernutrition is responsible for approximately 45% of deaths in children under five years old in the world. It is particularly true in countries with low or middle incomes (WHO, 2021). Chronic malnutrition harms the health and wealth of more than one-third of the total population of developing countries.

It has consistently affected approximately 156 million children worldwide and is a major cause of child death and poverty worldwide. Gavhi, Kuonza, Musekiwa & Motaze (2020) indicate that 30.9% of children below the age of 5 died in 2018 due to extreme hunger. A cross-sectional study conducted from 2014 to 2018 with 958 children, 480 males and 476 females, indicated that 256 of the children died of chronic malnutrition.

The common complications which led to these children's death were poor appetite, anaemia, hypoglycaemia, respiratory tract infection, dehydration, and diarrhoea. UNICEF (2020b) concurs that about 200 million school-going children in developing countries suffer from malnutrition with driving forces such as poverty, inequalities, and emerging health epidemics, making it difficult to feed children, thus threatening the child's chances to grow, survive and adequately develop.

2.7.1.2.2 In South Africa

Like in other developing countries, malnutrition in South Africa is rapidly rising with negative health implications for poor school-going children. At least 50% of the school-going children in South Africa are impoverished and live under the poverty line, thus causing chronic malnutrition (UNICEF, 2019).

Learners who are beneficiaries of the South African Social Security Agency (SASSA) are mostly in quantile 1-3 schools, and they are much more undernutritioned than those who are not recipients of SASSA. Most of those learners mainly depend on meals that the schools provide as they are poor compared to those who are not SASSA beneficiaries (Sambu, 2019). Furthermore, learners in rural areas suffer from undernutrition compared to those in urban areas. Learners in rural areas are far from schools and walk long distances to get to schools (Sambu, 2019).

Furthermore, from April 2017 to March 2018, the District Health Barometer reported that 11 229 children under five were treated for chronic malnutrition in South Africa (Health Systems Trust, 2020). During that time, chronic malnutrition was the underlying cause of death in 30.9% of South African children. Previous reports have suggested that approximately 33% of deaths in children under the age of 5 in South Africa from 2011 to 2013 are associated with chronic malnutrition (UNICEF, 2019).

In addition, a study of children admitted for chronic malnutrition at two regional hospitals in the Eastern Cape reported mortality in 24.4% of cases, which is much higher than the standard

accepted by the WHO which is less than 10% of admitted children in 2010 (Sambu, 2019). Additionally, children may grow and survive, but they do not thrive due to malnutrition because one in three children is not fed the proper nutrition they require during their early stages of childhood (UNICEF, 2019).

2.7.1.3 Consequences of undernutrition

This section discusses the various consequences that undernutrition poses on a person especially on learners or children. It discusses both long-term and short-term consequences.

2.7.1.3.1 Long term consequences

Iddrisu et al. (2021) attest that lack of proper nutrition impacts development and learning, resulting in extreme consequences during adulthood. Especially the productivity of a person as an adult and their ability to participate in the country's overall economic development is greatly reduced. Implementing policies such as the NSNP and other related policies is of greater importance in preventing malnutrition and improving health conditions related to lack of proper nutrition. Hence, the government took the initiative and introduced the feeding program in schools known as the NSNP.

If a child goes to school hungry at least once a week during a school year, 36 hours of schooling will be lost. If this happens every year for a total of hours in secondary school, a learner will lose 8.4 weeks - or 70% of a term. The loss would be much greater if a child went to school without food every day. It can mean that the child lacks basics such as literacy skills. In the long run, it is believed that hunger can also affect test results, which can affect prospects. It is all due to the lack of meals in the morning. According to Iddrisu et al. (2021), refraining from eating in the morning impacts the child's behaviour and concentration reducing the chances of maximizing school potential and thus potentially affecting prospects. As such, this section looks into long term consequences of undernutrition.

2.7.1.3.1.1 Person's right to life, survival, and development

NCDs for poor children increases the risk of early death and disability. Pullar, Allen, Townsend, Williams, Foster, Roberts, Rayner, Mikkelsen, Branca, & Wickramasinghe (2018), attest that NCDs contribute to the majority of deaths in poor developing countries, and the children that are already affected by NCDs are at a higher risk of falling deeper into poverty.

A high percentage of the deaths is accounted for in less developed and developing countries among the children population. Due to poverty in developing countries, people lack access to nutritious food and healthcare. Thus, children from low-income families are affected, and their right to life and survival is infringed on (Guariguata &Jeyaseelan, 2019). The NCD Alliance (2014) concurs that undernutrition affects children's growth and development and affects the quality of life. Hence, due to NCDs, the vulnerable and those disadvantaged get sick and die due to unhealthy diets (WHO, 2021). As such, the deaths violate a person's right to life, survival, and development.

The lack of access to a quality life means that the state violates a person's right to life, survival, and development. The state is also obligated to ensure that the child is protected against NCDs. If the child is already diagnosed, the child should also be given the opportunity by the state to enjoy a high quality of life (Guariguata & Jeyaseelan, 2019). The United Nations System Standing Committee on Nutrition (UNSCN) (2018) and the NCD Alliance (2014) agree that the trend of NCDs in children compromises their quality of life and threatens their growth and development, thus decreasing the child's life expectancy. Therefore, it is the state's responsibility as part of the UN to ensure that conditions are appropriate for people to live their lives healthily through the provision of its health care system (Gruskin, Ferguson, Tarantola, & Beaglehole, 2014).

2.7.1.3.1.2 School performance through physiological changes

Malnutrition in school-aged children significantly impairs learning ability, health, and cognition. Thus, affecting school performance through physiological changes and the ability to participate in school. Hunger is also a major obstacle to children's education. Therefore, many children in food insecurity areas are out of school (Zenebe, Gebremedhin, Henry & Regassa, 2018).

In comparison to students who don't eat a balanced diet, those who do perform better on exams, exhibit better behavior, are more likely to attend class, and complete their given work more thoroughly (Prangthip, Soe & Signar, 2019).

2.7.1.3.1.3 Poor school attendance

The poor quality of nutrition of students can lead to illnesses, headaches, and stomach-aches, keeping them from attending school (Brown, Beardslee, & Prothrow-Stith, 2008). It has been shown that students who are provided with nutritious food that contains protein, carbohydrates,

and glucose are more focused, concentrate better, and have greater energy levels (Bellisle, 2004; Sorhaindo & Feinstein, 2006).

2.7.1.3.1.4 Increase in school dropout rate

Having inadequate nutrition can permanently negatively affect the child psychologically and hinders the ability of the mind to function. Students or learners who stun or waste are more likely to have poor performance in school due to malnutrition's impact on the brain and a likelihood for malnourished children to leave school sick, thus dropping out of school.

2.7.1.3.1.5 Poor academic performance

Hence, proper nutrition, good health, school attendance and school attainment are interrelated. Krause (2012) concurs that proper feeding must be done at the early stages of life when improving a person's health because malnutrition affects academic performance and achievements at the early stages of a child, impacting productivity later in adulthood. Malnutrition prevents people from reaching their full potential. Children who suffer from malnutrition do not do well in school, limiting future employment opportunities. Malnourished adults are less able to work, contribute to the local economy, and care for their families.

2.7.1.3.1.6 Retarded socio-economic growth

For children, malnutrition results in a nation with a retarded socio-economic growth due to stunted mental and physical growth, resulting in disability and death (Iddrisu et.al 2021). Children who suffer from malnutrition find it difficult to concentrate in school, making it difficult for teaching and learning. Difficulty in learning for children forces them to be absent from school regularly, resulting in them dropping out of school. Hunger, therefore, exacerbates poverty for this learner as their productivity will be inhibited, slowing down the economic growth and putting pressure on the health sector.

2.7.1.3.1.7 Burden of disease on the health sector

According to Hernández-Vásquez & Tapia-López (2017), nutrition of children in lower socio-economic counties is a problem especially to public health as it adds a burden of additional diseases such as NCDs, underweight, stunting, impaired cognitive function, poor school performances, higher risk of infection, ill health, and death on an already fragile system. Malnutrition in children remains a major public health problem in many developing countries.

2.7.1.3.2 Short-term consequences

This section focuses on the short-term consequences of undernutrition.

2.7.1.3.2.1 Reduced concentration span

The research done by Kellogg's in 2016 indicates that hunger affects children's learning ability. A significant proportion of (81%) teachers said that hungry children could not concentrate and learn as they were lethargic. Perhaps more disturbingly, more than a quarter of teachers (26%) have seen a child fall asleep in class due to a lack of food or drink. These effects can significantly affect a child's ability to learn and reach their full potential in school. Hungry learners may not have the energy to concentrate and focus on class, forcing them to sleep during schooling hours (Borkowski, Ortiz-Correa, Bundy, Burbano, Hayashi, Lloyd-Evans, Neitzel, & Reuge, 2021).

2.7.1.3.2.2 Behavioural problems

According to Walthouse (2014), malnutrition can cause behavioural problems among learners with insufficient nutrients as those learners become uncomfortable, thus disturbing the whole class. Therefore, hungry children in the class disturb their own learning and the learning of other learners creating an unconducive teaching and learning environment (Iddrisu, Monteagudo-Mera, Poveda, Pyle, Shahzad, Andrews & Walton, 2021). Research shows that children from families who are unsure where their next meal may come from are more likely to have lower grades or marks, and higher repetition rates of a grade, among other challenges.

2.7.1.4 The cost of malnutrition

According to estimates, malnutrition costs South Africa about US$1.1 Billion annually in GDP due to vitamin and mineral deficiencies, although it would only cost US$55 million to alleviate this problem (Iddrisu, Monteagudo-Mera, Poveda, Pyle, Shahzad, Andrews & Walton, 2021). A malnourished child exhibits some if not most of the following symptoms: faltering growth; change in behaviour, including unusual irritability, slowness, or anxiety; tired more easily and with lower energy levels than other children.

2.7.1.4.1 Lack of interest in the environment and inadequate emotional development by school age

Young children learn social and emotional skills such as managing emotions, sharing with others, and following directions during their first few years of life. These talents serve as a

basis for the development of literacy, numeracy, and other cognitive abilities that are necessary for academic and personal success. Research indicates that malnutrition in early life results in reduced social responsiveness, a lack of interest in the environment and inadequate emotional development by school age (Suryawan, Jalaludin, Poh, Sanusi, Tan, Geurts, & Muhardi, 2021). When we are hungry, we feel uncomfortable and irritable, which might affect our mood. There is evidence that a change in glucose levels can affect mood for a long time, resulting in the less socialising, activities, and lack of interest in learning for learners.

2.7.2 Micronutrient- related malnutrition

Vitamin and mineral deficiencies, often known as micronutrient deficiencies, can be combined together. Micronutrients help the body make enzymes, hormones, and other compounds needed for normal growth and development. In terms of global public health, iodine, vitamin A, and iron are the most important; their insufficiency poses a serious threat to the health and development of populations globally, particularly children and pregnant women in low-income nations (WHO, 2021).

2.7.2.1 Causes of micronutrient- related malnutrition

Micronutrient malnutrition is caused by a range of circumstances including poverty, a lack of access to a diversity of foods, a lack of awareness about ideal dietary habits, and a high prevalence of infectious diseases (Shanshan, Jingqiu, Shanshan, Sheng & ZHANG, 2018). This section discusses the causes of micronutrient- related malnutrition.

2.7.2.1.1 Poverty

Fresh fruits and vegetables are rather expensive, which exacerbates the situation in low-income homes. Unfortunately, most fruits are also substantial sources of a variety of minerals, such as vitamins A and C, folate, and potassium, which are all underutilized by children from low-income families. The same is true for vitamin B12. Eggs, milk, cheese, milk products, meat, fish, shellfish, and poultry are the finest sources of vitamin B12. Regular use of these items comes at a high cost, which may be prohibitive for rural and poor families (Shanshan et al. 2018).

2.7.2.1.2 Lack of access to a diversity of foods

Overall, poor and low-income children's diets are less diverse, particularly in the vegetable, fruit, and animal food groups, resulting in a higher stunting rate and likely lower physical and mental development. Both cultural and structural factors contribute to the lack of nutritional

diversity. Poor South African's diets are still centred on plant items, and their energy density is primarily reliant on starch. This is especially true for rural youngsters, whose diet consists predominantly of high-glycaemic-index carbohydrates like flour, rice, or maize (Shanshan, et al. 2018).

A lack of any one of the micronutrients has a wide range of deleterious consequences. Goiters are caused by iodine shortage, anaemia is caused by iron insufficiency, and vitamin B12 deficiency can induce a variety of neurological problems, including indications of psychological disorders (depression, memory loss, sense perception loss etc.). It is obvious that micronutrient deficits have serious implications (Shanshan et al. 2018).

2.7.2.1.3 Lack of awareness about ideal dietary habits

Lack of nutrition education, restricted access to nutritionists, and limited resources, are all structural factors. Demographic considerations clearly play a role. Rural families are often poorer and have less education than their urban counterparts; both criteria have been linked to the direction and severity of the rural-urban nutritional quality gap (Shanshan et al. 2018).

2.7.2.2 Extent of micronutrient- related malnutrition

Ritchie & Roser (2017) indicates that micronutrient deficiency affects more than two Billion people worldwide, according to the WHO. At the very least, 795 million people worldwide suffer from severe unpleasant effects as a result of micronutrient deficiencies. Malnutrition stunts the growth of a quarter of all children worldwide, causes 45 % of child fatalities under the age of five, and kills 2.6 million children each year (Mrimi, Palmeirim, Minja, Long & Keiser, 2022).

According to Modjadji and Madiba (2019), 1 in 8 school-going children are suffering due to micro-nutrient deficiencies. The most frequent micronutrient deficiency and cause of anaemia in the world is iron deficiency. Iron deficiency is responsible for around 42 % of anaemia in children under the age of five. Anaemia has been linked to vitamin A deficiency, though the consequence is more likely to cause night blindness (Mrimi et al. 2022).

Over 2 billion people suffer from anaemia and iron deficiency in virtually all countries (WHO 1992). Pre-schoolers (as many as 50 % may be anaemic) and women are the most affected, but men and older children can also suffer from anaemia. Children and infants with anaemia exhibit low physical growth, reduced resistance to infections, and slow learning abilities. This

condition can negatively impact the effectiveness of work and impair reproduction in adults (Gorji & Ghadiri, 2021).

The WHO recommends a greater dose of oral vitamin A supplementation (30 mg) for babies in areas with a high prevalence of insufficiency, however only a 10% reduction in vitamin A deficiency has been observed. Despite these efforts, vitamin A insufficiency still impacts poor populations in low-income nations disproportionately, with more than a quarter of the malnourished population being vitamin A deficient. (Mrimi et al. 2022).

According to Neufeld, Beal, Larson & Cattaneo, (2020), there is a scarcity of current data on the magnitude and distribution of micronutrient deficiency worldwide and in many nations. Anaemia has been used as a proxy for malnutrition due to nutritional deficiencies. Micronutrient deficiencies are still a major public health issue, especially in underdeveloped nations. In 2011, about 6.9 million children under the age of five perished around the world.

More than one-third of these deaths and 11% of the global total disease burden were caused by inadequate breastfeeding and micronutrient deficiencies (especially vitamin A and zinc). Stunting affects 165 million children under the age of five, with 101 million being underweight and 52 million being wasted. Around 90% of these people live in just 36 nations, with the highest rates in Southeast Asia and Sub-Saharan Africa, and India alone accounts for 36.3 % of the overall stunted population. Malnutrition among children has decreased significantly in recent decades, and progress has been done, but at the current rate, it is nearly impossible (Bhutta et al. 2013).

2.7.2.3 Consequences of micronutrient- related malnutrition

Micronutrient deficits have even more severe implications in developing countries, where starving rates are substantially higher than in rich countries (Mrimi et al. 2022). Hence, this section discusses the consequences of micronutrient- related malnutrition.

2.7.2.3.1 Poor physical and mental development in children

Malnutrition affects critical development outcomes such as poor physical and mental development in children, illness vulnerability or exacerbation, mental retardation, blindness, and overall losses in productivity and potential due to micronutrient deficiencies. Micronutrient deficiency, unlike energy-protein malnutrition, has less obvious health consequences; as a result, it is frequently referred to as "hidden hunger" (the two terms can be used

interchangeably) (Hannah-Ritchie & Max-Roser, 2017). The WHO (2021) concurs that children who have micronutrient-related malnutrition with vitamin and mineral deficiency are children who suffer health problems and do not develop properly due to insufficient intake of vitamins and minerals (WHO, 2021).

2.7.2.3.2 Schooling and performance of a child

Khanam, Nghiem, & Rahman (2011) concurs that malnutrition affects a person's overall health, especially a child, while affecting the schooling and performance of a child (Khanam et al. 2011). Walthouse (2014) attests that mental development occurs quickly in the early ages. Hence, a shortage of nutrients within a child's body may result in psychological effects, such as depression, anxiety, irritability, apathy, poor sleep pattern and loss of concentration which can temper the child's ability to learn, resulting in long term negative effects.

When compared to students with adequate nutritional status, those who were stunted had a 79% lower likelihood of achieving good academic achievement. Underweight students were 37% less likely than their peers to achieve great academic performance in terms of their nutritional state.

2.7.2.3.3 Diseases and death

If children depend mainly on one food group, such as a meal highly dense in starch (pap), it does not meet the aim of addressing the micro-nutrient deficiencies. Micro-nutrient deficiencies such as vitamin A deficiency and anaemia. Over time, this can lead to night blindness and eventual blindness (xerophthalmia). As a result, young children have a high rate of illness and death due to impaired physical growth and infection resistance. Two-thirds of these children are likely to die each year; tens of thousands of children are permanently blinded each year (Walthouse, 2014).

2.7.3. Obesity

Obesity and overweight have different definitions across time; however, it can be described as an excess of body fat (BF). There is no universally accepted cut-off point for overweight or obesity in children and adolescents. (Sahoo, Sahoo, Choudhury, Sofi, Kumar & Bhadoria, 2015). The 95^{th} percentile of body mass index (BMI) for age was defined as overweight, while the 85^{th} to 95^{th} percentile of BMI for age was defined as "at risk for overweight. Overweight was defined as being at or above the 85th percentile of BMI, while obesity was defined as being at or above the 95th percentile (Williams, Going & Lohman (in Sahoo et.al, 2015)),

2.7.3.1 Causes of obesity

Obesity is thought to be an illness with various origins because the method of its development is unknown. Environmental factors, lifestyle preferences, and the cultural milieu all play a part in the global obesity epidemic. Obesity and overweight are often thought to be the outcome of increased calorie and fat intake. On the other hand, there is evidence that excessive sugar consumption from soft drinks, larger portion sizes, and a continuous drop-in physical activity have all contributed to the global obesity epidemic (Aggarwal & Jain, 2018). In this section causes of obesity are discussed.

2.7.3.1.1 Dietary factors

Poor diets mainly consumed by children include fast food, processed foods, and undiversified food (WHO, 2021). According to the World Cancer Research Fund International and The NCD Alliance (2014), eating food high in salt, trans fat and saturated fats, and processed meats results in obesity and overweight, which increases the chances of developing NCDs, due to high number of calories they contain. A diet that consists of a high intake of fruits and vegetables, such as a plant-based diet, contributes to fighting against NCDs by promoting a normal healthy weight and fighting against obesity. (Guariguata & Jeyaseelan, 2019).

2.7.3.1.2 Snacks and beverages high in sugar

Several countries in the region report that most secondary school students (ages 13 to 15) have consumed sugary carbonated soft drinks in the past 30 days. Socioeconomic development and globalization have led to a shift away from the traditional, healthier diet in the region, which generally consists of vegetables, fruits, whole grains, and moderate amounts of fat and meat malnutrition (Phillimore, Sibai, Rizk, Maziak, Unal, Abu-Rmeileh, Ben-Romdhane, Fouad, Khader, Bennett, & Zaman, 2019). The availability of soft drinks and sugary drinks in the lives of young people adds significantly to their calorie consumption. Salt, high-saturated fat, highly processed foods increase among the young population.

2.7.3.1.3 Portion size

In the last decade, portion sizes have climbed dramatically. Excessive calorie consumption is caused by eating large portions and snacking on high-calorie items often. Weight growth and, as a result, obesity can result from this energy imbalance (Aggarwal, & Jain, 2018).

2.7.3.1.4 Level of physical activity

The walking distance to reach schools plays a huge role in the obesity of the learners as they burn less calories than they receive, which exacerbate weight gain resulting NCDs. Children do not walk to school anymore and are now transported by parents, taxis, or school transport programmes. One can conclude that leaners in urban areas in quantile 4-5 experience the better forms of malnutrition, which is related to the affluent, than the learners in rural areas in quantile 1-3 due to less physical activity of travelling short distances to the school or rather using transport to get to the school (Phillimore et.al, 2019). The circumstance of the learners is different, and thus a one size fits all approach is unfair.

2.7.3.1.5 Sedentary behaviour

Sedentary behaviour is one of the major variables connected to obesity. Obesity prevalence increased by 2% for every additional hour of television watched every day. In recent years, television viewing among young children and teenagers has increased considerably. The quantity of time spent in sedentary habits has increased, whereas physical activity has decreased. According to research, the amount of time youngsters spends too much time watching television and on cell phones. The more time you spend watching television and cell phones is the more you eat junk food, such as sweetened cereals, sweetened beverages, and salty snacks (Sahoo et.al, 2015).

2.7.3.1.6 The impact of media

Despite the limitations in objectively quantifying media impact, additional research mentioned underscores the importance of advertising effects. Adolescent violence, smoking, and the establishment of unrealistic body ideals have all been linked to media exposure. It is suggested that harmful food marketing be regulated, as well as media campaigning to promote healthy eating (Guariguata & Jeyaseelan, 2019).

2.7.3.2 Extent of obesity in the world & South Africa respectively

In this section the extent of obesity is discussed in the world and in South Africa respectively discussing the numbers and types of people who suffer mostly form undernutrition.

2.7.3.2.1 The world

Overweight children under the age of five were expected to be over 42 million worldwide in 2010. Approximately 35 million of them live in poor countries (Sahoo et.al, 2015). Lee &

Yoon, (2018), concurs that obesity has become more common among children and adolescents (ages 2–18 years), with more than 100 million afflicted in 2015. According to the WHO, (2021), around 462 million adults worldwide were underweighting in 2014, whereas 1.9 billion were overweight or obese.

In 2016, 155 million children under the age of five were expected to be stunted, with 41 million being overweight or obese. On a global scale, UNICEF (2019) indicates that one out of three children below the age of five is overweight. In 2020, 38.9 million people worldwide were overweight or obese. Childhood obesity and overweight are on the rise in low- and middle-income countries.

2.7.3.2.2 South Africa

Obesity in children is one of the most important public health issues of the twenty-first century. The issue is widespread, impacting many low- and middle-income countries, especially in urban areas. The incidence has risen at an alarming rate. The UNICEF (2018) attest that South Africa is burdened with two forms of malnutrition. 13% of school-going children are overweight at the primary school level, while 27% are underweight.

An overall 35.6% for both males and females are overweight at the secondary school level while 12.9% is underweight. Children suffer from various forms of malnutrition. Some children are severely malnourished, while others are only mildly malnourished. The majority of children who are beneficiaries of the feeding scheme in quantile 1-3 suffer mainly from undernutrition related to both wasting and stunting, with a minimal number of learners suffering from overweight or obesity.

Whilst learners in quantile 4-5 schools mainly suffer from obesity or overweight rather than wasting and stunting. The WHO (2021) attest that learners from lower to middle-income regions suffer mostly from stunting and wasting while those in developed countries suffer from overweight and obesity. A survey of the school-going children indicated that 47% of the learners in South Africa buy unhealthy foods and snacks from the school tuck-shops regularly, especially those in quantile 4 and 5 schools thus, putting their health at risk and at risk of having NCDs (UNICEF, 2018).

2.7.3.3 Consequences of obesity

In this section, various consequences of obesity are discussed.

2.7.3.3.1 Social interaction

Childhood obesity has been considered as one of the most stigmatizing and socially unacceptable conditions. Children who are overweight or obese are frequently mocked and/or bullied because of their weight. Negative stereotypes, discrimination, and social marginalization are among the challenges they encounter. Obese children are frequently rejected from activities, especially those that involve physical effort (Branca, Lartey, Oenema, Aguayo, Stordalen, Richardson, Arvelo & Afshin, 2019).

Obese youngsters find it difficult to participate in physical activities since they are slower than their peers and suffer from shortness of breath. These negative social issues can lead to low self-esteem, low self-confidence, and a bad body image in youngsters, as well as affecting their academic achievement. All of the aforementioned harmful consequences of obesity and overweight in children and adolescents can be disastrous (Branca et al. 2019).

Obesity's social implications may lead to ongoing weight management challenges. Overweight children prefer to escape to secure areas, such as their homes, to protect themselves from unfavourable words and attitudes by seeking solace in food. Furthermore, overweight children have fewer friends than children of normal weight, resulting in less social engagement and play, as well as more time spent in sedentary activities (Branca et al. 2019).

2.7.3.3.2 Academic performances

Obesity in children has also been linked to poor academic performance. According to a study, overweight and obese youngsters were four times more likely than their normal-weight counterparts to report having troubles at school. They are also more likely to miss school, especially those with chronic illnesses like diabetes and asthma, which can have an impact on academic achievement (Sahoo et.al, 2015).

2.7.3.3.3 Reduced life expectancy & medical consequences (Diet- related NCDs)

The global life expectancy for females is 75 years and for males is 71 as of the year20220 in developed countries. While in developing countries, the life expectancy is 66 for females and 63 for males, with the affected population mainly being infants, children, and adolescents (WHO, 2020).

Obesity in children has been linked to a variety of medical issues. Fatty liver disease, sleep apnoea, Type 2 diabetes, asthma, hepatic steatosis (fatty liver disease), cardiovascular disease,

high cholesterol, cholelithiasis (gallstones), glucose intolerance and insulin resistance, skin conditions, menstrual irregularities, impaired balance, and orthopaedic problems are examples of these conditions. Most of the above-mentioned medical issues are often referred to as NCD's (Shanshan et al. 2018).

2.8 Conceptual overview of NCDs

NCDs diseases are usually defined as conditions that have long-term effects and are not contagious. These conditions are considered non-communicable diseases unless they are infectious. Since they can't be cured, they often lead to deaths due to lifestyle factors such as poor nutrition. Currently, the WHO only focuses on preventing these conditions (Lane, Davis, Beattie, Gómez-Donoso, Loughman, O'Neil, Jacka, Berk, Page, Marx, & Rocks, 2021).

Finlay (2020) concurs that NCDs are defined as diseases that are not spread directly from one person to another. Cardiovascular diseases (CVDs), cancer, type 2 diabetes, respiratory diseases (such as chronic obstructive pulmonary disease), and mental health problems are the most common NCDs. As NCDs are defined, microbial involvement (transferability) is excluded, and instead, genetic, environmental, and lifestyle factors such as poor nutrition are highlighted. Data repeatedly demonstrates that dysbiotic microbes are associated with various NCDs (Finlay, 2020).

2.9 Extent of NCDs

NCDs account for more than 70 % (41 million) of all deaths worldwide. Though NCDs are mainly associated with adulthood, they are also prevalent in children and strongly impacts children together with adolescents throughout the spheres of adulthood life. NCDs were responsible for more than 2.1 billion child premature deaths worldwide in 2017. All regions of the world are being affected by NCDs, affecting people of all ages and income levels. Developed countries have the biggest problem with NCDs, with over three-quarters of deaths occurring there (32 million). Currently, NCDs are the leading cause of death in all regions, this has also become true in Africa (Kaiser Family Foundation (KFF), 2019).

According to Samodien, Abrahams, Muller, Louw, & Chellan (2021), excess body weight is thought to be responsible for more than 90% of type 2 diabetes, 68 % of hypertension, 45 % of ischemic stroke, and 38 % of ischaemic heart disease cases in South Africa. The fast demographic and epidemiological transformation that is occurring in Sub-Saharan Africa is

thought to be the primary force behind the rising risk, prevalence, and burden of cardiovascular diseases, diabetes, and neurodegenerative illnesses.

NCDs, place a significant burden on individuals, especially children, communities, and economic resources. The management and treatment of NCDs in children can be a lifelong challenge (Branca et al. 2019). Approximately 60% of South Africa's children are currently disadvantaged, with severe socio-environmental conditions known to have a negative impact on development, leading to a slew of health issues in adulthood as a result of high unemployment and poor nutrition. The most frequent chronic disorders in children are asthma and chronic obstructive pulmonary disease, which affect up to 13% of children before the age of 14. Unlike asthma, whose risk factors are difficult to change, Chronic obstructive pulmonary disease (COPD) is a preventable disease caused mostly by tobacco smoke (both active and passive smoking), home and industrial air pollution, and the high incidence of tuberculosis in South Africa. It is the cause of significant impairment and mortality among children in South Africa (Bradshaw, Steyn, Levitt & Nojilana, 2011).

Due to obesity and undernutrition being a double burden in South Africa, it can be highlighted that both the poor and the rich suffer from NCDs. But it is also clear that the number of those from poor regions is high; thus, an increase in NCDs in poor developing countries. Hence, to school nutrition programmes such as the NSNP are essential as a means to address the issue of poor nutrition.

2.10 Comparison of nutrition programmes in other countries

School lunch programs, also known as school feeding programs, have been introduced worldwide to meet students' nutritional needs while promoting their learning abilities. Zenebe, Gebremedhin, Henry & Regassa (2018) attest that the School Feeding Program (SFP) is a targeted safety net program that provides educational and health benefits to learners that are at risk of chronic hunger or for children who are exposed to severe food scarcity.

The Food and Agriculture Organization of the United Nations (FAO) indicates that the School Meals Program (SFP) is a tool that brings children worldwide to school (FAO, 2015). In developed countries such as the USA, France, and England, millions of children have benefited from SFPs. Furthermore, SFP’s have benefitted learners around the African continent in countries such as Ethiopia, Botswana, and Lesotho. SFPs benefits children from disadvantaged backgrounds as measured by physical growth and cognitive ability indicators. School meals

can reduce malnutrition and improve school enrolment, dropout, and attendance (Zenebe, Gebremedhin, Henry & Regassa, 2018).

2.10.1 Internationally

Since the nineteenth hundred, the programs have been necessitated by poverty and child hunger, with countries such as Britain providing learners with school dinners, the USA providing breakfast such as oatmeal and milk, and Africa providing dried fruits and citrus (Banda, 2021). Thus, feeding schemes are seen as global tools that socially protect children, relieves parents from the financial burden and assist in keeping school children within the school education system.

2.10.1.2 United States of America

In the USA the SFP is known as the National School Lunch Program (NSLP). The NSLP is a nationally funded food program that serves students in public and private schools, as well as in residential childcare facilities. Every school day, it serves nutritionally balanced, low-cost, or free lunches to youngsters. The National School Lunch Act, enacted by President Harry Truman in 1946, launched the program. USA students are offered meals such as, but not limited to a free lunch of chicken, whole wheat bread, and salad (Feldman, Veiros & McGill, 2018).

2.10.1.3 France

In France, the SFP is known as the French school lunch programs (FSLP), because they are designed to educate pupils how to eat, French school lunch programs are part of the nation-building process. French school lunch programs teach children about nutrition, gastronomic pleasure, and French culinary heritage in addition to providing enough calories for classroom study (Aliyar, Gelli & Hamdani, 2015).

The Ministry of National Education in France establishes precise government laws outlining the nutritional components that should be present in each meal, as well as how to balance meal components across several weeks. Snack items like sodas and potato chips are never allowed in cafeterias in France, while decadent delicacies (such as ice cream or French fries) are only offered once every few weeks. France offers learners meals which includes items such as and not limited to Pike, green beans, Parisian mushrooms or rice, salmon, ratatouille, bread slices, celery and carrot salad, oranges, and doughnuts (Aliyar et al. 2015).

2.10.1.4 England

In London, England the SFP is known as the Free School Meals Pilot Scheme (FSMPS). Two years ago, the London Council has launched a pilot program for free school meals. The scheme, which offers free school breakfast and lunch to all students regardless of income, was created in an effort to combat the growing food poverty crisis in parts of the UK. The London council claimed that the national free school meals system was broken, causing many children to arrive at school hungry and stay hungry all day (Taylor, 2020). The meals in London schools consist of and are not limited to pasta, fresh broccoli, sliced bread, and fresh seasonal fruits (Feldman et al. 2018).

2.10.2 Continentally

According to Wang & Fawzi (2020), SFPs are widespread in high-income countries. Still, they are generally poorly spread in low- and middle-income countries (LMICs), with the highest needs for hunger and poverty alleviation. Most countries in sub-Saharan Africa have school meal policies targeting only the most food-conscious areas rather than being widely available.

2.10.2.1 Ethiopia

In Ethiopia, the SFP is known as the National School Feeding Programme (NSFP). Ethiopia's NSFP is a joint program involving the World Food Program (WFP) and the Federal Ministry of Education. This program was launched in 2005. According to the program guidelines, students will receive a hot lunch of 150g made from either wheat, corn, or beans from Monday to Friday. The data imply that the SFP has increased schoolchildren's dietary diversification and nutritional status. Furthermore, since the introduction of the SFP there was an increase in the percentage of malnutrition reduction, an increase in school attendance and a lower dropout rate. (Zenebe et al. 2018).

2.10.2.2 Botswana

In Botswana, the Food and Nutrition Security (FNS) and education are critical for human growth, according to the Government of Botswana (GoB). This has been proved over time by significant financial investment to education and nutrition-related programs. The initiative has also resulted in a recent increase in the Ministry of Agricultural Development and Food Security's budget allocation for programs aimed at improving food and nutrition security (Zenebe et al. 2018).

To improve its effectiveness and efficiency in fulfilling greater nutrition and economic value to school-aged children and rural households, the School Feeding Programme (SFP) initiative has been updated to incorporate green produce consumption in public primary schools. The main Goal of it is to address malnutrition and hunger issues that have arisen as a result of the country's recurring droughts (Zenebe et al. 2018). The precise Goals of this enlarged SFP project are to avoid children from going hungry during the school day, to offer a balanced diet to children, to keep children in school for the entire day, and to increase school attendance and results.

In Botswana, school-going children receive a box with milk (like a small liquid fruit box of fruit juice) as part of their food that they receive at school every day (Zenebe et al. 2018). It is full of protein and calcium, which is important for bone growth, and full fat to ensure energy. As such it is thus reasonable to give the children so much milk. That is part of their national instructions that children should get that much long-life milk. A factory packs the milk for the department and distributes it to the schools. That milk is imported from SA. It says something about the food quality and the thought and monitoring that goes into determining what children need and measures to ensure that the children get it. It is not a matter of what is in season and the cheapest ingredients that are available.

2.10.2.3 Lesotho

In Lesotho the SFP is referred to as the Lesotho Development School Meals Programme (LDSMP). The government implemented a School Meals Program in its education program to increase enrolment and attendance. The government feeds two-thirds of the country's schools, while the World Food Programme feeds the remaining one-third, which are all in isolated mountainous areas; thus, covering all school children in the country. Schools in Lesotho provides learners with two meals a day for breakfast and lunchtime.

The country also pays caterers to prepare food for children at a fixed rate for each child. The caterers provide five different diversified meals and consist of vegetables and animal protein from eggs and milk. The variety of meals additionally consists of soya mice, wheat, sorghum (Zenebe et al. 2018). It is part of their government catering model to ensure that children meet their daily calorie requirements while at the same time ensuring that learners receive food that is nutritionally based (Zenebe et al. 2018).

It also shows an understanding that learners spend more than seven hours at school. For that period or duration, a normal person should have at least consumed two meals excluding supper or dinner, as it is expected for a child to consume three full, balanced meals a day excluding snacks (Zenebe et al. 2018). As such, they would require more than just one meal that is diversified to receive the basic nutrients and concentrate during teaching and learning.

2.10.3 Food insecurity in South Africa

According to Thorogood, Goeiman, Berry, & Lakeiii (2020), the majority of South Africans are unemployed or unemployable. The majority earns R480 for the child support grant and R350 for the unemployment grant recently introduced as aid for loss of work during the COVID-19 pandemic. Those who do work earn between R5000 and R11000 each month. Thorogood, Goeiman, Berry, & Lakeiii (2020), states that the food poverty line, the lower-bound poverty line, and the upper-bound poverty line are all tracked by Stats SA.

The monthly food poverty level has risen to R624 per person, up from R585 earlier (+6.7%). This is the amount of money required for an individual to buy food to meet the minimal daily energy requirements. This is also known as the extreme poverty level; the lower-bound poverty limit has increased to R890 per person per month, up from R840 previously (+6.0%). The upper-bound poverty threshold is now R1,335 per person per month, up from R1,268 previously (+5.3 %). This relates to food insecurity.

30 % of South African children live in households with a per capita income of less than R571 per month, making them food insecure (Thorogood, Goeiman, Berry, & Lakeiii, 2020). These families do not have enough money to cover their children's dietary demands. The national minimum wage, set at such a low level, serves to institutionalize the low-base wage regime, and keep millions of employees in poverty.

