Strategy for the Prevention and Management of Obesity in South Africa

2023-2028

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Strategy for the Prevention and Management of Obesity in South Africa, 2023 - 2028

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FOREWORD

It is well established that overweight and obesity are serious health problems in South Africa that significantly contributes to non-communicable diseases as well as being associated with a higher risk of death and disability from these diseases. The Department in 2022 launched the *National Strategic Plan on the Prevention and Control of Non-Communicable Diseases, 2022 – 2027* to respond as a matter of urgency toward the prevention and control of NCDs, risk factors and mental health conditions.

The cost and extent of obesity and overweight in South Africa is unsustainable and does not contribute towards the Department of Health's vision of a "long and healthy life for all South Africans". The updated *Strategy for the Prevention and Management of Obesity in South Africa, 2023 – 2028,* therefore is timeous to contribute to the reduction of obesity and consequently NCDs.

The review process of the 2015- 2020 Strategy for the Prevention and Management of Obesity in South Africa highlighted successes such as early childhood campaigns and the health promotion levy of sugar-sweetened beverages.

The challenges and recommendations highlighted during the review of the 2015 – 2020 strategy were taken into account in updating this strategy which focuses at creating an enabling environment for healthy food choices and physical activity opportunities. This strategy requires a multifaceted, multisectoral approach to prevent and manage obesity in the country.

The updated strategy will build on the gains made in the last few years in relation to the health promotion levy on sugar-sweetened beverages, the salt reduction regulations and the work that is currently underway on front-of-pack labels to enable consumers to make informed decisions. These interventions are in line with the WHO's *"Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases*" and were generated through the collaboration with research institutions and other stakeholders. It is only through the collaboration of stakeholders that the vision of the strategy: *"All South Africans lead a healthy lifestyle and maintain a healthy weight"* can be realised.

Dr M J Phaahla, MP
Minister of Health
Date:

MESSAGE

A review of studies in the country has shown that obesity has increased dramatically in adults over a period of 20 years. In addition, the prevalence obesity in children 6 – 14 years of age is higher that the global average in school children. The causes leading to the high rates of overweight and obesity in the country are multifactorial. The nutrition transition from minimally processed and locally food to readily available and cheap ultra-processed food and drinks that are high in sugar, salt and/or fat are among the key factors that have contributed to the problem. In addition, sedentary lifestyles and lack of available and safe physical activity facilities and opportunities contribute to the problem.

It has become important to create enabling environments where people can have access to available healthy food and physical activity opportunities and to receive appropriate nutritional information to make decisions that will contribute to healthy eating habits and lifestyles. Legislation to restrict advertising of unhealthy food and beverages to children is also paramount if we want to halt the rise of obesity into the next generation. This strategy also seeks to capacitate health workers to counsel and manage obese persons and to monitor the rate of obesity through the health system.

Furthermore, the findings of the National Dietary Intake Survey conducted in 2022 will help to refine the actions that are outlined in the strategy as well as guide further fiscal measures and research that would be necessary to address obesity in the country in the next five years.

Dr S M Dhlomo, MP
Deputy Minister: Health
Date:

ACKNOWLEDGEMENTS

It concerns the National Department of Health that obesity is a public health challenge that is also contributing to the rising burden of non-communicable diseases (NCDs) in our country. I am committed to ensure that coordination of the Strategy for the Prevention and Management of Obesity in South Africa (2023 – 2028) will contribute to empower South Africans to make healthy choices by enabling equitable access to healthy food, physical activity opportunities and a capacitated health care system that supports the prevention and management of obesity.

I would like to thank the following individuals and organisations who contributed to the update of this Strategy:

1. Obesity Strategy management team

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    Department of Planning, Monitoring and Evaluation
    Department of Public Service and Administration
    Department of Sport, Arts and Culture
    Treasury

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The strategy is a multi-faceted and multi-sectoral document, which requires a multi-sectoral collaboration. Therefore, the joint collaboration by all stakeholders in implementing this Strategy to reduce the burden of obesity in the country is greatly appreciated.

Dr S S S Buthelezi
Director-General: Health
Date:

ABBREVIATIONS AND ACRONYMS

BHPSA	Better Health Programme South Africa
BMI	Body Mass Index
CHW	Community health worker
DBE	Department of Basic Education
DCDT	Department of Communications and Digital Technologies
DHIMS	District Health Information Management Systems
DOH	Department of Health (provinces)
DPME	Department of Planning, Monitoring and Evaluation
DSAC	Department of Sport, Arts and Culture
DSD	Department of Social Development
DSDB	Department of Small Business Development
FNS	Food Nutrition Security
FOPL	Front-of-Pack Labelling
GCIS	Government Communication and Information System
HCW	Health Care Worker
HEALA	Healthy Living Alliance
HPL	Health Promotion Levy
LMICs	Low- and Middle-Income Countries
LO	Life Orientation
M&E	Monitoring and Evaluation
NCD	Non-Communicable Disease
NCD+	Non-Communicable Diseases plus
NDoH	National Department of Health
NDP	National Development Plan
NFNSP	National Food and Nutrition Security Plan
NSNP	National School Nutrition Programme
SADHS	South African Demographic and Health Survey
SALGA	South African Local Government Association
SBCC	Social and Behavioural Change Communication
SDG	Sustainable Development Goal
SEIAS	Socio-Economic Impact Assessment System
SGB	School Governing Body
SSBs	Sugar-Sweetened beverages
T2D	Type 2 Diabetes
T2DM	Type 2 Diabetes Mellitus
WHO	World Health Organization

GLOSSARY OF TERMS

Agentic interventions

Agentic interventions are the ones in which an individual must act on the information provided.

Agento-structural interventions

Agento-structural interventions addresses the environment in which people behave and make choices but where individuals still play an important role.

Body mass index

Body mass index (BMI) is mostly used to classify obesity and is calculated from weight (in kilograms) and height (in meters) as BMI = kg/m^2.

Low- and middle-income countries

For the 2023 fiscal year, low-income economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of $1,085 or less in 2021; lower middle-income economies are those with a GNI per capita between $1,086 and $4,255; upper middle-income economies are those with a GNI per capita between $4,256 and $13,205; high-income economies are those with a GNI per capita of $13,205 or more.

Non-communicable diseases

Non-communicable diseases (NCDs), also known as chronic diseases, tend to be of long duration and are the result of a combination of genetic, physiological, environmental and behavioural factors. The main types of NCD are cardiovascular diseases (such as heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma) and diabetes.

Non-communicable diseases plus (NCDs+)

The entire group of NCD conditions, including risk factors and disabilities.

Obesogenic environment

The sum of influences generated by the surroundings, opportunities or conditions of life that promote obesity in individuals or populations.

Structural interventions

Interventions located at the structural end of the spectrum typically remove individual agency, rendering the healthier option the only option, in a given context. Individuals are left with little or no choice and are often unaware that health behaviours become improved.

Theory of change

A specific type of methodology for planning, participation, and evaluation that is used in the philanthropy, not-for-profit and government sectors to promote social change. The Theory of Change defines long-term goals and then maps backward to identify necessary preconditions.

Ultra-processed food and drink products

Ready-to-eat foods or drink formulations based on refined substances with a combination of sugar, salt, and fat, plus several additives. These include sugar-sweetened beverages, snacks and “fast foods”.

“Whole of society” or “whole of government” approach

One in which public service agencies work across portfolio boundaries, formally and informally, to achieve shared goals and an integrated government response to particular issues. It aims to achieve policy coherence to improve effectiveness and efficiency. This broader approach with a focus on programme and project management as well as policy, addresses any inherent departmentalism and unites different departments around a common cause.

CHAPTER 1

Executive Summary

1.1 Background

Obesity and overweight are escalating problems globally, with epidemiological studies confirming that increased weight is associated with increased risk of death from all causes, most notably noncommunicable diseases. The global prevalence of obesity has nearly tripled since 1975 and is expected to increase further during the coming decades. The highest rates of increase in obesity have been recorded in middle-income countries, including South Africa. In South Africa, obesity has emerged as an urgent public health crisis. In 2016, 31% of adult males, 67% of adult females, and 13% of children under five years old were either overweight or obese.

The increased cost of treating associated comorbid diseases presents a massive challenge to both private and public health care systems. In addition, individual costs are heavily impacted due to decreased productivity and subsequent lower household income. It has been estimated that the economic impact of obesity in South Africa amounts to R701 billion each year. This includes obesity-related costs such as loss of productivity, medical spending, and absenteeism.

Examples of interventions that have been successfully implemented in obesity programmes around the world include Front-of-Package Labelling of foods (FOPL), restrictions on marketing unhealthy products to children, improvement in school food standards and options, taxation on sugar sweetened beverages (SSBs), reformulation of ultra-processed foods to improve nutrient content, retail environment changes such as menu labelling, corporate voluntary efforts and social investment, utilising digital technology for weight awareness and management, and programmes for increased physical activity.

Policy-based approaches have shown to have a wider reach and are more enduring compared with other types of interventions because they codify change and survive transitions in leadership. The least successful policies tend to rely solely on individuals to make behaviour changes rather than shaping external influences. Several country examples emphasised the importance of adequate monitoring at the local level and effective oversight from government departments of fiscal and other measures adopted in relation to food products.

In South Africa, there appears to be limited published evidence about the effectiveness of measures adopted to reduce obesity. The absence of interim monitoring data for the 2015-2020 national obesity strategy in South Africa, means that it is impossible to assess the efficacy of the strategy. The most notable apparent successes in South Africa for obesity prevention and reduction are the National School Nutrition Programme (NSNP) and the Health Promotion Levy (HPL).

1.2 Approach and scope

The 2015-2020 Strategy for the Prevention and Control of obesity in South Africa was reviewed through firstly an interrogation of the theory of change in line with South Africa's international policy commitments and national priorities. A literature review of international and national best practices followed and then wide stakeholder engagements to review the 2015 – 2020 strategy were conducted. Two national workshops were held to get stakeholder inputs on the proposed key goals, strategic objectives, and actions, whereafter the strategy document was finalised.

The purpose of this strategy is to disrupt the obesogenic environment in South Africa which is compounded by poor socio-economic conditions and restricted choices to adopt a healthy lifestyle. The overall vision of the strategy is:

> *"All South Africans lead a healthy lifestyle and maintain a healthy weight".*

The strategy's mission statement sets out to:

> *"Empower South Africans to make healthy choices by enabling equitable access to healthy food, physical activity opportunities and a capacitated health care system that supports the prevention and management of obesity".*

The goal of this strategy is to:

> *"Reduce the prevalence of obesity and diet-related non communicable disease in the South African population".*

The following six strategic objectives were identified to achieve the strategy's vision, mission, and goal:

Strategic Objective 1: Healthy food is available and easily accessible in government workplaces and in schools.

Strategic Objective 2: An enabling environment is in place to facilitate equitable access to physical activity opportunities.

Strategic Objective 3: Education and communication at different levels is evidence-based to prevent and manage obesity.

Strategic Objective 4: The health care system is equipped to address obesity prevention and management.

Strategic Objective 5: An effective monitoring, evaluation and research system is in place.

Strategic Objective 6: Policy and legislation support a healthy food environment.

Strategic objectives 1 and 2 attempt to provide an enabling environment so that people can more easily access healthy food choices and physical activity opportunities. Although it is recognised that some people do not always have an optimal choice, Strategic objective 3 attempts to enable people to make healthy food choices from a position of knowledge and understanding. In line with the National Strategic Plan for the Prevention and Control of Non-Communicable Diseases, 2022 – 2027, it is recognised that broad health reform is required as is a "whole of government" and "whole of society" approach to promoting health. Strategic objective 4 aims to contribute to the reduction of NCDs through strengthening the health care system. The lack of monitoring data in relation to strategy implementation and the challenge in ensuring accountability for implementation, informed Strategic objective 5. Given that structural or policy interventions are cost effective and enduring interventions, Strategic objective 6 attempts to provide an enabling legislative and policy environment. For each strategic objective, a set of main actions, outputs and targets are specified.

1.3 Organisation of this document

This document is organised into four chapters plus an addendum.

Chapter one is the executive summary.

Chapter two states the escalating prevalence of obesity and overweight globally as well as nationally. This chapter explains obesity and overweight to the reader and looks at the key drivers of obesity in South Africa. It describes the enormous economic and personal costs of obesity, including the demand on the private and public health care system. The chapter provides an overview of the interventions that had some measure of success internationally and describes local efforts that have proved to have made a difference. The key global policies aimed at improving global health, and to which South Africa has committed, are discussed. An outline of the key related national policy and legislative measures that informed the development of the strategy is also provided.

Chapter three describes the review process and its findings and outlines the strategic framework for the updated strategy. It states the vision and mission of the strategy as well as the goals, strategic objectives, each of which, in turn are expected to contribute towards the achievement of the vision for the strategy to prevent and manage obesity in South Africa. The strategy in turn, will contribute to the vision of the National Department of Health: "a long and healthy life for all South Africans". Clear actions are identified against each of the strategic objectives to realise the overall goal.

Chapter four details the implementation, monitoring and evaluation plan for the strategic objectives and actions. Expected output for each action and targets per year are included to monitor the implementation of each of the actions. Responsibilities to perform the actions have been allocated and engagement sessions have been held with the relevant government departments. The resources needed and estimated costs for activities that cannot be covered by the normal budgets of government departments are also provided.

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The addendum lists the key supporting documents that were developed in the process of updating the strategy.

1.4 Conclusion

The strategy is a multi-faceted and multi-sectoral document, which requires a focused approach to ensure that the different sectors work together to realise its goals. Ultimately, it is in everyone's interest to enable people living in South Africa to enjoy long and healthy lives.

The cost and extent of obesity and overweight in South Africa is unsustainable and does not contribute towards the Department of Health's vision of a "long and healthy life for all South Africans", or towards achieving global or national health goals. Obesity and overweight affect the quality of life of affected South Africans and this strategy aims to positively change the situation. With stakeholder commitment and collaboration, it is expected that this strategy will assist people living in South Africa to make healthy choices and enjoy a healthier life.

CHAPTER 2

Background

2.1 Introduction

The 2015-2020 South African strategy for the prevention and control of obesity aimed to "reform obesogenic environments and enablers, while enhancing opportunities for increased physical activity and healthy food options in every possible setting, including healthcare facilities, early development centres, schools, workplaces and the community at large" (National Department of Health, 2016). The mission of the strategy was to "empower the population of South Africa to make healthy choices by creating an enabling environment that promotes healthy eating and physically active lifestyles for the prevention and control of overweight and obesity".

The National Department of Health selected a team of professionals to review the 2015-2020 strategy and to update the strategy in line with the recommendations emerging from the review for the period 2023-2028. The updated strategy builds on the successes of the previous strategy, addresses the challenges in preventing and managing obesity in South Africa, incorporates best practices from around the world, and aims to align with relevant national and global policies, strategies, and guidelines. Although prevention and management of obesity is an integral part of other policies and strategies to promote optimal nutrition, the focus of the strategy is on those actions that would impact on obesity.

2.2 Understanding obesity

Obesity is defined as an abnormal or excessive accumulation of fat in the body that presents a risk to health. Obesity is mostly classified using the body mass index (BMI) (WHO, 2021). BMI is calculated from weight (in kilograms) and height (in meters) as BMI = kg/m^2. A BMI below 18.5 is classified as underweight, BMI of 18.5-24.9 as normal weight, BMI of 25-29.9 as overweight, BMI of 30-34.9 as class I obesity, BMI of 35-39.9 as class II obesity, and a BMI of 40+ as class III obesity (also called severe or extreme obesity). BMI is the most widely used measure of obesity as it is easy to calculate and collect on a population level. BMI, waist circumference, and waist-to-hip ratio each have a similar strength of association with cardiovascular disease risk (Emerging Risk Factors Collaboration, 2011).

However, BMI has limitations. It does not provide information about fat distribution, which is an important risk factor for noncommunicable diseases (NCDs), and it does not consider muscle mass. Moreover, the ability of BMI to predict cardiovascular risk, and the associated optimal BMI cut-off values, vary among racial groups, as well as between men and women (Rao et al., 2015).

Epidemiological studies from around the globe have confirmed that increased weight is associated with increased risk of death from all causes, most notably NCDs (Freedman et al.,

2006; Gu et al., 2006; Pischon et al., 2008). Obesity is a significant risk factor for diseases such as type 2 diabetes (T2D), hypertension, cardiovascular diseases, osteoarthritis, pulmonary diseases, and cancers of the oesophagus, stomach, colorectum, biliary tract, pancreas, kidney, endometrium, ovarium, breast, and thyroid (Lauby-Secretan et al., 2016; Wolin et al., 2010). The increase in mortality associated with obesity follows a linear pattern, with a rising death rate as BMI reaches above 25 (Prospective Studies Collaboration et al., 2009). According to StatsSA, NCDs contributed to 57.4% of all deaths in 2016, 60% occurring in individuals younger than 70 years of age (StatsSA, 2018). It is also imperative to note that people living with obesity suffer from physical performance limitations and mental health issues related to stigmatisation and social discrimination (Pataky et al., 2014).

2.2.1 Key drivers of obesity

There is debate as to whether the causes of obesity, and thus the responsibility to address the increase in prevalence, lies with regulatory bodies (governments), providers (food industry), or the community (consumers). Researchers have shown that obesity is largely driven by environmental effects that undermine the self-regulatory capacity people have to make responsible decisions about personal diet and physical activity (Roberto et al., 2015).

The human body stores calories/kilojoules as fat as a net sum of the nutritional quality and volume of food consumed on any given day, together with the amount of physical movement we have subjected our body to on that day. Numerous factors influence people's ability to eat a healthy diet and perform physical activity, including the social, economic, and cultural environment in which people live and work, issues of accessibility and affordability, and education.

The social determinants of health[1] are the non-medical factors that influence health outcomes. These include biological and behavioural factors, socio-cultural factors, living and working conditions, and structural factors. Social determinants such as poor housing, inadequate water and sanitation, a sub-optimal food environment, high levels of alcohol and substance abuse, low levels of social cohesion, and an inadequate health-system response are some of the main drivers of ill health, and most notably, obesity, in South Africa (Scott et al., 2017).

Commercial determinants of health are defined as factors that influence health, and which stem from the profit motive used by the private sector to promote products and choices that are detrimental to health. The commercial determinants of health cover three areas. First, they relate to unhealthy commodities that are contributing to ill-health. Secondly, they include business, market and political practices that are harmful to health and are used to sell these commodities and secure a favourable policy environment. Finally, they include the global drivers of ill-health, such as market-driven economies and globalisation, that have facilitated the use of such harmful practices (Mialon, 2020). On an international scale, these

[1] The conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems. (World Health Organization)

three areas have converged to create the current obesogenic society we find ourselves existing in.

The above drivers of obesity can be described using an adapted version of Bronfenbrenner's Ecological Systems Theory (Bronfenbrenner, 1979; Bronfenbrenner & Evans, 2000) as illustrated in Figure 1 below.

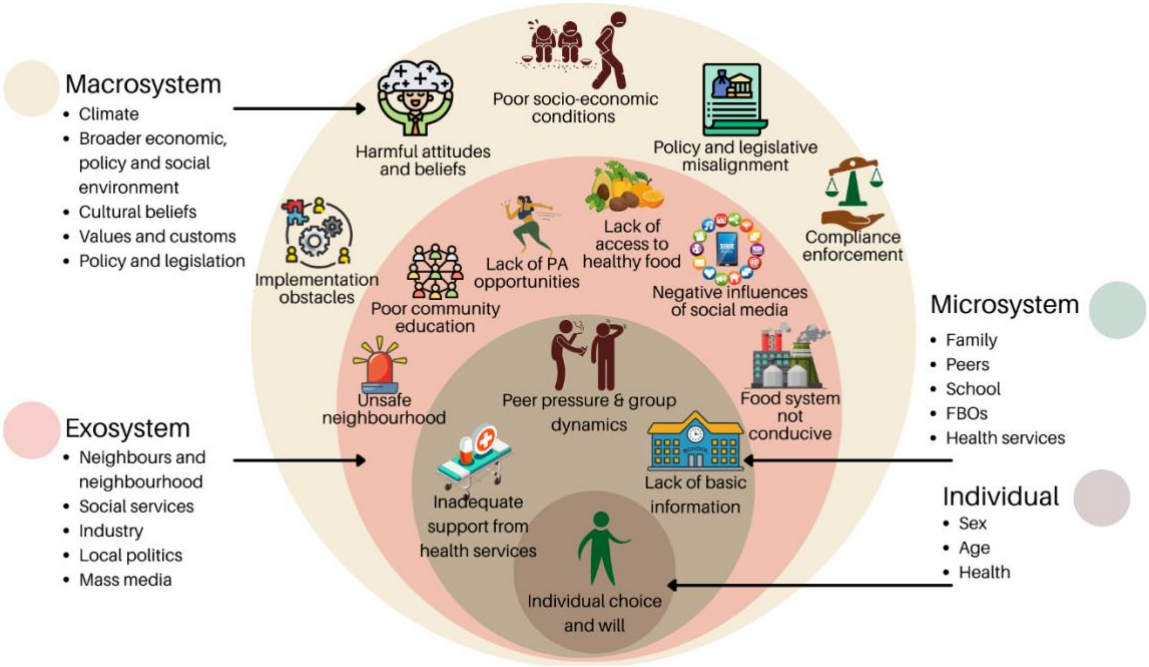

Figure 1: Contextual framework of influencers of obesity (Adapted: Bronfenbrenner's Ecological Systems Theory)

2.2.2 Obesity in South Africa

The global prevalence of obesity has nearly tripled since 1975 and is expected to increase further during the coming decades. The highest rates of increase in obesity have been recorded in middle-income countries, including South Africa (NCD Risk factor Collaboration, 2016). In South Africa, obesity has emerged as an urgent public health crisis. In 2016, 31% of adult males, 68% of adult females, and 13% of children under five years old were either overweight or obese (NDoH, 2019).