In general, the cost of groceries in South Africa varies substantially depending on income, with nutritious food baskets such as staple foods and protein-rich drinks costing an average of R3618 per month, according to the Bureau for Food and Agricultural Policy (BFAP). Meals in South Africa vary by day; however, breakfast is usually more expensive than lunch and dinner. The above stats indicate that there is a dire need for better food at schools (BFAP, n.d..). Since proper nutrition for children is essential for the quality of life, child growth and the prevention of NCDs, the quality of nutrition in school nutrition programmes, the quantity of food received,

and statistics indicate that there is a dire need for better food at schools. It is vital that attention is also given to the consequences of malnutrition.

2.11 Evaluation of South African NSNP

The success of school nutrition programmes in terms of implementation, as well as the impact that such programs have on academic achievement and nutritional results, is the subject of much worldwide and local discussion. Jaime and Lock (2008) write in a systematic review of school feeding and its impact on obesity that few large-scale studies have been evaluated globally, and that, in any case, evaluations are focused on improving the food environment and dietary intake in schools rather than evaluating their impact on BMI (Graham, Hochfeld, Stuart, & Van Gent, 2015).

Sinousi (2019), attest that the South African NSNP has not yet received any rigorous evaluations. Derex et.al (2018), concurs that the South African NSNP has yet to be subjected to a thorough impact evaluation, partly due to methodological issues. The NSNP makes no attempt to determine whether or not its efforts have a positive influence on children's health and well-being. In terms of nutritional condition, schooling, and job creation for impoverished women, the NSNP has yet to be thoroughly reviewed (Derex et.al, 2018). Despite the request for regular evaluation, there appears to be no such study that uses rigorous efficacy assessments (Graham, Hochfeld, Stuart, & Van Gent, 2015).

The Department of Planning, Monitoring & Evaluations (DPME, 2016) generally agree that the program's success is hampered by major operational constraints. In the first decade of the program, assessments revealed that meals made in schools frequently failed to fulfil the Department of Health's fundamental nutritional criteria, which would assure a balanced meal. Furthermore, flaws in the NSNP are linked to broader structural issues, such as inadequate supply chain management and record keeping, a lack of employees, inconsistencies in the contracting process, and a lack of infrastructure in schools to allow for appropriate food storage and preparation (DPME, 2016; Sinousi, 2019).

Other issues include food quality and quantity, a targeting mechanism (the quintile system) that excluded some impoverished students from receiving NSNP meals, and food gardens that were too small and inadequately maintained to produce enough food (Derex et.al, 2018).

In light of the above discussed literature above (cf. ch 2), the NSNP play a critical role in the development of learners by addressing their nutritional needs and providing them with adequate and nutritious meals. Firstly, proper nutrition is essential for optimal brain development and cognitive function. By providing balanced meals that include carbohydrates, proteins, healthy fats, vitamins, and minerals, feeding schemes ensure learners have the necessary nutrients to enhance their learning, memory, concentration, and overall cognitive abilities. Secondly, adequate nutrition contributes to improved academic performance. Hunger and malnutrition can hinder a child's ability to focus, concentrate, and learn effectively. By providing regular meals, feeding schemes ensure learners have the energy and nutrients needed to actively engage in their studies, leading to better academic outcomes, increased attendance rates, and overall educational achievement.

Thirdly, feeding schemes (NSNP) support the physical growth and development of learners. Proper nutrition is crucial during childhood and adolescence for healthy growth, including height, weight, and overall physical well-being. By providing balanced meals, feeding schemes help learners reach their full physical potential, supporting the development of strong bones, muscles, and immune systems, reducing the risk of illness and absenteeism. Lastly, feeding schemes contribute to improved behavior and mental health among learners. Hunger and poor nutrition can lead to behavioral issues and mental health problems. By providing regular and nutritious meals, feeding schemes alleviate hunger, stabilize blood sugar levels, and provide essential nutrients that positively impact learners' behavior and emotional well-being. This, in turn, creates a positive and conducive learning environment, promoting better social and emotional development among students.

South Africa can learn valuable lessons from other countries regarding feeding schemes. Firstly, countries like Brazil have successfully implemented large-scale feeding programs, such as the National School Feeding Program. South Africa can learn from Brazil's approach of incorporating local agricultural production into the program, which promotes sustainable food systems and supports local farmers. Additionally, Brazil has also focused on nutritional education and community involvement, which South Africa can adopt to raise awareness about healthy eating habits and engage local communities in the feeding scheme initiatives.

Secondly, countries like England have implemented comprehensive school meal programs that prioritize high-quality, nutritious meals for students. England's emphasis on providing fresh, locally sourced, and organic food options can inspire South Africa to prioritize the quality of

ingredients used in feeding schemes. Emphasizing the nutritional value of meals and offering a variety of healthy choices can have a positive impact on the health and well-being of South African learners.

Lastly, countries like the United States have implemented innovative strategies to address food insecurity and ensure access to nutritious meals, such as summer feeding programs and mobile food initiatives. South Africa can learn from these approaches to extend feeding programs beyond the academic year and reach children in underserved areas, including remote rural communities or areas with limited infrastructure.

By studying and adapting successful feeding scheme models from other countries, South Africa can improve the reach, quality, and sustainability of its own feeding programs. Learning from international experiences can help enhance the effectiveness of feeding schemes, promote healthy eating habits, support local economies, and contribute to the overall well-being and development of South African learners. Furthermore, By studying the experiences of neighbouring countries, such as Lesotho, Botswana and Ethiopia, South Africa can gain insights to enhance the effectiveness, community engagement, and cultural relevance of its own feeding schemes.

2.12 Chapter Summary

This chapter addressed the first secondary question. Which is, the necessity of proper nutrition for school-going children from various scholars' perspectives. South Africa's children's nutritional status is decreasing, a sign of chronic malnutrition that has remained stubbornly unchanged for the past 20 years (Thorogood, Goeiman, Berry & Lakeiii, 2020). South Africa has observed a consistent increase in childhood overweight and obesity over the same time span.

Two out of every three children in low- and middle-income countries cannot afford a nutritious meal, and we foresee an increase in the risk of all forms of malnutrition exacerbated by Covid-19 (Thorogood, et al. 2020). Forms of malnutrition continue to be a key underlying cause of infant mortality in South Africa, accounting for one-third of all child in-hospital deaths.

Using the Gini index, South Africa was found to be the most economically unequal society (out of 149 countries). Moreover, more than half of the population (55%) lives in poverty, with 63 % of children experiencing hardship (Samodien, Abrahams, Muller, Louw & Chellan,

2021). Childhood poverty has both short- and long-term implications, and early-life challenges can have a severe impact on growth and development. Children from poor families have greater incidence of acute and chronic diseases, as well as poor physical and mental health as adults. Long-term exposure to adversity in childhood creates a developmental biology of misfortune, involving neurological and epigenetic mechanisms that steer one's life track toward poorer health, unrealized potential, and shorter lifespan (Samodien et al. 2021).

Children with acute malnutrition have weakened immune systems and are more susceptible to infections, which can lead to mortality. They are more likely to be stunted and have long-term developmental impairments if they survive. The statistics are a wake-up call, as these youngsters will almost certainly not reach their full growth and developmental potential as a result of the permanent physical and cognitive harm caused by chronic malnutrition.

Furthermore, children who do not receive appropriate nutrition (due to malnutrition or overconsumption) have delayed development, learning impairments, are impulsive, and are prone to erratic and dangerous behaviour. If poverty and inequality are not addressed, vulnerable children will grow up to be people who are more prone to disease. Harsh socio-environmental conditions in a country with a high NCD burden may contribute to a vicious cycle of poor health outcomes, as seen in the current generation, which could worsen dramatically in future generations (Samodien, Abrahams, Muller, Louw & Chellan, 2021).

It can therefore be concluded that, child malnutrition is a silent type of cruelty that goes unnoticed until the child's health is jeopardized. It slowly eats away at children's potential, compromising their physical and cognitive development, as well as their educational and economic prospects – and it fuels an intergenerational cycle of poverty, malnutrition, and ill-health that costs individuals, families, and the South African economy a lot of money.

Rising unemployment, food prices and school closures have exacerbated these issues, causing a major increase in child hunger, and disrupting children's access to critical safety nets such as school nutrition, early childhood development programs, and health services. In order to cope with the lack of income, poor households eat less and eat less nutritiously.

Failure to optimize nutrition, particularly during fragile young children's vital developmental phases, should be avoided at all costs. It is unquestionably necessary to ensure that appropriate measures are in place to improve the national diet. Healthy foods, on the other hand, are significantly more expensive than less healthy, nutritionally deficient foods. Lean meat, fish,

fruits, and vegetables are often more expensive than oil-heavy processed foods, which are higher in sugar and fat.

This makes it difficult to promote a healthy diet because it is just out of reach for many South Africans. Although mothers buffer their children at the expense of their own health, the implication is that children will go hungry, increasing the risk of stunting as well as their consumption of cheap, but empty calories and their propensity to become overweight or obese. These challenges were exacerbated by the suspension of the NSNP during the Covid 19 pandemic, which made it more difficult and prevented children from accessing school meals. The following chapter covers the NSNP in secondary schools.

CHAPTER 3

National School Nutrition Programme in secondary schools

3.1 Introduction

In this chapter, the researcher consider the second sub-research question: on the National School Nutrition Programme (NSNP) guidelines for secondary schools (RSA DBE, 2009) in general and with specific reference to school breaks. the researcher first provide a background of the NSNP. Second, the researcher consider how the NSNP currently guides secondary schools concerning its three objectives. The first objective is the provision of nutritious meals.

Under the provision of nutritious meals, the following sub-topics are elaborated: The beneficiaries of the NSNP, food components of the NSNP, NSNP feeding time and days, the equipment or infrastructure of the NSNP, and the NSNP leftovers and stock. The second objective elaborates on nutritional education, whilst the third objective elaborates on the development of food gardens.

Third, the researcher consider the functioning of the NSNP. Under the functioning of the NSNP, the following sub-topics are discussed, namely: the NSNP funding; the implementation of the NSNP under two models, the centralised and decentralised model; the legal requirements for implementation; the three key role players of the NSNP and their responsibilities, namely, the food handlers, the coordinators, the provincial and district officials.

Next, the researcher consider the evaluation and monitoring of the NSNP. Then, the upscaling of the NSNP concerning the sponsorship and extension of the NSNP. Finally, the advantages and challenges of the NSNP. The advantages of the NSNP elaborate on the NSNP funding and its funding model (centralised and decentralised model), upscaling and extension, nutritional status and short-term hunger, educational outcomes, economic development, and local empowerment.

The challenges elaborate on the NSNP food menu/components, feeding time, feeding days, unintended beneficiaries, funding (centralised and decentralised model), monitoring and evaluations, nutritional education, equipment and infrastructure, school gardens, upscaling, management, leftovers and stock, untrained food handlers and gardeners. The section below covers the background and the overview of the NSNP.

3.2 Background and overview of the NSNP

The Primary School Nutrition Programme (PSNP) was established in 1994 as one of President Nelson Mandela's first 100 days programmes under the Reconstruction and Development Plan (RDP). Nutritionists suggested that its influence would be limited because it is difficult to repair nutrition deficits among school-aged children, despite its high political priority to achieve optimal nutrition for all South Africans (Derex et al., 2018).

A 1997 study of the then PSNP concluded that the program's primary focus was school meals and advocated a more comprehensive integration of nutrition and school health (Derex et al., 2018). The PSNP was intended to be a temporary solution that would be phased out when other Reconstruction and Development Programme (RDP) programs took over (Derex et al., 2018). Improving education outcomes by providing an early morning snack that met 25% of the recommended daily allowance (RDA) of energy requirements; improving health through micronutrient supplements; improving health through parasite control; and improving health through nutrition information was among the PSNP's Goals (DBE & DPME, 2016).

Nutrition was transferred to the Department of Health (DoH) during the transition period, and a Provincial Technical Task Team for the PSNP was formed (Derex et al., 2018). The PSNP was transferred from the DoH to the Department of Education (DoE) in 2004, and the National School Nutrition Programme was renamed in 2006 (DBE & DPME, 2016).

The NSNP is a government program that forms part of the integrated food security system that works in conjunction with other government departments such as the DoH, social development and land affairs and agriculture (Devereux, Hochfeld, Karriem, Mensah, Morahanye, Msimango, Mukubonda, Naicker, Nkomo, Sanders & Sanousi, 2018).

According to Furphy (n.d.), feeding programs assist parents, guardians, and caregivers who struggle to feed their kids enough food that is both adequate and nutritious. An international study found that offering free school lunches to kids from eligible families may increase average household incomes by 10%. Thus, feeding programs act as a social safety net for low-income households. Thus, the NSNP should be operational even during school breaks. operating school feeding schemes throughout the year is essential for addressing nutritional needs, promoting health and well-being, improving academic performance, addressing food insecurity, fostering equality and inclusivity, supporting physical and mental well-being, and

enhancing student attendance and engagement. It is a vital component of comprehensive educational programs that prioritize the holistic development and success of students.

3.3 Objectives and aims of the NSNP guideline

According to Devereux et al. (2018), the NSNP has three main pillars integrated within the objectives. The NSNP 2014 annual report names them as School Feeding, which provides meals to students on all school days; Nutrition Education, which promotes healthy lifestyles among students and school communities; and School Food Gardens, which promotes food production and teaches students how to grow food (RSA DBE, 2014). As such, this section discusses the three main pillars of the NSNP.

3.4 The provision of nutritious meals

This section discusses the first main objective/ pillar of the NSNP, which is the provision of nutritious meals for deserving learners. Under the provision of nutritious meals, this section elaborates on the following: The beneficiaries of the NSNP, food components of the NSNP, NSNP feeding time and days, the equipment or infrastructure of the NSNP, and the NSNP leftovers and stock.

The school feeding scheme aims to provide nutritious meals for poor learners in quantile 1 to 3 schools (RSA DBE, 2009). The aim is to alleviate learners' hunger in the short term, thus, promoting school attendance and addressing micro-nutrient deficiencies (Gelli, Cavallero, Minervini, Mirabile, Molinas & De La Mother, 2011).

3.4.1 Beneficiaries of the NSNP

From Grade R to Grade 7, all students in Quintiles 1, 2, and 3 public primary schools receive meals. In April 2009, the program was expanded to include Quintile 1 secondary schools. In 2010 and 2011, all Quintile 2 and 3 public secondary schools was included. Daily lunches have been supplied to all school students (RSA DBE, 2009).

Derex et al. (2018) attest that secondary schools were added, and coverage was increased from the poorest quintile schools to all schools in the three poorest quintiles. Currently, the NSNP serves more than 9 million students in over 20,000 schools in quintiles 1–3 across the country (Derex et al., 2018). The NSNP focuses on students in quintiles 1-3 of primary and secondary schools that do not charge school fees. Targeted students in quintiles 4 and 5 are also served,

if resources are available, but most school in the upper quartiles does not (RSA DBE, 2009). The lack of provision of food for the needy children in the upper quartiles raises issues of equality and equity.

3.4.2 Food components of the NSNP/ NSNP Mnandi Recipe book

To meet the required standard of nutrition for schools, the Department of Basic Education (DBE) works with the DoH to create menu options so that schools can choose from the various options. According to the South African Food-Based Dietary Guidelines (FBDG), the government allocates at least two dietitians per province to prepare a school menu. According to Browne (2021), the FBDGs were created in South Africa to address dietary adequacy and prudence. When the dietary recommendations are followed, the result should be optimal nutrition, corresponding to optimal physical and mental development, reduced risk of NCDs, and overall health and well-being.

The FBDG in South Africa recommends that children and adults enjoy a wide range of cuisines and take part in physical activities. To ensure that meals cover wide range of cuisine, the FBDG recommends that starchy foods is made the foundation of the majority of the meals and that foods such as dry beans, peas, lentils, and soy should be consumed regularly. The FBDG further recommends that people drink plenty of safe, pure water, consume plenty of fruits and vegetables, have milk, Maas or yoghurt and fish, chicken, lean meat, or eggs daily. additionally, consume fats in moderation by choosing vegetable oils rather than hard fats, use only a pinch of salt. If you must consume alcohol, do it in moderation and sugary foods and drinks should be consumed in moderation, and not between meals (Vorster, Badham & Venter, 2013).

The NSNP prescribes three components to meals served in all nine provinces, namely: a protein (soya mince, pilchards, eggs, milk, beans, lentils, or peanut butter), a starch (pap, bread, rice, samp or pasta), and vegetables and fresh fruits (RSA DBE, 2009). These menus are featured in the department's Mnandi for Sure recipe book. To supplement school menus, schools must plant fruit and vegetable gardens. Every day of the week features a different menu, with mealie-meal porridge or breakfast cereal being served in wealthier provinces, accompanied by a meal during or before lunch hour and just one meal served in the less-resourced provinces (Devereux, Hochfeld, Karriem, Mensah, Morahanye, Msimango, Mukubonda, Naicker, Nkomo, Sanders, & Sanousi, 2018).

Menus should be prepared in conjunction with dietitians, considering local preferences, habits, and cultural customs (Bundy et al., 2009; Kristjansson et al., 2016). According to Bundy et al. (2009), the recommended energy content of meals depends on the length of the school day: if students are at school for half a day, meals should provide 30-45 % of their daily energy requirements, and if they are at school for a full day, meals should provide 60-75 % their daily energy requirements. They also urge that fortified components be included in the meals, as school meals without these may not deliver essential micronutrients (DBE & DPME, 2016).

The menus and various recipes can be found in the department's Mnandi for Sure recipe book, NSNP guideline and provincial menus, which are utilised by volunteer food handlers (parents and jobless community members who are paid a monthly stipend). The guidelines mentioned above indicate that protein (soy, fish, eggs, milk, sour milk, beans, and lentils), fresh fruit and vegetables, and carbohydrate/starch should be included in the school meal. Every week, a different protein is provided. Soya should only be consumed twice a week. For food to be more flavourful, fats/oil, salt, and flavourings are added. A fresh vegetable or fruit should be served daily (NSNP, 2009).

Also, the menu options that the school chooses must be socially acceptable. Schools are also allowed to use familiar indigenous food and adapt it to learners' local tastes if the quality assurance standards of the DoH are met (RSA DBE, 2009; Graham, Hochfeld, Stuart & Van Gent, 2015). To meet the standards of the DoH, the meals served at the school should fulfil 30% of daily nutritional needs per meal. Therefore, learners at school should be provided with a daily balanced meal that consists of 10–35% protein, 45–65% of your daily calories from healthy starches and vegetables and 20–35% from fats (Graham, Hochfeld, Stuart & Van Gent, 2015). Using fats, oils, salts, and seasoning may also be used but only in moderation.

There is evidence that most learners in South African schools depend only on the school's daily meals. As seen in *Equal Education & Others v. Minister of Basic Education & Others* (2020), seven pupils at Mashoa High School did not have access to food outside of the NSNP, with NSNP coordinators giving them left over food at the end of each term so that these students can eat during the school holidays. During school breaks they were now without nourishment. A grade 12 learner and his sister live on R500 a month, which entails eating pap twice daily with no meat, vegetables, sweets, or milk.

For many students such as the grade 12 learner from Mashoa High School, school meals offered by the NSNP may be the only reliable and consistent source of nutritious food. Hence,

operating feeding schemes throughout the year can help address food insecurity among vulnerable students, ensuring that they have access to meals during weekends, holidays, and school breaks when they may not have access to regular meals at home.

3.4.3 NSNP meals

The NSNP guideline stipulates that leaner are provided with at least one meal a day when they are at school (RSA DBE, 2009). As such most schools provide learners with only one meal in South Africa, contributing only 30% of the daily nutritional needs per meal. Only two provinces, the Western Cape and Gauteng, are known to provide breakfast and lunch to students (Esakov & Vally, 2010). The others provide only breakfast before 10 a.m. There are, and were, no viable referrals by the NSNP for the children to social services. With only one meal provided to learners at schools, it is impossible to reach the recommendations of the FBDG. Every day of the school week, according to the NSNP, students should have at least one nutritious meal. But Esakov & Vally (2010), debate that learners should be served two meals every day: breakfast at 7:00 and lunch at 11:00.

According to News24 (2020), the Western Cape set asides funds for the poor to fund additional feeding schemes after school, during holidays and food packages. In order to feed the future, Food4Education (n.d.) in collaboration with the Ministry of education republic of Kenya provide subsidized nutritious meals to primary school children to improve nutrition, end classroom hunger, improve school attendance and performance.

3.4.4 NSNP feeding time

The NSNP guideline stipulates that on all school days, students are fed. By 10:00 a.m., the feeding of learners should be completed (RSA DBE, 2009). The main meal may be served later if a breakfast is served before the school day begins. Feeding times are set earlier in the day to ensure that students have the energy to focus and stay alert in class. The financial management guidelines for schools (RSA DBE, 2014) attest that feeding should be done by 10:00 a.m., and the DBE confirmed that this is still the guideline.

The department has set a deadline of 10 a.m. Esakov & Vally (2010), believe it to be too late. Many kids are hungry and underfed when they get to school, so it's crucial that they have a meal as soon as possible so that they have the energy to learn and participate in activities (Esakov & Vally, 2010).

3.4.5 Feeding days

School feeding programs typically run for a set number of days per year (on average, 180) and have a specified food basket (Bundy et al., 2009; DBE & DPME, 2016). According to the NSNP Annual Report, schools fed students for an average of 194 days in the 2013/2014 fiscal year. Except for Mpumalanga, all provinces met or exceeded the target of 190 days of feeding, with the Western Cape leading the way with 198 days (RSA DBE, 2014). The above indicates that learners do not receive food on weekends, public holidays, and extended school breaks, as had been seen during extended school closures during the COVID-19 lockdown.

3.4.6 The equipment related to the NSNP

For the NSNP to be implemented in schools, the schools are allocated funds to buy equipment and utensils necessary to serve the learners' meals. Equipment includes gas stoves, large cooking pots and eating utensils such as spoons, plates, and mugs (RSA DBE, 2009). Additionally, to avoid getting food poisoning, the coordinator should ensure that the food served to learners is not expired and is not expiring within the next three months (DPME, 2016).

Water is the most important ingredient, as cooking is sometimes impossible without it (WFP, 2010). Without it, there is no handwashing before and after using the lavatory, which leads to health issues such as diarrhoea and parasitic worm infections, reducing the effectiveness of a nutrition program. To avoid food contamination, the food served to learners must not be placed on the floor, and the area should be well ventilated (RSA DBE, 2009).

Therefore, aside from water, appropriate space for food storage and meal preparation is required, as is equipment to prepare, cook, and serve meals and fuel for cooking. Schools must have adequate infrastructure and equipment for storing food and cooking meals according to Health and Safety rules to prepare nutritious meals. The adequacy of infrastructure at the school level has been a challenge in previous NSNP inspections (Graham et al., 2015). There is a knock-on effect if these facilities are not available or are insufficient for the supply of school meals.

3.4.7 NSNP leftovers and stock

According to the NSNP final report conducted in 2016, over half of principals (55.6%) indicated no food left over after mealtimes, implying that food is left over in 44.4 % of schools.

Nearly a third (29.8%) of principals said that leftover food is given to underprivileged children, with a high of 73.1 % in Mpumalanga (DBE & DPME, 2016). The excess food is donated to Volunteer Food Handlers (VFHs) (4%) (mainly in the Western Cape (23.9%) and Limpopo (14.7%)), given to the community (0.9%), thrown away (0.7%), or used for other purposes, according to the remaining principals (13.5 %).

Furthermore, feeding farm animals is common in the Western and Northern Capes, food being given to individual learners and feeding being repeated later in the day is common in the Eastern and Northern Capes; and teachers eating and taking stock of food are some of the other uses prominent in some provinces (DBE & DPME, 2016). As such, 37.0 % of principals said there is no remaining stock at the end of the semester; 30.8 % said it is kept for use the next term; 35.1 % said leftover food is donated to needy children, and 4% said teachers or VFHs take it home (DBE & DPME, 2016).

3.4.8 Nutritional education

In this section, the second main pillar/objective of the NSNP is nutritional education to encourage healthy lifestyles (RSA DBE, 2009). The integration of nutrition education aims to promote healthy eating through healthy choices. One of the NSNP's goals is to teach students about healthy eating habits and encourage them to make good food choices.

In Life Orientation, learners are expected to learn about healthy living and good food choices, strengthen nutrition education in communities and cause learners to choose healthier food. Nutritional education has no budget on its own. The program was granted 0.5% of the Conditional Grant NSNP budget, together with school food gardens, but no funds were allocated in the 2015-2016 for the Conditional Grant framework. As a result, financing for each component is scarce (DBE & DPME, 2016).

3.5 The development of food gardens

In this section, the third main objective/pillar of the NSNP is discussed, which is the development of sustainable food production to encourage various education stakeholders such as learners, teachers, and community members to develop food gardens (RSA DBE, 2009).

The development of food gardens helps supplement the chosen diet for learners in the department's Mnandi for Sure recipe book and provides stakeholders with the knowledge and skills to feed themselves in the long term (RSA DBE, 2009). Providing learners with proper

nutrition also teaches and enables them to make better choices when choosing food, thus leading them in the right direction to lead a healthy lifestyle that is essential for their overall health and as adults. Hence education on nutrition is also vital.

Schools are encouraged to establish a food garden so that educators and students can learn how to grow fruits and vegetables. Vegetables grown/produced in the school garden can supplement the school meals with fresh and nutritious ingredients. Institution gardens also add to the aesthetic appeal of the school.

According to the NSNP annual reports, the number of schools with food gardens is increasing in most provinces: there were 4,671 school food gardens in 2012/2013 and 8,717 school food gardens in 2013/2014 (RSA DBE, 2014). Despite the absence of statistics for two provinces in 2012/2013, the growth is significant, particularly in the Eastern Cape and KwaZulu-Natal (RSA DBE, 2013). The Free State and the Eastern Cape had the lowest ratio of schools to food gardens, indicating that these provinces have the least food gardens concerning NSNP schools. The data in the annual report contradicts Araya, Amoo, Mofokeng, Makgato, Laurie & du Plooy (2020) claim that the number of school food gardens in South Africa has decreased in recent years and may reflect a recent revival (Araya et al. 2020).

The NSNP has a goal aimed at promoting long-term food production (RSA DBE, 2009). Rather than augmenting the NSNP, the emphasis is on food production as a means of learning. The emphasis is in line with international guidelines that school food gardens should be primarily educational; expecting food production in schools to sustain a nutrition program is impractical and potentially exploitative (Bundy et al., 2009).

3.6 Functioning of the NSNP

In this section, the functioning of the NSNP is discussed under the following sub-topics, namely: the NSNP funding; The implementation of the NSNP under two models, the centralised and decentralised model; The legal requirements for implementation; The three key role players of the NSNP and their responsibilities, namely, the food handlers, the coordinators, the provincial and district officials and finally, the NSNP monitoring and evaluations.

3.6.1 NSNP funding

The NSNP is supported by a Conditional Grant, distributed to provinces under the Division of Revenue Act (DORA) and other Department of Basic Education and National Treasury

directions (Grant Framework 2011/12). The poverty distribution chart utilised in the National Norms and Standards for School Funding, which the Minister of Basic Education gazetted on October 17, 2008, provides the basis for the allocation criteria to provinces.

The NSNP is funded under a National School Nutrition Program grant framework and is managed by the Ministry of Basic Education and the Ministry of Finance. According to an organisation called Section 27, R7.7 billion has been set aside specifically to provide school lunches for the year 2020/2021. An estimated amount of R8.1 billion for 2021/2022 is set aside for allocation, and R8.5 billion for 2022/2023 (Section 27, n.d.; Devereux et al. 2018).

According to the Household Affordability Index (HAI), as of March 2021, the average monthly cost of providing a child with a basic nutritional diet was R710.75. However, only 63% of this was funded by South Africa's child support grant. It indicates that learners are still at risk of undernutrition. Thus, the NSNP is vital in supplementing learners' home meals. But for learners who solely rely on the meals provided only at school. For learners to meet the required basic nutrition standards, they need more assistance, such as food parcels, food leftovers, and social services referrals (Devereux et al., 2018).

Based on the average monthly cost of providing a child with a basic nutritional diet of R710.75, The daily average cost of providing a balanced, nutritious meal is R 7.90. form the budget of R8.1 billion for 2021/2022; the NSNP sets an allocation of R3.60 a day to provide the one meal at schools. The is no budget allocation for school breaks, daily allocation mentioned above is only for the school days and not for when schools are on break. It therefore indicates that the amount allocated by the NSNP is only 41.4% of the required amount needed to provide learners with a nutritious, balanced meal. Thus, the allocated amount per meal by the NSNP is insufficient to feed learners a balanced nutritious meal (RSA DBE, 2021).

3.6.2 NSNP implementation

The DBE uses two models for implementation of the NSNP namely, the centralised model and the decentralised model. The disbursement of funding, contracting of service providers, and procurement of goods and services are all different in the two models. Still, they are both aimed at the same goal: providing nutritious meals to learners in schools (DBE & DPME, 2016).

3.6.3 The centralised model

As previously indicated, the NSNP in South Africa uses a centralised procurement model in some provinces and a decentralised procurement model in others. Province's award three-year tenders and contracts with service providers under the centralised approach. Accepting deliveries, inspecting quality and quantity, and arranging and paying for VFHs and gas are all tasks that schools must perform (RSA DBE, 2009; DBE & DPME, 2016).

The department then decides on the food delivered to schools based on Mnandi's menu book and ensures that the food is compliant with the menu and meets the nutritional standards stipulated in the FBDG (RSA DBE, 2015). The centralised model reaches 6.1 million learners in Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, and the Western Cape (DBE, 2015; DBE & DPME, 2016).

3.6.4 The decentralised model

Schools contract service providers and get cash from the government to pay them in the decentralised model. In the decentralised model, where provincial departments transfer money to schools, they can appoint their own service providers (RSA DBE, 2015). The decentralised strategy targets 3.0 million learners in the Eastern Cape, Free State, Northwest, and Northern Cape.

3.7 Legal requirements for implementation

The NSNP must be implemented following the legal requirements outlined in the following legislation: The *Constitution* of the Republic of South Africa, which states that when spheres of a government contract for goods and services, they must do so in a manner that is "fair, equitable, transparent, competitive, and cost-effective" (RSA, 1996: s.215(3)).

The Preferential Procurement Policy Framework Act, 2000 (PPPFA), provides a framework for preferential procurement towards historically disadvantaged individuals in the provision of goods and services (RSA, 2000:1). The South African Schools Act (SASA) highlights Section 21 functions that may be assigned to schools for them to be able to manage their funds (RSA, 1996b: s.21).

The Public Finance Management Act (PFMA) encourages prudent money management (RSA, 1999). The Division of Revenue Act (DoRA), which is published annually, defines the responsibilities of national and provincial departments in conditional grants, including the submission of business plans, monthly and quarterly reports, and compliance with CGF

conditions (RSA, 2013). The CGF outlines minimum requirements for NSNP implementation and includes dates on which funds will be disbursed, meal cost per learner per day, menu, and fees (DBE & DPME, 2016).

3.8 NSNP key role players and responsibilities

The NSNP is a multi-stakeholder initiative that involves stakeholders at four levels: national, province, district, and school levels. The food handlers, NSNP school coordinators and provincial and district officials all play key roles with certain responsibilities. As such, this section discusses the three main key role players and their responsibilities: food handlers, coordinators, and provincial and district officials.

3.8.1 Food handlers

Food handlers are responsible for the learners' food preparation, cooking and feeding. According to the NSNP (2009), the food is prepared by unemployed community members who are usually parents of the learners enrolled in the school who the School Governing Body (SGB) has nominated. The SGB also plays a part in supporting the NSNP committee by dealing with additional requirements for the successful operation of the NSNP and ensuring that the NSNP effectively identifies unemployed parents of learners within the school to assist as food handlers or gardeners (RSA DBE, 2011/2012).

Food handlers are responsible for the daily preparations, cooking and feeding of learners. At all public schools, quantile 1 to 3, one Volunteer Food Handler is used for every two hundred (200) students (1:200) (RSA DBE, 2009). The ratio is 1:125 in schools with a small number of students. While preparing, cooking, and serving food to learners, the food handlers are also expected to maintain high hygienic food practices (Mawela & Van den Berg, 2018). The food handlers only assist the school for 12 months; after that, new parents should be selected (Aleksynska, 2018).

3.8.2 Coordinators

The NSNP committee must be established consisting of stakeholders such as the principal, the coordinator, the administrator, the School Management Team (SMT), food handlers and gardeners, the SGB (RSA DBE, 2009). The SMT consisting of the school principal, deputy principal (DP) and all the heads of departments (HOD), are responsible for ensuring that the

NSNP runs successful and are the first point of contact at the school level to address any challenges that may arise concerning the NSNP.

The principal is the accounting officer responsible for the management and success of the NSNP (RSA DBE, 2015). The school principal will choose and designate an educator/administrator to serve as the NSNP School Co-ordinator. The educator/administrator designated as a coordinator is responsible for the day-to-day activities of the NSNP. They are in charges of the NSNP's day-to-day operations, such as monitoring and quality assurance, which should include inspecting deliveries (in terms of quantity, quality, and correct invoicing) and keeping the updated records of all the invoices (Mkosi et al, 2013).

Furthermore, keeping up with the important workshops and training dates that need to be attended (RSA DBE, 2009). The NSNP coordinator is primarily responsible for inspecting meal preparation, tasting the meal to be served to learners, keeping records of all the meals that were served and the total number of learners fed daily and compiling a monthly report on the number of students who eat NSNP meals every day and sending it to the district office (Rendall Mkosi et al, 2013).

3.8.3 Provincial and district officials

Officials at the provincial level appoint service providers, monitor and support programs, and create capacity at the district and school levels. Officials at the district level are in charge of program monitoring and support at the school level (RSA DBE, 2014). The DBE & DPME (2016) attest that monitoring and assisting implementation in schools, presenting monthly and quarterly reports, and (in decentralised provinces) reporting on school expenditure are all responsibilities at the district level (National Treasury, 2014). At the national, provincial, and district levels, audits, assessments, and other reviews are regularly undertaken as needed.

The CGF is discussed between the DBE and the provincial education district (, PEDs); the PEDs prepares a business plan, which is authorised by the DBE and given to Treasury; the business plan is used to budget for the requirements and proper running and implementation of the NSNP (DBE & DPME, 2016).

3.9 Monitoring and evaluations

Sanousi (2019) stipulates that monitoring is defined in the literature as an ongoing process by which stakeholders in a program receive regular feedback on its success and development.

National Treasury oversees the CGF, which is distributed to provinces to fund the NSNP in South Africa. For the NSNP to qualify for Conditional Grant money or funding, extensive monitoring and reporting are required. Most of the obligation rests with the districts, and district authorities play an important role in monitoring and promoting school implementation (DBE & DPME, 2016).

The DBE oversees provincial implementation, monitors, and evaluates compliance with the Conditional Grant's conditions, and provides quarterly performance reports and a yearly evaluation report. The DBE also performs school monitoring visits. PEDs are in charge of monitoring and assisting implementation at the district and school levels, implementing budget plans, submitting quarterly performance and financial reports, and reconciling school expenditure against quarterly transfers (in decentralised provinces). PEDs are also expected to monitor school visits (DBE & DPME, 2016).

According to the DBE, a monthly report should be submitted to the circuit or district (RSA DBE, 2011/2012). Regular meetings should be conducted to keep up with new developments concerning the NSNP (RSA DBE, 2011/2012). The school coordinator must report all complaints and questions/queries for assistance and support by calling or filling out a Complaints Form available at the nearest district office (RSA DBE, 2009). Still, the report conducted by the DBE (RSA DBE, 2014) indicates that union members and SGB members were not happy with the monitoring as monitoring was conducted at a lesser frequency than that stipulated in the guideline.

3.10 Upscaling of the NSNP

This section discusses how the NSNP has changed and evolved and highlights room for improvement for the NSNP as the need arises. According to Drake et al. (2016), school nutrition programs are dynamic and evolving; adjustments to program design, such as program goals and objectives, targeting criteria, and scaling-up, are considered a logical continuation of this process. The NSNP in South Africa has evolved, with a change in ownership from the DoH to the DBE, an increase in the quality of food provided (from a daily snack to a hot meal containing three food groups), refinement of the program goal and objectives, and upscaling to secondary schools beginning in 2009.

3.11 NSNP sponsorship and extension

Due to one lunch meal being insufficient and the budget being low to meet the required basic nutrition standards, provinces such as Gauteng and Western Cape have extended the program to include lunch and breakfast. Breakfast was offered in certain schools in the other provinces, either as a school initiative or through external funding from partners, but it was not uniform (DBE & DPME, 2016).

Not all school feeding programs are budgeted for by the ministry - some make up for it by providing food aid to vulnerable groups. Examples include the Western Cape Peninsula School Feeding Association and Gauteng's feeding plans for African children (Banda, 2021; RSA DBE, 2015).