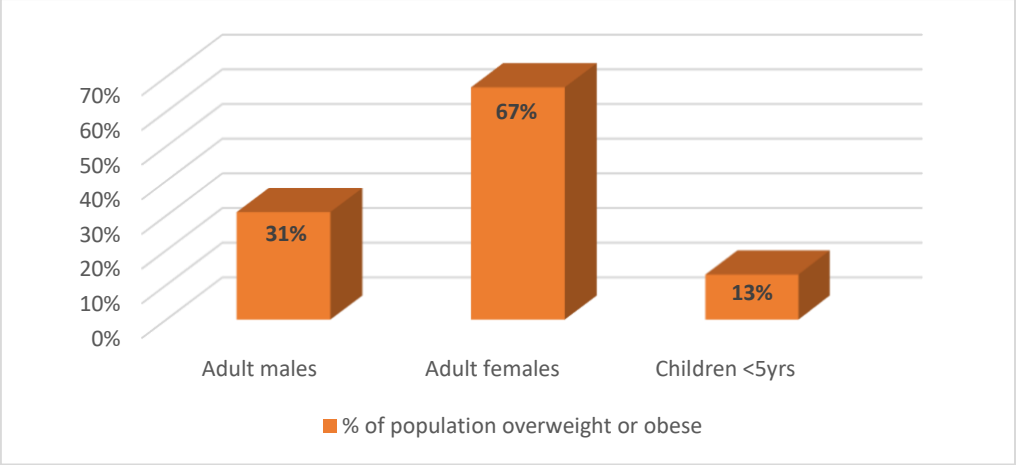

Figure 2: prevalence of obesity in South Africa

Morbidity due to obesity was defined for the South African population based on a comparative risk assessment analysis of the 1998 South African Demographic and Health Survey (SADHS) data. This analysis revealed that 87% of Type 2 Diabetes Mellitus (T2DM), 68% of hypertension, 61% of endometrial cancer, 45% of ischemic stroke, 38% of ischemic heart disease, 31% of kidney cancer, 24% of osteoarthritis, 17% of colorectal cancer, and 13% of postmenopausal breast cancer were attributable to a raised BMI (Joubert et al., 2007).

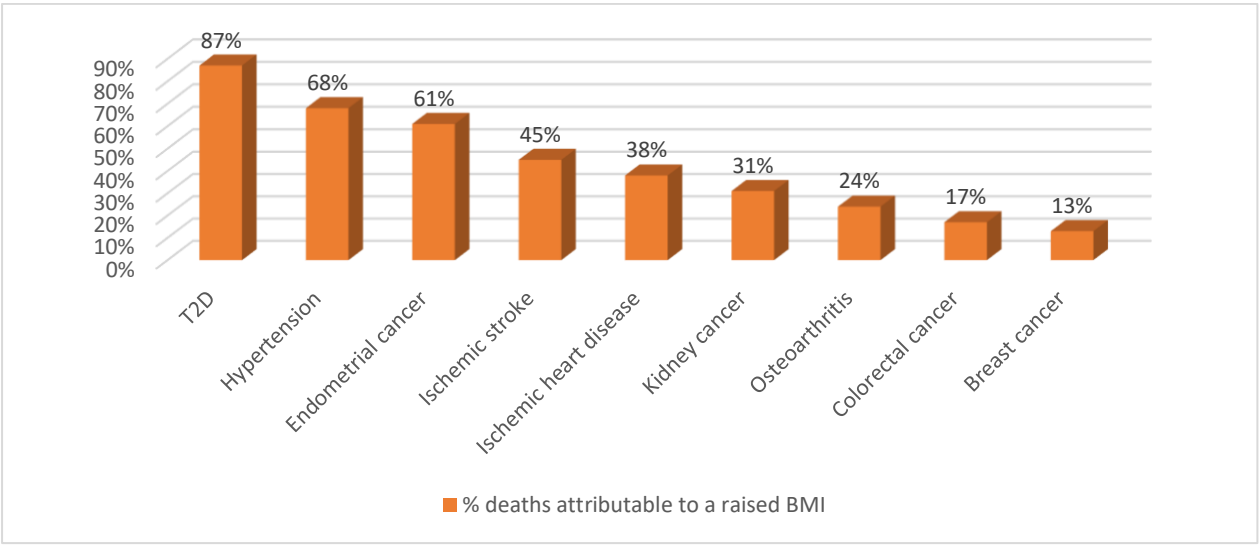

Figure 3: Morbidity due to obesity

The COVID-19 pandemic has emphasised and underscored our understanding of the increased mortality associated with obesity across all spheres of well-being, health, and disease (not being limited to NCD's). Overweight and obese individuals have an increased risk of developing severe COVID-19, including hospitalisation, intensive care support, and death (Parker et al., 2020; Popkin et al., 2020; Zhou et al., 2021). Increased COVID-19 mortality among individuals with obesity, diabetes, and hypertension is but one example of how excess weight impacts well-being at all levels and highlights the importance of strengthening intersectoral public health policies.

2.2.3 The cost of obesity

The cost of treating the most common obesity associated comorbid diseases (such as acute myocardial infarction and cerebrovascular disease) offers numbers for scrutiny and presents a challenging picture to both private and public health care systems. In addition to individual cost implications due to decreased productivity and subsequent lower household income, both private and public health care costs for treating obesity-related diseases have become an enormous economic burden (Daviglus et al., 2004; Finkelstein et al., 2008; Narbro et al., 2002; Quesenberry et al., 1998).

It is estimated that 9% and 13.2% of total health expenditure in Africa and at the global level is due to overweight and obesity, respectively (World Obesity Federation, 2020). The associated direct cost is only a fraction of the full economic cost of overweight and obesity (Boachie et al., 2022)

Discovery Health in their 2017 Discovery ObeCity Index (Discovery Obecity Index, 2017) estimated the impact of obesity on the South African economy. This private health insurer evaluated BMI and waist circumference in six South African cities and compared their health care spending. Results suggested that the economic impact of obesity in South Africa is R701 billion each year. This included obesity-related costs such as loss of productivity, medical spending, and absenteeism.

In a cost of illness study designed to estimate the direct cost of T2DM in the public sector in South Africa, the diagnosis and management of 240 000 patients with diagnosed T2DM costed R2.7 billion in 2018 (Erzse et al., 2019). This amount increased to R21.8 billion if undiagnosed patients were considered. The projected 2030 cost of all T2DM cases is estimated to be R35.1 billion, with 51% of the cost attributable to the management of T2DM and 49% attributable to complications.

Although studies have estimated the healthcare cost of weight-related diseases in South Africa, these studies do not quantify the cost of overweight and obesity to the public healthcare system specifically. A study estimating the healthcare cost of treating 12 million individuals with weight-related conditions who utilize healthcare services in the public sector and the proportion of the cost attributable specifically to overweight and obesity, showed that the total cost of overweight and obesity is estimated to be ZAR33,194 million in 2020. This represents 15.38% of government health expenditure and is equivalent to 0.67% of GDP. The overweight and obesity cost is disaggregated as follows: cancers (ZAR352 million), cardiovascular diseases (ZAR8,874 million), diabetes (ZAR19,861 million), musculoskeletal disorders (ZAR3,353 million), respiratory diseases (ZAR360 million) and digestive diseases (ZAR395 million). Annual per person cost of treating overweight and obesity is ZAR2,769. These findings do not account for the significant number of undiagnosed diabetic and hypertensive patients and others who do not seek treatment neither does this include insurance beneficiaries who utilize services in the private sector. Population-based interventions leading to significant BMI reduction can avoid up to 2.4 million incident cases of diabetes, 1.4 to 1.7 million cardiovascular diseases, and 73,000–127,000 cases of cancer (Boachie et al., 2022).

Another cost-analysis, estimates the annual combined (direct and indirect) cost of diabetes to be R 31 000 to R 173 000 per patient. It is further estimated that treating 5000 obese T2DM patients through bariatric surgery could lead to a cost saving of R 1.2 billion to R 6.68 billion (Aquilo Consulting, 2022).

2.3 Addressing obesity

Policy-based approaches often have a wider reach and are more enduring compared with other types of interventions because they codify change and survive transitions in leadership (Cobiac et al., 2013; Magnusson, 2008). Compared with individually targeted interventions, population-level policy can offer larger and more sustained benefits for population health and at a lower cost to society.

Obesity prevention and management interventions can be broadly organised into three groups by the degree to which an intervention involves individual agency versus structural change (Backholer et al., 2014). *Agentic interventions* aim to increase individual knowledge or skills to make healthier choices, leaving the environment unchanged. *Structural interventions*, by contrast, change the environmental context within which individual behaviours occur, thereby relying less on diminishing individual agency. *Agento-structural interventions* are situated between the two, as they address structural aspects of environments while requiring a level of individual agency for behavioural change.

An equity-focused systematic review including 36 papers showed that the obesity-related socio-economic equity impact of most policies examined, be they agentic, agento-structural, or structural in nature, was neutral (Olstad et al., 2016). These results were broadly consistent when findings were stratified by participant population (children versus adults), level of implementation (microenvironment versus macroenvironment), and by anthropometric and behavioural outcomes. Characteristics of policies more or less likely to improve obesity-related inequities could not be clearly ascertained. However, fiscal measures (including both taxes and subsidies) proved powerful, with free/subsidised school fruit/vegetable/healthy meal schemes having neutral impacts on obesity-related inequities in several studies, while tax-related fiscal measures had consistently neutral or positive impacts.

A growing recognition of the importance of environmental factors that promote obesity has led to a shift from the evaluation of so-called ‘upstream’ policy interventions to ‘downstream’ interventions that target behavioural changes such as regulatory and fiscal policies and community-level obesity prevention programmes. Fiscal measures (including both taxes and subsidies) have proved powerful (Vidaña-Pérez et al., 2021) and mathematical models have determined sugar-sweetened beverage (SSB) tax was the most cost effective, and had the largest and most equitable decrease in obesity across socioeconomic categories.

Since the introduction of HPL in South Africa, there has been growing evidence of product reformulation, with many brands reducing sugar content (Stacey et al., 2021). Argentina has had success in the banning of trans-fatty acids (Downs et al., 2017, 2013) and importantly, has been identified by the WHO as a 'best-buy' public health intervention for LMICs (Cecchini et al., 2010)

Globally, the most frequently reported challenges and barriers to addressing obesity involved the limited ability/competence by governments or their agencies to implement and enforce public policy.

In South Africa, for example, in a recent study to investigating the extent and nature of advertising of unhealthy versus healthy food and beverages to children in South African TV broadcasting channels. Unhealthy food and beverage advertising was recorded at a significantly higher rate compared with healthy food and beverages during the time frame when children were likely to be watching TV (Yamoah et al., 2021).

2.3.1 International best practices

Examples of interventions that have been successfully implemented in obesity programmes around the world include front-of-package labelling of foods, restrictions on marketing unhealthy products to children, improvement in school food standards and options, taxation on sugar sweetened beverages (SSBs), reformulation of ultra-processed foods to improve nutrient content, retail environment changes such as menu labelling, corporate voluntary efforts and social investment, utilising digital technology for weight awareness and management, and programmes for increased physical activity.

Policy-based approaches often have a wider reach and are more enduring compared with other types of interventions because they codify change and survive transitions in leadership (Cobiac et al., 2013; Magnusson, 2008).

The least successful policies tend to rely solely on individuals to make behaviour changes rather than shaping external influences.

Cost-effectiveness modelling studies of obesity prevention interventions in different countries have shown that regulatory and fiscal policies result in the largest cost savings over time, largely due to low implementation costs and wider population coverage resulting in lower cost per person (Ananthapavan et al., 2020; Lehnert et al., 2012).

Obesity prevention interventions targeting children, such as health education programmes or setting nutrition standards for food and beverages provided in schools, can reduce future health care expenditure throughout adulthood. The authors of a meta-analysis of interventions in the school food environment from all over the world concluded that policy actions are necessary to improve school food environments to sustain healthy dietary intake and prevent obesity, but that the effect may not be sustainable if an unhealthy food environment around schools competes with a healthy in-school environment (Pineda et al., 2021). The food environment around schools includes the location and concentration of food retailers such as convenience stores, take-aways, and fast food outlets within a 5km radius of

the school (Williams et al., 2014). In the South African context, the food environment around the schools also includes informal food vendors.

Several country examples emphasised the importance of adequate monitoring at the local level and effective oversight from government departments of fiscal and other measures adopted in relation to food products. Timely, easily understood, concise, and locally relevant data is needed to inform policy development to prevent obesity. Relevant data should be drawn from multiple sectors, and cross-sector collaboration is therefore essential. Indicators for implemented strategies should be developed and included in current data collection tools to ensure that monitoring and evaluation is effective (Erzse et al., 2021).

Monitoring the prevalence of obesity provides excellent markers for the efficacy of a strategy, however, monitoring obesity prevalence alone is insufficient information, because obesity is a complex and multifactorial issue. Measures of environmental determinants, such as the food and built environments should be included as part of surveillance data and recorded in such a way as to calculate outcomes benchmarked against internationally accepted recommendations for weight-related behaviours. In 2019 the Lancet Commission on Obesity suggested a framework, inclusive of LMICs, which identifies relevant interventions and indicators by which urban design, land use, and the built environment can address obesity (Devarajan et al., 2020).

Country examples highlighted multisectoral coalitions, strong advocacy, and persuasive evidence of the feasibility of policy implementation to accelerate the process to effectively address obesity (Paina and Peters, 2012; Pérez-Escamilla et al., 2017). Other key elements for successful and sustainable interventions were identified:

- Anticipating and addressing feedback loops early. Examples of positive feedback loops include research and evidence, informed advocates, public outreach, and a broad range of supporters. Negative feedback loops include outside interest groups, misunderstood definitions, and negative perceptions
- Utilising scale free networks - by change in one aspect leading to change in many areas. Strong evidence used in marketing campaigns (along with a plan for overcoming expected challenges) had a large impact on the support the interventions ultimately received.
- Opting for phased transitions. Most countries went through a phased transition using multisectoral coalitions, strong advocacy, and persuasive evidence of the feasibility of implementation.
- Understanding path dependence by explaining what characteristics influence divergent outcomes and anticipating the factors that will support or divert implementation.
- Optimising emergent behaviour when smaller entities spontaneously come together as a collective. Successful examples of policy implementation were marked by multiple consultations with members of academia, government, advocacy groups and civil society who eventually formed a coalition, with each stakeholder bringing a different

skill set to help overcome major negative feedback loops mostly driven by the food industry.

- Implementation should be based on clear time frames, well-defined goals, and regular reviews of progress (in the form of agreed actions, committed resources and results). No strategy can claim success or failure unless it is closely monitored, with results recorded and swiftly communicated to all stakeholders (from national to local levels) and the public. Only this approach was found to generate both public accountability and the desired momentum in strategy implementation.
- The strategy must have a champion or driver to coordinate the strategy and ensure implementation. An effective mechanism for cooperation and coordination between the sectors and between government departments must be established and information effectively disseminated. Adequate resources must be allocated to the implementation of the strategy across the relevant government departments.

Further detail on best practice examples from a selection of Asia Pacific, Latin American and European countries can be found in the Best Practices Report .

2.3.2 National best practices

Apart from a few noteworthy research reports, there is limited published evidence about the effectiveness of measures adopted in South Africa to reduce obesity. The absence of monitoring data for the 2015-2020 national obesity strategy in South Africa, means that it is impossible to assess the efficacy of the strategy. The most notable apparent successes in South Africa for obesity prevention and reduction are the South African National School Nutrition Programme (NSNP) and the Health Promotion Levy.

The NSNP provides one nutritious meal daily to 9 million children during school terms, supplemented by an additional nutritious breakfast to 40,000 children in the poorest schools (Hazell, 2016). Though one small study (Graham et al., 2018) has shown optimism that a nutritious daily meal may have protective effects against overweight and obesity among primary school children, there is not sufficient data on a larger scale to determine the programme's impact.

The implementation of a tax on SSBs in South Africa in 2018, called the Health Promotion Levy (HPL), was followed by a clear reduction in mean sugar intake, reduction of taxed beverage sales and increase in selection of untaxed beverages (milk, bottled water, 100% fruit juice, and alcohol) (Stacey et al., 2021). Remarkably, there were greater reductions in SSBs purchases among lower socioeconomic groups and in subpopulations with higher SSBs consumption. These groups bear larger burdens from obesity and related diseases, underscoring that this policy improves health equity (Hofman et al., 2021).

2.4 The policy and legislative framework

The national strategy for the prevention and management of obesity (2023-2028) is informed by, and built on, international and regional commitments to which South Africa is a signatory, as well as on the key legislative documents that inform South Africa's health response.

2.4.1 International commitments

Efforts to improve health throughout the world have included a wide range of international health policy instruments. It has been recognised that health is an investment in both human and economic development, that it is a central building block in fighting poverty and in ensuring sustainable development, and that health security and protection is the cornerstone of human security (Kickbusch, 2011).

Key international policies and strategies that this strategy has considered are outlined below.

The **United Nations Sustainable Development Goal 3** "*to ensure healthy lives and promote well-being for all at all ages*", specifically noting objective 3.4 (to reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being) and taking cognisance of the target to strengthen the capacity for early warning, risk reduction and management of national and global health risks.

The **WHO Global Strategy on Diet, Physical Activity and Health** addresses the major risk factors for non-communicable diseases and recognises that national strategies will need a clear plan for long-term and sustained disease-prevention measure and that national plans should have achievable short-term and intermediate goals.

The **Report of the WHO Commission on Ending Childhood Obesity** provides a set of recommendations focusing on six key areas:

- The promotion of healthy food intake.
- The promotion of physical activity.
- Preconception and pregnancy care.
- Early childhood diet and physical activity.
- Health, nutrition and physical activity for school age children, and
- Weight management.

The **WHO Global Action Plan for the Prevention and Control of Non-Communicable Diseases (2013-2020**), advances the implementation of the global strategy on diet, physical activity and health and other relevant strategies, and recognises that "most of the premature deaths from NCDs are largely preventable". Health systems should be enabled to respond more effectively and equitably to the healthcare needs of people with NCDs, and public policies should target sectors that impact on health such as tobacco use, unhealthy diet, physical inactivity, and the harmful use of alcohol. The goal for the action plan is stated as follows:

> "*To reduce the preventable and avoidable burden of morbidity, mortality and disability due to noncommunicable diseases by means of multisectoral collaboration and cooperation at national, regional and global levels, so that populations reach the highest attainable standards of health and productivity at every age and those diseases are no longer a barrier to well-being or socioeconomic development*."

The action plan outlines nine specific targets, seven of which are relevant to the national strategy to prevent and control obesity:

- A 25% relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
- At least 10% relative reduction in the harmful use of alcohol, as appropriate, within the national context.
- A 10% relative reduction in prevalence of insufficient physical activity.
- A 30% relative reduction in mean population intake of salt/sodium.
- A 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.
- Halt the rise in diabetes and obesity.
- At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.

Member states are urged to consider developing or strengthening national food and nutrition policies and action plans and implementing the global strategy on diet, physical activity and health, the global strategy for infant and young child feeding, the comprehensive implementation plan on maternal, infant and young child nutrition and WHO's set of recommendations on the marketing of foods and non-alcoholic beverages to children. Member States are also urged to consider implementing strategies to promote healthy diets in the entire population, while protecting dietary guidance and food policy from undue influence of commercial and other vested interests

The Action Plan calls on member states to develop multisectoral policies to address health and to implement national guidelines on physical activity. It also encourages member states to develop and put into practice policies and interventions to, among others, introduce transport policies that promote active and safe methods for travelling to and from schools and workplaces, such as walking or cycling.

The WHO's **Tackling NCDs: 'best buys' and other recommended interventions for the prevention and control of noncommunicable diseases**, provides policymakers with a list of 'best buys' and other recommended interventions to address noncommunicable diseases (NCDs) based on an update of Appendix 3 of the Global Action Plan for the Prevention and Control of NCDs 2013–2030. A list of options is presented for each of the four key risk factors for NCDs (tobacco, harmful use of alcohol, unhealthy diet, and physical inactivity) and for four disease areas (cardiovascular disease, diabetes, cancer and chronic respiratory disease).

2.4.2 National policy, legislation and plans

The **National Development Plan (NDP) 2030** commits the Government of South Africa to improving long-term health outcomes by prioritising, amongst other things, nutrition, physical activity, combating smoking, and alcohol abuse. The NDP recognises the need to:

- Address the social determinants of health including promoting healthy behaviours and lifestyles.

- Strengthen intersectoral and inter-ministerial collaboration to promote health in South Africa.
- Train and manage community health workers in adequate numbers and deploy them where most needed.

Goal 4 of the NDP, to "*significantly reduce the prevalence of non-communicable chronic diseases*" and Goal 7, "*primary healthcare teams provide care to families and communities*", are specifically relevant to the national strategy for the prevention and management of obesity.

The **National Health Act, 2003 (Act No. 61 of 2003)** provides for, among other things, the establishment of a district health system, which ensures that appropriate health services are effectively and equitably provided [Ch5, 32(1)] and that district health plans are developed based on national and provincial health policies [Ch5, 33(1)]. The Act also provides for the development of guidelines for the appropriate distribution of health care providers and health workers [Ch6, 49]. In addition, the Minister is mandated to make regulations to ensure that adequate resources are available for the education and training of health care personnel to meet the human resources requirements of the national health system [Ch7, 52(a)].

The **National Strategic Plan (NSP) for the Prevention and Control of Non-Communicable Diseases, 2022 – 2027** aims to move South Africa closer to Sustainable Development Goal (SDG) 3.4: To reduce, by one-third, premature mortality from NCDs+ through prevention and treatment and promote mental health and well-being by 2030 through the progressive improvement of wellness and reduction of premature morbidity, disability and mortality from NCDs+. The NSP recognises the large number of health conditions covered by the NCDs+ umbrella and the associated wide range of determinants and risk factors (some of which are shared). It also acknowledges the difficulties and complexities of addressing the entire disease burden in one strategy. Specific goals for the NSP are:

- Goal 1: Prioritise prevention and control of NCDs+
- Goal 2: Promote and enable health and wellness across the life course
- Goal 3: Ensure people living with NCDs+ (PLWNCDs+) receive integrated, people-centred health services to prevent and control NCDs+
- Goal 4: Promote and support national capacity for high-quality research and development for the prevention and control of NCDs+
- Goal 5: Monitor strategic trends and determinants of NCDs+ to evaluate progress in their prevention and control.