The fact that Gauteng and the Western Cape make provision for serving breakfast as well as lunch, and some schools in other provinces have identified a need and raised funds to do so - for some or all children - suggests there is a need for the provision of food during school breaks, the need for breakfast as well as lunch, particularly in provinces with high rates of child hunger. Gauteng province and Western Cape are in line with the recommendation from the literature that if learners spend half a day at school, the meals provided should meet 30-45% of their RDA energy requirements (Bundy et al., 2009; DBE & DPME, 2016).

3.12 Advantages and challenges of the NSNP

According to Sanousi (2019), the impact of the NSNP appears to be mixed, according to the research. Findings have revealed that the NSNP in Cape Town has increased food quality. The NSNP allows learners to actively participate in learning by reducing short-term hunger and giving them energy. It also helps to decrease some negative classroom behaviours and serves as an additional meal for some low-income students (Sanousi, 2019).

It improves school attendance, class participation, and perhaps student performance on the educational front (Sanousi, 2019). However, the program has had some issues, including food quality and quantity, a targeting method that prevented some impoverished students from receiving NSNP meals, and food gardens that could not produce enough food due to their small size and inadequate maintenance. Therefore, in this section, the study discusses the advantages and challenges of the NSNP

3.12.1 Advantages of the NSNP

This section looks into the advantages of the NSNP in relation to the following sub-topic: The NSNP funding and its funding model (centralised and decentralised model), upscaling and extension, nutritional status and short-term hunger, educational outcomes, economic development, and local empowerment.

3.12.1.1 NSNP funding/procurement

The NSNP funding, as previously discussed, occurs through two models. As such, this section discusses the advantages of both the centralised and decentralised funding models.

3.12.1.2 Centralised model

Long-term contracts with service providers run from 18 months to three years in centralised provinces and constantly interact with the same service provider. In Gauteng, extensive background investigations are conducted before the appointment of service providers (SPs). Some centralised provinces (e.g., the Western Cape) pass supplier information down to schools. Districts in the Northern Cape and North West offer significant assistance to schools in appointing SPs. Small, Medium and Micro Enterprises (SMMEs) and women-owned suppliers are supported in some provinces (KwaZulu Natal, Gauteng, Mpumalanga, and the Northern Cape) (DBE & DPME, 2016).

Pilots in which schools buy their fruit and vegetables have been reported to be successful in centralised provinces. Centralised provinces (Gauteng, the Eastern Cape, the Free State, and the Northern Cape) supply tools to schools to aid in the monitoring of deliveries. The Western Cape has two service providers who process bills weekly and make payments swift. Schools in centralised provinces check delivery schedules against the stock to keep track of deliveries (DBE & DPME, 2016).

3.12.1.3 Decentralised model

Decentralised provinces (Limpopo, Mpumalanga, North-West, Western Cape, KwaZulu-Natal) appear to have a superior delivery system: deliveries are less frequent, but school stakeholders better rate the delivery system, and deliveries are less likely to be late, implying that this model empowers schools to keep service providers accountable (DBE & DPME, 2016). Schools in Limpopo and the Northwest have NSNP accounts that assist in keeping the NSNP funding separate from the school's general account accountable (DBE & DPME, 2016).

Provinces that use a decentralised model have a better chance of getting cash to schools on time. If their financing is late, schools in decentralised provinces have more options since they can negotiate credit with service providers (DBE & DPME, 2016). In decentralised provinces, school-specific budgets and menus provide direction on ordering quantities. Schools in decentralised provinces can work with small businesses to support economic growth in their communities (DBE & DPME, 2016).

3.12.1.4 Advantages of upscaling of the NSNP

It's crucial to remember that the importance of school nutrition programs has been proven beyond a shadow of a doubt. According to the NSNP annual report for 2013/2014, an average of 9,131,836 students received an NSNP meal on an average of 194 school days in 2014 (RSA DBE, 2014). According to data sources, 75.6 % of learners received NSNP meals, reaching the 75% target set in the Action Plan through 2019 (RSA DBE, 2015). This percentage was over 70% in 2011, according to the School Monitoring Survey, General Household Survey, and monitoring reports prepared by PEDs. Between 2009 and 2011, when secondary schools began to be brought into the program, coverage increased steadily from 54% to 70% (RSA DBE, 2015).

The increased coverage is a significant accomplishment. Since 2009, there has also been a focus on enhancing meal quality, such as serving three dietary groups daily, including fresh fruit or vegetables and protein. A specific allocation of roughly R3.7 billion was made over three years (2010, 2011 & 2012) to support the increase in coverage and quality (DBE & DPME, 2016).

3.12.1.5 Nutritional status and short-term hunger

The NSNP meals increase learners' nutritional status; NSNP school meals can alleviate micronutrient deficits, provided they contain the micronutrients that children lack (Shisana et al., 2014). Furthermore, the NSNP meals lessen short-term hunger, enhancing concentration in class, and time on a task usually leads to better learning. Children with HIV and AIDS and those living in poverty and in child-headed households may rely on the school meal for most of their daily food intake (DBE & DPME, 2016).

3.12.1.6 Educational outcomes

Meals encourage families to send their children to school, increasing attendance and enrolment, particularly among girls, and assuring that teaching and learning take place (McEwan, 2010). Staying in school longer and achieving greater literacy levels are expected to positively impact other concerns, including teen pregnancy and HIV vulnerability. Although no evidence for this has been established, it is claimed that the presence of school meals promotes students to spend the entire school day in school. Enrolment, attendance, and time in school as key goals and nutrition as a secondary goal of a nutrition program may contribute to improved educational outcomes (McEwan, 2010).

3.12.1.7 Economic development and empowerment

The emphasis of the meals is cultural; therefore, farming techniques, diet, and food culture are encouraged, and most of the food given is organic and locally sourced (Aliyar, Gelli & Hamdani, 2012). Suppose the food is sourced from local farmers, in that case, the NSNP is also thought to encourage the formation and operation of primarily women's co-operatives, hence boosting local economic growth (Beesley & Ballard, 2013).

3.12.2 Challenges of the NSNP

In this section, the challenges faced in the NSNP are elaborated on in relation to the NSNP food menu/components, feeding time, feeding days, unintended beneficiaries, funding (centralised and decentralised model), monitoring and evaluations, nutritional education, equipment and infrastructure, school gardens, upscaling, management, leftovers and stock, and finally untrained food handlers and gardeners.

3.12.2.1 Food menu /components

The guidelines provided by the FBDG for the NSNP align with what is understood as basic nutrition, but the NSNP in school does not fully adhere to the guidelines. There is also no variation in the fruits that they receive. In most schools, the learners receive one kind of fruit weekly, an orange or an apple. Soya is only consumed once a week, which is less than recommended (Nhlapo et al., 2015).

Rendal-Mkosi et al. (2013) examined the NSNP menus and found that the nutritional value of the meals given by the NSNP provided learners with roughly 15% of their RDA of calories and 26% of their protein requirements. No recipe books were supplied by the DBE that contained portions of dry products to be cooked at any of the schools visited in this study, implying that

the portions may not be precise. Indeed, as the servings progressed, meal sizes shrank, ensuring that all students received some food (Rendall-Mkosi et al., 2013; DBE & DPME, 2016).

Aliyar et al. (2012) examines the nutritional content of school lunches in Ghana, India, Kenya, Mali, Rwanda, and South Africa, comparing them to the WHO recommended daily amount for students aged 10 to 14. While iodised salt is required to be included in meals, South Africa only supplies 59 % of the RDA of iodine. The NSNP also only meets 2% of the world's vitamin A needs (DBE & DPME, 2016).

Nhlapo et al. (2015); DBE & DPME (2016) chose ten schools in Bloemfontein at random and analysed their meals for nutritional composition in relation to the needs of children aged 11 to 18. They write those meals did not match the nutrient criteria for carbohydrates and energy. 40% of the protein requirements were satisfied. Only 10% of meals matched the calcium and zinc requirements, whereas 30% met the iron requirements. The amount of vitamin A and E in the blood was undetectable in both tests. There was a lot of difference in the nutrient content of meals with similar ingredients, which could be owing to long storage periods or exposure to light and oxygen, both of which cause food to deteriorate (DBE & DPME, 2016).

Outside of school, the literature study discovered that South African youngsters eat carbohydrate-rich diets with inadequate levels of other nutrients. Fresh fruits and vegetables and animal protein are scarce, and their diets are monotonous. Fruit and vegetables were the most frequently overlooked food group (Derex et al., 2018). The following reasons were given: NSNP monies were not received, deliveries were not made, and deliveries were short. There were also issues with the amount of food prepared in relation to the number of NSNP approved students in the schools. A large majority of schools cooked more than 100% or less than 80% of the quantities of each food category they were supposed to prepare daily (Nhlapo et al., 2015).

3.12.2.2 Feeding time

Concerningly, 75% of schools in provinces that do not provide breakfast - i.e., all except Gauteng and the Western Cape - finished feeding after 10:00 a.m., with Kwa-Zulu Natal (95.2 %) and the Free State leading the way (97.8%). Limpopo is the only province in which at least half of the schools had finished feeding by 10:00 a.m., as per the recommendations (DBE & DPME, 2016).

Schools still being closed early in the morning, lack of transportation for VFHs to get to the schools, and simply not being able to prepare, cook, and serve huge quantities of food in a short period were the main reasons for meals not being served on time as provided by the VFHs. Other factors given were the arrangement of the school day – students would have only been at school for 90 minutes before needing to take a break for feeding – and, to a lesser extent, late deliveries (DBE & DPME, 2016).

3.12.2.3 Feeding days

According to the principals in the NSNP final report (DBE & DPME, 2016), there were days when no food was given to learners. In the provinces that use the decentralised model, 26.5% of school principals said there were days when the learners weren't fed, including school breaks; this figure was greater among principals in the Eastern Cape and Northern Cape. Principals in provinces employing the centralised model were nearly twice as likely to say there were days when no feeding took place: This response was given by 48.2% of respondents, the bulk of whom was from KwaZulu-Natal (DBE & DPME, 2016).

Funds not being received on time, weather (in the Eastern Cape), teacher/learner/community disruptions (in the Eastern Cape and Northwest), and, to a lesser extent, late delivery by the supplier and lack of fuel were the main reasons given by principals in the decentralised provinces for feeding not taking place. The primary reasons in the centralised provinces were late supplier delivery, monies not being received on time, the tender procedure not being finished (in KwaZulu-Natal), and a lack of gasoline. No water (5.9%) and no gas, wood, or electricity (generally and specifically a concern in KwaZulu-Natal) (5.5%). The distinctions between decentralised and centralised provinces are stark.

3.12.2.4 Unintended beneficiaries

According to the DBE & DPME (2016), NSNP meals are delivered to the intended beneficiaries, low-income learners, but the unintended recipients also utilise them in the school, such as food handlers, educators, and other SGB members. To minimise the stigma associated with eating meals, the DBE encourages teachers and food handlers to eat with the students. However, the CGF financing does not allow for this, and there is fear that unless this is addressed, this practice will diminish the amount of food available for learners' lunches (DBE & DPME, 2016).

Additionally, the unintended beneficiaries consuming NSNP meals are not addressed in the NSNP guidelines (RSA DBE, 2009). Hence the Conditional Grant money does not account for it. The discovery that unintended beneficiaries are not covered by the CGF but are eating NSNP meals is relevant since this practice affects the amount of money that reaches the intended recipients. Therefore, affects the quality and the quantity of food for the intended beneficiaries.

3.12.2.5 NSNP Funding/ procurement

There are some costs associated with the program that the CGF does not fund. Food acquisition (different menu options); food processing (preparation and cooking); distribution (several alternatives currently being used); oversight of funds expenditure and food quality. For example, funding is not provided for the personnel required to manage and implement the program; and personnel needs vary greatly between provinces as the poverty backgrounds of the various provinces also vary; food acquisition (different menu options); food processing (preparation and cooking); distribution (several alternatives currently being used); oversight of funds expenditure and food quality (DBE & DPME, 2016).

3.12.2.6 Challenges of the central model

The centralised model, according to Rendall-Mkosi et al. (2013), is less burdensome on schools. However, they discovered that funds were not transmitted to PEDs and then to schools promptly at the start of the fiscal year, affecting their capacity to pay VFHs. In addition, there have been instances where VFHs have not been paid. Furthermore, some VFHs were not receiving their entire stipend, which was suspected to be attributable to misappropriation, possibly due to the lack of contracts between schools and VFHs (Rendall-Mkosi et al., 2013).

Procurement might take a long time in centralised provinces, resulting in extended contracts rather than recruiting new vendors. The failure to finish tender processes has been cited as to why some schools in KwaZulu Natal cannot feed on certain days and school breaks will have the same issues. Some service providers have been offering services for a long time (10+ years), which is cause for concern (DBE & DPME, 2016). Schools do not always follow the menu, and some schools cannot serve NSNP meals on certain school days due to late delivery by service providers (Graham et al., 2015).

Late deliveries (Mpumalanga, KwaZulu Natal, Gauteng); “short” deliveries (particularly vegetables); delivery of expired/poor quality food or food without an expiration date (the North

West); incorrect quantities (KwaZulu Natal, Limpopo); deliveries after hours (Limpopo, Gauteng, and Mpumalanga); and delivery being expensive are all challenges that are concentrated in specific provinces under the centralised model (the Eastern Cape) (Graham et al., 2015).

3.12.2.7 Challenges of the decentralised model

The disadvantage of a decentralised strategy is that it places a greater administrative burden on schools. Stakeholders in schools are concerned that the NSNP will impact teaching and learning by reducing teaching and learning time and increasing administrative costs. The NSNP co-ordinator –a teacher – has a lot of responsibility, especially in schools that use the decentralised model, which requires orders, liaising with suppliers, receiving deliveries, and financial reporting (Rendall-Mkosi et al. 2013).

Some schools in decentralised provinces have difficulty recruiting service providers because they lack suppliers or the capacity to identify and employ them, and not all schools have service level agreements in place with their service providers. Districts in the Northern Cape and the North West support schools in this area (DBE & DPME, 2016). In two provinces that use the centralised approach, KwaZulu Natal and Gauteng, there are issues with the timely payment of invoices, resulting in service providers being unable to deliver and meals not being provided. Payment of VFHs by service providers does not work properly in KwaZulu Natal.

3.13 Monitoring and evaluations

In most provinces, the NSNP is not adequately implemented, and some of the provided guidelines to the provinces are not effectively implemented (Mawela & Van den Berg, 2018). Hence the NSNP poses advantages and disadvantages, especially to the beneficiaries, which are learners. The guideline mandates that every province uses its methods of monitoring. The basic systems for monitoring and evaluation for all nine provinces vary. They vary based on the stage of development, the setting, and the efficacy.

Lack of monitoring affects the communication with suppliers in many provinces. It means that the tools and methods for monitoring are not efficient enough to identify and rectify the challenges of some schools (Mawela & Van den Berg, 2018). Challenges include non-implementation of food gardens, inadequate quality and quantity of food and menu substitutions, and delays in the delivery of supplies.

The challenges such as improper implementation, establishing food gardens, late deliveries, poor quality of food, and poor quantities remain unattended for longer periods affecting the realisation of the right to basic nutrition and food (Mawela & Van den Berg, 2018). Hence, challenges, such as the problem of implementation, food quality and quantity and delays in delivery should be properly addressed in the guidelines, as there may be little probability of improving children's nutrition, and it may even induce ailments in students. Also, even though there are challenges – children still benefit from the NSNP, and the benefit outweigh the challenges. The challenges can be addressed for the current position and for the issue of school breaks.

Qila & Tyil (2014) concurs that, although NSNP has benefited disadvantaged children, several studies have revealed flaws including food inequitably distributed, stale and often poor-quality food, a lack of variety, with no fruit and vegetables, food stolen by school caretakers and teachers, and government officials' corruption, as well as a lack of proper monitoring. As a result, students in some schools have gone days without eating. As a result, many orphans have dropped out of school or had inconsistent attendance (Qila & Tyilo, 2014).

3.13.1 Nutritional education

While educators are provided with Learning and Teaching Support Material (LTSM) resources and lesson plans to help them cover the Nutrition Education curriculum, the amount of time allotted to Nutrition Education (as part of Life Orientation) is limited. Furthermore, DBE officials from the NSNP Directorate stated that a different branch of the DBE handles curricular issues and that the NSNP Directorate does not collaborate with these colleagues. As such many schools have no extracurricular activities that takes place or that learners partake in.

Extracurricular activities help students' social and personal development abilities; this is a generally accepted standard. Extracurricular activities contribute to the positive development of people. Additionally, extracurricular activities support all facets of human development, independent of peculiarities, and this is especially true in multicultural educational settings where the complete development of students is seen as crucial. Different aspects of human growth, including the physical, emotional, mental, spiritual, and social ones, can be seen from a holistic point of view. Overall, Alexander, Matoti, & Van Zyl, (2021), contend that involvement in extracurricular activities, overall development, and academic success are all causally related.

Education on nutrition and extracurricular activities are linked in a number of ways. They offer hands-on learning opportunities that encourage healthy lifestyle choices, take a holistic approach to students' well-being by integrating concepts related to nutrition, involve role models who can affect students' attitudes and behaviors towards food choices, and engage the community in raising awareness about the significance of nutritional education. Extracurricular activities and nutritional instruction work together to form a dynamic framework that encourages learners to understand and adopt good eating practices. As a result, there is a positive relationship between extracurricular activities and nutritional education (Alexander, Matoti, & Van Zyl, 2021).

3.13.2 The equipment/ infrastructure of the NSNP

Principals reported several infrastructure and equipment-related challenges, including a lack of kitchens, forcing VFHs to prepare food outside (common in KwaZulu-Natal, Mpumalanga, and Limpopo); a lack of adequate preparation areas (common in Gauteng, Mpumalanga, and KwaZulu-Natal); a lack of utensils for food preparation (common in Gauteng, Mpumalanga (prevalent in Mpumalanga, Gauteng, and the Eastern Cape). Overall, schools in KwaZulu-Natal, Gauteng, and Mpumalanga were the most likely to report infrastructure-related issues, with the centralised model provinces reporting these issues most frequently (DBE & DPME, 2016).

If schools run out of fuel, for example, food preparation workers must rely on wood fires (Adelman et al., 2008; WFP, 2010), which is difficult to do when it’s windy or raining. Thus, causing cooking time to be delayed, causing children to receive their meals late and meal preparation personnel to stay longer at work (DBE & DPME, 2016). Previous NSNP reviews have revealed a variety of difficulties related to school infrastructure and equipment. In the Eastern Cape, Rendall-Mkosi et al. (2013) discovered that parents were expected to collect firewood to contribute to the NSNP.

Furthermore, the lack of cold storage facilities impacts both cost and food quality. It demands frequent deliveries of fresh produce: vegetables and fruit are intended to be delivered weekly. However, many schools have reported issues with vegetables and fruit not being delivered on time or on schedule (DBE & DPME, 2016).

The security of the storage locations is also a source of concern. Food is given in large amounts to schools. The food must be kept in a secure and lockable location to reduce the possibility of food theft. Lockable storage rooms were found in most schools in the country (75.1%). The Free State (73.9%), KwaZulu-Natal (49.9%), and the North West (49.7%) had the highest proportion of schools without lockable storage areas, accounting for 22.6% of all schools. In these provinces, food was being stored in a VFH or school staff member's house and transported to school every day in two schools in the Eastern Cape, which is problematic in terms of accountability (DBE & DPME, 2016).

The challenge of a proper kitchen creates a hurdle and makes it tough to prepare food correctly and timeously. Hence, schools are unable to manage meal preparation on schedule (DBE & DPME, 2016). The implications are that if many students are given food during break time, other students may be denied access to food and return to class hungry. The injustice in this situation is that the health and well-being of the students are jeopardised (Mawela & Van den Berg, 2020). Hence, the preparation of meals during school breaks will also be a hurdle.

3.13.3 School gardens

Food gardens in schools are another area where there is room for development. They are undersized and poorly managed, they are currently either not generating enough food or not producing any food to supplement the main meals.

The 2016 NSNP final report discovered that in numerous schools in the Free State, community members had taken over the school garden, which was not being used to serve the school or the students (DBE & DPME, 2016). A vegetable garden has challenges for schools as it necessitates human resources, land, gardening tools, seeds, water, sufficient security, fertile soil, and insecticides, for which schools have no allocated funds (Mawela & Van den Berg, 2020).

Establishing a vegetable garden has its challenge for the coordinators of the NSNP. The workload of coordinators posed a new challenge. The appointed nutrition coordinator lacks commitment because the program is considered extra work without remuneration (Mawela & Van den Berg, 2020).

Proteins like pilchards and soya make up a significant amount of the NSNP meals' cost and are unlikely to be produced locally. hence, the production of school food gardens is important in reducing costs. Rendall-Mkosi et al. (2013) believe that the NSNP has the potential to assist

local food production but that this would necessitate a reform in the NSNP procurement policy/strategy and concurrent support to develop small-scale farmers' capacity to supply food.

3.13.4 Monitoring and evaluating the upscaling of the NSNP

The NSNP in South Africa has evolved and upscaled to secondary schools in 2009. But since 2009, other relevant changes persist, such as the non-feeding of learners during school breaks, weekends and extended closures, and feeding of learners under quantiles 4 and 5, which is still not covered under the NSNP guidelines.

Geographic and individual targeting are the most prevalent ways utilised by the NSNP. Both these utilised method of selecting beneficiaries has challenges. Individual targeting may stigmatise the beneficiaries, while geographic targeting, which targets quantile 1,2 and 3, may penalise poor or vulnerable children living or attending school in areas categorised as better affluent (DBE & DPME, 2016).

Because learners in some quintile 4 and 5 schools in some provinces receive NSNP meals – and in the case of the Western Cape, in a province with lower rates of child hunger than other provinces – there are likely to be needy children attending quintile 4 and 5 schools in other provinces who are not receiving NSNP meals. There is a compelling case to be made for expanding the NSNP to identify students in quintile 4 and 5 schools and providing breakfast to those in need in these schools. Therefore, there must be a balance against the cash available and the upscaling costs.

3.13.5 NSNP Management

Mawela & Van den Berg (2020) indicates that most schools face challenges, especially managing the distribution of food parcels to the needy learners, especially after school, during weekends, school holidays and school closures. Most schools complain that the food is insufficient to sufficiently feed learners a balanced meal consisting of breakfast and lunch, let alone distribute food parcels equally to learners in need Mawela & Van den Berg, 2020).

Most schools also face challenges such as overcrowding caused by the frequent changing of schools during the middle of the school term, with no budget readjustment. Mawela & Van den Berg (2020) agrees that schools may face unanticipated increases in student enrolment due to repopulation. As a result, a food shortage due to lack of allocation top up deprives learners of their right to basic nutrition.

Certain schools admitting more students than in previous years is also a challenge, and the Department of Basic Education does not always make provisions for the increasing number of students. As such, food delivered by the DBE contracted company does not match the number of learners enrolled, leading to shortages. Furthermore, the vegetables are sometimes of inferior quality. Most principals and coordinators saw the lack of a balanced meal and food shortages as a severe obstacle because they undermined the NSNP's Goal (Mawela & Van den Berg, 2020).

Since coordinators are teachers, it is tough to put attention in class to complete your syllabus while supervising food handlers and ensuring that pupils have healthy meals. Therefore, nutrition coordinators frequently left their students unattended to acquire food and examine how food handlers prepared meals. As a result, there is a disturbance in instruction and a reduction in learning contact time (Mawela et al. 2020)

3.13.6 NSNP leftovers and stock

Only 8.6% of VHFs indicated that leftovers were given to them, while 89.8% said they disappeared. However, this issue has been reported to be pervasive in the Free State, with 71.8% of VFHs reporting stock disappearance (DBE & DPME, 2016). The provision of NSNP leftovers to underprivileged children is commendable. Still, the distribution of leftovers to VFHs and teachers and some of the "other" applications are cause for concern. The NSNP guidelines do not address these concerns (RSA DBE, 2009).

3.13.7 Untrained NSNP food handlers and gardeners

According to Mawela (2020), it is the responsibility of the school feeding program's management to encourage personnel to follow proper cleanliness and food safety practices. Many people who work in school feeding programs aren't properly trained. As stated by the NSNP guideline, the food handlers and the gardeners ought to be hired yearly; this means that the food handlers and gardeners are hired on a 12-month contract. After that duration, new food handlers and gardeners must be hired and trained as newly appointees.

The regular change in food handlers is good for poor community members to play a part in the NSNP and earn a living, which positively impacts poverty. In contrast, the regular change may also mean that more money is to be spent on training new food handlers, which may lead to many schools not training them, leading to food handlers undermining the nutritional impact of the food and NSNP in general. Sanousi (2019) attest that many food handlers in South

African school are untrained, especially those in Limpopo and the Eastern Cape. Lack of skills for the food handlers dealing with food leads to unsafe food consumption, which leads to diseases, further undermining the assurance of basic nutrition.

Another challenge is food handlers who have no expertise in preparing healthy food in a tasty manner. The food served to learners is either overcooked or contaminated. The major hurdle is staff training. Food handlers and gardeners' training comes with a price tag that includes time away from the kitchen and garden, trainer fees, and material and supply expenditures. One of the challenges faced by the training of the food handlers is that most of the food handlers and gardeners at quantile 1 to 3 have low education levels and have difficulty reading manuals due to the language barrier used in the training manuals (Mawela, 2020)

3.14 Chapter Summary

The NSNP is a critical initiative in South Africa, responding to national imperatives to reduce child hunger and improve access to and participation in education. Learners from poor socio-economic backgrounds who attend quintile 1-3 public schools: primary, secondary, and specified special schools, are the intended beneficiaries of the NSNP.

Evidence was shown that some needy students from low socio-economic origins attend schools in quintiles 4 and 5 that do not give NSNP lunches. Some provinces (Gauteng, KwaZulu-Natal, Northern Cape, and Western Cape) provide NSNP lunches to schools in quintiles 4 and 5, indicating a need. Breakfast and lunch are provided in Gauteng and the Western Cape, implying that hungry students in other regions are likely to be hungry for breakfast.

Furthermore, VFHs, educators, and other school employees are among the unexpected beneficiaries of the NSNP meals, including VFHs, educators, and other school staff. The DBE encourages this practice to reduce any potential stigma associated with consuming NSNP meals. However, the Conditional Grant financing does not allow for other people, as mentioned, to eat the NSNP meals, and it is feared that unless well provisioned, this will diminish the funding and food accessible to learners.

There is no doubt that learners generally receive NSNP meals regularly. Still, there is an opportunity for improvement in terms of meal composition, such as the number of food groups offered, the amount of food prepared, and the time when meals are served. Given the number of students approved for the NSNP, schools usually prepare more carbohydrates and fewer

vegetables and protein than they should. It is concerning because, outside of school, South African children's diets are deficient in fresh fruits and vegetables and animal protein.

On-time delivery of the NSNP lunch was a weak point. The NSNP recommends feeding before 10:00 a.m., but research suggests that in all provinces, the last learner finished eating after 10:00 a.m. Some schools only finished feeding in the afternoon. Except in Limpopo, most schools finish eating after 10:00 a.m. in all provinces. The main reason was that VFHs could not prepare and cook meals promptly.

For different reasons, certain schools do not receive NSNP meals on certain days. Feeding was less likely to occur on some days in provinces that used the centralised approach, especially in KwaZulu Natal, where 70% of school principals, NSNP Coordinators, and VFHs indicated there were days this year when feeding did not occur. Days or even months went by without any NSNP feeding being reported in the worst cases.

Schools, particularly in some regions, confront issues due to a lack of basic infrastructure, including water, storage facilities, and food preparation places, which are all necessary for safe meal preparation. A food preparation space should be included in every newly constructed school. However, there is a backlog of current schools that do not have one. KwaZulu Natal, Limpopo, and Mpumalanga faced the biggest difficulties.

The NSNP's nutrition education and food production components aim to increase understanding and, as a result, help learners make healthier food choices. These components receive only a small amount of Conditional Grant money. Hence, most schools do not have food gardens. The primary causes for the lack of food gardens in schools are a lack of workers and a water shortage. The gardens are mostly used to complement the NSNP meal.

In the next chapter the legal framework is discussed by investigating the international and national law on the right to food and the right to education.

CHAPTER 4

LEGAL FRAMEWORK PERTAINING TO NUTRITION & EDUCATION

4.1 Introduction

Every person in South Africa has rights. Those rights are entrenched in chapter 2 of the *Constitution* of the Republic of South Africa (*Constitution*) as the Bill of Rights. The Bill of Rights is the cornerstone of the South African democracy that affirms a person's rights (RSA, 1996: s 7(1)). The state must ensure that the human rights in the Bill of Rights are respected, protected, promoted and fulfilled (RSA, 1996: s 7(2)). It must also be noted that the rights in the *Constitution* are connected and interrelated, and the state cannot realise them in isolation (South African Human Rights Commission, (SAHRC)), (2016).

Every individual has human rights by virtue of being a human. Obligations accompany all human rights. Under the United Nations Convention on the Rights of the Child (UNCRC) and the African Charter on the Rights and Welfare of the Child (ACRWC), the state and other duty-bearers must fulfil their human rights obligations. There are different kinds of obligations: sometimes, the state is expected not to do something; other times, it is expected to do something actively; and in still other situations, the state is expected to prevent powerful people or companies from harming those who are less powerful and more vulnerable (Dutschke & Abrahams, 2006).

Children are protected by two major human rights treaties: the UNCRC and the ACRWC. Both of these treaties have been ratified by South Africa. Similarly, the *Constitution* of South Africa protects human rights vigorously in the Bill of Rights and offers special protection for children under section 28. Section 27 of the *Constitution* (RSA, 1996a) deals with a person's rights to access to food and water and access to healthcare services.

Section 28 of the *Constitution* deals with children's rights such as the right to basic nutrition, being protected from degradation, and "not to do work that would interfere with his or her well-being, education, physical or mental health" (RSA, 1996a: s 28). In light of the study, section 28 of the *Constitution* deals with children's rights to basic nutrition being protected from the suspension of the National School Nutrition Programme (NSNP) during school breaks which interferes with the child's well-being and physical and mental health.

The purpose of section 28 of the *Constitution* (RSA, 1996a) is to make sure that children are protected, especially when they are vulnerable; hence section 28 makes special reference to

children's rights. Section 28(3) refers to everyone under 18 as a child. Hence, "[a] child's best interests are of paramount importance in every matter concerning the child" (RSA, 1996: s 28(2)). The NSNP and related policies should therefore respect, protect, promote, and fulfil the rights in the Bill of Rights and the rights of children, particularly vulnerable learners at schools in poor communities.

In this chapter, the study focuses on the legal framework, which is the third sub-research question: the constitutional rights that the NSNP guidelines (RSA DBE, 2009) should respect, protect, promote, and fulfil (cf. Ch 1 par 1.6.1). The legal framework discussed in chapter 4 investigates the international and national law on the right to food and the right to education.

First, the study provides a broad overview of food security and the 2030 Development Goals as a broad background. Second, the international law concerning nutrition and education captured in the ICESCR and relevant General Comments, the UNCRC and the relevant General Comments and the ACRW of the State is explored. Third, the study investigates the South African law, namely, the *Constitution*, legislation such as the National Education Policy Act (NEPA), South African School Act (SASA), Children's Act and relevant case law such as *Governing Body of the Juma Musjid Primary School & Others v. Essay NO and Others*, (Juma Musjid, 2011) *Moko v Acting Principal, Malusi Secondary School (*Moko, 2020), and [*Equal Education and Others v Minister of Basic Education and Others*] (EE vs DBE, 2020).

4.2 Food security and the 2030 Sustainable Development Goals background

This section discusses food security, nutrition security and the 2030 Development Goals (Pérez-Escamilla, 2017) as a background. The study only focuses on the first four development Goals: ending poverty, ending hunger, ensuring good health and well-being, and ensuring quality education.

4.2.1 Food security

Pérez-Escamilla (2017) indicates that when all people, at all times, have physical and financial access to enough, safe, and nutritious food that satisfies their dietary needs and food choices for an active and healthy life, this circumstance is referred to as food security. Therefore, physical availability of food, financial accessibility to food, and adequate food utilisation—which is a function of the body's capacity to process and use nutrients, as well as the dietary quality and safety of the foods consumed—are the three main components of the household food security construct (Pérez-Escamilla, 2017). Given food's crucial role in human growth,

food security is acknowledged as a fundamental human right being denied to Billions worldwide, especially learners or children. Therefore, learners through the NSNP must have unfettered access to a balanced diet for food security to be a reality.

Therefore, the right to food security for all citizens, especially learners, must be upheld through effective food security governance. Government oversight of food security concerning school-going children is crucial for maintaining national stability. Food security governance relates to formal and informal NSNP guidelines and processes by which interests are expressed, and choices concerning food security in schools are taken, put into practice, and upheld on behalf of the learners (Pérez-Escamilla, 2017).

4.2.2 Nutrition security

Although they are different, nutrition security and health are intimately tied to food security. Learners can achieve nutritional security when their bodily tissues are exposed to the right amounts of nutrients and other necessary elements. When access to food through the NSNP is assured, paired with access to health care and other fundamental human requirements, such as proper sanitation, nutrition security follows. The other factors that determine nutrition security are related to food security (Pérez-Escamilla, 2017). In turn, having access to nutritious food in schools depends on having enough financial resources and having access to food in the nation, area, communities, and schools where the learners are located.

4.2.3 2030 Sustainable Development Goals

To achieve leaner food and nutrition security globally, it is crucial to maintain and keep a nutritious food supply at the global school level. The UN Sustainable Development Goals (SDGs), which notably call for ending hunger, attaining food security, improving nutrition, and supporting sustainable agriculture internationally, must be understood and addressed in school nutrition policies like the NSNP guidelines (Pérez-Escamilla, 2017). The SDGs are important as they create a set of global objectives that will aid in addressing the pressing political, economic, and environmental problems our planet is currently facing (Allen, Metternicht & Wiedmann, 2018).

Based on the underlying idea of fair and sustainable economic growth, governments have agreed to accomplish the 17 Goals and 169 objectives of the SDGs by 2030. In fact, achieving all 17 of the Goals—from eradicating poverty and hunger to promoting gender justice and

planetary sustainability—requires food security (Pérez-Escamilla, 2017). But the study only focuses on the first four SDGs that are relevant to the study.

4.2.4 Goal 1: Ending poverty

According to United Nations South Africa (UNSA) (2022), extreme poverty for all people worldwide is presently defined as a person making less than $1.25 (R20,62) per day. At least 50% of people of all ages, by national standards, are living in poverty in all of its manifestations (UNSA, 2022).

First, Goal 1, which is to "End poverty in all its forms everywhere", focuses on food insecurity as a significant cause and result of poverty. In contrast, poverty is a significant cause of food insecurity (Pérez-Escamilla, 2017). The global mission of Samsung, in partnership with the United Nations General Assembly (2015), attests to the fact that eliminating poverty is a moral obligation and the path to realising human potential. Numerous individuals die from hunger every year, yet by addressing poverty through the NSNP, the hungry learners can be fed, diseases such as NCDs can be reduced, and people can enjoy fulfilling lives.

Furthermore, Goal 1 focuses on ensuring that all and particularly, the poor and the vulnerable learners, have equal access and rights to economic resources, such as food which includes being beneficiaries of the NSNP (Pérez-Escamilla, 2017). By 2030, Goal 1 further aims to achieve substantial protection for the poor and the vulnerable and enhance the resilience of the poor and those who are vulnerable and decrease their exposure and vulnerability to various economic, social, and environmental shocks, disasters, and epidemics such as COVID-19, or extreme weather-related events (UNSA, 2022). The substantial protection of the poor, especially learners, was not the case when the learners were vulnerable to COVID-19 and the NSNP was suspended during school breaks.

Additionally, Goal 1 aims to ensure that considerable resources are mobilised from a range of sources, including through improved development cooperation, to give developing countries, especially the least developed ones, appropriate and reliable means to implement programs such as the NSNP and policies to overcome poverty in all forms (Pérez-Escamilla, 2017; UNSA, 2022).

4.2.5 Goal 2: Ending hunger

Second, the aim of Goal 2 is to "End hunger, achieve food security and improved nutrition, and promote sustainable agriculture", which is a Goal that clearly asks for a solution regarding food

safety (Pérez-Escamilla, 2017). Food safety such as continuous feeding of leaners through the NSNP, even when schools are closed for breaks. By 2030, Goal 2 targets eradicating hunger and ensuring that everyone has access to enough food throughout the year, focusing on the underprivileged and those in vulnerable situations, such as infants and learners (UNSA, 2022). Hence, the suspension of the NSNP when schools break is against the focus of this Goal.

Furthermore, Goal 2 aims to eradicate all types of malnutrition, including reaching the Goals for reducing stunting and wasting by 40 % in school children under five by 2025 and taking care of the nutritional requirements of adolescent girls, pregnant and lactating mothers, and older people. The Goal is also to increase the agricultural output of school vegetable gardens twofold and to ensure equal and secure access to land, other productive resources and inputs, knowledge, and financial services (UNSA, 2022).