The **National Food and Nutrition Security Plan for South Africa (2018 - 2023),** states its vision as "*optimal food security and enhanced nutritional status for all South Africans"* and sets out impact targets covering interventions to address vulnerability to hunger, undernutrition and overweight and obesity. The six objectives outlined in the plan are pertinent to the national strategy to prevent and control obesity and are stated as:

- Establish a multisectoral Food and Nutrition Security Council to oversee alignment of policies, coordination and implementation of programmes and services which address food and nutrition security.

- Establish inclusive local food value chains to support access to nutritious and affordable food.
- Expand targeted social protection measures and sustainable livelihood programmes.
- Scale up high impact nutrition interventions targeting women, infants and children.
- Influence people across the life cycle to make informed food and nutrition decisions through an integrated communications strategy.
- Develop a monitoring and evaluation system for food nutrition security (FNS), including an integrated risk- management system for monitoring FNS-related risks.

Notably, the National Food and Nutrition Security Plan (NFNSP) is based on the "assumption of responsibility for nutrition improvement at the highest levels of government and the development of processes to help those leaders coordinate action and monitor progress, making adjustments as needed and being more accountable to the people". The primary focus areas of the plan are related to the establishment of inclusive local food value chains to support access to nutritious affordable food.

Health care and nutrition programmes are essential provisions of early childhood development services as outlined in the **National Integrated Early Childhood Development Policy, 2015**. Multi-sectoral and integrated responses are cited as key approaches to ensuring health, nutrition, a safe environment, and psychosocial and cognitive development, for young children. The policy commits the South African government to the provision of early childhood development services which includes nutrition services.

The **Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972)** places restriction on the manufacture, importation and placing on the market of articles that are adulterated, are harmful or injurious to human health or that contain a prohibited substance. The Act also prohibits the false description and labelling of foodstuffs; defines the liability of an importer, a manufacturer or a packer; provides for the appointment of inspectors; provides for the analysis of foodstuffs and the examination, control and disposal of certain imported articles; defines offences; provides with respect to legal responsibility and legal proceedings; and grants regulation-making powers to the Minister. One of the regulations under the Act is the Regulations relating to the Labelling and Advertising of Foodstuffs (Government Notice No. R. 146 of 1 March 2010). Draft amended regulations were published for public comment in 2014 (R429). In terms of marketing to children, the draft regulations only stated: "No food or non-alcoholic beverage shall be marketed to children unless it complies with all the criteria in Guideline 14." Section 1 of the Foodstuffs Act defines different types of advertising. However, the scope of the advertising restrictions imposed by the Act is specifically limited to advertising related to the false description of articles. Section 5 of the Act prohibits false or misleading advertising of foodstuffs, cosmetics and/or disinfectants and provides penalties attached to contraventions of this prohibition. Currently, the draft Regulations relating to the Labelling and Advertising of Foodstuffs have been amended to include front-of-pack labelling requirements as part of the regulations, to sensitise consumers about the content of the foodstuffs so that they can make healthier food choices. The amended draft Regulations have been published for public comments.

CHAPTER 3

Approach and methodology

3.1 The 2015 – 2020 Obesity strategy review

3.1.1 Review process

A scoping review method was undertaken to examine the current status in relation to obesity in South Africa and to explore international best practices (See the Best Practices Report) in the prevention and control of obesity. The review was undertaken in parallel with stakeholder engagement to identify diverse perceptions of what worked, what did not work and what could have been done differently in the 2015-2020 strategy design and implementation, as well as recommendations on what should be included in the updated strategy (See the Review Report). The findings of the best practices review were collated with the information gathered from key informant interviews, questionnaires, and focus group discussions with specific targeted stakeholders from academia, government, international agencies, NGOs, civil society, the private sector including the food and beverage industry (See Figure 4 for the methodology).

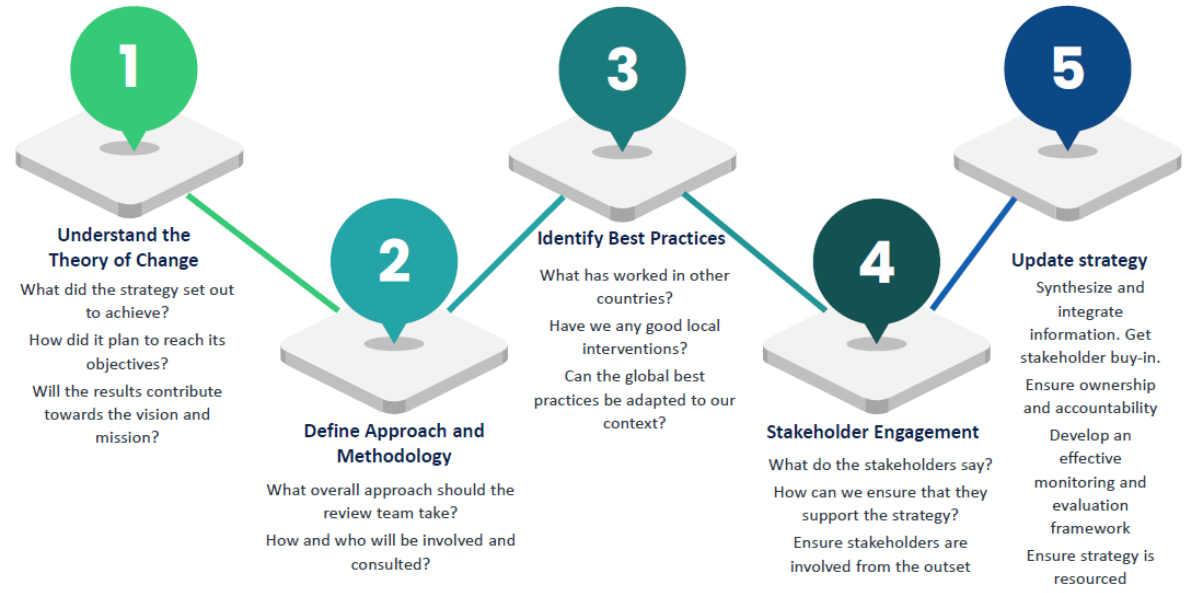

Figure 4: Overarching review process

The 2015-2020 strategy did not specifically outline a theory of change. Based on the Department of Planning, Monitoring and Evaluation (DPME) National Evaluation Policy (2019), the 2015-2020 strategy's theory of change was considered against an adapted version of the DPME evaluation framework as illustrated below.

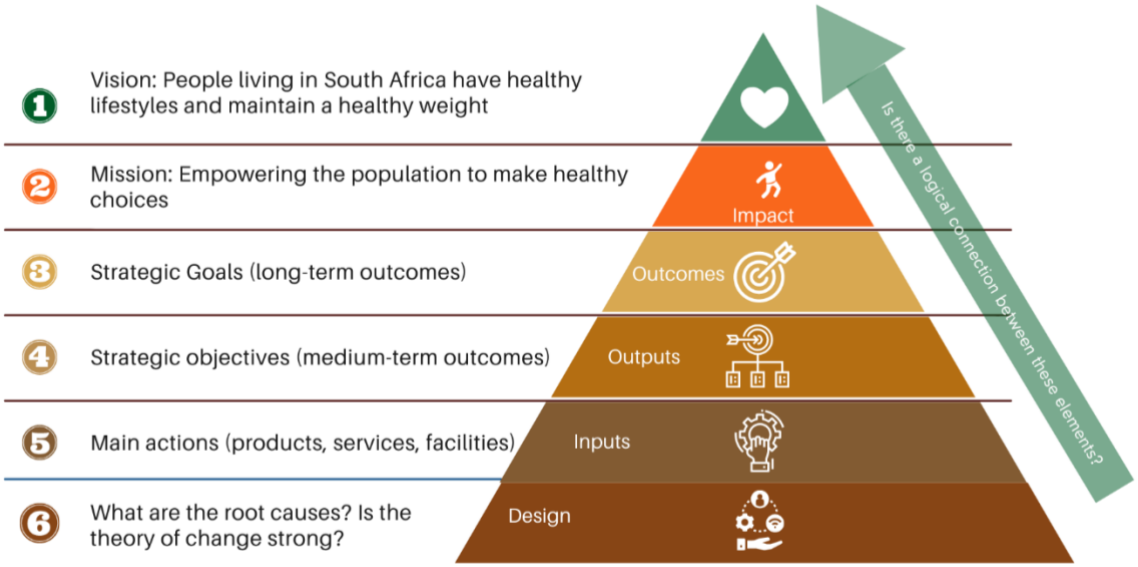

Figure 5: Adapted Theory of Change for the 2015 -2020 strategy

In considering the 2015-2020 strategy's theory of change within the context of the DPME monitoring and evaluation framework model (as illustrated in figure 5), the review process concluded that while the strategy provided a comprehensive list of key actions aimed at achieving each of the six strategic goals, the theory of change as presented above did not fully translate into a logical framework for tracking the impact of each action on medium-term outputs and long-term outcomes. In particular, Goal 4: "support obesity prevention in early childhood (in-utero – 12 years)", does not immediately link to any long-term outcomes. Overall, based on the steps followed in the review process, the following shortcomings of the 2015-2020 strategy were identified:

- Resources for implementation or monitoring and evaluation were not proposed in the strategy.
- It is unclear which organisation / department was explicitly responsible for taking the lead in implementing and monitoring the impact of an activity / action.
- No plan for how the impact of each action will be monitored and evaluated.
- Intermediate outcome targets not specified
- The theory of change did not explicitly outline assumptions and risks that are likely to impact on how activities/actions undertaken are successfully translated into outputs, intermediate outcomes, and end targets.

3.1.2 Stakeholder engagement

In reviewing the 2015 -2020 Strategy for the Prevention and Control of Obesity (National Department of Health, 2016)), the wide stakeholder engagement process attempted to unpack challenges and successes and identified key success factors/intervention for inclusion in the updated strategy to address the obesity epidemic (See the Stakeholder Engagement Report). This exercise provided grass roots responses as well as a deep understanding of the issues in play from the stakeholders responsible for implementing sections of the strategy.

More than 1500 qualitative inputs were captured, coded, and sorted to enable key themes to emerge.

The major challenge for implementing Goal 1 mentioned by stakeholders related to the planned legislative framework was the lack of capacity within NDoH. The legislation of marketing of unhealthy food to children and front of pack labelling (FoPL) have not been implemented.

Goal 2 was to **c**reate an enabling environment that supports the availability and accessibility of healthy food choices in various settings. The key respondents reported that the sugar tax was successfully implemented as envisaged in the obesity strategy. Respondents also mentioned measures introduced to limit salt and trans-fats consumption leading to the reduction of sodium content of bread and other processed foods – although these measures were introduced before 2015.

The DSRAC (now DSAC) in collaboration with the Health Promotion Directorate of NDoH were responsible for the implementation of Goal 3 of increasing the percentage of the population engaging in physical activity (PA). Physical activity is encouraged on wellness promotion days, and physical activities such as aerobics, walking/running and dancing have been implemented in some government events.

Goal 4 was to support obesity prevention in early childhood. An example of successful implementation of this goal is the "Side-by-Side" national campaign which aims to ensure that all children under 5-years receive sufficient nurturing care for optimal development. Good nutrition, including breastfeeding, is promoted. Health workers and Early Childhood Development (ECD) practitioners were trained to provide the necessary support. NDoH provided policies and guidelines and ensured that the provinces had sufficient capacity for implementation.

Goal 5 was communicating with, educating and mobilising communities. This goal was achieved through the work done in relation to the annual National Nutrition Week and World Obesity Day campaigns.

Goal 6 was to establish a surveillance system, and strengthen monitoring, evaluation, and research. This goal was not achieved since reporting is not prioritised at a national level, and provinces have to monitor their own indicators. There is no system for provinces to collate information at a national level, due to the lack of a coordinating structure. Furthermore, the NDoH's monitoring and reporting system does not include the information required to monitor the implementation of the obesity strategy.

Challenges identified by stakeholders included the lack of adequate resources for implementation of the strategy, the absence of a strategy review plan, a system to collate information at a national level, a coordinating structure, and a national data repository. Poor commitment from relevant sectors and a lack of resources meant that some of the planned activities were not effectively carried out. The lack of monitoring and evaluation of the implementation of the strategy meant that it is unclear if all the objectives were achieved. Socio-economic conditions and harmful attitudes and beliefs make it difficult for people to

make healthy choices in terms of food and physical activity. The food system is not conducive to healthy eating, with easy access to unhealthy food and drinks, while healthy options are expensive. Misinformation on social media in relation to nutrition and marketing of fast food contribute to unhealthy eating. Health care facilities lack resources to support weight control.

The successes included the implementation of the health promotion levy on sugar-sweetened beverages and early child health campaigns.

Recommendations from stakeholders focussed on improved availability and access to affordable healthy foods, improved collaboration, and access to safe and affordable local physical activity opportunities. Several stakeholder groups recommended that the obesity strategy must be based on robust research and that stakeholders must be involved during early stages of planning, to get buy-in and to allocate responsibility to achieve the goals of the strategy. Other recommendations included enforced FoPL, improved education and communication strategies, and to regulate advertising of unhealthy foods and drinks to children. A clear monitoring and evaluation framework is recommended to improve implementation and monitor progress in achieving these objectives.

3.2 Update of the 2023 – 2028 Obesity Strategy

The key themes that emerged from the stakeholder responses were access to healthy food and physical activity opportunities, education and communication, policies and legislation, planning and implementation, monitoring and evaluation, and the healthcare system.

The approach embedded in this strategy is to focus interventions across the agento-structural spectrum to enable South Africans to make healthy choices in relation to food and physical exercise, as well as to enable people to access a capacitated health care system. Furthermore, the strategy draws on key principles from around the globe, as well as locally, that should be considered to underpin successful implementation of a strategy. These principles are described in chapter 3 as well as in the Best Practices Report.

The high level theory of change was developed in relation to the adapted theory of change model as described by the DPME in its National Evaluation Policy Framework (November 2019).

A national workshop was held at the end of 2021 to validate the findings of the stakeholder engagement process and to get input on proposed high level theory of change for the updated strategy. A series of task team meetings were then set up to refine the theory of change as illustrated in figure 6. The strategic objectives and main actions were then presented at a national workshop at the end of 2022, whereafter the draft updated strategy was finalised.

A socio-economic impact assessment (SEIAS) as per the requirements of the DPME has been completed for the updated Strategy. The purpose of the SEIAS is to minimise unintended consequences, unnecessary costs from implementation and compliance and from unanticipated outcomes as well as to anticipate implementation risks and encourage measures to mitigate them.

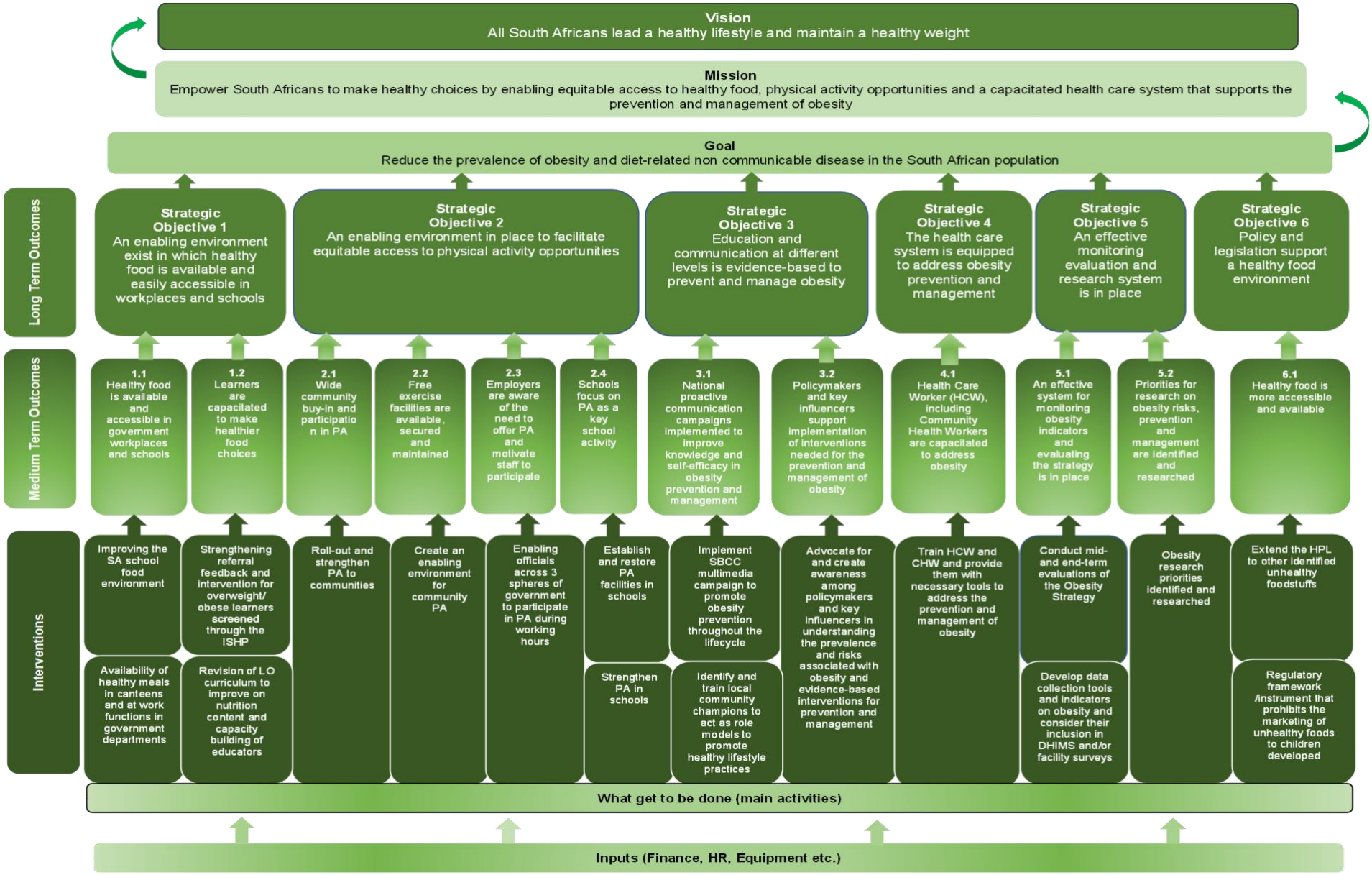

Figure 6: High level Theory of Change for the updated Strategy for the Prevention and Management of Obesity in South Africa, 2023 - 2028

CHAPTER 4

Implementation, monitoring and evaluation plan

The implementation, monitoring and evaluation plan presented below assumes that in year 5 (2027/2028) output indicators will be evaluated, assessed, and strengthening or corrective measures put in place to reposition the strategy in line with the prevailing context. The output indicators identified to measure the extent to which the strategic objective has been achieved, should be used for the mid- as well as the end-term reviews. At the mid-term, corrective actions can be taken where actions have not been effective and reorient part of the plan as needed. The evaluation at the end of the 5-year cycle will inform the update of the strategy for the new planning cycle. The additional costs to implement the activities that will not be absorbed by the normal budget allocation are also included in the plan for each goal. The total additional cost to implement the strategy is summarised at the end of the chapter.

4.1 Implementation, monitoring and evaluation plan per goal and estimated costs

Strategic Objective 1: An enabling environment exists in which healthy food is available and easily accessible in workplaces and in schools

1.1: Healthy food is available and easily accessible in government workplaces and schools			Targets					Resources required	Costs[2] (ZAR)
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Improving the South African school food environment	DBE NDoH Local Municipalities UNICEF	Tuckshops and by street vendors around schools trained	Training manual and toolkit ("blueprint") for tuckshop owners and vendors around schools developed	Tuckshop owners in and street vendors around schools trained (25% trained)	Tuckshop owners in and street vendors around schools trained (50% trained)	Tuckshop owners in and street vendors around schools trained (75% trained)	Tuckshop owners in and street vendors around schools trained (100% trained)	Development of training manual and tool kit	0
								Printing and distribution of training and IEC material	830 271
								Training of tuckshop owner & street vendors around schools	184 800
		Healthy food preparation methods implemented through NSNP	Operational manual with standardised NSNP recipes developed	Operational manual with standardised recipes approved	Implementation of operational manual with standardised recipes rolled out in 30% schools	Implementation of operational manual with standardised recipe rolled out in 60% schools	Implementation of operational manual with standardised recipes rolled out in 100% schools	Development of operational manual with standardised recipes	0
								Printing and distribution of operational manual and standardised recipes	4 500 000

[2] Costs indicated as '0', are either absorbed by the normal budget allocation of a Department and /or part of technical support already committed by an external organisation

			Audit on food preparation facilities and equipment conducted Costing model developed	Funding plan for food preparation facilities and equipment developed	Funding plan for food preparation facilities and equipment approved	Funding plan for food preparation facilities and equipment implemented	Funding plan for food preparation facilities and equipment implemented	Audit and costing on food preparation facilities and equipment	0
								Development of costing model (budget) for food preparation facilities and equipment by consultant	217 615
	DBE NDoH Treasury	Transversal Treasury tender for NSNP products in place	Specifications and procurement process developed	Specifications and procurement process approved	Transversal tender advertised and adjudicated	Tender implemented	Tender implemented	Transversal Treasury tender for NSNP products	0
Availability of healthy meals in canteens and at work functions in government departments.	NDoH DPSA (as part of wellness programmes)	National guide for healthy meal provisioning implemented in government departments	Framework for implementation of the guide developed	National guide for healthy meal provisioning implemented at 25% of government departments	National guide for healthy meal provisioning implemented at 50% of government departments	National guide for healthy meal provisioning implemented at 75% of government departments	National guide for healthy meal provisioning implemented at 100% of government departments	Development of implementation framework for the guide by consultant	108 807
1.2: Learners are capacitated to make healthier food choices			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Strengthening referral feedback and intervention for overweight/obese learners screened and assessed through the	DBE NDOH	Overweight and obese learners are referred for appropriate care and management and feedback provided to	Protocols/algorithms for obesity screening, management, referral and feedback guidelines for ISHP teams developed	Training and implementation plan developed	ISHP teams trained	Implementation	Implementation	Protocols/algorithms for obesity screening, management and referral guidelines for integrated school health (ISHP) teams developed	

Integrated School health programme (ISHP)platform		schools						Training and implementation plan developed by consultant	54 891
								Training of ISHP teams	507 870
								Implementation	0
Revision of LO curriculum to improve on nutrition content and capacity-building of educators	DBE NDOH	LO textbooks revised to include appropriate nutrition content	Draft prepared for inclusion in LO curriculum	Draft sent for comments and finalised	New nutrition content in Life Orientation school curriculum approved Training and capacity plan for educators developed	Educators capacitated	New nutrition section in LO school curriculum implemented	LO textbooks revised by consultant to include appropriate nutrition content	217 615
								New nutrition section in LO school curriculum implemented and educators capacitated	148 960
								Purchase of LO textbooks	591 900 000
Total Costs for Strategic Objective 1									**598 345 999**

Strategic Objective 2: An enabling environment in place to facilitate equitable access to physical activity (PA) opportunities.