Furthermore, the Goal aims to increase rural infrastructure funding through improved international cooperation, especially in developing countries (UNSA, 2022). Increasing funding for NSNP infrastructure is imperative for schools as it allows for proper and timeous delivery of quality food to the learners, and many schools in South Africa are still without proper infrastructure necessary for the success of the NSNP, such as kitchens, equipment, and utensils (DBE & DPME, 2016).

The government's introduction of the NSNP is a significant initiative in the fight against hunger and malnutrition. The NSNP, however, only aims to reduce hunger in the short run. As a result, the program typically only offers one meal per day, making it only one of the steps that should be in place to guarantee that children obtain appropriate nourishment. 191 days out of the year are meal days for kids. As such schools being on breaks indicate that learners are exposed to hunger or more severe hunger (Esakov & Vally, 2010).

According to the Public Holidays Act (Act No 36 of 1994), there are 12 public holidays that affect the schooling terms. According to the DBE, the academic year in South Africa lasts from January to December. In South Africa, there are four school breaks: a two-week vacation in March or April, a three-week break in June or July, a one-week break in September or October, and a lengthier break of about five to six weeks in December or January. There are also other additional days off every school year. Altogether, there are around 200 days in the South African school year and about 165 days of school holidays per year including holidays and

weekends. It, therefore, shows that there is almost close to a half of a year where learners are exposed to hunger. Thus, defeating the aim of Goal 1 which is to end hunger.

4.2.6 Goal3: Ensuring good health and well-being

Third, Goal 3 aims to "Ensure healthy lives and promote well-being for all at all ages" and stipulates that poor physical and mental health have been linked to food insecurity throughout a person's life (Ameli, Esfandabadi, Sadeghi, Ranjbari & Zanetti, 2022). Goal 3 aims to end acquired immunodeficiency syndrome (AIDS), Tuberculosis (TB), malaria, and other neglected tropical diseases by 2030 and fight hepatitis, water-borne illnesses, and other infectious diseases. Through early detection, effective treatment, and mental health and well-being promotion, the premature mortality rate from Non-communicable Diseases (NCDs) should be cut by a third.

Furthermore, Goal 3 aims to boost efforts to prevent and treat substance abuse, particularly the destructive use of alcohol and narcotic drugs (UNSA, 2022). Simultaneously, increasing the ability of all nations, especially emerging nations, to handle national and international health concerns through risk reduction, early warning, and management (UNSA, 2022). Therefore, through the NSNP, the country can handle health concerns through a preventative method rather than treatment (cf. Ch2).

As already explained in Goal 1 to end hunger, but 165 days of school breaks out of 365 days per year means that children are without food and the additional or much needed food for +-165 days per year. Therefore, learners are for instance 45,2% of the days per year possibly exposed to going hungry because they do not get food at school. As such, if the learners are malnourished for a week or 4-5 weeks over the December holidays, it means that the quality standard of living of the learners is also compromised if they often have to contend with hunger because the school nutrition programme is not available during school breaks.

4.2.7 Goal 4: Ensuring quality education

Then, Goal 4 aims to "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" and stipulates that children's capacity to learn in school is impacted by food hardship. Reduced educational attainment raises the risk of food insecurity (Ameli, Esfandabadi, Sadeghi, Ranjbari & Zanetti, 2022). Goal 4 indicates that all girls and boys should receive free, equitable, and effective primary and secondary education by 2030 (UNSA, 2022). In addition to education for all, Goal 4 aims to ensure that by 2030 every child

has access to high-quality pre-primary education (Grade R), so they are prepared for primary education. The guideline should thus make provision for food for these learners too.

Furthermore, Goal 4 aims to ensure that all learners have the knowledge and abilities necessary to advance sustainable development, including, among other things, through instruction in sustainable living such as the NSNP food gardens, gender equality, human rights, and promoting a culture of peace and nonviolence (UNSA, 2022). They should also be taught about global citizenship, respect for cultural diversity, and culture's role in advancing sustainability (UNSA, 2022).

4.3 The legal framework

This section explores the meaning of children's rights to basic nutrition and food access. It further analyses the relevance of these two rights as they are specified under sections 27(1)(b) and 28(1)(c) of the *Constitution* (RSA, 1996), respectively, and then consider what they represent for the state, drawing on concepts from international human rights law. This prompts a review of the policies, in particular the NSNP and laws in the South African government has implemented to realise these two rights.

4.3.1 The right to nutrition

For every person to have life and survive, they need food, but for a person to have a quality life, develop and grow healthy, they need nutritious food (Birchfield & Corsi, 2010). Hence, everyone in South Africa has the right to have access to nutritious food and produce their own food (Khoza, 2004). Inclusive rights which include the right to food for everyone, goes beyond simply having a legal right to consume a certain number of calories, proteins, and other nutrients. It is a right to access all the dietary components needed for an active and healthy life. As such the principles applicable to the right to access food is also relevant to the right to basic nutrition (Mabhaudhi, Chibarabada & Modi, 2016).

4.3.2 International law

According to Wallace & Martin-Ortega (2020), international law is a body of rules and principles that regulates how states and people interact and how international organisations interact. It provides overview mechanisms for international practices and lays forth fundamental concepts simply and plainly. Section 39 of the *Constitution* provides that in interpreting the Bill of Rights, the provisions of international law must be considered (RSA,

1996a: s.39). As such, this section explores the international law and specific international instruments such as the UNCRC (UNCRC, 1989), the Universal Declaration of Human Rights (UDHR) (1948), the International Covenant on Economic, Social and Cultural Rights (ICESCR) (1996), and the African Charter on the Rights and Welfare of the Child (ACRWC), plus the relevant General Comments of the mentioned documents, concerning the right to nutrition.

According to national and international law, human beings have a right to food, have access to food, and feed themselves by producing or purchasing it (Hossain & te Lintelo, 2018). Life and dignity are intertwined with the right to food. All people should have access to adequate food without discrimination. According to factsheet no:34 of the United Nations (UN, 2010) fighting hunger and malnutrition is more than just a moral imperative or a matter of policy; in many nations, it is a requirement under the laws of human rights. Both the rights to sufficient food and basic nutrition are entrenched in the UDHR (1948) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) (1996).

In addition to this, several international conventions acknowledge the right to food for specific groups. The right to food and to be free of hunger belongs to every human, regardless of race, colour, sex, language, religion, political opinions, social status, national or ethnic origin, income, property, or other status. Therefore, the study focuses on the right to food specifically for children in relation to the NSNP (UN, 2010).

4.3.3 Universal Declaration of Human Rights

The UDHR declares that certain freedoms, such as the right to life, liberty, and freedom from slavery and torture (art. 3; art. 4; art. 5), as well as the freedom from arbitrary detention or arrest (art. 9), the right to freedom of expression (art. 19), the right to work (art. 23), and the right to an education (art. 26), are "inherent to all human beings" (UDHR, 1948). Human rights encompass both positive and negative rights. Positive rights include the right to get something, like clean, safe water and being beneficiaries of the NSNP. Negative rights entail the right not to receive something, like refusing to be part of the NSNP. It may also entail not to be refused access to the NSNP when schools break such as the suspension of the NSNP during school closures.

Article 25 of the Universal Declaration of Human Rights particularly mentions food as a component of the right to a quality standard of living. According to the UDHR, article 25

stipulates that everyone has the right to a standard of living that is sufficient for their families and their health and well-being, including access to food (UDHR, 1948: 25). Since it is a statement of principles the UDHR does not establish legally obligatory responsibilities. However, it might be claimed that the UDHR's solemnity and importance, as well as the wide support it gained from States, show a strong desire to respect the ideas it contains. The UDHR may be regarded as international law binding on States to the extent that such a desire is supported by state practice (FAO, 2009). According to article 3 of the UDHR, for example, the right to life and the right to be free from hunger are intimately intertwined.

4.3.4 The International Covenant on Economic, Social and Cultural Rights (ICESCR)

The ICESCR is a treaty which makes provision for 18 independent experts that make up the Committee on Economic, Social, and Cultural Rights (CESCR). The rights to adequate food (art. 11), shelter (art. 11), education (art. 13), health care (art. 12), social security (art. 9), access to water and sanitation (art. 11), and employment (art. 6) are among the economic, social, and cultural rights protected by the Covenant. For everyone to fully enjoy these rights, the Committee aims to establish positive communication with State parties, including South Africa, examine how the Covenant is being implemented and enforced, and decide whether its standards are being followed (The Office of the High Commissioner for Human Rights (OHCHR), 2022).

The CESCR defined the right to food in its General Comment No. 12 (1999), as the right to regular and unrestricted access to adequate and quality food to support one's physical and mental well-being and their individual and group's pursuit of happiness and dignity without fear. This access can be achieved directly or through financial purchases (CESCR General Comment No. 12, 1999; Magnusson, McGrady, Gostin, Patterson, & Abou Taleb, 2019). When every man, woman, and child, whether alone or in society, have constant physical and financial access to sufficient food or the means to obtain it, their right to enough food is realised (UN, 2010). Hence when children have no continuous access to the NSNP, their right to adequate food and basic nutrition is violated.

Article 11(1) of the ICESCR (1996) recognises that food plays a role in attaining a proper standard of living which requires sufficient food. At the same time, article 11(2) states that everyone has the right not to be hungry (Hendriks & Olivier, 2015). Food is an inclusive right. Food as an inclusive right entail all aspects that revolves around food. It is not only about the right to a minimum ratio of calories, protein, and other nutrients but the individual's right to

all the nutritional elements necessary to live a healthy and active life and the means to obtain them. As such, the suspension of the NSNP violates the rights of children not to be hungry and the right to all the nutritional elements.

General Comment No. 12 contributed to the definition of the right to food's fundamental principles and the domestic implementation of those principles by nations. Therefore, the three fundamental principles of the right to food referred to as availability, accessibility, and adequacy of food, are essential. Hence, they are discussed below.

4.3.5 Three fundamental principles of the right to food

This section discusses the three fundamental principles of the right to food (CESCR, 1999), namely, availability, accessibility, and adequacy that the NSNP should abide by.

4.3.5.1 Availability

Having access to food is being able to either feed oneself directly from arable land or other natural resources, or having access to efficient market, distribution, and processing systems that can move food from the point of production to the point of consumption based on demand (CESCR, 1999). D'Odorico, Carr, Davis, Dell'Angelo & Seekell (2019), attest that the availability of food requires that it be made possible to gather food from natural resources, either by making food, cultivating the land, raising animals, or other means to acquire food, such as fishing, hunting, and gathering. Regarding poor school-going children, food should be acquired or made available through the NSNP and school vegetable gardens.

It also means that food should be available in markets and shops such as school tuckshops for schools without the NSNP and the need for healthy food in tuckshops (D'Odorico, et al. 2019). That is to say, the NSNP should ensure that the quantity of food provided by the NSNP to learners must be sufficient to cater for all the learners in the school. Additionally, the DBE stakeholders should make sure that learners who benefit from the NSNP know that meals are being given, how they will be provided, and, if necessary, whether student transportation is available for those who travel a long distance to the school as the distance might also have an effect in learners receiving food. When schools break students may not be aware that food is being served at schools during school breaks due to lack of communication. Those who live far from schools may be aware but the distance to travel to school may be demotivating.

4.3.5.2 Accessibility

Accessibility necessitates the provision of both financial and physical meals. Food must be affordable to be economically accessible. Individuals should be able to buy food for a balanced diet without sacrificing other necessities such as school fees or medication (CESCR, 1999: 11). Food should be accessible to everybody, especially the physically vulnerable, such as children, the sick, people with disabilities, and the elderly (UN, 2010). For poor learners who cannot afford to buy food at school tuckshops, food should thus be accessible via the NSNP.

Going back and forth between home and school to eat food may be difficult for most learners who stay far from school. Learners in isolated locations such as rural and deep rural areas must also have access to food (UN, 2010). Hence, ensuring that transportation is available for isolated, vulnerable learners ensures that those learners have equal access to food such as those nearer to schools. Furthermore, during natural disasters such as the floods in KwaZulu Natal and COVID-19 which caused extended school closures and impacted on children's access to school and food, the food needs to be made accessible for school-going children. Hence the suspension of the NSNP during epidemic management and natural disasters indicates that there is no guarantee that food is accessible to vulnerable learners.

4.3.5.3 Adequacy

Adequacy refers to the food's ability to meet nutritional requirements while considering the individual's age, living circumstances, health, occupation, and gender (CESCR, 1999: art.11). It is insufficient if children's meals provided by the NSNP lack the nutrients required for physical and mental growth. Food high in calories but low in nutrients, which can lead to obesity and other ailments, indicates insufficient nutrition. Food should be safe for children's consumption and free from harmful pollutants such as pesticides, hormones, veterinary medicine residues, and toxins from industrial or agricultural operations. Food that is adequate and culturally appropriate should be available (UN, 2010). In addition, the NSNP should thus ensure that the food provided to learners must be wholesome, which means it must be edible and hygienic, especially for water.

Hence, the ICESCR (1996) requires all participating states to employ necessary measures to realise the right to access food. In accordance with Asbjrn Eide's typology, General Comment No. 12 also helped clarify the three obligations of states to respect, protect, and fulfil the right to food as well as the obligations of third parties regarding that right (Eide, 2001). The three

obligations of the state as required by the ICESCR will be discussed further under domestic law.

4.3.6 The United Nations Convention on the Rights of the Child (UNCRC)

In the context of the rights to life, survival, and development, as well as to health, nutrition, and appropriate quality of living, the United Nations Convention on the Rights of the Child (UNCRC) safeguards a child's right to food. Article 24 (1) of the UNCRC states that States Parties acknowledge that children have a right to the best possible quality of health and access to facilities for medical care and wellness restoration. States Parties shall work to ensure that no child's right to access such health care services is violated (UNCRC, 1989: art. 24(1)). Therefore, the NSNP plays a vital role through food in ensuring children have an appropriate quality of life because the risk for NCDs is reduced.

The UNCRC (1989) in article 18 indicate that all "parents must care for and protect their children", but the state also has the responsibility to ensure that it "assists parents" (UNCRC, 1989: art. 18(2)). Implementing the NSNP is vital in assisting parents in feeding their children, especially those vulnerable children and those whose parents lost jobs during the pandemic.

Furthermore, States Parties must work to implement this rightfully and, in particular, must take the following actions: To battle sickness and malnutrition, especially within the context of primary healthcare, by employing, among other things, the provision of adequate nutritious food to children who are beneficiaries of the NSNP and clean water to drink while considering the risks and hazards of environmental pollution (UNCRC, 1989: art. 24).

Furthermore, the state has the responsibility to also ensure that all societal groups, especially parents and children, are educated, have access to education, and receive help in improving their fundamental understanding of child health and nutrition, the benefits of breastfeeding, personal hygiene, environmental sanitation, and accident prevention (UNCRC, 1989: art. 24). In addition, article 27 of the UNCRC, indicates that the right to "a standard of living adequate for the child's physical, mental, spiritual, moral and social development" (UNCRC, 1989: art. 27). Furthermore, article 27(3) of the UNCRC imposes a duty on the state to provide support programs to parents to implement the child's rights, particularly with regard to nutrition, clothing and housing" (UNCRC, 1989: art. 27). As such, the NSNP in times of need, especially when schools break or are closed is crucial. UN (2010) attests that for children to exercise their right to food, a supportive environment must be established to ensure their access to sufficient

nutrition. Support should be given, for example, through school lunch programs or food aid in the case of natural and other disasters if children and their families cannot exercise their right to food using the means at their disposal. The food provided by the NSNP should be suitable for children's dietary needs.

Article 28 of the UNCRC indicates that states parties acknowledge that children have a right to an education, and in order to realize this right gradually and on the basis of equal opportunity, they shall take particular steps to encourage regular attendance at school and to lower drop-out rates (UNCRC, 1989: art. 28). Thus, for proper learning to occur children need food and as such providing learners with food from the NSNP assist in keeping learners from dropping out from school, thus encouraging lower dropout rates and improving attendance.

Article 29 of the UNCRC is in accordance with article 28 in that it demands that the child's education be focused on maximizing the development of his or her personality, talents, and mental and physical capacities; thus, the provision of food via the NSNP allows learners to receive adequate nutritious food to allow for the full development of the child especially academically (UNCRC, 1989: art. 29).

State Parties are urged under Article 32 to acknowledge the child's right to protection from economic exploitation and from engaging in any work that could be dangerous, interfere with their education, or be detrimental to their health or overall physical, mental, spiritual, or moral growth (UNCRC, 1989: art. 32). The state is responsible for protecting children from malnutrition and diseases such as NCDs, which harm a child's survival, development, and life. Malnutrition and death are linked; as such, the state must ensure that all children are prevented from malnutrition, resulting in death of a child. Every child's right, even those with developmental delays, is to live a healthy life and survive (Clark, Coll-Seck, Banerjee, Peterson, Dalglish, Ameratunga, Balabanova, Bhan, Bhutta, Borrazzo & Claeson, 2020).

4.3.7 Regional law

This section focuses on regional law. With Africa as the starting point, regional law compares the legal facets of economic and political integration in diverse regions. Thus, the African Charter on the Rights and Welfare of the Child (ACRWC)is discussed together with the African Charter on Human and Peoples Rights (ACHPR).

4.3.8 African Charter on the Rights and Welfare of the Child

According to the ACRWC (1999), in accordance with their constitutional procedures and the provisions of the present Charter, the Member States of the Organization of African Unity Parties to the Charter shall recognize the rights, liberties, and obligations enshrined therein and shall commit to taking the necessary actions to adopt any legislative or other measures that may be required to give effect to the Charter's provisions (AU, 1999).

In adopting legislative measures, South Africa as a member of the ACRW is required by article 4, to ensure that "the best interests of the child" must be the main factor in all decisions made by anybody with power over the child (AU, 1999). Thus, the DBE and the NSNP have a role in ensuring that the best interest of the child is regarded as of paramount importance.

The ACRWC (1999) and the UNCRC (1989) express similar sentiments. Every child has the right to the best possible state of bodily, mental, and spiritual health, according to article 14 (ACRWC, 1999: art. 14). and that "state parties to the present Charter shall pursue the full implementation of this right and in particular shall take measures to ensure the provision of adequate nutrition and safe drinking water (AU, 1999); to combat disease and malnutrition within the framework of primary health care through the application of appropriate technology (AU, 1999); and to ensure that all sectors of the society, in particular, parents, children, community leaders, and the community work together to achieve this right" (AU, 1999). In addition, article 20 of the ACRWC imposes a duty on the state to provide material aid and support programs in times of need, particularly the provision of nutrition (AU, 1999: art. 20);

The suspension of the NSNP means that many children are at risk of malnutrition with possible long-term health complications. Therefore, when the NSNP realises an individual's right to access healthcare services, especially primary health care and preventative health care through the provision of nutritious meals at schools, the state simultaneously realises the right of the child to basic nutrition and adequate food, the right to life, survival, and development, and the right to basic education which requires the state to provide them with the full enjoyment of quality of life in conditions that ensure dignity (IHRIP, 2000: 3).

According to the ACRWC, children have the right to maximum survival and development (AU, 1999: 5). Dutschke & Abrahams (2006) states that child development is fundamental to a child's survival. The right of children to survive under conditions enabling their development is therefore undeniable. When children's rights to survival and development are not realised

and unfulfilled, death is the worst possible outcome. As death usually results from several factors, children's mortality is complex but can be related to malnutrition in some instances (Dutschke & Abrahams, 2006).

The severity of the matter is aggravated by a lack of access to basic services such as nutrition, water, and sanitation and high levels of trauma and violence (Dutschke & Abrahams, 2006). These factors and conditions impact children's rights to survival and development and should be considered in a rights-based approach to child survival (Dutschke & Abrahams, 2006). A variety of state departments must take positive action to help realise the right to life of all children, given the complexity of the issue and the wide variety of causes of child death (Dutschke & Abrahams, 2006). The right to life is also linked to a quality life.

4.3.9 African Charter on Human and Peoples' Rights (ACHPR)

According to the African Commission on Human and Peoples' Rights, the rights to life, health, and economic, social, and cultural development implicitly protect the right to food under the African Charter on Human and Peoples' Rights (1981) (ACHPR)).

Article 1 of the ACHPR, the Member States of the Organization of African Unity Parties to the Charter shall recognize the rights, liberties, and obligations enshrined therein and shall commit to taking the necessary actions to adopt any legislative or other measures that may be required to give effect to the Charter's provisions (AU, 1981: art. 1). According to article 16(1), every person has the right to the highest possible level of bodily and mental health (AU, 1981: art. 16(1). As such States that have ratified the current Charter must take the appropriate steps to safeguard their citizens' health (AU, 1981: art. 16(2)).

4.3.10 Domestic law: South African law and policies

The rights to food and adequate nutrition are covered by a wide range of laws in South Africa. According to Nkrumah (2019), the right to food imposes a legal obligation on the state to ensure that all citizens, including children, meet the required dietary needs. In South Africa, the rights to food and basic nutrition have been applied fairly haphazardly through a patchwork of laws and regulations.

As such, it is the state's responsibility to ensure that legal frameworks and proper legislation are developed, adopted, and implemented to realise the right to food, as stated in General Comment 12 of the ICESCR (1996). The South African *Constitution* of 1996 boldly safeguards

the right to access food as a self-standing right. As if that weren't enough, it expressly recognises children's rights to basic nutrition (Chirwa, 2009).

Therefore, in this section, under the domestic law of South Africa, the *Constitution* is discussed regarding the right to basic nutrition and the right to adequate or sufficient food. Followed by the South African legislation and the case law.

4.3.10.1 The South African Constitution

The South African *Constitution* (RSA 1996a: s. 2) guarantees the supremacy of the *Constitution* and states that: "This *Constitution* is the supreme law of the Republic; law or conduct inconsistent with it is invalid, and the obligations imposed by it must be fulfilled". Thus, the education department is responsible for changing its policies to align with the *Constitution* and address the past inequalities while ensuring everyone's right to education is made accessible and available.

Food rights are recognised in two different sections of the South African *Constitution*. As recognised by the *Constitution* (RSA, 1996a), every person has the right to access "sufficient food" (RSA, 1996a: s 27(1) (b)). As enshrined in the *Constitution,* the right to adequate food is progressively realisable. Furthermore, every child has the right to "basic nutrition" (RSA, 1996a: s 28(1)(b)). The right to basic nutrition only applies to children, and the right is immediately realisable.

4.3.10.1.1 The right to basic nutrition

Basic nutrition, like sufficient food, refers to what food children should access and consume for a healthy standard of living. Therefore, the same access, quality and quantity principles apply to basic nutrition. The right cannot be realised if there is no access to food of proper quality and sufficient quantity of food. Children's right to adequate nutritious food, clean drinking water, and health care are essential for combating disease and malnutrition (UN, 2010).

As such, the right to proper nutrition cannot be said to be more important than the right to food. Nutrition is a technical term in health sciences that refers to nutrition, food composition, dietary requirements, food nutrients, and the human body's assimilation of these nutrients (Chirwa, 2009). As a result, the right to basic nutrition must be concerned with a person's nutritional well-being.

The right to basic nutrition through food "shall not be read in a restricted or restrictive manner that equates it with a minimum package of calories, proteins, and other specified nutrients," according to General Comment 12 on the ICESCR. In other words, the NSNSP just supplying a meal or a pre-packaged meal to learners without sufficient nutrients does not satisfy the standards set by this right. Human dignity would be incompatible with such an approach by the NSNP. Delivering such meals may be appropriate in a short-term emergency to address hunger. Still, it cannot be the long-term solution to ensuring the human right to basic nutrition.

The right to basic nutrition is only applicable to children in terms of section 28(1)(c) of the South African *Constitution*. Therefore, the right to basic nutrition, like the right to basic education, is unqualified, which means that it is not subject to "available resources" or "progressive realisation" in the South African *Constitution* as is the case with other socio-economic rights. As such, the right to basic nutrition is not subjected to available resources or progressive realisation. The right can only be limited in accordance with section 36 of the *Constitution*'s general limitation clause (RSA, 1996: s 36). Thus, the suspension of the NSNP during school breaks and extended closures is a retrograde action that violates several Constitutionally guaranteed rights, such as the right to basic nutrition and must be justified. If the limitation cannot be justified, then the limitation is unlawful.

In this sense, in times of economic crisis, retrogression should only be considered after all other options have been exhausted and ensure that learners, particularly those in vulnerable situations, are the last to be affected (CRC,2019: par 4). The state is obligated to ensure that it upholds the rights reserved in the *Constitution* and make sure that "the State must respect, protect, promote and fulfil the rights enshrined in the Bill of Rights" (RSA, 1996) and offer social support to those that "are unable to support themselves and their dependents" especially children (RSA, 1996). The UNCRC (1989) concurs with the *Constitution* regarding providing food to children as the primary responsibility (UN, 2010).

4.3.10.1.2 The right to sufficient food

On the other hand, the right to sufficient food is a comprehensive right that covers all aspects of eating, including spiritual, recreational, and social dimensions, as well as food security, accessibility, acceptability, quality, and safety. The right of everyone to enough food serves as a stark reminder that food security, nutrition, and accessibility require specialised programs such as the NSNP, legislation, and other interventions (Chirwa, 2009).

4.3.10.2 National Education Policy Act

According to the National Education Policy Act (NEPA) (RSA 1996), adopting legislation is important to enable the democratic transformation of the country's educational system into one that meets the needs and interests of all South Africans and preserves their fundamental rights. NEPA (1996) further indicates that the DBE should "support services, including health, welfare, career and vocational development, counselling and guidance for education institutions, within the functional responsibility of a department of education" (RSA, 1996). Therefore, the DBE should support and promote continuous access to the NSNP even when schools break and also the quality of the existing programme and the policy.

Schedule 4 of the *Constitution* states that a Parliamentary Act creates a new law or changes an existing law jointly with the provincial legislatures in education (but not tertiary or higher education). Therefore, the link according to the National Education Policy Act (RSA, 1996) is that the policy should be "directed towards the advancement and protection of the basic rights to education for every person in conjunction with Chapter 2 of the *Constitution*, and in terms of international conventions ratified by Parliament". This section provides that, "every person should be protected against unfair discrimination within or by an education department or education institution on any ground whatsoever". For example, children who are beneficiaries of the NSNP should be protected from discrimination at school.

NEPA (RSA, 1996) continues to stipulate that "in determining national policy for education at education institutions; the Minister shall take into account the competence of the provincial legislatures in terms of section 146 of the *Constitution* and the relevant provisions of any provincial law relating to education". Hence when creating guidelines for the NSNP, it is imperative that it is in line with other relevant provisions.

4.3.10.2 The South African Schools Act

The South African Schools Act (SASA) (RSA 1996) provides that "a public school must admit learners and serve their educational requirements without unfairly discriminating in any way". This implies that public schools must admit all learners in all different quantiles equitably and ensure that all deserving learners participate as beneficiaries of the NSNP regardless of the quantile. There are no feeding schemes in quantile 4 and 5 schools which is therefore discriminating.

The SASA rejects discrimination against learners on any ground which include race, gender, class, culture, religion or tradition (SASA, 1996). Section 3 of SASA also compel children to go to school (SASA, 1996: s 3). The state therefore must promote the right to education by providing learning with food. As such, based on class, poor learners can not be discriminated against receiving quality education because they are poor and cannot afford access to food to enable them to learn and concentrate at school. Therefore, if education is compulsory, the state should ensure that the child can attend school and not avoid school due to hunger. The SASA also obliges children to attend school. But if the learners have to walk for longer distances, such as those who attend school far, they are hungry and unable to learn when they get to school. As such, they struggle to keep a longer concentration span.

The SGB should also play a role in the feeding scheme and the development of food gardens. As parents of learners within the school and the community, the SGB "stands in a position of trust towards the school" (SASA, 1996). Thus, according to section 20 of SASA, the role of the SGB is to ensure that they support the school's best interests and work to assure its development by offering all students at the school a high-quality education (SASA, 1996).

The allocated functions of the SGB under section 21 of SASA allows the SGB to "To maintain and improve the school's property, and buildings and grounds occupied by the school, including school hostels, if applicable (SASA, 1996). This may also include maintaining infrastructure such as the NSNP kitchen. Also, SASA allows the SGB to "purchase textbooks, educational materials or equipment for the school" (SASA, 1996).; and "to pay for services to the school" (SASA, 1996). Furthermore, section 36 of SASA determines that the "governing body of a public school must take all reasonable measures within its means to supplement the resources supplied by the State in order to improve the quality of education provided by the school to all leaners at the school" (SASA, 1996).

The governing body should consider ways to supplement State resources to improve the overall educational experience for students, which may include initiatives related to food provision, even though it is not specifically mentioned in this section (NSNP). This clause may be construed as urging the governing body to consider measures like food parcels or vouchers, collaboration with non-profits or governmental organizations to guarantee students receive appropriate nutrition, or the use of resources to advance nutritional education and awareness.

The governing council wants to establish an environment that supports students' general well-being and maximizes their academic potential by raising the quality of instruction, which includes taking learners' dietary needs into account. While efforts to supplement resources are encouraged in this area, it's crucial to keep in mind that the precise execution and scope of such actions will rely on the available resources, available money, and viability within the school's environment.

4.3.10.3 Children's Act

Two specific Acts address children's rights in general: the Child Justice Act (RSA, 2008) and the Children's Act (RSA, 2005). The latter facilitates the realisation of some but not all *Constitution*ally guaranteed rights. Most of its provisions deal with children's civil and political rights, define parental responsibilities and rights, establish and govern children's courts, provide for children in need of care and protection, control international adoptions, and make provisions for safeguards against kidnapping and trafficking in children. In essence, the Act makes no explicit provisions for the child's socio-economic rights (Chirwa, 2009).

It often indirectly addresses these rights by outlining parental responsibilities and including clauses relating to alternative care, adoption, and international adoption (Chirwa, 2009). Section 9 of the Children's Act says that "the child's best interests are of "paramount importance" (RSA, 2005:9). According to the Children's Act, the best interest standard must be used in all child protection, care, and well-being decisions. Therefore, the best interest criteria must be used in all decisions, actions, and procedures involving the health and well-being of children (Chirwa, 2009). And the best interest of the child lies in the fact that they are not neglected and need food to survive, thus necessitating undisturbed access to the NSNP.

According to the Children's Act (RSA, 2005), the provisions of the Children's Act on the objectives of the act is to make provisions for structures and means of promoting and monitoring the overall well-being of the child (RSA, 2005). Whilst, strengthening the existing structures that can assist in the care and protection of children (RSA, 2005). The NSNP is an existing structure that can be used to ensure that children are properly fed during school holidays and ensure that the physical, emotional, psychological, intellectual, and social development of children are monitored and promoted.

According to the Children's Act (RSA, 2005), "neglect" is defined as the failure of the parents to provide for the child's basic social, physical, intellectual, and emotional needs. As seen

during the pandemic, parents lost their jobs and could not execute their responsibilities. Hence, according to section 150 of the Children's Act, a child is in need or care and protection when the child "lives in circumstances that expose the child to exploitation" (RSA, 2005: s.150(1(e)); and the child is exposed to circumstances that may physically, socially, and mentally harm the well-being of the child" (RSA, 2005:s.150(1(f)).

In some instances, the situation must be reported to authorities. Situations such as child headed families and leaners in the school who show no doubt signs of neglect. In section 110(1) of the Children's Act, educators, as persons who on reasonable grounds suspects neglect are compelled to report it to the authorities such as social workers (RSA, 2005). Social workers can investigate the circumstances of some children to determine if they need food. Thus, the school and the NSNP can be of assistance to such learners.

4.3.10.4 White paper 6

According to White Paper 6: Special Needs Education (2001), under The Framework for Establishing an Inclusive Education and Training System, it is stated that the "National Standards Funding for Schools should be applied and *adjusted to ensure equity and redress* to the new Inclusive Education and Training System", meaning the intention is to ensure that everything possible should be done to keep children in school. Especially children who drop out of school to find work in an effort to alleviate the lack of food and other sources at home. For children that experience hindrances of daily travel to school for their meals, transport could be provided to enable access and equity. Furthermore, food parcels can be organised for such learners.

4.3.10.5 Case laws

A person who is hungry or not receiving basic nutrients from food suffers from malnutrition, affecting their health and quality of life. Poor quality of life thus affects the ability of a person to execute other duties in their lives, such as learning, especially for children. Hence, to fulfil the right to a basic education, the child's heath must first be considered as poor health can adversely affect education. This section discusses three South African cases in relation to the NSNP.

4.3.10.5.1 Juma Musjid case – education as an immediately realisable right

The right to basic education is vital for realising other human rights. Therefore, providing quality education means a child fully develops into a well-rounded, independent person equipped to deal with other societal problems (UNESCO, 2020). Hence the right to basic education is enshrined in the *Constitution* and states that "[e]everyone has the right to a basic education" (RSA, 1996).

As seen in Juma Musjid (2011), the right to a basic education is immediately realisable. It has no internal qualifiers except in the law of general application that is deemed reasonable and justifiable, meaning it can only be limited in terms of the limitation clause (RSA, 1996). As indicated above, the right to adequate food is subjected to progressive realisation, but the right to basic nutrition is unqualified in the South African *Constitution*. Therefore, the right to basic nutrition, like the right to basic education, is unqualified, which means that it is not subject to "available resources" or "progressive realisation" in the South African *Constitution*.

4.3.10.5.2 Moko v Acting Principal Malusi Secondary School

In Moko (2020), the Constitutional court clears the speculations on what constitutes or encompasses the right to a basic education and how far the right to a basic education can be extended. On November 25, 2020, Mr. Moko, a Grade 12 student, arrived at his school in Limpopo to take the Business Studies Paper 2 matric examination. Because he had skipped some extra lessons, the acting principal of Malusi Secondary School stopped him at the school gates. Mr. Moko was instructed not to come back to school without his parents so they could talk about the missing extra classes (Moko, 2020).

When Mr. Moko tried to locate his guardians but was unable, he came back to the school by himself. The Business Studies Paper 2 exam had already begun when he returned. Mr. Moko was not allowed admission into the examination room by the acting principal. Mr Moko subsequently missed the examination. Moko, was subsequently advised that he could write supplementary exams in May 2021. He wouldn't be able to start postsecondary school in 2021 because of the delay in finishing his matriculation exams. Mr Moko claimed that his rights to a basic education and higher education were violated by the principal's conduct and the state's refusal to let him take the exam until May 2021 (Moko, 2020).

According to Harding (2021), the National School Nutrition Program (NSNP), textbooks, fundamental furnishings and infrastructure, student transportation, post-provisioning, and

sufficient sanitation facilities are all included in the right to a basic education, according to earlier findings by the courts. However, there was still considerable uncertainty regarding the line between basic and higher education before the Moko case. The important finding is that the court determined that basic education is for all education from grade 1 to 12 – until a national qualification is obtained. Thus, the feeding scheme should be for all learners from grade R to 12.

As such, the *CC* the right to basic education encompasses access to the NSNP and thus access to basic nutrition. It would be 'unduly narrow' to interpret basic education as only including schooling, especially considering the transformative purpose of the right to basic nutrition towards proper education. The judgment is impactful because it makes access to the NSNP an immediately realizable right, meaning that any limitation to the right is subject to strict scrutiny in terms of the limitations clause in section 36 of the *Constitution*.

The NSNP is the teaching and learning pillar for many poor South African learners. It also opens the possibility of pursuing education, expanding career choices and economic opportunities by reducing absenteeism and dropout rates (Zenebe, Gebremedhin, Henry & Regassa, 2018). Therefore, there is a link between poor nutrition and high rates of school dropout.

4.3.10.5.3 Equal Education v Minister of Basic Education (Children's Institute Amicus Curiae) 2020 JDR 1545 (GP)

In Equal Education v Minister of Basic Education (Children's Institute Amicus Curiae) 2020 JDR 1545 (GP) (EE vs DBE, 2020), South African schools have closed for extended periods due to COVID-19. The extended closures stopped the distribution of food through the NSNP, which offers a daily lunch to all kids in the country who qualify based on economic need. Judge Sulet Potterill's decision recognises that nutrition is a vital component of the right to a basic education, alongside school facilities, textbooks, and scholar transportation. The Constitutional rights to basic nutrition and basic education are interrelated. 'It is well-established that well-nourished pupils learn better,' Judge Potteril writes in her decision.

The judge also gave a declaratory order underlining the DBE and provincial education departments' Constitutional and statutory obligations to offer the NSNP to fulfil learners' Constitutional rights to basic nutrition and education. The court concluded that the Minister and the MECs had infringed the rights guaranteed by sections 27(1)(b), 28(1), and 29(1)(a) of

the constitution by postponing the NSNP program's implementation, based on the basis that the government has a positive duty to uphold the *Constitution*'s rights. As such, the state and the NSNP are obligated to ensure that the right to education is protected, respected, and fulfilled as part of the responsibilities in terms of international treaties.