SO 2.1: Wide community buy-in and participation in PA			Targets					Resources required	Costs[2] (ZAR)
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Roll-out and strengthen physical activities to communities	Local municipalities DSAC & Social Partners) Districts, Provinces & National	Physical activities rolled-out to communities in all districts, local municipalities and Provinces	**Move for Health:** 26 000 **Golden Games:** 5 800 **Indigenous Games:** 18 200 **Recreation day activities:** 39 000 **Big walk:** 52 000	**Move for Health:** 26 000 **Golden Games:** 5 800 **Indigenous Games:** 18 200 **Recreation day activities:** 39 000 **Big walk:** 52 000	**Move for Health:** 30 000 **Golden Games:** 5 800 **Indigenous Games:** 18 200 **Recreation day activities:** 44 200 **Big walk:** 62 400	**Move for Health:** 30 000 **Golden Games:** 5 800 **Indigenous Games:** 18 200 **Recreation day activities:** 44 200 **Big walk:** 62 400	**Move for Health:** 18 000 **Golden Games:** 5 800 **Indigenous Games:** 18 200 **Recreation day activities:** 28 600 **Big walk:** 62 400	Move for Health: Golden Games: (Venue, equipment, handouts, refreshments) Indigenous Games: (Venue, equipment, handouts, refreshments) Recreation Day activities: (Venue, equipment, handouts, refreshments) Big walk: (Refreshments, handouts) (Venue, equipment, handouts, refreshments)	38 200 012 9 966 301 33 913 827 72 925 439 47 988 286
SO 2.2: Free exercise facilities are available, secured & maintained			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Create an enabling environment for community	Local municipalities DSAC:	Provision of facilities and sports equipment	Database of the existing PA facilities compiled	27 MIG facilities to be implemented and 10 outdoor gyms	27 MIG facilities to be implemented and 10 outdoor gyms	27 MIG facilities to be implemented and 10 outdoor gyms	27 MIG facilities to be implemented and 10 outdoor gyms and	Compilation of database on existing PA facilities and costing and funding model developed by consultant	217 615

physical activities	Districts, Provinces & National DSD		Costing and funding model compiled and approved	and children's play park in municipalities	and children's play park in municipalities	and children's play park in municipalities	children's play park in municipalities	Outdoor gym equipment	34 927 149
								Children's playpark equipment	35 042 845
		Coordinators, managers, facilitators, and volunteers capacitated	Capacity-building and support plan for coordinators, managers, facilitators, and volunteers developed	2500 coordinators, managers, facilitators, and volunteers supported and empowered	2500 coordinators, managers, facilitators, and volunteers supported and empowered	2500 coordinators, managers, facilitators, and volunteers supported and empowered	2500 coordinators, managers, facilitators, and volunteers supported and empowered	Training of coordinators, managers, facilitators and volunteers	15 265 490
SO 2.3: Employers are aware of the need to offer PA and motivate staff to participate			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output indicator**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Enabling officials across all 3 spheres of government to participate in PA during working hours (e.g. National Recreation Day; Sports Wednesdays)	DPSA (Wellness) DSAC	Established PA opportunities within working hours	Criteria and monitoring tools developed Leagues and sporting codes defined Coordinators across departments identified	40% of officials participating in PA	60% of officials participating in PA	65% of officials participating in PA	70% of officials participating in PA	Development of criteria and monitoring tools by consultant	36 269
								Defining leagues and sporting codes	0
								Identification of coordinators across department	0
SO 2.4: Schools focus on PA as a key school activity			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		

Establish and restore PA facilities in schools	DBE SGBs DSAC	Schools have PA facilities	Situation analysis on PA facilities in schools conducted and Costing model developed	Funding and renovation plan for PA facilities developed	Funding and renovation plan for PA facilities approved	10% of schools have useable PA facilities	25% of schools have useable PA facilities	Situation analysis on PA facilities in schools conducted and costing and funding model developed by consultant	108 807
Strengthen PA in schools	DBE DSAC	PA educators are capacitated on physical activity	Training and capacity-building plan for PA educators developed	25% PA educators capacitated	50% of PA educators capacitated	75% of PA educators capacitated	100% of PA educators capacitated	Training and capacity-building of PA educators	744 800
Total Costs for Strategic Objective 2									**255 555 444**

Strategic Objective 3: Education and communication at different levels is evidence-based to prevent and manage obesity

SO 3.1: National proactive communication campaigns implemented to improve knowledge and self-efficacy in obesity prevention and management			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Implement SBCC multimedia campaign to promote obesity prevention	NDoH NNCG	Improved knowledge and self-efficacy in obesity prevention and management	Service provider for KAB study appointed	Knowledge, attitude and behaviour (KAB) study undertaken in 4 pilot districts to assess baseline KAB	KAB study findings disseminated and reviewed	Service provider for KAP study	Knowledge, attitude and practice (KAP) study undertaken in 4 pilot districts to determine changes in knowledge, attitudes and self-efficacy	KAB study service provider	818 440
								KAP study service provider	818 440

throughout the-lifecycle			Evidence based multi-year media campaign plan on obesity prevention and management plan developed	Evidence based multimedia campaign on obesity prevention and management, implemented and monitored	Multimedia campaigns on obesity prevention and management implemented and monitored	The impact of the multimedia campaign on obesity prevention and management evaluated and revised.	The revised multimedia campaign on obesity prevention and management implemented and monitored.	Evidence-based multi-year media campaign plan on obesity prevention and management (Consultant)	658 691
								Radio, TV, print advertisements, monitoring and evaluation	261 483 387
Identify and train local community champions to act as role models to promote healthy lifestyle practices	NDOH in partnership with GCIS, DSD, DBE UNICEF, WHO, CHAI	Champions trained in all provinces to promote healthy lifestyle practices	Criteria for champions identified and recruitment strategy developed Training programme developed .and piloted	Champions in all provinces. trained and implementation of programme monitored.	Champion programme implemented monitored and supported.	Champion programme, implemented monitored and supported.	Champion programme reviewed and revised as appropriate.	Identification of champions	711 751
								Training of champions (development of training programme, piloting, refreshments)	
SO 3.2: Policymakers and key influencers support implementation of interventions needed for the prevention and management of obesity			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Advocate for and create awareness among policy makers and key influencers in	UNICEF, WHO, Academic/research institutions NGOs Civil society	Shift in awareness and support among policy makers and key influencers on	Advocacy plan and advocacy briefs developed on obesity risks, prevention and management	Advocacy briefs on obesity risks, prevention and management disseminated	Advocacy briefs on obesity risks, prevention and management disseminated	Advocacy briefs on obesity risks, prevention and management disseminated	Advocacy briefs on obesity risks, prevention and management disseminated	Development of advocacy plan and advocacy briefs on obesity risks, prevention, and management	0

understanding the prevalence and risks associated with obesity and the evidence-based interventions for prevention and management	NDoH	obesity risks, consequences, prevention and management						Dissemination of advocacy briefs	0
Total Costs for Strategic Objective 3									**264 490 710**

Strategic Objective 4: The Health Care System is equipped to address obesity prevention and management

SO 4.1: Health Care Workers (HCW), including Community Health Workers (CHW) are capacitated to address obesity			**Targets**					**Resources required**	**Costs[2] (ZAR)**
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Integrate the screening, management and referral of obese clients by all healthcare cadres	NDoH (Nutrition, M&E) Provincial DoH WHO	Obesity screening, management and referral system in place	Protocols/algorithms for obesity screening, management and referral guidelines for health care professionals and CHWs developed	Training and implementation plan developed	Training of health care workers	Implementation	Implementation	Development of protocols/algorithms (consultant)	658 691
								Development of training and implementation plan (consultant)	36 269
								Training of health care workers, including CHWs	5 225 001
Total Costs for Strategic Objective 4									**43 081 519**

Strategic Objective 5: An effective monitoring, evaluation and research system is in place

SO 5.1: An effective system for monitoring obesity indicators and evaluating the strategy is in place			Targets					Resources required	Costs[2] (ZAR)
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Conduct mid- and end-term evaluations of the Obesity Strategy	NDOH, DPME, Dir: Research	Mid and end-term evaluations commissioned and conducted	Service provider for mid- evaluation appointed	Data collection protocols and tools for mid-term evaluation developed	Mid-term evaluation conducted (as part of the Departmental Evaluation Plan (DEP) Submission of proposal for end-term evaluation in the national evaluation plan (NEP)	Appointment of service provider	Data collection protocols and tools for end-term evaluation developed End-term evaluation conducted (end-term report available in 2028/2029)	Mid-term evaluation service provider	658 691
								End-term evaluation service provider	658 691
Develop and pilot data collection tools and indicators on obesity	NDOH (M & E, Nutrition, DHS, Hospital services) Provincial DoH	Relevant, selected obesity indicators and data collection tools developed and piloted	Establish technical working group to: (i) develop project plan (ii) conduct scoping exercise on information collected by facilities and (iii) develop objectives and indicators and methods of data collection	Conduct piloting of proposed indicators and conduct review sessions with national colleagues and provinces	Implement proposed indicators	Implement proposed indicators	Conduct review and amend indicators as appropriate	Development of project plan, objectives and indicators Conduct scoping exercise and review sessions	0

SO 5.2: Priorities for research on obesity risks, prevention and management are identified and researched			Targets					Resources required	Costs
Main activity	**Responsibility**	**Output**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Obesity research priorities identified and researched	NDoH Academic and Research Institutions	Obesity research priority system in place	Establishment of an obesity research task/expert team Research priorities identified	Research conducted and findings published	Research conducted and findings published	Research conducted and findings published	Research priorities reviewed and updated	Establishment of an obesity research task/expert team	0
Total Costs for Strategic Objective 5									**1 317 382**