In addition to the government's positive duty to uphold the *Constitution*'s rights, it also has a negative commitment to ensure that such rights are not violated. Learners' rights to basic nutrition were jeopardised by the NSNP's cancellation, as seen in EE vs DBE (2020). The court stated that there was no logical reason for the NSNP's suspension, particularly because money for the program was readily available.

Since funding was already distributed for the current year, it, therefore, indicates that the right to basic nutrition was violated when the state allows learners or children to suffer from hunger or starvation in circumstances where the state has the resources to address the problem, such as continuing with the NSNP. Violation of the right to basic nutrition also occurs when the state fails to protect the right by not removing discriminatory barriers that prevent access to basic nutrition. Barriers such as discontinuation of the NSNP due to school closures or during school holidays and breaks and the state's refusal to reintroduce the NSNP after a period of school closures caused by the COVID-10 epidemic (EE vs DBE, 2020).

When children or groups of children, especially from child-headed families, are unable to fully enjoy their right to basic nutrition through the means available to them due to circumstances beyond their control, states are obligated to fulfil it, for example, by providing food assistance or ensuring social safety nets for the poorest.

Additionally, EE vs DBE (2020), schools did not receive food during school breaks, and prolonged school closers exacerbated hunger issues. And there was no viable solution to replace the benefits of the NSNP. Hence, the suspension of the NSNP has been described as a "colossal calamity" regarding food delivery to disadvantaged children. One of the affidavits from the EE vs DBE (2020), showed that education was not being provided dignifiedly. The affidavits revealed seven pupils at Mashoa High School, referred to as third applicants, who do not have access to food outside the NSNP. Educators donate after each term food for the learners to eat throughout the school holidays. They were now without nourishment for the duration of the pandemic.

The NSNP would once more be accessible to all students as soon as schools reopened, the Minister of Education declared during public gatherings and in remarks made in public throughout March, April, and May. It was originally planned for the school to reopen on June 1, 2020, however that date has been moved to June 8. The education minister drew back her repeated claims that the NSNP would be completely implemented when classes resumed on June 1, 2020, saying that the government would initially start by giving meals to students in grades 7 and 12. The Department responded to the applicants' requests for clarification by saying that they would start by taking a "phased-in approach" This strategy was used with students in grades 7 and 12 and did not provide meals to learners in any other grades.

A grade 12 student and his sister live on R500 per month, which entails eating pap twice daily with no meat, vegetables, sugar, or milk. The grade 12 students who submitted affidavits all expressed shame that they will now have a nutritious supper, knowing their siblings who are learning at home will not. As a result of food poverty, the students express their displeasure, stress, and lack of concentration. Some people claim that they have simply given up learning. Therefore, the right to learning for those learners has thus been violated. According to the affidavits, it is clear that hunger is not an issue but an obscenity.

The situation became increasingly critical as qualifying students could not obtain meals due to insufficient scholarly transportation and inadequate communication between education officials and school communities. Food insecurity has a sad and intolerable mental, physical, and financial impact on students and families.

As seen in the EE vs DBE (2020), learners can't learn without food or on an empty stomach. Therefore, nutritious food is vital in protecting the learner's right to basic education. Hence, the state must ensure that education equips individuals, especially those from poor backgrounds (Heyns & Brand, 1998). Therefore, the state should ensure adequate nutritious food for learners to attend school (RSA, 1996: 3). Additionally, the NSNP should ensure that the learners who travel long distances to school have sufficient food to have the energy to walk such long distances.

4.4 Components of food adequacy

This section discusses the components of food adequacy under the right to sufficient food such as the quantity, quality, safety and cultural acceptance of food. Furthermore, the section looks at physical and economic access to food.

4.4.1 Quantity, quality, safe and cultural acceptance

International instruments use the term adequate food, but section 27(1)(b) of the *Constitution* uses the term sufficient food. The terms sufficient and adequate shall be used interchangeably throughout this discussion. Therefore, the right to adequate food must not be construed in a constrictive or limited way that equates it with a base number of calories, proteins, and other specified nutrients. It will take time for the right to sufficient food to be realized. However, even in times of natural or other disasters, States have a fundamental duty to take the required action to mitigate and alleviate hunger as stated in paragraph 2 of article 11 of the CESCR (CESCR, 1999).

Adequate food must be provided in adequate quantity, be of acceptable quality, be safe and secure, and be culturally acceptable in the community.

4.4.2 Quantity and quality

The NSNP guideline on its own does not regulate and guide the quantity and quality of food provided to learners. Sufficient calories must meet people's nutritional needs, especially learners. Dietary needs denote that the diet as a whole provides a variety of nutrients for physical and mental growth, development, and maintenance, as well as physical activity, in conformity with physiological demands of humans at all phases of the life cycle and according to living conditions and health. The nutrition composition of food, including the number of vitamins, iron, iodine, and carbs, is called quality

Therefore, steps may need to be taken to safeguard dietary diversity and healthy consumption patterns, while ensuring that changes in food supply availability and access, at the very least, do not adversely impact dietary composition and intake. For instance, the Department of Health has established minimum daily calorie recommendation prohibiting children from consuming less than 1000 kcal per day which increases by gender and age (Faizan & Rouster, 2021). As such, the food provided by the NSNP should thus comply with DoH recondensation's concerning the quantity and quality of food required for learning and concentration.

4.4.3 Food safety

Section 28 of the Constitution (RSA, 1996a) protects the rights of children, including the right to basic nutrition, shelter, healthcare services, and social services. It can be argued that ensuring food safety in school food programs is essential to protect the well-being and rights of children.

As such, food must be safe from harmful elements, such as pesticide contamination, poor environmental hygiene, or naturally occurring poisons. Furthermore, care must also be taken to identify learners with allergies and avoid or destroy any contact that may occur with food that may cause allergic reactions and fatalities to learners (CESCR, 1999).

Hence, the food prepared for the learners should be prepared in a way that is safe and hygienic to prevent food contaminations and poisoning from occurring, thus putting learners' health and lives at risk.

4.4.4 Cultural acceptability

Section 31 of the Constitution (RSA, 1996a) recognizes and protects the right to cultural, religious, and linguistic communities, including their rights to enjoy and develop their culture, practice their religion, and use their language. While not specific to food, these rights imply a broader recognition of cultural practices and customs, which can extend to food choices and preferences.

Cultural acceptance requires that the cuisine conforms to the predominant dietary or food culture. Both the texture and flavour of the food must be of high quality. This leads to the opinion that under very strict guidelines, options including the manufacture and distribution of genetically modified food should be investigated (CESCR, 1999). This point of view contends that to protect people's freedom to eat following their cultural norms, customers should be made aware of the ingredients in the food that has been genetically altered.

The NSNP want to provide children with good nutrition and support their healthy development. Still, learners coerced to eat new foods different from what is culturally known or acceptable may acquire bad eating habits, such as long-term dislike of the meal, fussiness, weight problems and NCDs. As such it is imperative that the NSNP make provisions for the needs of the children, such as religious prescription as halal, vegan and vegetarian.

4.5 Physical and economic access to sufficient food

As was already mentioned, the *Constitution*'s section 27(1)(b) guarantees everyone's right to access sufficient food. The reduction of obstacles to food acquisition is necessary for such access. Access involves both physical and financial requirements.

4.5.1 Physical access

Section 27 of the Constitution (RSA, 1996a) guarantees the right to access healthcare services, including reproductive health care, sufficient food, water, and social security. While the provision does not explicitly mention physical access to food, it implies the importance of ensuring access to sufficient and nutritious food for all individuals, including children within the educational context. Similarly, Section 28 of the Constitution (RSA, 1996a) protects the rights of children, including the right to basic nutrition, shelter, healthcare services, and social services. It can be argued that physical access to food is crucial in fulfilling children's right to basic nutrition and overall well-being.

Physical access refers to the access that will allow vulnerable populations, such as children, the elderly, and the disabled, to have food. Hence, the obstacles such as the suspension of the NSNP during school breaks need to be addressed as they hinder the learners to have access to school and therefore have no access to the NSNP.

4.5.2 Economic access

Economic access refers to the individual's or household's financial means to obtain appropriate food. Instead of providing food during breaks, children and their families should be able to access additional financial means to access food during school breaks. This also applies to those who have chronic medical conditions such as NCDs. Economic access necessitates that States enhance food distribution practices by utilising all available technical and scientific knowledge and communicating nutrition-related information (CESCR, 1999).

Socially vulnerable groups such as landless persons and other particularly impoverished segments of the population such as poor learners may need attention through special programmes. The need for this requirement became more evident during the Covid pandemic when learners and parents have been impacted severely by the economic repercussions of it. As such, the right to adequate food will have to be realised progressively. As indicated above, the right to adequate food is subjected to progressive realisation.

4.5.3 Progressive realisation

According to section 27(2) of the *Constitution*, the state is expected to take reasonable legislative and other measures within its resources to achieve the progressive realisation of the right to adequate food. As previously noted, the phrase within its available resources relates to

resources accessible within a State and resources available from the international community. This is in line with the international provisions regarding the reasonable measures that needs to be taken to realise the right (CESCR, 1990). The nature of the responsibility imposed on the state by section 28(1)(c) of the *Constitution* differs from that imposed by section 27(1)(b). Regarding children, the right places the main duty for food provision on parents or guardians. However, in cases where parents or guardians cannot provide food for their children, the state should do so immediately and not progressively. The following section discusses the three government obligations: to respect, protect and fulfil.

4.5.4 Government's obligations

According to section 7(2) of the *Constitution*, the state is required to protect, respect, promote and fulfil the rights contained in Bill of Rights. The UN (2010) on the right to food attests that, in addition to signing many international agreements, South Africa has to ensure that it respect, protects, promotes and fulfils the right to adequate food (SAHR, 2016).

4.5.5 Respect

While the South African Constitution may not explicitly state the government's obligation to provide food in schools, it does establish the principles of social justice, equality, and the right to access sufficient food (Constitution, 1996a:s.27). These principles imply that the government has a role to play in creating an enabling environment and implementing policies and programs that ensure access to adequate and nutritious food for all individuals (Constitution, 1996a:s.28), including through school food programs such as the NSNP.

It's important to note that the government's specific obligations and responsibilities regarding the provision of food in schools are often outlined in relevant legislation, policies, and programs at the national, provincial, and local levels. These documents provide more specific guidance and requirements related to the government's role in implementing and supporting school food programs to ensure access to nutritious meals for learners.

Firstly, to respect the right, the state must ensure that its measures do not prevent any individual from exercising their right to basic nutrition. Thus, the state should do nothing that can inhibit anybody from accessing adequate food (SAHRC, 2016). The state and the NSNP mut provide the food and the learners have the right to choose whether they eat the food or not. Thus, the state must respect children's food access and acquire food through the NSNP.

It means that any action that prevents learners from getting nutritious food, such as withholding food, or providing food of poor quality and/or suspending the NSNP during prolonged school closures and school breaks and refusing to reinstate the NSNP, is illegal. Unless adequately justified, states cannot suspend legislation or policies that provide individuals with access to food (e.g., social welfare legislation, nutrition-related programs). The state should ensure that public institutions, such as state-owned corporations and schools, do not obstruct learners' access to food. The state should also assess the national food policies and programs, to ensure that they effectively respect everyone's right to food and immediately address any new issues (SAHRC, 2016).

4.5.6 Protect

The South African Constitution does not specifically address the government's obligation to protect the provision of food. However, the Constitution establishes a framework of rights and principles that indirectly relate to the government's responsibility to protect individuals' access to food, including in the context of school food programs (Constitution, 1996a: s.27; s.28).

Although the South African Constitution does not explicitly state the government's obligation to protect the provision of food in schools, it establishes the principles of social justice, equality, and the right to access sufficient food (Constitution, 1996a: s.27; s.28). These principles imply that the government has a role in creating a protective environment and implementing policies and programs that safeguard access to nutritious food, including within school food programs.

Thus, to protect the right to basic nutrition, the state must take measures to ensure that no third party prevents any person from access to basic nutrition (SAHRC, 2016). This refers to instances where for instance the state makes the food available through the NSNP, but the food is stolen by staff or where only some of the children that qualify for the food receive it and someone prevents the other learners from getting the food. The duty to safeguard also extends to ensuring that the food served by the NSNP is safe and healthy. As a result, the state must create and enforce food quality and safety regulations and ensure that food is distributed fairly and equally. Furthermore, when engaging in agreements with other entities, such as suppliers who provide food to schools, the state must consider its international legal obligations respecting the right to basic nourishment. Legal obligations, such as ensuring that suppliers are paid on time to ensure that they do not stop supplying food due to non-payment.

4.5.7 Promote and fulfil

The South African Constitution stipulates the concepts of social justice, equality, and the right to adequate food access, even though it may not expressly mention the government's duty to promote and fulfil the provision of food in schools. These principles imply that the government has a responsibility to actively encourage and take action to ensure that people have access to wholesome food, especially through programs like school meal programs (Constitution, 1996a: s.27; s.28).

Therefore, to promote and fulfil the right to basic nutrition the state has a legal obligation to assist those who are responsible for the implementation of the right to nutrition and, if necessary, to provide material assistance and support programmes, particularly for nutrition. To promote and fulfil a right means that the state should take additional steps to ensure that more people can realise the right, that it becomes easier to realise a particular right and that the right is realised even better (WHO, 2019). This means that the state should take active steps to realise the right to nutrition even better than what it is currently doing. It should also rid the education system and legislative framework of any obstacles that can hinder the promotion of the right to nutrition (SAHR, 2016).

If a person or a group cannot exercise their right to enough nourishment due to circumstances beyond their control, the government shall provide access to resources to realise that right. The government must provide an environment that allows people to produce or obtain sufficient food for themselves and their families. A person must have access to an income to purchase food, and the government must ensure that those who do not have access to social security receive it (SAHR, 2016).

4.5.8 Legislation

National legislation such as the Constitution (RSA, 1996a) is crucial to ensure that the state upholds its obligation to guarantee the respect for, protection of, and promotion of economic, social, and cultural rights in all facets of society, particularly the right to food in general and children's rights to basic nutrition.

There is not only one piece of legislation that deals with the realisation of the right to food. In what follows legislation relevant to the realisation of the right to food will be discussed. This will be complemented with a discussion on the rights to education and health and the realisation of the right to food in education

4.6 Chapter Summary

The right of everyone to access adequate food and the right of children to basic nutrition are both enshrined in sections 27(1)(b) and 28(1)(c), respectively, of the *Constitution*, which places a high premium on the government's efforts to address poverty, hunger, and malnutrition. Additionally, the South African *Constitution*, which significantly deviates from accepted practice in comparative constitutional law and international human rights law, boldly safeguards the right to access food as a self-standing right.

The right to food access as it pertains to children remains underdeveloped at the international, regional, and national levels despite the clear importance of the right for children and the significance the *Constitution* assigns to the right of children to adequate nourishment. This component of the right to food has received little attention from the UNCRC Committee and the ICESCR. A rising collection of legal precedent concerning economic, social, and cultural rights is developing in South Africa. However, it mostly relates to the rights to food access, children's right to basic nutrition, and less to the rights to health, housing, water, and social security (OHCHR, 2022).

As such, many students rely on school meals as a significant source of their daily nutrition. Operating school feeding schemes throughout the year ensures that students receive regular and adequate meals, helping to meet their nutritional needs consistently. This is particularly crucial for students from low-income backgrounds who may have limited access to nutritious food at home. Regrettably, there hasn't been any legal action taken regarding two crucial rights, although child poverty, malnutrition, and hunger are extremely common.

The lack of Constitutional litigation on children's socio-economic rights highlights how vulnerable children are and why they require specific protections to exercise their rights. It is difficult to determine what the *Constitution* meant when it separately enshrined everyone's right to access sufficient food in section 27(1)(b) and children's right to basic nutrition in section 28(1) because there is no direct jurisprudence on children's socio-economic rights. Section 28 of the Constitution emphasises the vulnerability of children. As such This right is immediately realisable while section 27 of the Constitution depends on availability of resources.

In terms of nutrition and food access, there is currently a limited number of child-specific policies in place. As long as no comprehensive legislative and policy framework is put in place

to manage the complex terrain of food in general and children's basic nutrition in particular, the success of these programs (NSNP) will remain restricted and short-lived. In the next chapter the study focuses on the evaluation of the NSNP in line with the provisions of the legal framework, to determine to what extent the existing NSNP guideline meets the national and international legal standards.

The next chapter focuses on the presentation and evaluation of the NSNP guideline. Chapter 5 determines to what extent the existing guideline meets the national and international legal standards by discussing the data's meaning and the data analysis. Chapter five is both descriptive and analytical of the NSNP guideline. Hence, chapter 5 aim to evaluate if the failure to provide food to learners during school breaks and the provisions of the NSNP guidelines in this regard (RSA DBE, 2009) constitute a constitutional violation.

CHAPTER 5

ANALYSIS OF THE NATIONAL SCHOOL NUTRITION PROGRAM

5.1 Introduction

Chapter 4 of the study focused on the legal framework for the right to basic nutrition which looked at the general legal requirements regarding the right to nutrition. Chapter five of the study consists of the presentation and evaluation of the NSNP guideline. Chapter 5 determines to what extent the existing guideline meets the national and international legal standards by both discussing the meaning of the data and the data analysis about the evaluation of the need to keep the NSNP going during school holidays. In other words, the chapter is both descriptive and analytical of the NSNP guideline.

After a comprehensive literature survey, in chapters 2, 3 and 4 the below identified themes were highlighted. As part of the process of identifying and exploring the constitutional imperatives of the NSNP during school breaks, the data was categorized into various themes. These themes were identified during the evaluation of the literature review and the review of the law and were constantly revisited and amended. The organizing themes were further classified around the research questions and interpretations were made from them. The researcher also compared the findings of the research to the information gathered from the literature review in the three previous chapters to identify the similarities and inconsistencies in the findings of this study with other research work.

This section thus presents the criteria set to analyse the extent to which the NSNP guideline (2009) infringe or ameliorate the right to nutrition during school breaks. However, the researcher first gives a brief exposition of how the researcher went about constructing the emerged themes. To derive the themes, the researcher looked for the characteristics or features related to nutrition (cf. ch2). To do this, the researcher revisited the literature review (cf. ch2) of the previous chapter and the legal framework on basic nutrition (cf. ch4). the researcher looked for indicators of the realisation of the (cf. ch3) right to basic nutrition and education and whether the NSNP meet these requirements.

The themes helped to set a standard that would guide me to look for legal imperatives that the NSNP should meet based on legislation. the researcher contended that the themes would assist in critically evaluating the NSNP guideline to find answers to the set criterion. Once the researcher had the list of criteria, the researcher grouped legal imperatives together. By doing

this, specific themes emerged, and the researcher refined the framework to consist of five themes.

Managing the NSNP proper attention is required, especially when it comes to the continuous feeding of learners, promoting sustainable food production in schools and meaningful collaboration with non-governmental organisations (NGOs) and other stakeholders. As such, there is a need to investigate whether the NSNP guideline (2009) guides secondary school to meet Constitutional imperatives. Chapter 5 thus, presents the findings of the evaluation of the study. The thematic network analysis was used to draw common themes that emerged from the previous chapters. Themes generated were focused on addressing the research objectives. The main objective of this research was to evaluate the Constitutionality of the NSNP guidelines for secondary schools during school breaks. Hence, the NSNP guideline is evaluated with reference to the following themes:

- Theme 1: Enhancing the standard of living of learners
- Theme 2: Positive communication and cooperative governance
- Theme 3: Adequacy (quantity) and quality of food
- Theme 4: Physical and financial access to the NSNP
- Theme 5: Continuous access to the NSNP

5.2 Theme 1: Enhancing the standard of living of learners

Basic nutrition, like sufficient food, refers to how people should have access to food for a quality standard of living. Article 11(1) of the International Covenant on Economic, Social and Cultural Rights (ICESCR) (1996) recognizes that food plays a role in attaining a proper standard of living which requires sufficient food (cf. ch4 par 4.3.4). Article 27 states that "Every child has the right to an adequate standard of living optimally for their development" (UNCRC, 1989: art.27; cf. ch4 par 4.3.6). Article 25 of the Universal Declaration of Human Rights (UDRH) (1949) also commits States to recognise the right to health as part of providing an individual with a quality standard of living. (cf. ch4 par 4.3.3).

Magnusson, McGrady, Gostin, Patterson, & Abou Taleb (2019) indicate that the ICESCR recognises obligations under the right to life, including obligations to ensure that nutritious food is accessible and adequate (cf. ch4 par 4.3.6). Therefore, all the member states of the United Nations (UN) are obligated to respect, protect, and fulfil the right to an adequate standard of living optimally for the development of all people (cf. ch4).

If individuals are unable to feed themselves, they stand a high chance of suffering from starvation. When people are starving, it means that the person is not getting enough nutrition in the body, resulting in the form of malnutrition known as undernutrition (cf. ch2 par 2.7.1). According to WHO (2021), malnutrition robs people from the ability to achieve their physical and mental potential (cf. ch2 par .13). Thus, the state must play a role to ensure that it protects the person's right to life. Hence, according to the *Constitution*, "everyone has the right to life" (RSA, 1996a: s.11).

Article 6 of the UNCRC states that the state realises that every child has the "inherent right to life". As such, the state has the responsibility to ensure that the "survival and development of the child is maximised" (UNCRC, 1989: art.6; cf. ch4 par 4.3.6). Hence, the researcher gave the NSNP guideline a critical read to look for content that plays a role in maximising the learner's right to a quality standard of living. In this regard, the researcher noticed that the general aims of the NSNP guidelines aims to:

> enhance the learning capacity of learners through the provision of a healthy meal at schools. Where it is implemented, the programme has shown to improve punctuality, regular school attendance, concentration, and the general well-being of participating learners (RSA DBE 2009:1)

This quotation not only foregrounds an emphasis on the provision of "healthy meals" to learners at school but also foregrounds the "general well-being" of learners who participate in the NSNP. Reference to enhancing "the learning capacity of learners" implies to an extent maximising the learner's quality and standard of living, especially that of development, but only when they are at school. It should be noted that every school year, there are also additional days off. The South African school year lasts about 200 days overall, and there are roughly 165 days of school breaks per year, including holidays and weekends (Esakov & Vally, 2010).

It, therefore, demonstrates that the amount of time that learners are exposed to hunger is close to half a year (45,2%). Lack of food impacts the child's growth, behaviour, and concentration, reducing the chances of maximizing school potential and thus potentially affecting prospects of success (Iddrisu, Monteagudo-Mera, Poveda, Pyle, Shahzad, Andrews & Walton, 2021). Thus, affecting the learner's standard of living.

Consequently, the aims of Goal 1—to abolish hunger and Goal 2 to ensure healthy lives and promote well-being for all ages of the SDGs 2030 is defeated. Because students don't go to

school during school breaks and therefore do not obtain food in terms of the NSNP. Students are at risk of going hungry 45,2% of the days per year (cf. ch4 par 2.4.4). Therefore, if the students are undernourished for a week or more or even 4-5 weeks over the December holidays, it means that their development, health, and quality of life are also compromised for extended periods of time, especially if they frequently deal with hunger because schools are on breaks and the NSNP is unavailable (cf. ch4 par 4.3.4 & 4.3.6).

Hunger robs learners of the ability to enhance their learning capability (cf. ch2 par 2.13.2); in that sense, the standard of living of learners is also tempered. Thus, minimising the quality and standard of living. In this regard, note should be taken that most learners come to school hungry and cannot maximise their development and growth. According to Saunders & Smith (2010), malnutrition affects how the body composes itself and functions (cf. ch2 par 2.13). Thus, affecting the ability of the body to allow all functions of the body to function to its best capacity (cf. ch2 par 2.13). Hence the NSNP ensures that "The meals which are provided at schools are, therefore, intended to give energy for mental and physical activities for the body and brain to function" (RSA DBE 2009:3). Although not specified as such, one would assume that by emphasising the provision of healthy meals for the general well-being of the learner, the NSNP promotes and fulfils the right to an adequate standard of living.

Drawing from my understanding of nutrition and its broadness (cf. ch2), the researcher started to look for content in the NSNP guideline document that suggests that the NSNP have developed or created other policies that advance the quality of the standard of living. Reading through the NSNP (RSA DBE, 2009), I noticed the statement "[s]pecifications of new menu option inclusions are obtainable from the District/Circuit NSNP officer" (RSA DBE 2009:4), which indicates that the NSNP has developed a menu specification guideline aside from the NSNP guideline.

The following statement "[t]he Department of Education in conjunction with the Department of Health provides a variety of menu options from which the schools may choose. The district office will make this available to schools." (RSA DBE 2009:4), attest that aside from the NSNP guideline, the NSNP has developed a variety of menu specifications which schools may choose from in an attempt to advance a healthy quality standard of living. The menu options are stipulated in the Mnandi for sure recipe book (cf. ch3 par 3.4.2).

The Goal of the cookbook is to guide schools to provide meals that are higher in quality, more palatable, accommodate the diverse gastronomic and cultural preferences of students in each province and choose ingredients to satisfy the dietary requirements of developing bodies and brains (RSA DBE, n.d..; cf. ch3 par 3.4.2). However, the NSNP guideline does not include within it, the menu specifications and recipes as mentioned in the Mnandi for sure recipe book. Furthermore, the NSNP guideline does not refer to the above-mentioned book, though the recipe book is clearly indicated as "A recipe book for the National School Nutrition Programme" (RSA DBE, n.d..; cf. ch3 par 3.4.2). The guideline only highlights that there are menu options that are obtainable at the district office.

Only highlighting that menu specifications are obtainable at the district office possess a risk. As the district might not distribute the books to all schools. Additionally, schools might not put in the effort to contact the districts to get hold of the books – and this will be detrimental for the learners and the quality of the food that they get as schools will have to do what they can with what they have in their possession.

Furthermore, the NSNP guideline is silent and does not lay down the guidelines or menu specifications that schools can choose from to ensure that food packages are made, or food is made available for learners when school breaks. The NSNP guideline merely indicates that learners should be provided with food that enhances them physically, mentally and their general well-being. As such, the whole NSNP document is set up to just provide food while schools are open and is silent on the provision of food to children while schools are closed.

It is imperative for the NSNP to create policies that allow for access to nutritious food that promotes the right to survival and promotes the normal growth and development for a healthy life (Ayala & Meier, 2017; cf. ch4 par 4.4.2); it is also imperative that the state simultaneously adopt all measures to fight against malnutrition and diseases such as non-communicable diseases (NCDs) and to promote high life expectancy (CRC, 1989: a.24(2)(c); cf. ch4 par 4.4.1). Thus, to promote longevity and high life expectancy, the NSNP is obliged to create a diet that prevents NCDs (Magnusson & Patterson, 2014; Irmak, 2020; cf. ch2 par 2.7.1). From my understanding of fighting against malnutrition and NCDs whilst reading the NSNP guideline, the researcher noted the statement, which seems to align with the healthy ways that can assist in preventing NCDs and malnutrition while promoting longevity.

> Currently, meals are provided to all learners in Quintile 1, 2 and 3 public primary schools from Grade R to Grade 7. The programme will be extended to Quintile 1 secondary schools in April 2009. All Quintile 2 and 3 public secondary schools will be included in 2010 and 2011, respectively. All learners in the schools must be provided with daily meals. (RSA DBE 2009:4).

The above statement indicates that the DBE intends to combat hunger and malnutrition among primary to secondary school learners. Currently, as set out in the NSNP guideline, all learners in quintile 1, 2 and 3 schools are to be provided with at least one meal. The shift from providing meals to only public primary school learners in Quintile 1, 2 and 3, to providing all public secondary schools in Quintile 1, 2 and 3 indicates that the DBE is on the right path of alleviating hunger and fighting against malnutrition and preventing NCDs.

While the NSNP is on the right path, attention should be given to the statement, "[a]ll learners in the schools must be provided with daily meals" (RSA DBE 2009:4). The NSNP in the quote indicates that all qualifying learners at school should be provided with a daily meal, which is not currently happening as most learners in quantiles 4 and 5 in South Africa are not provided with meals, and some of the learners in quantiles 4 and 5 come from poor backgrounds and might qualify for inclusion in the NSNP. However, the NSNP is not rolled out in quintile 4 and 5 schools which are fee paying schools. Therefore, the well-being and quality standard of living of those learners is compromised.

Note should be given to the fact that there are no provisions in the NSNP for any children in quantile 4 and 5 schools. As such, there should be guidelines in place to ensure that quantile 4 and 5 schools are guided to ensure that special provision is made for poor children in these schools. Perhaps some sort of subsidy for poor children to give them food at school too or measures to ensure that quantile 4 and 5 schools are sensitive to be on the lookout for children that might need food. As there is currently nothing in the NSNP for quantile 4 and 5 schools.

Additionally, the NSNP moved from primary to secondary schools during normal school times. The *Constitution* provides in section 28(3) that a child is a person under the age of 18 years. This extension of the NSNP to secondary schools in in line with the best interest principle applicable to all children and constitutes the promotion and fulfilment of the *Constitution*al imperative.

The programme does not extend further to also address the needs of children during school breaks and holidays. One of the aims of the Children's Act is to protect children from neglect which "means a failure in the exercise of parental responsibilities to provide for the child's basic physical, intellectual, emotional, or social needs. Due to poverty many parents are unable to provide adequate food for their children. The NSNP thus address the unintentional neglect of children in families. The provisions of the Children's Act on the objectives of the act indicates that existing structures should be strengthened to provide care and protection to children. (RSA, 2005: s.1(2b(iii) & (e); cf. ch4 par 4.4.6).

Schools are an existing structure that implement the NSNP and consequently ensure that children are properly fed during school terms but does not fulfil this role during breaks and holidays. This role can be enhanced and strengthened if the guidelines also include prescriptions on the role of schools to address unintentional child neglect due to poverty during school holidays. As such the non-provision of school meals during breaks is defeating the objectives of the provisions of the Children's Act since schools and all its infrastructure is still available during school breaks. Thus, weakening the states response to malnutrition rather than strengthening it and therefore infringing upon the learner's rights to a better standard of living and well-being. This can be addressed by including prescriptions in the NSNP guidelines to enhance the role of schools to address unintentional child neglect due to poverty during school holidays.

During school holidays, learners who depend only on food provided by the NSNP do not receive food. Thus, compromising their standard of living. According to two Non-governmental organisations, Equal Education (EE), and Section 27, at least 50% of learners do not receive a meal or a food parcel on days that they are not at school (EE & Section 27, 2021; cf. ch4). The state's failure to uphold the right by leaving in place barriers that obstruct access to basic nutrition also constitutes a violation of the right to basic nutrition. Barriers include the state's refusal to restart the NSNP following a period of school closures brought on by the COVID-10 pandemic and suspension of the program due to school closures, school holidays, and breaks, among other barriers (EE vs DBE, 2020; cf. ch4 par 4.5).

State obligations include ensuring social safety nets for the poorest and providing food assistance when children or groups of children, especially those from child-headed families, are unable to fully enjoy their right to basic nutrition through the means available to them due to events beyond their control (cf. ch4 par 4.5). Therefore, the NSNP guidelines is silent in

meeting the *Constitution*al imperatives, especially during school breaks as the NSNP programme is non-functional during those times. Therefore, the guidelines should be amended and implemented to also address the needs of children during school breaks.

5.2 Theme 2: The preventative health care and survival of learners

The right to basic nutrition in conjunction with healthcare is vital for fighting against malnutrition and NCD's (SAHRC,2016). Therefore, the food provided to the learners by the NSNP should meet the basic standard of nutrition to maintain a healthy lifestyle. Simultaneously fighting or preventing NCD's (Irmak, 2020; cf. ch2 par 2.7.1). Hence, the foundation of health and survival, healthy development, and building resilience against NCD's are to eat a balanced diet that has enough nutrients and calories (Irmak, 2020; cf. ch2 par 2.8).

As such, the researcher critically read the NSNP guideline to draw attention to the promotion of health care and survival of learners through healthy eating by the NSNP guideline. With the importance of promoting healthy eating in mind, the researcher noted the statement, "[t]he NSNP aims to enhance the learning capacity of learners through the provision of a healthy meal at schools" (RSA DBE 2009:1). The above quote indicates that the NSNP guideline aims not only to provide food for learners to alleviate hunger but also considers that healthy eating impacts their health, survival and learning capacity. Large numbers of ill children, due to malnutrition could undermine the long-term viability of healthcare systems if these learners become chronically ill learners with NCDs (Palmer, Monaco, Kivipelto, Onder, Maggi, Michel, Prieto, Sykara & Donde, 2020; cf. ch2 par 2.8),

Thus, the NSNP plays an important role in preventative healthcare by providing healthy meals that can diminish the prevalence of NCDs. But although it is there by implication there is nothing explicit in the NSNP guidelines that emphasise the need to prevent illness, disease and NCDs. Thus, those responsible for the NSNP should be made aware in the guideline of the important role the NSNP plays in the prevention of illness and NCDs. Furthermore, the researcher critically read the NSNP guideline to draw attention to NCDs.

The DBE indicate that the NSNP guideline was created with the hope schools "will use this manual as a guide and resource document in your work as you provide school meals" (RSA DBE 2009:1), and "that it will encourage healthy eating habits and contribute to the growth, development, learning and overall achievement of learners in your school." (RSA DBE 2009:1). Yet, there is evidence, in a study conducted by Nhlapo, Lues, Kativu & Groenewald

(2015), that most schools relied heavily on starches such as pap or samp, which makes up 50% to 75% of the plate with little protein and vegetables, with a supplement of fruits once a week or no fruit at all (cf. ch2 par 2.13).

Thus, such heavy reliance on starch indicates that the NSNP does not live up to the expectations of the guideline. Failure to provide learners with balanced meals can be considered a recipe for the development of NCDs, potentially compromising the immunity of learners due to the under-representation of other food groups such as vegetables, fruit, and healthy proteins (Koo, Poh & Abd Talib, 2018; El Ghoch & Valerio, 2020; cf. ch2 par 2.13). Hence, the NSNP guideline is compliant, but in implementation it violates the constitutional imperative to health and survival of the learners.

Additionally, the NSNP guideline does not have any accountability measures in the guidelines which prescribe who should monitor the implementation of the guidelines. This is apart from the teacher that is in charge of the NSNP but there is no one above the teacher or some independent evaluation on the implementation. As such, it opens room for poor quality implementation of the guideline and non-compliance, thus infringing upon the Constitutional imperative to health and survival of the learners. Therefore, the NSNP needs to ensure that there are proper monitoring structures put in place to ensure proper implementation of the programme.

Furthermore, one of the objectives of the NSNP guideline is to "promote healthy lifestyles amongst learners" (RSA DBE 2009:3). Hence the NSNP saw it imperative to ensure that throughout the school day, "[l]earners must drink at least 8 cups/glasses of water daily." (RSA DBE 2009:5) because sufficient amounts of water are also crucial for the overall health of a person. A healthy plate of food should be supplemented by lots of fruits and drinking a lot of water (Nambung & Hong, 2019; cf. ch2 par 3.2). But there is evidence that learners only receive fruits once a week or none at all (Nhlapo, Lues, Kativu & Groenewald, 2015; cf. ch2 par 2.13.2).

Additionally, according to Vorster, Badham & Venter (2013), The Food Based Dietary Guidelines (FBDG) in South Africa recommends that children and adults enjoy a wide range of cuisines and drink a lot of water (cf. ch3 par 3.4.2). The interest theory of rights (, IToR) aims to protect individuals against violations of their rights by other individuals and the government (McBride, 2020; cf. ch1 par 3.4). But 5.9% of schools have limited access to water

(cf. ch3 par 3.11) which indicates that the rights of learners to access to basic water supply and sanitation services is infringed upon.

The NSNP guideline calls that "schools should ensure that it is hygienic and is clear of any potential risk for food contamination. The cooking area must always be kept in a neat and hygienic condition" (RSA DBE 2009:7). Equally, lack of water can also compromise hygiene in the preparation of the food and cleaning dishes, which put the learners further at risk for ill-health. Thus, such kind of infringement is not in the best interest of the child as sufficient amounts of water are also crucial for the survival and healthcare of a person. The *Constitution* of South Africa in the Bill of Rights in section 27(1)(b) states that "[e]very person has the right to have access to sufficient food and water".

The NSNP guidelines state that "[t]he meals which are provided at schools are, therefore, intended to give energy for mental and physical activities for the body and brain to function" (RSA DBE 2009:3). Although not specified as such, one would assume that by emphasising the provision of healthy meals for the general well-being, healthcare, and survival of the learner, the NSNP fulfils the constitutional imperative to the healthcare and survival of the learners, especially preventative healthcare. Arguably, the NSNP guideline provides schools with opportunities to provide learners with food that meet constitutional imperatives.

However, by schools providing only one meal at school (cf. ch3 par 3.4.2), one would assume that the NSNP guideline does not adequately enhance the standard of living of those learners for whom the food they receive at school is their only meal for the day. This enhance the responsibility to ensure that it is a balanced plate of food. Furthermore, the guideline is silent on measures that should be taken to address the specific needs of children that has access to only the one plate of food per day provided as school. The NSNP guidelines make provision for one meal per day, but children actually need three meals per day.

The Guidelines follows a one size fits all approach and does not make provision to assist children to access more than one meal per day. This is not in line with the best interests of the child principle which requires that the individual needs of every child should be assessed and addressed accordingly, especially, when school breaks. Because with only one meal provided to learners at schools, it is impossible to reach the recommendations of the FBDG.

As seen in the case *Centre for Child Law v Minister of Justice and Constitutional Development* (*Centre for Child Law v Minister of Justice and Constitutional Development 2009*), the court

held that children's right does not apply "indifferently" to children by category. This means that a child's needs and interest are not capable of legislative determination by group but by individualisation of the children's needs and interest (cf. ch1 par 1.4). Therefore, the children's best interests can only be given proper effect to if their needs are individualised and that we do not just make legal provisions such as the guidelines that do not make provision for exceptions – such as more than one meal for children who has access to only that one plate of food provided at school.

Hence mealie-meal porridge or breakfast cereal is being served in wealthier provinces (Gauteng & Western Cape), accompanied by a meal during or before lunch hour and just one meal served in the less-resourced provinces (Devereux, Hochfeld, Karriem, Mensah, Morahanye, Msimango, Mukubonda, Naicker, Nkomo, Sanders, & Sanousi, 2018; cf. ch3 par 3.1.2). Thus, there is a need, but the Guidelines does not prescribe that there should be two meals for deserving learners and or specific schools.

The state and the NSNP guidelines should therefore make sure that it takes "reasonable legislative and other measures, within its available resources, to achieve the progressive realisation" of the right to access nutritious food in schools that prevent NCD's and promote healthy living (RSA, 1996a:s.27(2); cf.h4 par 4.2.6). With the above deduction, the researcher noticed that the NSNP is responsive in this regard as it prescribes that learners have access to healthy, nutritious food that is balanced by highlighting that "[s]chool menus should offer tasty and adequate meals which must fulfil at least 30% of the daily nutritional needs of learners per meal" (RSA DBE 2009:4).

There are thus rooms for schools to do more, but it is not explicitly stated or demanded from schools to do it for children with access to only one meal per day. Thus, the guidelines actually say that we know this child get only 30% of what is needed but we are not doing anything explicitly about it by amending the guidelines to make provision for children who are in dire need to have access to at least two meals. And they know that these children get nothing during school breaks (not even the one meal a day) and did not amend the Guidelines. Hence, it is vital that the NSNP guidelines must be amended.

Based, on evidence provided by Nhlapo, Lues, Kativu & Groenewald (2015), the NSNP only prescribe that it should be balanced, but there are no measures in place to ensure that it is indeed balanced (cf. ch2 par 2.4). Mawela & Van den Berg (2018), in this regard, highlight the lack

of monitoring mechanisms and accountability measures in most provinces (cf. ch3 par 2.4.1). As such, the NSNP is not adequately implemented, and some of the provided guidelines to the provinces are not effectively implemented (cf. ch3 par 3.2.6; Mawela & Van den Berg, 2018). Hence, the guidelines should be amended to include explicit monitoring mechanisms.

As seen in chapter 2, the food components of a balanced meal are essential for healthcare and survival (cf. ch3 par 3.1.2). Thus, the NSNP guideline further states that "[i]t is important to serve a balanced meal which is composed of: Protein: vegetable protein e.g., Soya products, dried beans, lentils, nuts and dried peas or animal protein e.g., meat, milk, eggs, and fish. Starch: e.g., maise meal, samp, mealie rice, rice, bread, potatoes. Vegetables: at least one green and one red or yellow or orange vegetable per meal" (RSA DBE 2009:4). Whilst ensuring that the condiments used, such as "fats and oils, must be used in moderation, Iodated/iodised salt and seasoning must be used in moderation." (RSA DBE 2009:4).

While the NSNP prescribes that the meals are balanced and nutritious, it does not ensure implementation and ensure that the physical and mental growth of learners is protected through the provided food. Section 28 of the *Constitution* acknowledges that "[e]very child has the right to basic health care services", which include preventative health care (RSA, 1996a: s.28(1)(c)). As such, the NSNP and the state are obligated to ensure that the "well-being, education, physical or mental health" of the child is protected through the provision of nutritious food (RSA, 1996a: s.28(1)(f)(ii)).

The NSNP is also responsive by prescribing that physical and mental growth is protected by ensuring that it "encourages healthy eating habits and contributes to learners' growth, development, learning and overall achievement" (RSA DBE 2009:1). One of the objectives of the NSNP guidelines is also responsive in promoting "the learning capacity" (RSA DBE 2009:3). Additionally, the NSNP guideline responds by asserting that "[i]t is important to feed learners before 10h00 so as to give them energy to concentrate and be alert in class" (RSA DBE 2009:5). The use of the terms "concentrate" and "alert" suggest that the NSNP is invested in protecting the mental growth of learners as hunger has the ability to disorientate learners and affect how they learn (cf. ch2 par 2.3.3).

Furthermore, the researcher noticed the quote:

> The National School Nutrition Programme aims to provide meals to the neediest learners. Good food provides energy for the brain. The meals which are provided at

> schools are, therefore, intended to give energy for mental and physical activities for the body and brain to function and to make the learners alert and receptive during lessons (RSA DBE 2009:3).

According to Burchi, Fanzo, & Frison (2011), nutrients are essential for performing various physiological activities such as growth, movement and responsiveness and psychological functions such as mental development, thinking and understanding (cf. ch2 par 2.3.1). Such functions are essential components in education for learning, especially in the early stages of a child's life (cf. ch2 par 2.3.3 & 2.3.2). The quote above indicates that the NSNP guideline is responsive in the protection of mental and physical growth as it powerfully highlights that the food provided to learners should be sufficient to "provides energy for the brain" and "for mental and physical activities for the body and brain to function." (RSA DBE 2009:).

According to Irmak (2020), without proper nutrition, a person suffers from malnutrition with imbalances in how a person absorbs necessary nutrients (cf. ch2 par 2.3.1). Hence, the researcher critically read through the NSNP guideline in search for measures that are aimed at countering malnutrition, and the researcher noted the following quotes, which seem to align with the prescribed measures that are in place to fight against malnutrition and prevent NCDs.

> Promote self-supporting school food gardens and other production initiatives (RSA DBE 2009:3). Each school will be expected to initiate a food garden or food production project (RSA DBE 2009:3); to promote healthy lifestyles amongst learners (RSA DBE 2009:3).

The above quote from the NSNP objectives aligns with Burchi, Fanzo, & Frison (2011) and Irmak (2020) that adopting measures to fight against malnutrition and preventing NCDs should always consider the role played by nutrients (cf. ch2 par 2.2.). Hence, the establishment of school gardens is of paramount importance (cf. ch3 par 3.3). From the above quote, the statement that says to "promote self-supporting school food gardens and other production initiatives" (RSA DBE 2009:3) indicate that by promoting the establishment of school gardens, the NSNP guideline is being responsive towards the prevention of NCDs but does not ensure or guarantee the development or implementation of vegetable garden at school.

The term "self-supporting" would indicate that schools are expected to have functional food gardens throughout the year, and various vegetables would be available to feed learners based on the seasons. Yet most schools have no functional school vegetable gardens, and no training

is provided for staff (Rendall-Mkosi et al., 2013; cf. ch3 par 3.3). Therefore, schools have no proper vegetable gardens to supplement learners' diet with the nutrients required for performing various physiological activities such as growth, movement and responsiveness and psychological functions such as mental development, thinking and understanding, which are all of paramount importance (Burchi, Fanzo, & Frison, 2011; cf. ch2 par 2.3).

Guariguata & Jeyaseelan (2019); Kraemer, Cordaro, Fanzo, Gibney, Kennedy, Labrique, Steffen, & Eggersdorfer (2016) highlight that unhealthy food increases the vulnerability of a child to NCD's and severe health risks, which later affects the child's health in adulthood (cf. ch2 par 2.13.1). Additionally, the lack of proper healthcare services in developing countries for people and children who will be diagnosed with NCD's exacerbate the issue (cf. ch2 par 2.13.2). As such the NSNP and state should employ measures to eliminate barriers that inhibit access to health care services. Section 28 of the *Constitution* acknowledges that "[e]very child has the right to basic access to healthcare services" (RSA, 1996a: s.28 (1) (c)). As such, the NSNP and the state are obligated to ensure that the "well-being, education, physical or mental health" of the child is protected through the provision of nutritious food (RSA, 1996a: s.28 (1) (f) (ii)).

The state can also adopt measures such as programmes that fight against NCD's by ensuring equal access to determinants of health such as safe, nutritious food (SAHRC, 2016: UN, 2010). Drawing from the above obligation of the NSNP, the researcher critically looked for measures or programs that the NSNP has adopted to ensure equal access to determinants of health such as safe, nutritious food. The researcher, therefore, noticed the statement in the guidelines:

> The 2006 survey by the Fiscal and Finance Committee confirmed that there was a need to extend the programme to secondary schools. In October 2008 the Minister of Finance announced a budget for the inclusion of secondary schools in the programme (RSA DBE 2009:3).

The quote indicates that the program of providing nutritious food to learners was previously only in primary schools. The extension from primary school to secondary school suggests non-discrimination on the ground of age which respond to the needs of all children who do not have access to food. However, quantile 4 and 5 schools are not catered for and the NSNP guideline and is silent in that regard.

The NSNP guideline does not lay guidelines for the extension to upper quantiles, ignoring poor learners in the upper quantiles. Thus, it does not adequately realise the right to life, survival and development as some learners are left out. Thus, the NSNP is discriminating on the grounds of quantiles as there are gaps and not all learners in all quantiles are targeted. Thus, leaving out other learners who are disadvantaged in upper quantiles contradicts the quote "[a]ll learners in the schools must be provided with daily meals" (RSA DBE 2009:4).

According to the WHO (2020), eating unhealthy with insufficient exercise deteriorate a person's heath and simultaneously increases the risk of NCD's (cf. ch2 par 2.13.1). Notwithstanding that the NSNP guideline does not explicitly promote physical activities, one would assume that by using the term "physical activities", the NSNP is aware of the importance of a balanced diet in conjunction with exercise for the overall health of the learner to prevent NCDs. Therefore, the NSNP encourages that learners are provided with meals that are intended to support them during exercise and physical activities that require physical strength.

Nevertheless, it should be noted that the use of the term "physical activities" does not necessarily mean that the NSNP promote any form of activities for learners to partake in. As, there are many schools that lack in extracurricular activities. According to Alexander, Matoti, & Van Zyl, (2021), different aspects of human growth, including the physical, emotional, mental, spiritual, and social ones, can be seen from a holistic point of view. Overall, we contend that involvement in extracurricular activities, overall development, and academic success are all causally related (cf. ch3 par 3.). Thus, the lack of extracurricular activities therefore infringes upon the right to preventive health care and the right to development and growth as stipulated in the UNCRC (cf. ch4 par 4.3.6) that States Parties shall work to ensure that no child's right to access such health care services is violated (UNCRC, 1989:24(1)). Article 27 of the UNCRC, indicates that the right to "a standard of living adequate for the child's physical, mental, spiritual, moral and social development" (UNCRC, 1989: art.27; cf. ch4 4.3.6).

Whilst promoting physical activities to prevent NCD's together with a proper diet, the state, as part of the UN, should ensure that all children's right to healthcare is protected (Guariguata & Jeyaseelan, 2019; cf. ch2 par 2.7.1). The state is also obligated to ensure that the child is protected against NCD's. If the child is already diagnosed, the child should also be given the opportunity by the state to receive proper health care and nutrition to address the NCD (Guariguata & Jeyaseelan, 2019; cf. ch4 par 2.7.1). Thus, the state's responsibility is to ensure

that it fulfils the powerless children's health rights, especially those from poor backgrounds, as they cannot advocate for themselves (Alliance, NCD, 2011; cf. ch2 par 2.8).

Hence, the researcher critically looked for information indicating if the NSNP provides any alternative diets to ensure that sick learners are accommodated during feeding time. After a thorough review of the NSNP guideline, the only information the researcher could refer to, was the information indicating that all learners should be provided with meals. Still, the NSNP guideline does not indicate whether alternative meals should be offered to learners who already suffer from NCD's or learners who do not eat specific types of food due to pre-existing conditions such as allergies or diabetes. Furthermore, if the child is sick and not in school, there is nothing put in place to ensure that the child receive food, even though it is known that the child depends on the meal provided at school, especially learners from child headed families.

It is impossible to exaggerate the value of diet for children with HIV and AIDS. Inadequate nutrition reduces children already weakened immune systems, making them more vulnerable to illness (Esakov & Vally, 2010). A healthy diet is especially important for kids using antiretroviral drugs (ARVs) because it improves the way the drugs work, reduces side effects, strengthens the immune system, and protects against opportunistic infections (Esakov & Vally, 2010). The gist of the argument is that children with HIV/AIDS or other illnesses need to eat healthily. Thus, everything possible should be done to support and improve the immunity of those children. Meals that consist primarily of starch will not assist to improve the health status of these children.

Therefore, lack of alternative diets and food packages impacts negatively on the realisation of the constitutional imperatives for the realisation of the right to health care services and the right to life, survival, and development. Additionally, the NSNP guideline does not lay guidelines of how many meals in total learners should be served. It merely indicates that learners should at least be served a meal a day. On the one hand, lack of guidelines might leave a gap on how healthy food should continuously be offered for deserving learners to prevent them from NCDs and adequately fulfil the right to life, survival, and development even when schools are on break. On the other hand, it creates the opportunity for schools to use their discretion and provide learners with more than one meal and offer food packages for learners who deserve them.

The evaluation reveals that the NSNP guideline is clear towards respecting, promoting, protecting, and fulfilling the right to access to preventative health care services. The NSNP guideline positively responds to the preventative health care mentioned above as it proposes that the meals provided to the learners develop them both physically and mentally, thus ensuring that children do not get sick by providing learners with balanced healthy meals. Healthy meals are essential for the prevention of NCDs. There are however room to improve and promote and fulfil the right even better.

On the contrary, the NSNP guideline is silent regarding special diets for children with special dietary needs. There is still a gap that needs to be filled. Therefore, there are more roles that dietitians need to play in the development of the menus. Dietitians also play an important role as far as the diet of sick children such as those with diabetes and HIV is concerned. Additionally, the NSNP guidelines is silent in ensuring that the menus are linked to the work of dietitians and expecting schools with a feeding scheme to consult with a dietitian on the special needs of specific children such as HIV positive learners.

Besides, the meal provided by the NSNP is not enough as it lacks fruits. The meal is also not enough to prevent NCDs as most schools offer one insufficient meal. For those learners who only depends on the one meal at school, one can assume that it is not enough to prevent NCDs as indicated by Alexander, Matoti, & Van Zyl (2021), nutrition is particularly critical in children who are sick (cf. ch3 par 3). Not getting adequate nutrition weakens an already fragile immune system - making children more vulnerable to other illness (cf. ch2 par 2.7.1). A nutritious diet is also very important for children who are sick and make the drugs work better, reduce side effects, build up the immune system and protect against opportunistic infections (cf. ch2 par 2.7.2). The bottom line is receiving one meal a day that lacks fruits and vegetables, that is not balanced and relies heavily on carbohydrate is not sufficient to promote healthy living and prevent learners from being sick from NCDs (cf. ch2 par 2.7.1). The NSNP guideline merely indicates that “all learners should be served with a daily meal” (RSA DBE, 2009:3).

Furthermore, the NSNP does not offer any alternative diets for learners who are already suffering from NCDs and have certain food groups that they should not consume. The NSNP guideline is entirely silent in this regard. When schools break, the NSNP is silent and non-responsive towards the right to healthcare, especially preventative healthcare. When learners are at home, the NSNP guideline does not offer guidance on how qualifying and deserving learners should continue to receive that daily nutritional needs, which prevents them from

malnutrition and NCDs. As such, long-term physical and mental consequences of inadequate nutrition might include stunted growth and, in extreme situations, even death (cf. ch2 par 2.7.1).

5.3 Theme 3: Positive communication and cooperative governance

Without sharing ideas and knowledge, relevant stakeholders cannot work together to achieve a goal. Collaboration occurs when two or more stakeholders and departments work together on a problem in order to achieve a common objective (Klein, 2021). While evaluating the NSNP guideline the researcher also noticed the statement "[t]he Department of Education in conjunction with the Department of Health (DoH), provides a variety of menu options from which the schools may choose. The district office will make this available to schools" (RSA DBE, 2009). One would assume that since the health of a person is the responsibility of the DoH; the DBE is on the right path of fighting against malnutrition and preventing NCDs by working in collaboration with the DoH in matters that relate to learners right to life, survival, and development.

Whilst noting the collaboration in the NSNP and the DoH, the above quote indicates that the NSNP, in collaboration with the DoH, might have adopted measures and works with other relevant departments, which shows that there might be other policies developed by the DoH that collaborate with the DBE to advance healthy living of learners. But the NSNP guideline does not explicitly refer to the necessary policies through direct links within the NSNP guidelines.

The DBE, in conjunction with the NSNP, should therefore teach learners through their programs the importance of healthy eating and making healthy food choices (DPME, 2016; cf. ch3 par 3.2). Healthy food choices include giving preference to fruits, water and vegetables over sweets, sugary drinks, and fast foods. Additionally, learning and teaching support materials (LTSM) should be supplied to ensure that nutritional education is progressively realised (DPME, 2016; cf. ch3 par 3.2.7). Whilst reading the NSNP guideline, the researcher looked for information that promotes communication and collaboration such as that indicates any learning and teaching support materials (LTSM) supplied by the NSNP to ensure that nutritional education or healthy eating is promoted and communicated to learners and teachers. the researcher noted the statement:

> Sustainable Food Production – A nominated educator, SMT, and SGB members will be provided with training in food production. Each school will be expected to initiate a food garden or food production project (RSA DBE 2009:8).

In the above quote, the NSNP guideline indicates that all schools are expected to have a food garden or a food project initiative which calls for cooperation between school, parents, and the DBE. Those responsible for the running of the food garden must be provided with the necessary training. As such, one would assume that schools should be provided with the necessary LTSM relevant for a food production project, such as gardening tools, seedlings, and gardening manuals during the training from other departments such as the Department of Agriculture (cf. ch3 par 3.2.9).

Still the guideline is vague as it does not specify who should contact the Department of Agriculture and the guidelines does not explicitly say who should provide the training and who should go for the training and the steps to be taken if no one goes to the training. It further does not specify who, between the schools, DBE, and the DoH should initiate the process of training and what needs to be done if follow up training should be required. Additionally, it is also not clear who should work in the vegetable gardens between the parents, SMT, and children. Furthermore, there is also no clear specification regarding who is responsible for the creation or development of the required LTSM.

Therefore, the NSNP guideline mentions the promotion of positive communication and cooperative governance. But the NSNP guideline is vague, and it is rather seeming like suggestions than instructions and there is no clear guidance on who should do what and the consequences for schools that do not start a vegetable garden and the alternatives for vegetable gardens. Considering that the NSNP operates mostly in poor communities where illiteracy is much higher, the NSNP guideline should be much more explicit and detailed.

Additionally, there is no clear guidance on what should happen to the food if schools have a vegetable garden. There is no guidance on what should happen to access food, for instance if food should be stored for use later and again it is also silent on who should manage the access to the vegetable garden food as mentioned above, especially during school breaks. There is nothing in the guidelines on who is responsible for the costs of a vegetable garden. These are mostly quantile 1- 3 schools. As such, the NSNP guidelines should be explicit on the responsibilities of the Department too.

Quantile 1-3 schools do not have money to start vegetable gardens and for the water to irrigate the plants. As such one would assume that the Guidelines prescribe things that is not in line with the realities of what schools can do and not do and afford. Furthermore, there are no indication in the guidelines on whether the department will pay people to work in the gardens the same way they pay VFHs who prepares the food and who will be responsible for the appoint these people to work in the gardens. As such, there is no proper communication amongst stakeholders and there is a lack of cooperation amongst various departments.

There was no evident information indicating that the NSNP guideline directly or indirectly promotes the provision of food during school breaks to combat hunger and suffering. As seen in the *Equal Education and Others v Minister of Basic Education and Others* (EE vs DBE, 2020) (cf. ch4 par 4.4.6). As a result of the Covid-19 pandemic, the applicants were urgently requesting declaratory orders against the Minister of Basic Education and the MECs of Education of eight South African provinces (the MECs), alleging that they have violated their *Constitution*al and statutory obligations to ensure that the NSNP provides a daily meal to all qualifying learners, whether they are at school or at home.

There was no proper communication between the beneficiaries of the NSNP and the DBE as the DBE made promises of restarting the NSNP for all students during school closures but later failed to restart the programme. These failed promises infringe on students' constitutional rights to equality, a minimum standard of nutrition, and an education, and they also worsen the suffering of entire families and homes during this trying time. The NSNP touches millions of households that require nutritional support now more than ever in an environment of increased food insecurity and should be used by the government to fight hunger and misery.

The broken promises by the DBE to resume the NSNP when school breaks for prolonged periods of time indicates that the DBE even though has a plan communicated to the necessary stakeholders. The DBE has no plan of how to execute its promises thus failing dismally on the aspect of cooperation as it has nothing within its guidelines that forces them to keep to the promises made towards the deserving learners. Therefore, infringing upon the leaners right due to lack of cooperation between the DBE, schools, and learners.

The NSNP guideline further reveals that it does not offer or provide any programs that offer food to learners during school breaks. The NSNP guidelines make it clear that it does not offer food to learners or provide any form of incentive by stating that “The NSNP aims to enhance

the learning capacity of learners through the provision of a healthy meal at schools" (RSA DBE 2009:1), which indicates that it only offers food to learners when they are at school. Therefore, there should be proper cooperation with the Department of Social Development and DBE to ensure that the Department of Social Development knows which children will need food during school holidays and take over the nutritional needs of so many children during school breaks. But at this point that it is the DBE that deals with children that need care and support and responsible to ensure that children are not neglected. As such, cooperation requires that schools should inform the social services of learners who will need food during school breaks or the NSNP should continue during school breaks. We saw during Covid that the Department of Social Development (DoSD) does not have the capacity to look after so many children. Thus, the NSNP guidelines should be more explicit regarding cooperation with DoSD and/ or the continuation of the NSNP during school breaks.

As such the guideline does not ensure that there is proper communication between learners and schools to ensure that they know that they can go to schools to receive food when schools' breaks. As seen in the EE vs DBE case (cf. ch4 par 4.4.4), the issue grew more critical as qualifying students were unable to receive meals as a result of roadblocks and lack of transportation and inadequate communication and cooperation from education officials with school communities. Food insecurity has catastrophic and unacceptable effects on students and their families in terms of their emotional, physical, and financial health. Consequently, these were the lessons learnt during Covid on what issues arise due to lack of communication with school communities.

A thorough evaluation of the NSNP guideline also reveals that the NSNP guidelines does not emphasise the importance of the role of the curriculum to promote nutritional and physical education. The NSNP guideline merely indicates that its second objective is to "promote self-supporting school food gardens and other production initiatives" (RSA DBE 2009:3). But the guideline does not guide how school gardens and other production initiatives should be incorporated or embedded within the curriculum. As such, it therefore indicates that there is a gap of cooperation between the branches of the NSNP and the curriculum and there is no clear link between them. Hence, schools can use the gap mentioned above to use school gardens as a tool to teach healthy eating to learners while achieving physical activity at the same time.

On the notion of LTSM that should be provided to schools by the NSNP to ensure that nutritional education is promoted, the NSNP guideline is not entirely clear. The NSNP

guideline merely states that all schools are expected to have food gardens and that training will be provided to one nominated member of teachers, SMT and SGB. The guideline leaves a gap, as schools are not guided on initiating a school food garden but are expected to. Schools are also not guided on food garden sustainability as they are only trained on food garden production. Which indicate that the relevant the DBE, schools, and the Department of Agriculture responsible for the success of the school gardens do not work together.

Although the NSNP guideline is responsive towards encouraging school gardens, it cannot be assumed that all schools are well equipped to have food project initiatives. Because, many schools have insufficient access to water and fertile soil, lack of space or land to create a food garden (cf. ch3 par 3.2.9). Furthermore, it can also not be assumed that the food project initiatives will benefit learners, especially during school breaks because the food gardens and the NSNP do not operate over weekends and during school and public holidays, leaving many children going hungry over these periods. Hence, if it is not operating during school holidays then the vegetable will rot or die if it is not cared for and harvested and given water during holidays. There should be staff available during holidays to care for the gardens otherwise everything will be lost and no food for the children when they come back to school after school re-opens.

Hence, when coming to the food gardens in South African schools, providing learners with food from school gardens such as vegetable parcels when schools break, the NSNP guideline is non-responsive. No evidence in the guideline suggests that schools are compelled to continue providing learners with fruits and vegetables from food gardens when schools are on break. The NSNP guideline merely indicates that schools should have food gardens. It is very silent on whether schools should continue to provide learners with food from the garden when schools break. Additionally, there is no guidance for those schools that have vegetable gardens on what should be done with the extra vegetables during breaks, whether they should be preserved for out of season times or should be given to deserving learners when schools break. Thus, form the funds provided for the utensils of the NSNP, schools and the SGB should provide NSNP kitchens with freezers to ensure that there is no wastage of surplus or vegetable harvested during holidays.

Again, the NSNP guideline is unclear when coming to collaboration issues with other departments such as the Department of Agriculture and the Department of Public Works. The NSNP guideline only states that schools will be provided with training but does not specify the

source of that training (cf. ch3 par 3.2.9). Furthermore, it is also not clear how training will be offered based on the requirement of individual schools. The NSNP guideline also refers to the schools developing vegetables gardens (cf. ch3 par 3.2.9), but it is not clear regarding the acquisition of the land to be used for the gardens. Since the vegetables gardens are meant to supplement the nutrition of the meals provided at school, the learners are therefore left without supplementation of nutrition thus negatively impacting on the quality of the program and subsequently violating their rights to nutrition as the food they will receive will either be insufficient, unbalanced and not nutritious.

Furthermore, the NSNP guideline stipulates that monitoring should be done monthly (cf. ch3 par 3.5). Still, the report conducted by the DBE (RSA DBE, 2014) indicates that union members and SGB members were not happy with the monitoring as monitoring was conducted at a lesser frequency than that stipulated in the guideline (cf. ch3 par 3.5). It is therefore an indication that there is no proper cooperation amongst the stakeholders of the NSNP. Thus, learners are the ones who suffer most subsequently violating their right to nutrition due to lack of cooperation.

5.4 Theme 4: Adequacy (quantity) and quality of food

Article 11(1) of the ICESCR (1996) recognises that food plays a role in attaining a proper standard of living that requires adequate and quality food (cf. ch4 par 3.1.1.2). At the same time, article 11(2) states that everyone has the right not to be hungry (Hendriks & Olivier, 2015; cf. ch4 par 3.1.1.2). The implication for the NSNP is that it provides learners with sufficient nutritious food.

In this regard, the NSNP guideline advises schools to ensure that "All learners in the schools must be provided with daily meals" (RSA DBE 2009:4). At the same time, ensure that the provided "School menus should offer tasty and adequate meals which must fulfil at least 30% of the daily nutritional needs of learners per meal" (RSA DBE 2009:4). Hence, the ICESCR (1996) requires all participating states to employ the necessary measures to realise the right to access food and basic nutrition to satisfy the dietary needs of a healthy person.

While the NSNP offers guidelines for providing nutritious food, it also offers ample space for adequate food. The aspect of food adequacy is fore grounded by Irmak (2020) and Burchi, Fanzo, & Frison (2011) as essential for receiving enough nutrients and sufficient calories for preventing NCDs and leading a healthy lifestyle. As stated in article 11(2) that everyone has

the right not to be hungry (cf. ch4 par 4.5.3), the NSNP guideline seems to be responsive in this regard, as the NSNP guideline states that “it is important to feed learners before 10h00” (RSA DBE 2009:5).

One would assume that by ensuring that learners are fed not more than 2 hours after they arrive at school. The NSNP guideline considers that most learners arrive at school on an empty stomach with insufficient nutrients to execute their functions for the day. However, according to Esakov & Vally (2010), the department's 10 am planned time is viewed as being too late (cf. ch3 par 3.1.3). Many learners come from extremely underprivileged homes; thus, they frequently go to school hungry and unfed. To give themselves the energy they need for learning and classroom activities, they must eat as soon as possible.

The evaluation reveals that the NSNP guideline partially realise the right to basic nutrition during school hours by prescribing that learner are served with at least 30% of their dietary needs.

There is not enough guidance and detail in the guidelines to optimise the constitutional rights to basic nutrition by adhering to the quality and quantity. For instance, the guideline does not provide explicit guidance on what the 30% of the diet should entails, as 30% for a school age child or pre-scholar vary from 30% of an adolescent or young adult. Furthermore, the guideline is also not clear on the portion sizes. Arguably, using the term “at least” the NSNP guideline gives ample space for schools to provide learners with meals more than what the NSNP guideline has stipulated.

Koo, Poh & Abd Talib (2018), state that the right to basic nutrition such as vegetables, fruits, nuts, and legumes in conjunction with the right to healthcare is vital for fighting against malnutrition and NCDs (cf. ch2 par 2.7.1). Therefore, by implication, the NSNP has to ensure that the meals provided to learners are balanced and meet the dietary needs. According to the World Cancer Research Fund International and The NCD Alliance (2014), eating food high in salt, trans fat and saturated fats, sugar and is processed results in obesity and overweight, which increase the chances of developing NCDs (cf. ch2 par 2.8).

The findings also reveal that the NSNP guideline encourages learners to have a balanced diet of starch, protein, and vegetables, with moderate salt and fat intake. However, the NSNP guideline does not lay guidelines on the types of fruits the learners should be provided daily and the quantity, thus, leaving schools to use their discretion. Indirectly, this leads to many

schools providing learners with fruits once or a week or none at all. Additionally, the NSNP guideline does not explicitly specify the types of vegetables to be utilised and the quality, it only makes reference to the colour of the vegetables. It is also not clear with regards to the quantity to be served to learners.

The NSNP guideline merely states that all learners should be provided with "adequate" meals. On the other hand, schools can take advantage of the term "adequate" and provide deserving learners with more than one meal a day and provide learners with food parcels to ensure that learners receive adequate food necessary for the protection, respect, promotion, and fulfilment of the right to basic nutrition.

5.5 Theme 5: Physical, financial, and continuous access to the NSNP

A diet that consists of a high intake of fruits and vegetables, such as a plant-based diet, contributes to the fight against NCDs by promoting a normal healthy weight and fighting against obesity (Koo, Poh & Abd Talib, 2018). But low-income families are at a higher risk of contracting NCDs because quality nutritious food is not available and affordable to them (Guariguata & Jeyaseelan, 2019). Furthermore, 30% of South African children live in households with a per capita income of less than R571 per month, making them food insecure (Thorogood, Goeiman, Berry, & Lakeiii, 2020). Thus, Nkrumah (2019) argues that the right to food imposes a legal obligation on the state to ensure that all citizens, including children's diet, meet the required dietary needs (cf. ch4 par 4.5.4).

As seen in chapter four of the study and attested to by Chirwa (2009), the South African *Constitution* of 1996, boldly safeguards the right to access food as a self-standing right. As if that is not enough, it expressly recognises children's rights to basic nutrition (Chirwa, 2009 cf. ch4 par 3.1.3). As such, it is the state's responsibility to ensure that legal frameworks and proper legislation are developed, adopted, and implemented to realise the right to nutrition as set out in General Comment 12 on the ICESCR (1996) (cf. ch4 par 4.5.4). Additionally, it is the state's responsibility to ensure that learners have physical, financial, and continuous access to the NSNP. Hence, the researcher critically evaluated the NSNP guidelines in search of what the guideline proposes regarding the financial access or referral to social services (cf. ch3 par 3.1.2) by the NSNP especially, when schools close.

After a critical evaluation of the guideline, the NSNP is silent in responding to financial access of the NSNP when schools break. The NSNP has not developed, adopted, and implemented a

framework to ensure that learners are presented with for instance vouchers that enables them to continue having access to the NSNP when school breaks. As seen in *Equal Education & Others v. Minister of Basic Education & Others* (2020), a grade 12 student and his sister live on R500 a month, and there are, and were, no viable referrals by the NSNP for the children to social services (cf. ch3 par 3.1.2). Therefore, the learners are without nourishment for the duration of the school break (cf. ch3 par 3.1.2). Thus, violating the learner's rights to basic nutrition (cf. ch4).

Additionally, the researcher critically evaluated the NSNP guidelines in search of what the guideline proposes regarding the physical access or food packages (cf. ch3 par 3.1.2) by the NSNP especially, when school break. Regarding developing a framework and proper legislation to ensure that children meet the required dietary needs by providing learners with food packages during school breaks and school holidays, the NSNP guideline is silent and unresponsive towards providing learners with food at school or food parcels, especially when they cannot have physical access to the school and NSNP during school breaks (cf. ch4 par 4.5.1).

The NSNP guideline is also silent on providing food packages, especially for children who depend only on the one meal provided at school for their source of nutrition. Every child, whether alone or in society, must have constant physical access to sufficient food or the means to obtain it, for their right to sufficient food to be realised (UN, 2010; cf. ch4 par 4.5.3). Thus, lack of physical access infringes on the learners' right to sufficient food and basic nutrition. Learners in isolated locations such as rural and deep rural areas must also have access to food (UN, 2010). Ensuring that transportation is available for isolated, vulnerable learners ensures that those learners have equal access to foods such as those nearer to schools (cf. ch4 par 4.5.2).

The NSNP guideline is also unclear in adopting programs or legal frameworks to ensure that learners continue to have a balanced diet necessary for nutritional dietary intake when schools break. On the one hand, the NSNP guideline is not clear in providing learners who depends on daily meals from school as their only meal as to how they will have continuous undisturbed access to meals when they go home, during school holidays and school breaks. It also does not provide a clear guideline on providing food packages to deserving learners and what should be in the packages for learners to continue eating a balanced diet.

As mentioned by Thorogood, Goeiman, Berry, & Lakeiii, (2020); (cf. ch2 par 2.8), some learners live in households with a per capita income of less than R571 per month, making them food insecure (cf. ch2 par 2.8). Hence, there is no dignity when a person does not have physical, financial, and continuous access to food or is malnourished. As seen in the *Equal Education and Others v Minister of Basic Education and Others,* (EE; cf. ch4). The suspension of the NSNP means that many children are at risk of being malnourished with possible long term health complications (cf. ch3). The affidavits provided by the learners from the two school applicants indicated that hunger was not a problem but an obscenity (IHRIP, 2000: s.3 (module 5). The researcher, therefore, looked for information on the NSNP guideline that shows that the NSNP provides food to learners in a dignified manner. the researcher noticed the statement:

> When the province/district/school procures equipment and utensils, the following items are required to prepare and serve meals: 3 burner gas stove, 20 litres cooking pots (3 pots per 500 learners), Stainless steel or heavy-duty melamine eating spoons, plates, and mugs/cups (RSA DBE 2009:6).

Though the NSNP guideline does not explicitly indicate that learners should be provided with food in a dignified manner, the first important thing one would recognise is that by ensuring that all learners receive food, the NSNP ensures that it covers the embarrassment caused by hunger as hunger on its own is undignified. Thus, providing a social safety net for low-income households (Furphy, n.d.; cf. ch3 par 3.6).

Additionally, the above quote indicates that the NSNP does not only offer food to learners but is also aware of the backgrounds from which learners come. It ensures that all learners are served food on the utensils, which one would consider dignified. At the same time, the NSNP guideline does not emphasise the importance of providing each learner with their personal utensils. The NSNP guideline merely states that schools should procure utensils to be used for learners. Still, principals in most provinces reported lack of utensils (DBE & DPME, 2016; cf. ch3 par 3.2.8).

Furthermore, the NSNP guideline also prescribes that the food prepared for the learners is done in a dignified manner by stating that

> [a] school needs to select an area for cooking, preparation and serving of meals with adequate ventilation. When choosing a cooking area, schools should ensure that it is hygienic and is clear of any potential for food contamination. The cooking area must

always be kept in a neat and hygienic condition (RSA DBE 2009:7). Food must not be placed on the floor but on an elevated palette/unused desk to avoid food contamination (RSA DBE 2009:6).

As such, the NSNP guideline is therefore responsive in this regard. Yet, some schools still report several infrastructure and equipment-related challenges including a lack of kitchens, forcing Volunteer Food Handlers (, VFHs) to prepare food outside which is difficult to do when it's windy or raining (cf. ch3 par 3.2.8). Therefore, leading to undignified health issues such as diarrhoea and parasitic worm infections, and furthermore reducing the effectiveness of a nutrition program and violating learner's rights to dignity (cf. ch3 par 3.1.5).