Strategic Objective 6: Policy and legislation support a healthy food environment

SO 6.1: Healthy food is more accessible and available			Targets					Resources required	Costs[2] (ZAR)
Main activity	**Responsibility**	**Output indicator**	**2023/2024**	**2024/2025**	**2025/2026**	**2026/2027**	**2027/2028**		
Extend the HPL to other identified unhealthy foods	NDoH Treasury DPME	HPL extended to other identified unhealthy foods	Unhealthy foods that can be taxed and how this can be achieved identified from the National Dietary Intake Survey (NDIS)	Potential role of tax (incl. admin & enforcement) on specified unhealthy foods researched and drafting of	Engagement process on extending the HPL to specified unhealthy foods conducted Recommendation	regulatory instrument on the extension of the HPL to specified unhealthy foods developed	Regulatory instrument published and implemented	Identify and rank unhealthy foods in terms of its contribution to NCDs	0

			findings Unhealthy foods in terms of its contribution to NCDs ranked and prioritise	position papers drafter	s for extending the HPL to specified unhealthy foods drafted			Research and drafting of position paper(s) on the potential role of tax (incl. admin & enforcement) on specified unhealthy foods	658 690,90
Regulatory framework/instrument that prohibits the marketing of unhealthy foods to children developed	NDoH Department of Communications and Digital Technologies (DCDT) UNICEF WHO	No unhealthy food advertised during children TV times and on other children's' platforms	Position paper on restricting advertising of unhealthy food during children TV times and on other children's platform developed	Engagement sessions on position paper conducted	Draft Regulatory framework /instrument developed	Engagement sessions on the draft regulatory framework/ instrument conducted	Regulatory framework/ instrument approved	Research and drafting of position paper on marketing of unhealthy foods to children and the regulatory requirements	658 690,90
Total Costs for Strategic Objective 6									**1 317 381,80**

4.2 Summary of the estimated additional costs per strategic objective per year

ESTIMATED ADDITIONAL COSTS[2] PER STRATEGIC OBJECTIVE AND GOAL PER YEAR (ZAR)							
STRATEGIC OBJECTIVE (SO)		**2023 - 2024**	**2024 - 2025**	**2025 - 2026**	**2026 - 2027**	**2027 - 2028**	**TOTAL**
SO 1: An enabling environment exists in which healthy food is available and easily accessible in workplaces and in schools	SO 1.1: Healthy food is available and easily accessible in government workplaces and schools	**1 456 222**	**1 144 214**	**1 159 753**	**1 176 504**	**945 000**	**5 881 694**
	SO 1.2: Learners are capacitated to make healthier food choices	876 306	**54 891**	**507 870**	**591 974 480**	**591 974 480**	**1 185 388 027**
	Total for SO 1	**2 332 528**	**1 199 105**	**1 667 623**	**593 150 984**	**592 919 480**	**1 191 269 720**
SO 2: An enabling environment in place to facilitate equitable access to physical activity (PA) opportunities.	SO 2.1: Wide community buy-in and participation in PA	**27 335 759**	**28 378 063**	**33 493 651**	**36 663 946**	**38 922 436**	**164 793 853**
	SO 2.2: Free exercise facilities are available, secured & maintained	**14 817 542**	**15 724 786**	**16 951 319**	**18 273 522**	**19 698 857**	85 466 026
	SO 2.3: Employers are aware of the need to offer PA and motivate staff to participate	**36 269**	0	0	0	0	**36 269**
	SO 2.4: Schools focus on PA as a key school activity	**853 607**	0	0	0	0	**853 607**
	Total for SO 2	**43 043 177**	**44 102 849**	**50 444 970**	**54 937 468**	**58 621 292**	**251 149 756**
SO 3: Education and communication at different levels is evidence-based to prevent and manage obesity	SO 3.1: National proactive communication campaigns to improve knowledge and self-efficacy in obesity prevention and management	**47 109 634**	**49 191 838**	**53 028 801**	**57 983 488**	**57 176 950**	**264 490 710**

	SO 3.2: Policymakers and key influencers support implementation of interventions needed for the prevention and management of obesity	**0**	**0**	**0**	**0**	**0**	0
	Total for SO 3	**47 109 634**	**49 191 838**	**53 028 801**	**57 983 488**	**57 176 950**	**264 490 710**
SO 4: The Health Care System is equipped to address obesity prevention and management	SO 4.1: Health Care Workers (HCW), including Community Health Workers (CHW) are capacitated to address obesity	6 164 107	8 294 393	12 752 499	14 128 853	1 741 667	43 081 518
	Total for S0 4	**6 164 107**	**8 294 393**	**12 752 499**	**14 128 853**	**1 741 667**	**43 081 518**
SO 5: An effective monitoring, evaluation and research system is in place	SO 5.1**:** An effective system for monitoring obesity indicators and evaluating the strategy is in place	**658 691**	**0**	**0**	**658 691**	**0**	**1 317 382**
	SO 5.2: Priorities for research on obesity risks, prevention and management are identified and researched	**658 691**	**710 069**	**765 454**	**825 159**	**825 159**	**3 784 533**
	Total for SO 5:	**1 317 382**	**710 069**	**765 454**	**1 483 850**	**825 159**	**5 101 915**
SO 6: Policy and legislation support a healthy food environment	SO 6.1: Healthy food is more accessible and available	**658 691**	**658 691**	**0**	**0**	**0**	**1 317 382**
	Total for SO 6:	**658 691**	**658 691**	**0**	**0**	**0**	**1 317 382**
	TOTAL (All SOs)	**100 625 518**	**104 156 944**	**118 659 347**	**721 684 643**	**711 284 548**	**1 756 411 000**

Addendum

Key supporting documents

A substantial amount of research and stakeholder energumen was undertaken to inform this document and it should be read in conjunction with the key documents outlined below.

1. Best Practices Report

The review team undertook an extensive review of practices around the world and nationally, that have been implemented and that have enjoyed some measure of success. The report covers the key issues that the world's population faces in relation to a growing obesity epidemic. The costs of not addressing obesity are enormous and it was calculated that in South Africa, annual costs are in the region of R701 billion.

The report looks at the specific factors that affect obesity, such as urbanisation, cultural perceptions, obesity normalisation, food insecurity and nutrition education, lack of data and a lack of funding to conduct relevant research. Global and national challenges and barriers in addressing obesity are discussed, with a key issue in South Africa being limited evidence on strategy performance and outcomes. This results in decision-making that is not necessarily evidence-based and could cause sub-optimal use of resources.

The report includes a review and discussion of different approaches used in a range of settings to address obesity or nutrition-related challenges, with an emphasis on the types of interventions that have been used: agentic; structural; and agento-structural interventions. One of the findings suggested that policy-based approaches (structural) often have a wider reach and are more enduring compared with other types of interventions because they codify change and survive transitions in leadership (Cobiac et al., 2013; Magnusson, 2008). Fiscal measures (including both taxes and subsidies) appeared to have powerful outcomes, and mathematical models determined that a 20% SSB tax produced the largest estimated increase (4.50%) in normal BMI prevalence, was the most cost-effective intervention, and had the largest and most equitable decrease in obesity across socioeconomic categories.

The outcomes of the research on global and national best practices informed the development of this strategy. The document can be accessed by clicking on the link: Best Practices Report.

2. Review and stakeholder engagement reports

A wide stakeholder engagement process was undertaken, using interviews, focus group discussions, online surveys and a national workshop to which all stakeholders were invited. Eleven groups of stakeholders were identified across the sectors.

Key informants included people directly responsible for implementing and overseeing the national obesity strategy 2015-2020. National-level secondary informants were drawn from the national government and identified as the individuals that were committed to promote the strategy or had specific roles in the implementation of the strategy. Provincial-level secondary informants were those who were expected to implement aspects of the strategy at provincial and local levels. Academic and research institutions provided scientific evidence to inform the development of the strategy. Industry role players were active participants and are impacted by the implementation of the strategy. Private sector interested parties included medical aid scheme representatives with a vested interest in a healthy population and who could potentially provide useful implementation support. Health professionals and health care workers are directly involved in

implementation at the health care level and work with obese patients. Professional societies disseminated the survey to ensure a good representation across the nine provinces. Community influencers included educators, community members and councillors. Local-level food outlets consisted of tuckshop owners and street vendors from three of the nine provinces (North West, Limpopo and Western Cape). Obese individuals included obese individuals awaiting an appointment for obesity management at a tertiary hospital in the Western Cape.

The research looked at three key areas: what worked in the 2015-2020 strategy, what did not work and what can be done to address obesity in South Africa. Over 1500 data points were collated, synthesised and analysed in relation to the emerging themes. From this, focus areas were identified which formed the basis of the strategic framework contained within this document.

The full stakeholder engagement report can be accessed by clicking on the link: Stakeholder Engagement Report.

The 2015-2020 strategy was reviewed in the light of the strength of the theory of change, the local and global context and current research related to obesity and how to address it. Stakeholder engagement outcomes were instrumental in informing the review and provided information to understand the extent to which the strategy was implemented and the extent to which it achieved its goals and objectives.

Findings from the literature review were collated with the information gathered stakeholders. Evidence from the scoping review indicated that population-level policy interventions can offer large benefits for population health at a low cost to society. Challenges identified by stakeholders included the lack of adequate resources for implementation of the strategy, the absence of a strategy review plan, a system to collate information at a national level, a coordinating structure, and a national data repository.

Poor commitment from relevant sectors and a lack of resources meant that some of the planned activities were not effectively carried out. The lack of monitoring and evaluation of the implementation of the strategy underpins the possibility that resources may or may not have been spent sub-optimally, but that it is impossible to determine the efficacy of interventions.

Key recommendations arising from the scoping review included alignment with relevant national priorities, plans and policies, building on successes, and clear identification of necessary resources to implement the strategy. The review of the 2015-2020 strategy highlighted strengths on which the new strategy should build, and identified challenges in implementation, Weak commitment from relevant sectors and the lack of adequate resources constrained implementation. Failure to monitor implementation of the strategy, coupled with the absence of a measurement of obesity prevalence, results in an uncertain possibility that the target of a 10% decrease in the prevalence of obesity in all age groups by 2020 has**,** or can be, achieved.

The review identified an urgent need to develop and implement an effective social and behaviour change communication strategy to enable communities to take ownership of their health, thereby preventing and controlling overweight and obesity.

The full strategy review report can be accessed by clicking on the link: Review Report.

3. Costing report

The costing report unpacks the actions defined and resources identified to implement the strategy effectively. The monitoring and evaluation process, by definition, means that actions may change or will be found to be unnecessary or excessive, or that additional actions may be required to achieve the objective.

However, without funds to undertake the work, it is not possible to achieve the objectives. The costing of the strategy is complex since it is a multi-faceted and multi-sectoral document with many considerations. Some of the actions may already be integrated into the budgets of different stakeholders, and some may still need to be included. The final budget will require multi-stakeholder collaboration and agreement.

The costing report can be accessed by clicking on the link:

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