Countries such as South Africa, who have signed the UDHR (cf. ch4), have committed themselves to protect and defend a person's dignity. The CESCR defined the right to food in its General Comment No. 12 (1999), as the right to regular and unrestricted access to adequate and quality food to support one's dignity without fear (cf. ch4 par 4.4.3). Therefore, learners must be protected from hunger at all times while at school and while at home when schools break. Hence, as seen in the affidavits of *EE vs DB*E, hunger is not an issue but an obscenity (cf. ch4 par 4.4.6).

Hence, the researcher looked for information on the NSNP guideline that accommodates the provision of food during school breaks. A thorough review of the NSNP guideline showed no clear indication that learners are continually served food when schools break. It should be noted that the NSNP guideline indicates that learners should be served at least one meal at school, but schools are not properly guided on how and when to provide food when schools break, especially those who depend on the one meal provided by the school and nothing else. Hence, the verdict from *EE vs DBE*, instructed the NSNP to resume with the feeding of all qualifying learners.

Some learners in public schools come from child-headed families (cf. ch2; ch4). Still, a critical review of the NSNP guideline does not consider that learners from child-headed families might require extra food. The NSNP guideline reveals that the NSNP guideline only compels schools to feed learners with more than one meal a day by merely stating that learners should "at least" be provided with a meal at school. This leaves a gap and the discretion to schools to decide if they should offer learners more than one meal a day and offer extra food to learners from child-headed families. Therefore, the NSNP guideline does not compel schools to provide extra food

for child-headed families and children in dire need during school closures thus violating the learner's dignity. As mentioned by Furphy (n.d.; cf. ch3 par 2), feeding programs assist parents, guardians, and caregivers who struggle to feed their kids enough food that is both adequate and nutritious.

A further perusal of the guideline shows that the NSNP calls for "the last food items" (RSA DBE 2009:6), to be "completely utilised before the newly delivered items are consumed. (First-in first out: FIFO)." (RSA DBE 2009:7), and further advises that "[s]chools should not accept any expired food items or food which expires within 3 months." (RSA DBE 2009:7). With the above quotes in mind, one would conclude that the NSNP affirms the dignity of learners at school by ensuring that learners are not fed food that is detrimental to their health.

Nonetheless, the guideline is non-responsive on what should be done with the surplus food items that will expire when schools break. Chapter 3 of the study reveals that most schools do not know what to do as there is no clear guidance from the guideline indicating what must be done. Therefore, some schools donate excess food to VFHs (4%) (mainly in the Western Cape (23.9%) and Limpopo (14.7%)), give to the community (0.9%), thrown away (0.7%) (cf. ch3 par 3.1.6), leaving out deserving learners. Hence, such a gap opens room for schools to give food to individual deserving learners through food parcels or opens room for corruption due to lack of proper guidance (DBE & DPME, 2016; cf. ch3 par 3.1.6).

In terms of the UDHR (cf. ch4 par 4.5.1), for the state to be dignified, it requires that the state be a state that is fair and just. Therefore, the state should ensure that while affirming learners' dignity, the provision of food should also be fair and just. Though not as explicit, one would assume that by offering learners food before 10H00 (cf. ch3 par 3.1.3), the NSNP guideline is being fairly and justly considerate of the fact that most learners come to school on an empty stomach and that is undignified.

Furthermore, the extension of the provision of food to secondary schools indicates that the NSNP guideline is fair and just by acknowledging that learners from public primary schools suffer from hunger in an undignified manner and public secondary schools' pupils suffer the same fate. Hence, the extension to public secondary school is also a noble idea. As such, a note should be given that even learners in upper quartiles are suffering from hunger in an undignified manner. As a result, our students continue to be scarred by inequality. Due to the fact that some

learners at quintile 4 and 5 schools are required to learn while starving, access to education in South Africa continues to be severely divided and uneven.

Through the extension of the NSNP to secondary schools, the NSNP guideline is partially responsive towards providing food for learners justly and fairly. The NSNP is partially responsive because it does not provide any guidelines for the deserving learner in upper quartiles who come from disadvantaged backgrounds and qualify to be beneficiaries of the NSNP. Thus, the NSNP guideline is not fair and just towards the learners mentioned above. The NSNP guideline merely states that "all learners in schools must be provided with daily meals" but does not guide the upper quartiles.

To recognise all other rights, the state has the responsibility to realise and affirm the right to dignity, which is essential for affirming other rights. Therefore, should the state realise other rights without affirming a person's dignity, the state has violated all other rights (World Youth Alliance, 2013). Finding information on the NSNP guideline that affirms dignity in the provision of food is highly significant. Whist giving the NSNP guideline a critical read, the researcher noticed that the NSNP guideline does not respond to affirming learners' dignity when schools break as learners would be at home and suffering from hunger. There is no dignity in not having access to food or feeling hungry. However, the NSNP does not affirm learners' dignity during school breaks. The NSNP guideline is only responsive towards affirming learners' dignity when they are at school.

Regarding the affirmation of dignity in the provision of food, the NSNP guideline is relatively straightforward. The handlers of food are expected to maintain a high standard of hygiene. Various ways of affirming dignity when dealing with food are mentioned, such as: storing food in ventilated areas, not putting food on the floor, ensuring that the food received first is utilised first, not receiving soon to expire foods and ensuring that food contaminations are wholly prevented.

5.6 Chapter Summary

In South Africa, the NSNP is a crucial project that addresses the need to lessen child hunger and increase access to and participation in education. The results show, however, that the NSNP does not give students meals during school breaks so they can continue studying at home. There was no clear evidence that the NSNP guideline directly or indirectly supports giving students access to food during school breaks. The NSNP guideline also makes clear that there are no

programs that supply food to students during school breaks. Because hunger or a lack of food impairs a person's capacity to carry out other life tasks.

The NSNP in the quote indicates that all qualifying learners at school should be provided with a daily meal, which is not currently happening as most learners in quantiles 4 and 5 in South Africa are not provided with meals. Some of the learners in quantiles 4 and 5 come from poor backgrounds and might qualify for inclusion in the NSNP. However, the NSNP is not rolled out in quintile 4 and 5 schools which are fee paying schools. Therefore, the well-being and quality standard of living of those learners is compromised.

The NSNP guideline, does not specify menu requirements that schools can use to guarantee that meal packages are created or that food is available for students during school breaks. The NSNP guideline only states that students should be fed food that improves their physical, mental, and overall well-being. The NSNP guideline also doesn't specify how many meals should be provided to students overall. It only suggests that students should receive at least one meal each day. On the one hand, a lack of regulations could create a gap in how deserving students should always be provided with appropriate and adequate meals to protect them from NCDs and effectively fulfil their right to life, survival, and development.

The NSNP guideline does not specify the kinds of fruits that students should have daily or the recommended serving size, leaving it up to the schools' discretion. Indirectly, this results in many schools giving students fruit only sometimes, or not at all. The NSNP guideline is particularly ambiguous when it comes to creating policies or regulatory frameworks to guarantee that students maintain the balanced diet required for nutritional dietary intake when schools are out of session. It is unclear how learners who only rely on daily meals from school will continue to get balanced meals at home, during school breaks, and throughout school vacations. Additionally, it doesn't clearly outline how to give food packages to worthy students.

The evaluation also shows that by offering students nutritious, well-balanced meals, the NSNP guideline is responsive as a form of preventative health care. Eating well-balanced meals is crucial for preventing NCDs. The lack of fruits makes the lunch given by the NSNP insufficient. The meal is also insufficient to avoid NCDs because most schools only provide one meagre meal. The NSNP recommendation does not specify how deserving students in the higher quantiles should be provided with meals that encourage healthy living and shield

students from contracting NCDs, simply stating, “all learners should be given with a daily meal” is the NSNP recommendation (RSA DBE, 2009:3).

Once more, when it comes to concerns about collaboration and cooperation with other agencies, including the Department of Agriculture and the Departments of social welfare, the NSNP guideline is ambiguous. The origin of that training is not mentioned in the NSNP guideline. Additionally, it is unclear how training will be provided in accordance with each school's requirements. The NSNP guideline merely indicates that schools should have food gardens. It is very silent on whether schools should continue to provide learners with food from the garden when schools break. Additionally, there is no guidance for those schools that have vegetable gardens on what should be done with the extra vegetables during breaks, whether they should be preserved for out of season times or should be given to deserving learners when schools break.

The evaluation reveals that the NSNP guideline partially realise the right to basic nutrition during school hours by prescribing that learner are served with at least 30% of their dietary needs. There is not enough guidance and detail in the guidelines to optimise the constitutional rights to basic nutrition by adhering to the quality and quantity. After a critical evaluation of the guideline, the NSNP is silent in responding to the financial access of the NSNP when schools break. The NSNP has not developed, adopted, and implemented a framework to ensure that learners are presented with for instance vouchers that enables them to continue having access to the NSNP when school breaks.

The NSNP guideline is also silent on providing food packages, especially for children who depend only on the one meal provided at school for their source of nutrition. Every child, whether alone or in society, must have constant physical to sufficient food or the means to obtain it, for their right to sufficient food to be realised (UN, 2010; cf. ch4 par 4.5). Thus, lack of physical access infringes on the learners’ right to sufficient food and basic nutrition. Learners in isolated locations such as rural and deep rural areas must also have access to food (UN, 2010). Ensuring that transportation is available for isolated, vulnerable learners ensures that those learners have equal access to foods such as those nearer to schools.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

Chapter five of the study covered the presentation and evaluation of the NSNP guideline. Chapter 5 determined to what extent the existing guideline meets the national and international legal standards by discussing the data's meaning and the data analysis. Chapter five was both descriptive and analytical of the NSNP guideline.

This chapter covers chapter six of the study. This final chapter's main goal is to thoroughly explain the findings and suggestions made by the research study. Numerous discoveries from the research effort allowed the researcher to develop specific, well-defined recommendations. As such, this chapter offers a concluding response to the study's aim by summarising the research and the key findings about the secondary research questions (cf. ch1 par 1.6.1). Furthermore, the researcher make recommendations on the findings of this research, with specific reference to the constitutionality of the NSNP guidelines for secondary schools during school breaks.

6.2 Aim and objectives of the study

The research aimed to evaluate the constitutionality of the NSNP guidelines for secondary schools during school breaks (cf. ch1 par 1.6.1). The research's objectives were laid out in Chapter One (cf. ch1 par 1.6.1), and subsequent chapters analysed the goals as they relate to the research data examined in accordance with the pertinent research chapters and themes. This study aims to evaluate the constitutionality of the NSNP guidelines for secondary schools during school breaks (cf. ch1 par 1.6.1). Following the completion of the desktop study and policy evaluation, the following contextual discussion of the study's findings concerning the objective and research question is provided:

6.2.1 To determine the extent of malnutrition among school-going children.

The first secondary research question focused on the extent of malnutrition among school-going children. As such, the literature review was probed to illustrate and determine the extent of malnutrition among school-going children. The necessity of proper nutrition as proper nutrition plays an important role in the development of children and the prevention of non-

communicable diseases (hereafter, NCDs). The objective outlined has been appropriately and reasonably attained.

According to the literature and empirical findings, South Africa is burdened with two forms of malnutrition. Research indicates that 13% of school-going children are overweight at the primary school level, while 27% are underweight (UNICEF, 2018; cf. ch 2 par 2.7.1). Overall, 35.6% of males and females are overweight at the secondary school level while 12.9% are underweight. Most children who are beneficiaries of the feeding scheme in quantiles 1-3 schools suffer mainly from undernutrition related to both wasting and stunting, with a minimal number of learners suffering from overweight or obesity. Whilst learners in quantile 4-5 schools mainly suffer from obesity or overweight rather than wasting and stunting. A survey of school-going children indicated that 47% of the learners in South Africa buy unhealthy foods and snacks from the school tuck-shops regularly, especially those in quantile 4 and 5 schools, thus, putting their health at risk and of having NCDs (UNICEF, 2018 cf. ch 2 par 2.7.1).

Furthermore, 50% of the school-going children in South Africa are impoverished and live under the poverty line, thus causing chronic malnutrition. Furthermore, chronic malnutrition was the underlying cause of death in 30.9% of South African children for the year 2017/2018; Previous reports have suggested that approximately 33% of deaths in children under the age of 5 in South Africa from 2011 to 2013 were associated with chronic malnutrition (Sambu, 2019; cf. ch 2 par 2.7.1). A study of children admitted for chronic malnutrition at two regional hospitals in the Eastern Cape reported mortality in 24.4% of cases, much higher than the standard accepted by the WHO, which is less than 10% of children admitted to a hospital by 2010 (Sambu, 2019). Additionally, children may grow and survive, but they do not thrive due to malnutrition because one in three children is not fed the proper nutrition they require during their early stages of childhood (UNICEF, 2019; Sambu, 2019; cf. ch 2 par 2.7.2).

The findings reveal that the diet of poor learners in South African schools consists mainly of carbohydrates, poor-quality oils, and processed meats such as soya mince. According to a study conducted by Nhlapo et al. (2015), most meals provided by schools in South Africa did not meet the nutritional standards, especially for secondary school learners aged between 12 and 18 years (cf. ch 2 par 2.8). The meal offered by schools relies heavily on starches such as pap or samp, which makes up 50% to 75% of the plate with little protein and vegetables, with a supplement of fruits once a week or none (cf. ch 2 par 2.8). Hence, Modjadji and Madiba (2019) indicate that 1 in 8 school-going children suffer from micronutrient deficiencies.

6.2.2 To evaluate what the NSNP guidelines for secondary schools (RSA DBE, 2009) determine in general and with specific reference to school breaks.

The second research question asked was what the NSNP guidelines for secondary schools (RSA DBE, 2009) determine in general and with specific reference to school breaks. As such, the literature review was probed to evaluate what the NSNP guidelines for secondary schools (RSA DBE, 2009) determine in general and with specific reference to school breaks. The strategy of the research study was to evaluate how the NSNP currently guides secondary schools during breaks by highlighting the programme's positive outcomes and emphasising the shortfalls that influence the successful application of innovative processes and constitutional imperatives in alleviating malnutrition and NCDs in schools. Certain areas have been highlighted where strategies can be adopted and implemented to guarantee the positive effects of the NSNP to meet constitutional imperatives during school breaks.

The findings have indicated that the school receives R3.60 as of 2022 for each learner for food per day to provide for the nutritional needs of the learners in terms of the NSNP, which is inadequate (cf. ch1 par 5; ch3 par 3.1). Due to a lack of funds and sponsorship, most schools can only provide learners with one meal a day at 10 a.m. or before, contributing only 30% of the daily nutritional needs per meal (NSNP, 2009; cf. ch3 par 3.1.3). Still, in other provinces, meals are not served on time (DBE and DPME, 2016; cf. ch3 par 4.6).

Only two provinces, the Western Cape and Gauteng are known to provide breakfast and lunch to students (Esakov & Vally, 2010; cf. ch3 par 3.1.3). The others provide only lunch. There are, and were, no viable referrals by the NSNP for the children to social services. With only one meal provided to learners at schools, it is impossible to reach the recommendations of the FBDG.

Thus far, according to News24 (2020), the Western Cape is the only province that has set aside funds for poor learners to fund additional feeding schemes after school, during school breaks and food packages (cf. ch3 par 3.1.3). The findings further reveal that the NSNP only aims to reduce hunger in the short run. Altogether, there are around 200 days in the South African school year and about 165 days when schools are clodes due to school holidays and weekends. It, therefore, shows that there is almost half a year when learners are exposed to hunger. As such, schools being on breaks indicate that learners are exposed to hunger or more severe hunger (Esakov & Vally, 2010 cf. ch4 par 4.3.2).

Furthermore, the program has certain issues, including food quality and quantity, a targeting mechanism (the quintile system) that excluded some impoverished students from receiving NSNP meals. Food gardens that were too small and inadequately maintained to produce enough food (Derex et al., 2018; cf ch3 par 3.2.1). Fresh fruits and vegetables and animal protein are scarce, and their diets are monotonous. Fruit and vegetables were the most frequently overlooked food group (Derex et al., 2018).

Additionally, findings revealed that infrastructures and equipment-related challenges, including a lack of kitchens, adequate preparation areas, and a lack of utensils for food preparation most likely reported with the centralised model provinces (DBE and DPME, 2016; cf. ch3 par 3.2.8). Hence, lack of monitoring affects communication with suppliers in many provinces. It means that the tools and methods for monitoring are not efficient enough to identify and rectify the challenges of some schools. Challenges include non-implementation of food gardens, inadequate quality and quantity of food and menu substitutions, and delays in the delivery of supplies (cf. ch3 par 3.2.6).

6.2.3 To explore constitutional rights, the NSNP guidelines should respect, protect, promote, and fulfil.

The third research question asks which constitutional rights of secondary school learners the NSNP guidelines (RSA DBE, 2009) should respect, protect, promote, and fulfil (cf. ch1 par 1.6.1). Thus, the legal framework and literature review were probed to explore constitutional rights the NSNP guidelines should respect, protect, promote, and fulfil. Considering the violation of learner's rights to sufficient food (cf. ch4 par 4.7), basic nutrition (cf. ch4 par 4.1) and education, it was necessary through this study to explore the constitutional rights that the NSNP guidelines should respect, protect, promote, and fulfil. The objective was achieved by applying a legal framework to basic nutrition and education. The research project recognised the need for the NSNP to be sustainable, accessible, adequate, and continuous. Furthermore, achieve the UN Sustainable Development Goals (hereafter, SDGs) by achieving leaner food and nutrition security globally by maintaining and keeping a nutritious food supply at the global school level.

Every person in South Africa has rights. Those rights are entrenched in chapter 2 of the Constitution of the Republic of South Africa (*Constitution*) as the Bill of Rights. The Bill of Rights is the cornerstone of the South African democracy that affirms a person's rights (RSA,

1996a: s.7(1)). The state must ensure that the human rights in the Bill of Rights are respected, protected, promoted and fulfilled (RSA, 1996a: s.7(2); cf. ch4 par 4.1)

The finding reveals that goal 1 of the SDGs which deals with ending hunger fights for the poor. The vulnerable learners have equal access and rights to economic resources, such as food which includes being beneficiaries of the NSNP and appropriate and reliable means to implement programs such as the NSNP and policies to overcome poverty in all forms (Pérez-Escamilla, 2017; UNSA, 2022; cf. ch4 par 4.3.1). Second, the goal asks for a solution regarding food safety, such as continuous feeding of learners through the NSNP, even when schools are closed for breaks (UNSA, 2022; cf. ch4 par 4.3.2).

Hence, the suspension of the NSNP during school breaks is against this goal's focus. Third, goal 3 aims to "Ensure healthy lives and promote well-being for all at all ages" and stipulates that poor physical and mental health have been linked to food insecurity throughout a person's life (Ameli, Esfandabadi, Sadeghi, Ranjbari & Zanetti, 2022; cf. ch4 par 4.3.3). Then, goal 4 aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" and stipulates that children's capacity to learn in school is impacted by food hardship (UNSA, 2022; cf. ch4 par 4.3.4).

For every person to have life and survive, they need food, but for a person to have a quality life, develop and grow healthy, they need nutritious food (Birchfield & Corsi, 2010). Hence, everyone in South Africa has the right to have access to nutritious food and produce their food (Khoza, 2004; cf. ch4 par 4.3.1). Inclusive rights, which include the right to food for everyone, go beyond simply having a legal right to consume a certain number of calories, proteins, and other nutrients. It is a right to access all the dietary components needed for an active and healthy life. As such, the principles applicable to the right to access food are also relevant to basic nutrition (Mabhaudhi, Chibarabada & Modi, 2016; cf. ch4 par 4.2).

Article 25 of the Universal Declaration of Human Rights mentions food as a component of the right to a high standard of living. According to the UDHR, article 25 stipulates that everyone has the right to a high standard of living that is sufficient for their families and their health and well-being, including access to food (UDHR, 1948: a.25). Article 3 of the UDHR adds that the right to life and the right to be free from hunger is intimately intertwined (cf. ch4 par 4.2.3). The ICESCR is a treaty which makes provision for 18 independent experts that make up the Committee on Economic, Social, and Cultural Rights (CESCR). The rights to adequate food,

shelter, education, health care, social security, access to water and sanitation, and employment are among the economic, social, and cultural rights protected by the Covenant (cf. ch4 par 4.2).

The CESCR defines the right to food in its General Comment No. 12 (1999) as the right to regular and unrestricted access to adequate and quality food to support one's physical and mental well-being and their individual and group's pursuit of happiness and dignity without fear. This access can be achieved directly or through financial purchases (CESCR General Comment No. 12, 1999; Magnusson, McGrady, Gostin, Patterson, & Abou Taleb, 2019). Article 11(1) of the ICESCR (1996) recognises that food plays a role in attaining a proper standard of living which requires sufficient food. At the same time, article 11(2) states that everyone has the right not to be hungry (Hendriks & Olivier, 2015).

In the context of the rights to life, survival, and development, as well as to health, nutrition, and appropriate quality of living, the United Nations Convention on the Rights of the Child (UNCRC) safeguards a child's right to food. Article 24 (1) of the UNCRC states that States Parties acknowledge that children have a right to the best possible quality of health and access to facilities for medical care and wellness restoration (cf. ch4 par 4.5). States Parties shall work to ensure that no child's right to access such health care services is violated (UNCRC, 1989:24(1)). The UNCRC (1989) in article 18 indicates that all "parents must care for and protect their children" (UNCRC, 1989: art.18), but the state also has the responsibility to ensure that it "assists parents" (UNCRC, 1989: art.18(2)). Furthermore, article 27(3) of the UNCRC imposes a duty on the state to provide support programs to parents to implement the child's rights, particularly concerning nutrition, clothing and housing" (UNCRC, 1989: art.27(3); (cf. ch4 par 4.4.3).

In adopting legislative measures, South Africa as a member of the African Charter on the Rights and Welfare of the Child (hereafter, ACRW), is required by article 4 to ensure that "the best interests of the child" must be the main factor in all decisions made by anybody with power over the child (AU, 1999: art 4:(1); cf. ch4 par 4.6). The ACRWC (1999) and the UNCRC (1989) express similar sentiments that every child has the right to the best possible state of bodily, mental, and spiritual health (cf. ch4 par 3.1.2.1). According to the ACRWC, children have the right to maximum survival and development (AU, 1999:5)

According to the African Commission on Human and Peoples' Rights, the rights to life, health, and economic, social, and cultural development implicitly protect the right to food under the

African Charter on Human and Peoples' Rights (1981) (ACHPR) hereafter). According to article 16 (1), every person has the right to the highest possible level of bodily and mental health (AU, 1981: art 16(1); cf. ch4 par 3.1.2.2)). As such, States that have ratified the current Charter must take the appropriate steps to safeguard their citizens' health (AU, 1981: art 16(2); cf. ch4 par 4.5.1).

Food rights are recognised in two different sections of the South African Constitution. As recognised by the Constitution (RSA, 1996a), every person has the right to access "sufficient food" (RSA, 1996a:27(1) (b)). As enshrined in the Constitution, the right to adequate food is progressively realisable. Furthermore, every child has the right to "basic nutrition" (RSA, 1996a:28(1)(b)). The right to basic nutrition only applies to children and is immediately realisable (cf. ch4 par 4.6.1).

Therefore, the right to basic nutrition, like the right to basic education, is unqualified, which means that it is not subject to "available resources" or "progressive realisation" in the South African Constitution, as is the case with other socio-economic rights. The right can only be limited following section 36 of the Constitution's general limitation clause (RSA, 1996a: s.36); (cf. ch4 par 4.4.3). Thus, the access to the NSNP during school breaks can only be limited following section 36 of the Constitution's general limitation clause. If not, it is a violation of the learner's rights to basic nutrition.

According to section 7(2) of the Constitution, the state must protect, respect, promote and fulfil the rights contained in the Bill of Rights principles. The South African Schools Act (hereafter SASA) rejects discrimination against learners on any grounds, including race, gender, class, culture, religion or tradition (SASA, 1996; cf. ch4 par 4.4.3). Section 3 of SASA also compels children to go to school (SASA, 1996: s.3; cf. ch4 par 4.4.4). The state, therefore, must promote the right to education by providing learning with food.

According to section 20 of SASA, the role of the SGB is to ensure that they support the school's best interests and the NSNP during school breaks to assure its development by offering all students at the school a high-quality education (SASA, 1996: s.20(1(a)); cf. ch4 par 4.4.4). Furthermore, section 36 of SASA commits the "governing body of a public school must take all reasonable measures within its means to supplement the resources supplied by the State to improve the quality of education provided by the school to all learners at the school" (SASA, 1996: s.21(1(a)); cf. ch4 par 4.4.4).

Section 9 of the Children's Act says that "the child's best interests are of "paramount importance" (RSA, 2005: s.9; cf. ch4 par 4.4.4). According to the Children's Act, the best interest standard must be used in all child protection, care, and well-being decisions. Therefore, the best interest criteria must be used in all decisions, actions, and procedures involving the health and well-being of children (Chirwa, 2009; cf. ch4 par 4.4.2). According to the Children's Act (RSA, 2005), the provisions of the Children's Act on objectives of the NSNP during school breaks are to make provisions for structures and means of promoting and monitoring the overall well-being of the child (RSA, 2005: s.1(2(e); cf. ch4 par 4.3.2). In section 110(1) of the Children's Act, educators, as persons who, on reasonable grounds, suspect neglect, are compelled to report certain things as those mentioned to the authorities such as social workers (RSA, 2005: s.110(1). Social workers can investigate the circumstances of some children to determine if they need food and continuous access to the NSNP during school breaks (cf. ch4 par 4.4.1).

6.2.4 To evaluate whether the failure to provide food to learners during school breaks and the provisions of the NSNP guidelines in this regard (RSA DBE, 2009) constitute a constitutional violation.

The fourth research question asks: In what ways does the failure to provide food to learners during school breaks and the provisions outlined in the NSNP guidelines (RSA DBE, 2009) amount to a violation of constitutional principles?. As such, the data analysis through a comprehensive literature review of chapter 2, 3 and 4 and the evaluation of the NSNP guideline was probed to evaluate whether the failure to provide food to learners during school breaks and the provisions of the NSNP guidelines in this regard (RSA DBE, 2009) constitute a constitutional violation by determining to what extent the existing guideline meets the national and international legal standards by both discussing the meaning of the data.

The exploration of the legal framework revealed that learners are possibly exposed to going hungry 45,2% of the year because they do not get food at school during school breaks (cf. ch4 par 4.3.3). As such, if the learners are malnourished for a week or 4-5 weeks over the December holidays, it means that the quality standard of living of the learners is also compromised if they often have to contend with hunger because the school nutrition programme is not available during school breaks (cf. ch4 par 4.3.2).

Human rights encompass both positive and negative rights. Positive rights include the right to get something, like clean, safe water and being beneficiaries of the NSNP. Negative rights

entail the right not to receive something, like refusing to be part of the NSNP. It may also entail not being refused access to the NSNP when schools break, such as suspending the NSNP during school closures (UDHR, 1948; cf. ch4 par 4.4.2). Hence, when every man, woman, and child, whether alone or in society, have constant physical and financial access to sufficient food or the means to obtain it, their right to enough food is realised (UN, 2010; cf. ch4 par 4.4.1). Hence when children have no continuous access to the NSNP, their right to adequate food and basic nutrition is violated (cf. ch4 par 4.3.2).

Article 11(2) states that everyone has the right not to be hungry. Food is an inclusive right. Food as an inclusive right entail all aspects that revolve around food. It is not only about the right to a minimum ratio of calories, protein, and other nutrients but the individual's right to all the nutritional elements necessary to live a healthy and active life and the means to obtain them. As such, the suspension of the NSNP violates the rights of children not to be hungry and the right to all the nutritional elements (Hendriks & Olivier, 2015; cf. ch4 par 4.5).

The findings further reveal that the NSNP must abide by the three fundamental principles of the right to food, as mentioned in the CESCR (1999). Namely, availability, accessibility and adequacy. When schools break students may not be aware that food is available at schools during school breaks due to a lack of communication. The suspension of the NSNP during epidemic management and natural disasters indicates that there is no guarantee that food is accessible to vulnerable learners. Additionally, the food learners receive are high in calories but low in nutrients, which can lead to obesity and other ailments, which indicates insufficient nutrition (CESCR 1999; cf. ch4 par 4.2.3). The right cannot be realised if there is no access to food of proper quality and sufficient quantity of food. Children's right to adequate nutritious food, clean drinking water, and health care are essential for combating disease and malnutrition (UN, 2010; cf. ch4 par 4.2.3).

The NSNP is an existing structure that can be used to ensure that children are properly fed during school breaks and holidays. As such, the non-provision of school meals during breaks regresses the objectives of the provisions of the Children's Act (RSA, 2005). Thus, weakening the NSNP rather than strengthening it infringes upon the learner's rights to a better standard of living and well-being (cf. ch5 par 5.1.1). The state's failure to uphold the right by leaving barriers that obstruct access to basic nutrition constitutes a violation of the right to basic nutrition (cf. ch5 par 5.1.1). Barriers include the state's refusal to restart the NSNP following a period of school closures brought on by the COVID-19 pandemic and suspension of the

program due to school closures, school holidays, and breaks, among other reasons (EE vs DBE, 2020; cf. ch4 par 4.2.3).

6.3 Recommendations

The findings were consolidated from five major themes, namely: Theme 1: Enhancing the standard of living of learners (cf. ch5 par 5.1.1), Theme 2: Positive communication and cooperative governance (cf. ch5 par 5.1.2), Theme 3: Adequacy (quantity) and quality of food (cf. ch5 par 5.1.3), Theme 4: Physical and financial access (cf. ch5 par 5.1.4), Theme 5: Continuous access to the NSNP (cf. ch5 par 5.1.5). Based on the findings of my evaluation of the NSNP guideline, the researcher make recommendations to enhance the constitutionality of the NSNP guidelines for secondary schools during school breaks (cf. ch1 par 1.7). The evaluation of the NSNP guideline and findings allowed for the study to make the following recommendations:

6.3.1 Expand the NSNP's purview

The NSNP guideline indicates that all qualifying learners at school should be provided with a daily meal. As such, all learners, including those in quantiles 4 and 5 in South Africa, should be provided with meals, as some of the learners in quantiles 4 and 5 come from poor backgrounds (cf. ch3 par 3.6.2). Therefore, the well-being and quality standard of living of those learners should be considered. Additionally, for all deserving learners, feeding should continue (continuous access) even when schools break to avoid regressing what the NSNP has achieved thus far against hunger and malnutrition. Perhaps some sort of subsidy for poor children to give them food at school too or measures to ensure that quantile 4 and 5 schools are sensitive to be on the lookout for children that might need food as there is currently nothing in the NSNP for quantile 4 and 5 schools.

6.3.2 Increased and improved communication & cooperation

As seen in *Equal Education vs Minister of Basic Education* (hereafter**,** EE vs DBE,2020), when the court ruled that the NSNP should resume, there was poor communication amongst the relevant stakeholders (schools, parents and learners). Therefore, improved and increased communication between the community, parents, and program participants must be considered. The community and students can access the program if a more creative and empowered approach is implemented to ensure strategic contact between important parties.

The program would be accessible to all students if communities and the government worked together effectively. Furthermore, with proper collaboration from other departments, such as the Department of Social Development, schools could refer learners to social welfare for proper assistance, especially when school breaks and learners are without food, particularly those from child-headed families.

Furthermore, the NSNP guideline is silent regarding special diets for children with special needs. There is still a gap that needs to be filled. Therefore, dietitians need to play a more prominent role in the development of menus. Dietitians also play an important role as far as the diet of sick children, such as those with diabetes and HIV, is concerned. Additionally, the NSNP guidelines are silent in ensuring that the menus are linked to the work of dietitians and expect schools with a feeding scheme to consult with a dietitian on the special needs of specific children, such as HIV-positive learners (cf. ch5 par 5.1.2).

The broken promises by the DBE to resume the NSNP when school breaks for prolonged periods indicate that the DBE even though has a plan communicated to the necessary stakeholders. The DBE has no plan of how to execute its promises, thus failing dismally on the aspect of cooperation as it has nothing within its guidelines that forces them to keep to the promises made towards the deserving learners, therefore infringing upon the learner's right due to lack of cooperation between the DBE, schools and learners (cf. ch5 par 5.1.3). As such, cooperation is recommended for feeding to expand towards school breaks.

6.3.3 Meal servings

Copying from the Western Cape and Gauteng provinces, it is advised that students receive two meals per day (cf. ch5 par 5.1.3; ch3 par 3.1.2). Breakfast can be a snack of a combination of a sandwich with fruit, a sandwich with juice, or cereal and fruit juice. A whole meal should be offered at noon or during lunch. This would enable students to eat a well-balanced breakfast and lunch, and it would also enable students to take their meals home if they weren't hungry during lunch. They wouldn't go hungry if they arrived home later in the day.

6.3.4 Increased funding for physical and financial access during breaks

The average cost of providing a balanced, nutritious meal is R 7.90; the NSNP sets an allocation of R3.60 a day to provide one meal at schools (cf. Ch 3 par 3.1). Thus, the allocated amount per meal by the NSNP is insufficient to feed learners a balanced nutritious meal (RSA DBE, 2021). The study recommends that the entire NSNP budget be increased in this segment. The

budget should be increased to include financial access, such as food vouchers and physical access, such as food packages during school breaks.

6.3.4.1 Physical access

As seen in the EE vs DBE (2020), when schools break, it might be difficult for some students to attend school and receive their meals due to long distances and transportation issues (cf. ch4 par 4.2). Thus, the study recommends that schools provide parcels of food which can be prepared at home, such as maise, dried beans, and milk which mostly might get ruined due to lack of usage when schools break. Hence, the government needs to invest properly in the nutrition programme so that provinces have enough budget to provide food parcels for learners on the days that they are at home.

6.3.4.2 Financial access

The National School Nutrition Programme (NSNP) serves millions of students nationwide and provides their primary or only meal of the day. When every man, woman, and child, whether alone or in society, have constant physical and financial access to sufficient food or the means to obtain it, their right to enough food is realised (UN, 2010). Hence when children have no continuous access to the NSNP, their right to adequate food and basic nutrition is violated (cf. ch 4 par 4.3.2). Schools must feed eligible students even when they are at home. However, some students are unable to go to school on those days. As such, Schools are encouraged to provide students with food vouchers that will sustain them on days off or during school breaks.

6.3.5 Proper implementation and monitoring of vegetable gardens

It should be promoted for schools to have vegetable gardens. To make the meals last longer and provide more sustenance to the students, extra veggies could be included and provided to learners during school breaks. Community people can also gain from food gardens, especially those who are underprivileged, jobless, or lack access to land (cf ch5 par 5.1.3; cf. ch3 par 3.2.9).

Additionally, copying from The Ministry of National Education in France, the NSNP can establish precise government laws outlining the nutritional components that should be present in each meal and how to balance meal components across several weeks. It is advised that schools acquire training, supplies, and guidance - either through pertinent organisations or the Department of Agriculture - to ensure that the food gardens are successful and long-lasting.

This indicates that the DBE, schools, and the Department of Agriculture responsible for the success of the school gardens must work together.

Gardening could be incorporated into the curriculum and made a part of the learning process for children (cf. ch5 par 5.1.2). Regular monitoring is recommended about the food quality and strategies determining what children need. Monitoring and measures must be implemented to ensure that the children get it. Additionally, the study recommends that challenges, such as the problem of implementation, food quality and quantity and delays in delivery, should be properly monitored and addressed in the guidelines, as there may be little probability of improving children's nutrition. It may even induce ailments in students. Also, despite the challenges, children still benefit from the NSNP, and the benefit outweighs the challenges. Thus, the challenges must be addressed for the current position and the issue of school breaks. Hence, the guidelines should be amended to include explicit monitoring mechanisms.

6.3.6 Strengthening existing structures

Schools are a pre-existing structure that carries out the NSNP and, as a result, ensures that kids are fed correctly during school hours, but they do not perform this duty over breaks and holidays. This function can be strengthened and extended if the guidelines also contain recommendations on how schools should manage unintended child neglect caused by poverty during school breaks. As a result, since schools and their infrastructure are still open during breaks, the non-provision of school meals defeats the Children's Act's provisions (cf. ch4 par 4.2.2). This compromises the learner's rights to a higher standard of life and well-being while weakening rather than enhancing the state's response to starvation. The NSNP guidelines can be amended to add recommendations to strengthen the role of schools in addressing unintended child neglect caused by poverty during school breaks.

6.3.7 Infrastructure and equipment expansion

Without proper infrastructure and equipment, food preparation becomes difficult. This causes cooking time to be delayed, causing children to receive their meals late (DBE and DPME, 2016). Furthermore, the lack of cold storage facilities impacts cost and food quality. It demands frequent deliveries of fresh produce: vegetables and fruit are intended to be delivered weekly. However, many schools have reported issues with vegetables and fruit not being delivered on time or schedule (DBE and DPME, 2016; cf. ch3 par 3.2.8). Thus, the study recommends that from the funds provided for the utensils of the NSNP, schools and the SGB should provide

NSNP kitchens with freezers to ensure that there is no wastage of surplus or vegetables harvested during school holidays and that learners continue to receive safe and quality food even on school breaks (cf. ch5 par 5.1.3).

6.3.8 Extend feeding days to school breaks

The study recommends that all provinces fast-track the move to the decentralised funding model to include school breaks and feeding days because, with the decentralised model, learners are less likely to be unfed (cf. ch 3 par 3.2.3). With the centralised model, learners were nearly twice as likely to say there were days when no feeding took place (DBE and DPME, 2016; cf. ch 3 par 3.2.3), as funds are not being received on time, late delivery by the supplier, and the tender procedure not being finished. The distinctions between decentralised and centralised provinces are stark. As such, the decentralised model is recommended.

6.4 Study Conclusions

The conclusion answers the original research question. The main research question was: How does the failure to provide food to learners during school breaks and the silences in the NSNP guideline for secondary schools in this regard align with constitutional imperatives? In response to the main research question, the conclusion is that there are no guidelines on food during breaks, and it is the fact that there are no guidelines and no provision of food for needy children during breaks which is indeed unconstitutional.

The interest theory of rights (hereafter, IToR) aims to protect individuals against violations of their rights by others, the government, and the judiciary (McBride, 2020; cf. ch1 par 3.1). Still, the study's findings reveal that the guideline does somehow contributes to learners' development. But it does not maximise it because the food quality consists mostly of starch and lacks fruit and vegetables. Furthermore, the learner's quality standard of living, especially that of development, when they are not at school during break is compromised as learners are exposed to hunger for almost close to half a year (45,2%) when schools are closed (Esakov & Vally, 2010; cf. ch4 par 4.3.1).

The NSNP is an existing structure that can be utilised to guarantee that kids are nourished appropriately during breaks from school and throughout vacations. As a result, the goals of the Children's Act's provisions are compromised by not providing school meals during breaks (RSA, 2005). The learner's rights to a higher level of life and well-being are thereby violated by limiting the functions of the NSNP rather than improving and expanding the work and reach

of the NSNP during breaks (cf. ch5 par 5.1.1). A violation of the right to basic sustenance occurs when the state fails to uphold the right by leaving obstacles in the way of access (cf. ch5 par 5.1.1). Barriers include suspending the program due to school closings, holidays, and breaks (EE vs DBE, 2020; cf. ch4 par 4.3.3).

Therefore, it has become necessary and critical for the state to come down to grass root levels to acknowledge and meet constitutional imperatives during school closures. In collaboration with other departments and stakeholders, the education department needs to link together to foster innovative and effective policies and practices to ensure that the violation of learners' constitutional rights declines. Proper and sufficient funding towards the NSNP would ensure the effective and efficient application of the NSNP and allow for coverage across all quantiles and during school breaks.

In addition, lessons from other countries can be adopted; such as offering school breakfast and lunch to all students regardless of income (cf. ch2 par 2.1.3); being part of the nation-building process teaching children about nutrition and providing enough calories for classroom study (cf. ch2 par 2.1.2); and establishing precise government laws outlining the nutritional components that should be present in each meal and how to balance meal components across several weeks (cf. ch2 par 2.1.2); paying caterers to prepare food for children at a fixed rate for each child (cf. ch2 par 2.2.3), to ensure that children meet their daily calorie requirements.

It also shows an understanding that learners spend more than seven hours at school. For that period or duration, a normal person should have at least consumed two meals, excluding supper or dinner, as it is expected for a child to consume three full, balanced meals a day, excluding snacks (cf. ch2 par 2.2.3). As such, they would require more than one diversified meal to receive the basic nutrients even during school breaks (cf. ch2 par 2.2.3). Because with only one meal provided to learners at schools, it is impossible to reach the recommendations of the FBDG. The NSNP is not adequately implemented, and some of the provided guidelines to the provinces are not effectively implemented (cf. ch3 par 2.2.6; Mawela & Van den Berg, 2018).

The government allowing for an increase in the scope of the NSNP across all quantiles and during school breaks and creating policies that allow for continuous access competently lays the platform for an effective, efficient, and innovative NSNP guideline that not only meets immediate constitutional needs but one that contributes to a more sustainable strategy in the medium to long- term through the SDGs in addressing hunger and malnutrition.

APPENDICES

Appendix A: Ethical Clearance

UNIVERSITY OF THE FREE STATE
UNIVERSITEIT VAN DIE VRYSTAAT
YUNIVESITHI YA FREISTATA
UFS UV

GENERAL/HUMAN RESEARCH ETHICS COMMITTEE (GHREC)

15-Nov-2022

Dear Mrs Lebohang Mulaudzi

Continuation/Report Approved

Research Project Title:
Evaluating the constitutionality of the National School Nutrition Programme guideline for secondary schools during breaks.

Ethical Clearance number:
UFS-HSD2021/1778/21/22

We are pleased to inform you that the application to extend your ethical clearance has been approved. Your ethical clearance is valid for twelve (12) months from the date of issue. We request that any changes that may take place during the course of your study/research project be submitted to the ethics office to ensure ethical transparency. furthermore, you are requested to submit the final report of your study/research project to the ethics office. Should you require more time to complete this research, please apply for an extension. Thank you for submitting your proposal for ethical clearance; we wish you the best of luck and success with your research.

Yours sincerely

Dr Adri Du Plessis
Chairperson: General/Human Research Ethics Committee

205 Nelson Mandela Drive
Park West
Bloemfontein 9301
South Africa

P.O. Box 339
Bloemfontein 9300
Tel: +27 (0)51 401 9337
duplessisA@ufs.ac.za
www.ufs.ac.za

Appendix B: CTR Title and Proposal Defence

Postgraduate Office
Faculty of Education
Room 16
Winkie Direko Building
Faculty of Education
University of the Free State
P.O. Box 339
Bloemfontein 9300
South Africa

T: +27(0)51 401 3651

www.ufs.ac.za
Duvenhagecs@ufs.ac.za

10 November 2021

APPLICATION FOR TITLE REGISTRATION

Applicant: Mulaudzi, LV
Student Number: 2010132799
Discipline: Education Law
Study Code: Masters (EDLW8900)

Dear Ms Mulaudzi

Your registered title is as follows: "Evaluating the constitutionality of the *National School Nutrition Programme guideline for secondary schools during breaks*"

All of the best with your studies.

Yours sincerely,

Prof Patrick Mafora
Chair: CTR committee

Ms CS Duvenhage
Secretary: CTR committee

Appendix C: Turnitin Report

Turnitin Originality Report

Processed on: 29-Nov-2022 10:30 SAST
ID: 1966073974
Word Count: 67226
Submitted: 1

Evaluating the constitutionality of the National School Nutrition Programme guideline for Secondary Schools during breaks. By Lebohang Mulaudzi

Similarity Index 5%

Similarity by Source
Internet Sources: 4%
Publications: 2%
Student Papers: 3%

< 1% match ()
Chirwa, Danwood Mzikenge. "Child poverty and children's rights of access to food and basic nutrition in South Africa : A contextual, jurisprudential and policy analysis", Community Law Centre. University of the Western Cape, 2009

< 1% match ()
Johnston, Sheehama. "Food security and local government in South Africa: the role of municipalities in a food systems approach.", 'University of the Western Cape Library Service', 2019

< 1% match ()
Manyaka, Mmaneu. "An exploration of health-related lifestyle behaviours of foundation phase learners : a socioecological perspective", 2022

< 1% match ()
Moyo, Admark. "Balancing child participation rights, parental responsibility and state intervention in medical and reproductive decision-making under South African law", Department of Public Law, 2014

< 1% match ()
Saukila, Walhalha Sohlwe. "Overcoming Parental Consent: How can International Human Rights Law be used to Protect a Child's Right to Health in Childhood Immunization Cases?", Department of Public Law, 2020

< 1% match ()
Alvedun, Yetunde Adenike. "Fair trial and access to justice in South Africa how traditional tribunals cater to the needs of rural female litigants", Department of Public Law, 2013

< 1% match ()
Knbuzi, Dorcas Nabiseke. "Towards a Framework for Regulating the Sustainability of Mine Hospitals: A Legal Perspective", Department of Private Law, 2020

< 1% match ()
Ncube, Kukhanya. "The right to water in the constitution and sustainable development in South Africa", 'University of the Western Cape Library Service', 2018

< 1% match ()
Lubaale, Emma Chardene. "A human rights-based approach to child labour in Africa : challenges and prospects in South Africa", 'University of Pretoria - Department of Philosophy', 2011

< 1% match ()
Hall, Katharine, Leatt, Annie, Rosa, Solange. "The Means to Live. Targeting poverty alleviation to realise children's rights", Children's Institute of UCT, 2009

< 1% match ()
Magadu, Nceba. "Factors impending the implementation of the school nutrition programme in King Williams Town", Faculty of Arts, 2011

< 1% match ()
Ashipala-Hako, Anna Niitembu. "Stakeholders' perspectives on the school counselling programme in Namibia", 'University of the Western Cape Library Service', 2014

< 1% match ()
Pienaar, Catherina Elizabeth. "The incommensurability of the archaic perceptions of the maxim res ipsa loquitur in medical negligence litigation", Department of Public Law, 2016

< 1% match ()
Mweni, Sabelo Kenneth. "The right to education of asylum seeker and refugee children", Department of Public Law, 2018

Appendix D: Final Editing Letter

P.R.C

PRO-ACAEMIC RESEARCH CONSULTANCY

"DIG DEEPER AND MAKE IT HAPPEN"

28 NOVEMBER 2022

To Whom It May Concern

RE: DISSERTATION EDITING FOR LEBOHANG VICTORIA MULAUDZI (2010132799)

Pro-Academic Research team hereby confirm that it is responsible for all editing done on this research dissertation titled **"Evaluating the constitutionality of the National School Nutrition Programme guideline for Secondary Schools during breaks."** for submission of the Master's degree in Education Law at University of Free State. The editing focused on the grammar, tense, spellings, use of language and referencing.

Pro-Academic team is a research institute run by experienced professional researchers who have relevant credentials to do this work. If the student alters the document P.R.C shall not be held accountable for any anomalies.

Yours Sincerely

K Nkomo

Khumbulani Nkomo

References

Abdool Karim, S. & Kruger, P., 2021. Unsavoury: How effective are class actions in the protection and vindication of the right to access to food in South Africa? *South African Journal on Human Rights, 37*(1), pp.59-82.

Abramov, M. 2021. The role of customer experience management in the purchase-decision-process. (Unpublished Ph.D. thesis.) Helsinki Metropolia University of Applied Sciences, Helsinki.

Alderman, H. & Bundy, D. 2012. School Feeding Programs and Development: Are we Framing the Question Correctly? *The World Bank Research Observer,* 27(2): 204-221.

Alexander, G., Matoti, S. & Van Zyl, P., 2021. ascertaining the use of extracurricular activities in promoting learners'holistic development in multicultural school settings.

Aliyar, R., Gelli, A. & Hamdani, S.H., 2015. A review of nutritional guidelines and menu compositions for school feeding programs in 12 countries. Frontiers in public health, 3, p.148.

Allen, C., Metternicht, G. & Wiedmann, T., 2018. Initial progress in implementing the Sustainable Development Goals (SDGs): A review of evidence from countries. *Sustainability science*, *13*(5), pp.1453-1467.

Ameli, M., Esfandabadi, Z.S., Sadeghi, S., Ranjbari, M. & Zanetti, M.C., 2022. COVID-19 and Sustainable Development Goals (SDGs): Scenario analysis through fuzzy cognitive map modeling. *Gondwana Research*.

Amery, L.S., 2021. *Thoughts on the Constitution*.

Anyadike, N.O., Nwachukwu, S.T. & Wogu, J.O., 2021. Human Rights in Nigeria and the Implications of Human Rights Education for Resource Collection by Libraries. *Library Philosophy and Practice*, pp.1-21.

Assembly, U.G., 1989. Convention on the Rights of the Child. *United Nations, Treaty Series*, *1577*(3), pp.1-23.

Backhaus, A., 2022. International travel in times of the COVID-19 pandemic: The case of German school breaks. *Economics & Human Biology*, *44*, p.101090.

Banda, M., 2021. It takes a full stomach to feed the mind: The ins and outs of South Africa's school feeding scheme. Retrieved https://www.dailymaverick.co.za/article/2021-03-04-it-takes-a-full-stomach-to-feed-the-mind-the-ins-and-outs-of-south-africas-school-feeding-scheme/

Bellisle, F., 2004. Effects of diet on behaviour and cognition in children. *British Journal of nutrition*, *92*(S2), pp.S227-S232.Branca, F., Lartey, A., Oenema, S., Aguayo, V., Stordalen, G.A., Richardson, R., Arvelo, M. and Afshin, A., 2019. Transforming the food system to fight non-communicable diseases. *Bmj*, *364*.

Bentham, J. 1987. *Anarchical Fallacies*, in, Waldon, J. (Ed.) *Nonsense upon Stilts* New York: Methuen

Berg, B. L. 2004. *Qualitative research methods.* 5th edition. Boston: Allyn& Bacon.

Borkowski, A., Ortiz-Correa, J. S., Bundy, D. A. P., Burbano, C., Hayashi, C., Lloyd-Evans, E., Neitzel, J. &Reuge, N. 2021. COVID-19: Missing More Than a Classroom. The impact of school closures on children's nutrition. Innocenti Working Paper 2021-01. Florence: UNICEF.

Brown, J. L., Beardslee, W. H., & Prothrow-Stith, D.,2008. Impact of school breakfast on children's health and learning: An analysis of the scientific research. Retrieved from: http://www.sodexofoundation.org/hunger_us/Images/Impact%20of%20School%20Breakfast%20Study_tcm 150-212606.pdf.

Browne, C.A., 2021. Food-based dietary guidelines for South Africans: an under-utilised tool for improving nutritional well-being. *South African Journal of Clinical Nutrition*, *34*(sup1), pp.Si-Sii.

Burrows, J. 2004. *Textual analysis: A companion to digital humanities.* Oxford: Blackwell.

Charter, A., 1990. African Charter on the Rights and Welfare of the Child. *AU. Addis Ababa*.

Chirwa, D.M., 2009 Child Poverty and Children's Right of Access to Food and Basic Nutrition in South Africa: A Contextual. *Jurisprudential and Policy Analysis (Community Law Centre Bellville 2009)*.

Christian Education South Africa v MEC of Education 2000 (4) SA 757 (CC); 2000 ZACC 11.

Clark, H., Coll-Seck, A.M., Banerjee, A., Peterson, S., Dalglish, S.L., Ameratunga, S., Balabanova, D., Bhan, M.K., Bhutta, Z.A., Borrazzo, J. & Claeson, M., 2020. A future for the world's children? A WHO–UNICEF–Lancet Commission. *The Lancet*, *395*(10224), pp.605-658.

Codd, J. A. 2008. The construction and deconstruction of education policy documents. In: Ball, S., Goodson, I. F. & Maguire, M. (Eds.). *Education, globalisation and new times.* London: Routledge. (Pp 167-180).

Collins, C.S. and Stockton, C.M., 2018. The central role of theory in qualitative research. *International Journal of Qualitative Methods*, *17*(1), p.1609406918797475.

Comment No, G., 2013. Convention on the Rights of the Child.

Committee on Economic, Social and Cultural Rights, general comment No. 12 (1999) on the right to adequate food.

Creswell, J. W. 2007. *Qualitative inquiry and research design*. 2nd edition. Thousand Oaks, CA: Sage.

D'Odorico, P., Carr, J.A., Davis, K.F., Dell'Angelo, J. & Seekell, D.A., 2019. Food inequality, injustice, and rights. *Bioscience*, *69*(3), pp.180-190.

De Coning, C. & Wissink, H. 2011. Nature roles and history of public policy. In: Cloete, F. & De Coning, C. (Eds.). *Improving public policy: Theory, practice and results*. 3rd edition. Pretoria: Van Schaik.

Denzin, N.K. & Lincoln, Y.S. eds., 2011. *The Sage handbook of qualitative research*. sage.

Department of Agriculture Forestry and Fisheries (DAFF), 2013. National policy on food and nutrition security.

Devereux, S., Hochfeld, T., Karriem, A., Mensah, C., Morahanye, M., Msimango, T., Mukubonda, A., Naicker, S., Nkomo, G., Sanders, D. & Sanousi, M., 2018. School Feeding in South Africa: What we know, what we don't know.

Dutschke, M. & Abrahams, K., 2006. *Children's right to maximum survival and development*. Children's Institute, University of Cape Town.

El Ghoch, M. & Valerio, A., 2020. Let food be the medicine, but not for coronavirus: Nutrition and food science, telling myths from facts. *Journal of population therapeutics and clinical pharmacology*, *27*(SP1), pp.e1-e4.

Engel, L., Bryan, S. & Whitehurst, D.G., 2021. Conceptualising 'Benefits Beyond Health'in the Context of the Quality-Adjusted Life-Year: A Critical Interpretive Synthesis. PharmacoEconomics, 39(12), pp.1383-1395.

Fairclough, N. 2003. *Analysing discourse: Textual analysis for social research*. Psychology Press.

Faizan, U. & Rouster, A.S., 2021. Nutrition and hydration requirements in children and adults.

Feldman, C., Veiros, M.B. & McGill, T., 2018. School lunches: getting healthy food on the menu in government-sponsored lunch programmes in the United States and Brazil. *Perspectives in Public Health*, *138*(2), pp.89-90.

Finlay, B.B., CIFAR Humans & Microbiome, 2020. Are noncommunicable diseases communicable? *Science*, *367*(6475), pp.250-251.

Fitch, D.T., Rhemtulla, M. & Handy, S.L., 2019. The relation of the road environment and bicycling attitudes to usual travel mode to school in teenagers. Transportation research part A: policy and practice, 123, pp.35-53

Flick, U. 2018. *Designing qualitative research*. New York: Sage.

Gavhi, F., Kuonza, L., Musekiwa, A. & Motaze, N.V., 2020. Factors associated with mortality in children under five years old hospitalized for Severe Acute Malnutrition in Limpopo province, South Africa, 2014-2018: A cross-sectional analytic study. *PloS one*, *15*(5), p.e0232838.

Gelli, A. 2019. A School Meals Program Implemented at Scale in Ghana Increases Height-for-Age during Mid-childhood in Girls and in Children from Poor Households: A Cluster Randomized Trial. *The Journal of Nutrition*, 149 (8): 1434–1442.

Gorji, A. & Ghadiri, M.K., 2021. Potential roles of micronutrient deficiency and immune system dysfunction in the coronavirus disease 2019 (COVID-19) pandemic. *Nutrition*, *82*, p.111047.

Governing Body of the Juma Musjid Primary School v Essay NO 2011 (8) BCLR 761 (CC); 2011 ZACC 13.

Grazioli, F., Turdieva, M. & Kettle, C.J., 2020. The role of school gardens as conservation networks for tree genetic resources. In *Agrobiodiversity, School Gardens and Healthy Diets* (pp. 105-114). Routledge.

Gresse, A., Nomvete, A. & Walter, C. 2017. Situational analysis: implementation of the National School Nutrition Programme in low socio-economic primary schools in Nelson Mandela Bay. *Journal of Consumer Sciences,* Special Edition. Food and nutrition challenges in Southern Africa. Vol 2 (2017).

Guariguata, L. & Jeyaseelan, S., 2019. Children and non-communicable disease: Global Burden Report 2019. *NCD Child: Toronto, ON, Canada*.

Haddaway, N. R., Collins, A. M., Coughlin, D. & Kirk, S. 2015. The role of Google Scholar in evidence reviews and its applicability to grey literature searching. *PloS one*, 10(9).

Hale, T., Petherick, A., Phillips, T. & Webster, S., 2020. Variation in government responses to COVID-19. *Blavatnik school of government working paper*, *31*, pp.2020-11.

Harrington, A. 2005. *Modern social theory*. Oxford: Oxford University Press.

Hartline-Grafton, H. & Dean, O., 2017. The impact of poverty, food insecurity, and poor nutrition on health and well-being. *Washington, DC: Food Research & Action Center*.

Henning, E. 2004. *Finding your way in qualitative research.* Pretoria: Van Schaik.

Hernández-Vásquez, A. & Tapia-López, E., 2017. Chronic malnutrition among children under five in Peru: a spatial analysis of nutritional data, 2010-2016. *Rev EspSalud Publica*, *91*, p.e201705035.

Hossain, N. & te Lintelo, D., 2018. A common sense approach to the right to food. *Journal of Human Rights Practice*, *10*(3), pp.367-387.

Human Rights Committee, general comment No. 6 (1982) on the right to life.

Hunt, P., 2016. Interpreting the international right to health in a human rights-based approach to health. *Health and Human Rights*, *18*(2), p.109.

Hunter, D., Monville-Oro, E., Burgos, B., Roel, C.N., Calub, B.M., Gonsalves, J. &Lauridsen, N. eds., 2020. *Agrobiodiversity, School Gardens and Healthy Diets: Promoting Biodiversity, Food and Sustainable Nutrition*. Routledge.

Iddrisu, I., Monteagudo-Mera, A., Poveda, C., Pyle, S., Shahzad, M., Andrews, S. & Walton, G.E., 2021. Malnutrition and Gut Microbiota in Children. *Nutrients*, *13*(8), p.2727.

Isphording, I.E., Lipfert, M. & Pestel, N., 2020. *School re-openings after summer breaks in Germany did not increase SARS-CoV-2 cases* (No. 13790). IZA Discussion Papers.

Johnson, B. & Christensen, L. 2000. *Educational research: qualitative and quantitative approaches.* Boston: Ally &Bacon.

Jumma Masjid Primary School Case, 8 B.C.L.R. 761 (2011).

Kaiser Family Foundation (KFF), 2019. The US government and global non-communicable disease efforts.

Khalili Tilami, S. & Sampels, S., 2018. Nutritional value of fish: lipids, proteins, vitamins, and minerals. *Reviews in Fisheries Science & Aquaculture*, *26*(2), pp.243-253.

Klein, J.T., 2021. *Beyond interdisciplinarity: Boundary work, communication, and collaboration*. Oxford University Press.

Kluge, H.H.P., Wickramasinghe, K., Rippin, H.L., Mendes, R., Peters, D.H., Kontsevaya, A. & Breda, J., 2020. Prevention and control of non-communicable diseases in the COVID-19 response. *The Lancet*, *395*(10238), pp.1678-1680.

Koo, H.C., Poh, B.K. & Abd Talib, R., 2018. The GReat-Child™ Trial: A quasi-experimental intervention on whole grains with healthy balanced diet to manage childhood obesity in Kuala Lumpur, Malaysia. *Nutrients*, *10*(2), p.156.

Kota, Z. 2015. Case Study 1: The National School Nutrition Programme - Feeding Hungry Minds. In: McLaren, D., Moyo, B. & Jeffery, J. 2015. The right to food in South Africa: An analysis of the content, policy effort, resource allocation and enjoyment of the constitutional right to food. *Johannesburg: Studies in Poverty and Inequality Institute (SPII).*

Kramer, M.H., 2010. Refining the interest theory of rights. *The American Journal of Jurisprudence*, *55*(1), pp.31-39.

Kripperdorf, K. 2004. *Content analysis. An introduction to its methodology.* 2nd edition. Thousand Oaks, CA: Sage.

Lane, M.M., Davis, J.A., Beattie, S., Gómez-Donoso, C., Loughman, A., O'Neil, A., Jacka, F., Berk, M., Page, R., Marx, W. & Rocks, T., 2021. Ultraprocessed food and chronic noncommunicable diseases: a systematic review and meta-analysis of 43 observational studies. *Obesity reviews*, *22*(3), p.e13146.

Laurie, S.M., Faber, M. & Maduna, M.M., 2017. Assessment of food gardens as nutrition tool in primary schools in South Africa. *South African Journal of Clinical Nutrition*, *30*(4), pp.80-86.

Lochmiller, C.R., 2021. Conducting Thematic Analysis with Qualitative Data. *Qualitative Report*, *26*(6).

Mail and guardian. 2021. South African children suffer the 'slow violence of malnutrition'. 18 February: Online.https://mg.co.za/news/2021-02-18-south-african-children-suffer-the-slow-violence-of-malnutrition/.

Mampai, R. K. 2008. *The role of the school management team in implementing the development appraisal system.* Doctoral Thesis. North-West University, Potchefstroom.

Mantenta, Z.I. & Mzini, L.B., 2021. Performance Assessment of Public Funded School Food Gardens Projects in the Sedibeng District Municipality.

Mawela, A. & Van den Berg, G. 2020. Management of school nutrition programmes to improve environmental justice in schools: A South African case study. *South African Journal of Clinical Nutrition*, 33 (2): 30-35.

Mazibuko & Others v City of Johannesburg 2010 (4) SA 1 (CC); 2009 ZACC 28.

McBride, M., 2020. Preserving the interest theory of rights. *Legal Theory*, *26*(1), pp.3-39.

McKee, A. 2003. *Textual analysis: A beginner' s guide*. London: Sage.

Mestry, R. 2017. Principals' perspectives and experiences of their instructional leadership functions to enhance learner achievement in public schools. *Journal of Education*, 69:257-280.

Mila Harding, “South African Constitutional Court confirms that the right to basic education encompasses access to final exams”, (OxHRH Blog, February 2021), <https://ohrh.law.ox.ac.uk/south-african-constitutional-court-confirms-that-the-right-to-basic-education-encompasses-access-to-final-exams> [3 September 2022].

Minister for Basic Education v Basic Education for All 2016 (4) SA 63 (SCA); 2015 ZASCA 198.

Minister of Home Affairs v Watchenuka 2004 1 All SA 21 (SCA); 2003 ZASCA 142.

Mogre, V., Stevens, F.C., Aryee, P.A., Amalba, A. & Scherpbier, A.J., 2018. Why nutrition education is inadequate in the medical curriculum: a qualitative study of students' perspectives on barriers and strategies. *BMC Medical Education*, *18*(1), pp.1-11.

Mullerson, R., 2020. Right to Survival as Right to Life of Humanity. *Denver Journal of International Law & Policy*, *19*(1), p.6.

Murimi, M.W., Moyeda-Carabaza, A.F., Nguyen, B., Saha, S., Amin, R. & Njike, V., 2018. Factors that contribute to effective nutrition education interventions in children: a systematic review. *Nutrition reviews*, *76*(8), pp.553-580.

Myers, M. D. 2019. *Qualitative research in business and management*. London: Sage.

Namgung, K., Kim, T.H. & Hong, Y.S., 2019. Menu Recommendation System Using Smart Plates for Well-balanced Diet Habits of Young Children. *Wireless Communications and Mobile Computing*, *2019*.

Nayak, J. K. & Singh, P. 2021. *Fundamentals of Research Methodology Problems and Prospects*. Delhi: SSDN Publishers & Distributors.

Newman, T. 2020. What is nutrition and why does it matter? *Medical News Today*. 09 January 2020. (Online). https://www.medicalnewstoday.com/articles/160774.

Nhlapo, N., Lues, R.J., Kativu, E. & Groenewald, W.H., 2015. Assessing the quality of food served under a South African school feeding scheme: A nutritional analysis. *South African Journal of Science*, *111*(1-2), pp.01-09.

Nkosi, B. 2020. “326 000 pupils believed to have dropped out between April and October”. (Online).https://www.iol.co.za/the-star/news/326-000-pupils-believed-to-have-dropped-out-between-april-and-october-39117879-69c5-466b-89de-2dea8f155040.

Onwuegbuzie, A. J., Leech, N. L. & Collins, K. M. 2012. Qualitative analysis techniques for the review of the literature. *Qualitative Report*, 17:56.

Pădurariu, I., 2020. The principle of the best interests of the child. *LESIJ-Lex ET Scientia International Journal, 27*(2), pp.7-13.

Perera, S. 2018. Research paradigms. Singapore: Sage.

Pérez-Escamilla, R., 2017. Food security and the 2015–2030 sustainable development goals: From human to planetary health: Perspectives and opinions. *Current developments in nutrition*, *1*(7), p.e000513.

Philipsen, K., 2018. Theory building: Using abductive search strategies. In *Collaborative research design* (pp. 45-71). Springer, Singapore.

Phillimore, P., Sibai, A.M., Rizk, A., Maziak, W., Unal, B., Abu Rmeileh, N., Ben Romdhane, H., Fouad, F.M., Khader, Y., Bennett, K. & Zaman, S., 2019. Context-led capacity building in time of crisis: fostering non-communicable diseases (NCD) research skills in the Mediterranean Middle East and North Africa. *Global health action*, *12*(1), p.1569838.

Pullar, J., Allen, L., Townsend, N., Williams, J., Foster, C., Roberts, N., Rayner, M., Mikkelsen, B., Branca, F. & Wickramasinghe, K., 2018. The impact of poverty reduction and development interventions on non-communicable diseases and their behavioural risk factors in low and lower-middle income countries: a systematic review. *PLoS One*, *13*(2), p.e0193378.

Qila, V.E. & Tyilo, N., 2014. Implementing National School Nutrition Programme (NSNP): How Involved are the Stakeholders?. *Mediterranean Journal of Social Sciences*, *5*(27 P1), pp.381-381.

Rahman, R., 2022. Private sector healthcare in Bangladesh: Implications for social justice and the right to healthcare. *Global Public Health*, *17*(2), pp.285-296.

Ramugondo, M., 2020. *Iodine content of salt used in the National School Nutrition Programme at Mopani and Vhembe Districts in Limpopo Province, South Africa* (Doctoral dissertation).

Republic of South Africa v. Grootboom. Case No. CCT 11/00. 2000 (11) BCLR 1169 and Minister of Health v. Treatment Action Campaign. Case No. CCT 8/02.

Reyneke, M. 2020. The Constitutionality of Suspending the South African National School Nutrition Programme during the COVID-19 Pandemic: The Equal Education Case. *International Journal of Education Law & Policy,* 16:223.

Ringeval, M., Wagner, G., Denford, J., Paré, G. & Kitsiou, S., 2020. Fitbit-based interventions for healthy lifestyle outcomes: systematic review and meta-analysis. *Journal of medical Internet research*, *22*(10), p.e23954.

Ritchie, J. & Spencer, L. 1994. "Qualitative data analysis for applied policy research". In: A. Bryman & R. G. Burgess (Eds.). *Analysing qualitative data*. London: Routledge.

Romani, L., Barmeyer, C., Primecz, H. &Pilhofer, K. 2018. Cross-cultural management studies: state of the field in the four research paradigms. *International Studies of Management & Organization*, 48(3): 247-263.

Rose, D., Heller, M.C. & Roberto, C.A., 2019. Position of the Society for Nutrition Education and Behavior: the importance of including environmental sustainability in dietary guidance. *Journal of nutrition education and behavior*, *51*(1), pp.3-15.

RSA (Republic of South Africa). 1996a. *Constitution of the Republic of South Africa (Act no. 108 of 1996)*. Pretoria: Government Printer.

RSA (Republic of South Africa). 1996b. *South Africans Schools Act* (Act no. 84 of 1996). Pretoria: Government Printer.

RSA (Republic of South Africa). 2008. Child Justice Act *(*2008). Pretoria: Government Printer.

RSA. Ministry of Finance. 1999. *Public Finance Management Amendment Act no.29 of 1999.* Pretoria: Government Printer.

RSA. Department of Education (DoE). 2009. *National School Nutrition programme*. Pretoria: Government Printer.

RSA. Ministry of Finance. 2000. *The Preferential Procurement Policy Framework Act no. 27 of 2000.* Pretoria: Government Printer.

Schreinemachers, P., Baliki, G., Shrestha, R.M., Bhattarai, D.R., Gautam, I.P., Ghimire, P.L., Subedi, B.P. & Brück, T., 2020. Nudging children toward healthier food choices: An experiment combining school and home gardens. *Global Food Security*, *26*, p.100454.

Shanshan, G.E.N.G., Jingqiu, M.A., Shanshan, L.I.U., Zhang, J. & Sheng, X., 2018. Lack of dietary diversity contributes to the gaps in micronutrient status and physical development between urban and rural infants. Iranian journal of public health, 47(7), p.958.

Skelton, A., 2019. Too much of a good thing? Best interests of the child in South African jurisprudence. *De Jure Law Journal*, *52*(SPE), pp.557-579.

Snyder, H. 2019. Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104: 333-339.

Prangthip, P., Soe, Y.M. & Signar, J.F., 2019. Literature review: nutritional factors influencing academic achievement in school age children. *International journal of adolescent medicine and health*, *33*(2), p.20180142.

Sorhaindo, A. & Feinstein, L., 2006. What is the relationship between child nutrition and school outcomes?. *Journal of the Home Economics Institute of Australia*, *13*(3), pp.21-23.

Steinmann, R., 2016. The core meaning of human dignity. *PER: PotchefstroomseElektronieseRegsblad*, *19*(1), pp.1-32.

Tardy, A.L., Pouteau, E., Marquez, D., Yilmaz, C. & Scholey, A., 2020. Vitamins and minerals for energy, fatigue and cognition: A narrative review of the biochemical and clinical evidence. *Nutrients*, *12*(1), p.228.

Te One, S. 2007. Defining rights: Children's rights in theory and in practice. *Freeman*, pp.7-8.

Theobald, M., 2019. UN Convention on the Rights of the Child:"Where are we at in recognising children's rights in early childhood, three decades on…?". *International Journal of Early Childhood*, *51*(3), pp.251-257.

UN Office of the High Commissioner for Human Rights (OHCHR), *Fact Sheet No. 31, The Right to Health,* June 2008, No. 31, available at: https://www.refworld.org/docid/48625a742.html [accessed 21 March 2022]

UN. Fact sheet 34 - The Right to Adequate Food. (United Nations, 2010).

UNICEF. 2020a. *What you need to know about malnutrition & feeding children*. New York: UNICEF Press.

UNICEF. 2020b. *Nutrition for Every Child: UNICEF Nutrition Strategy 2020–2030*. Paris: UNICEF Press.

UNICEF. 2020c. *West and Central Africa: More than 15 million cases of acute malnutrition expected in 2020*. New York: UNICEF.

United Nations Office of the High Commissioner for Human Rights (OHCHR) (2008). A human-rights-based approach to health. Geneva, Switzerland: World Health Organization and UN Office of the High Commissioner for Human Rights

Vorster HH, Badham JB, & Venter CS. 2013. An introduction to the revised food-based dietary guidelines for South Africa. S Afr J Clin Nutr 2013;26(3):S1-S164school outcomes? *Journal of the Home Economics Institute of Australia*, *13*(3), pp.21-23.

Wallace, R.M. & Martin-Ortega, O., 2020. *International law*. Sweet and Maxwell.

Wang, D. & Fawzi, W.W., 2020. Impacts of school feeding on educational and health outcomes of school-age children and adolescents in low-and middle-income countries: protocol for a systematic review and meta-analysis. *Systematic reviews*, *9*(1), pp.1-8.

Western Cape Forum for Intellectual Disability v Government of the Republic of South Africa 2011 (5) SA 87 (WCC); 2010 ZAWCHC 544.

World Health Organization, 2017. *Primary health care systems (primasys): case study from South Africa* (No. WHO/HIS/HSR/17.38). World Health Organization.

World Health Organization, 2019. *Nutrition in universal health coverage* (No. WHO/NMH/NHD/19.24). World Health Organization.

World Health Organization, 2020. *Improving early childhood development: WHO guideline*. World Health Organization.

World Health Organization, 2021. WHO fact sheet on malnutrition. Retrieved from: https://www.who.int/newsroom/factsheets/detail/malnutrition#:~:text=There%20are%204%20broad%20sub,height%20is%20known%20as%20wasting.

Zenebe, M., Gebremedhin, S., Henry, C.J. & Regassa, N., 2018. School feeding program has resulted in improved dietary diversity, nutritional status and class attendance of school children. *Italian journal of pediatrics*, *44*(1), pp.1-7.

Zermatten, J., 2010. The best interests of the child principle: literal analysis and function. *The International Journal of Children's Rights*, *18*(4), pp.483-499.

Zhang, F.F., Cudhea, F., Shan, Z., Michaud, D.S., Imamura, F., Eom, H., Ruan, M., Rehm, C.D., Liu, J., Du, M. & Kim, D., 2019. Preventable cancer burden associated with poor diet in the United States. *JNCI Cancer Spectrum*, *3*(2), p.pkz034.

Case laws

Equal Education and Others v Minister of Basic Education and Others (22588/2020) [2020] ZAGPPHC 306; [2020] 4 All SA 102 (GP); 2021 (1) SA 198 (GP) (17 July 2020).

Governing Body of the Juma Musjid Primary School & Others v Ahmed Asruff Essay N.O. and Others (CCT 29/10) [2011] ZACC 13; 2011 (8) BCLR 761 (CC)

Moko v Acting Principal of Malusi Secondary School and Others (CCT 297/20) [2020] ZACC 30; 2021 (3) SA 323 (CC); 2021 (4) BCLR 420 (CC); (2022) 43 ILJ 2269 (CC) (28 December 2020)