



Basic Education
Health



Concept document

**National Nutrition Week and National Obesity Week 2020:
“Good Nutrition for Good Immunity”**

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1. ACRONYMS/ABBREVIATIONS

BMI	Body Mass Index
CDC	Centers for Disease Control and Prevention
DBM	Double Burden of Malnutrition
FBDGs	Food-Based Dietary Guidelines
HICs	High-Income-Countries
mRFEI	modified Retail Food Environment Index
NCDs	Non-Communicable Diseases
NIDS-CRAM	National Income Dynamics Study (NIDS) Coronavirus Rapid Mobile Survey (CRAM)
NNOWs	National Nutrition and Obesity Weeks
NNW	National Nutrition Week
NOW	National Obesity week
SADHS	South African Demographic and Health Survey
SANHANES	South African Health and Nutrition Examination Survey
SARS	Severe Acute Respiratory Syndrome
UPFs	Ultra-Processed Foods
WHO	World Health Organization

2. TERMS AND DEFINITIONS

Blood sugar/ glucose: the sugar that the body makes from the food. Glucose is carried in the bloodstream to the cells in the body. Insulin carries the glucose across cell walls, the cells then use the glucose for energy.

Body mass index (BMI): is a calculation of adult nutritional status calculated by dividing weight in kilograms by height in metres squared ($BMI = \text{kg}/\text{m}^2$). BMI is not accurate in pregnant women and women up to six months post-partum. A BMI equal and greater than 18.5 but less than 25 indicates a healthy body weight for an adult.

Breakfast cereals: a food made from processed and / or ultra-processed grains, such as maize, oats, wheat or rice, usually eaten for breakfast with milk or water and often with sugar.

Caloric sweeteners: are ingredients in food that are sweet and provide energy. They are also known as nutritive sweeteners, or free sugars. Many different sugars are used in food manufacture, such as white sugar, brown sugar, corn sweetener, corn syrup, maple syrup, dextrose, xylose, fruit juice concentrates, apple, pear or grape juice, sucrose, glucose, lactose, honey, invert sugar, high-fructose corn syrup, treacle, molasses, lactose, syrup or cane sugar.

Cancer: an abnormal growth of cells, which tend to proliferate in an uncontrolled way and, in some cases, to metastasize (spread). Cancer is not one disease. It is a group of more than 100 different and distinctive diseases. Cancer can involve any tissue of the body and have many different forms in each body area.

Cereals: a grass such as wheat, sorghum, oats, or maize, of which the starchy *grains* are used as food.

Cardiovascular disease: are disease affecting the heart or blood vessels.

Cholesterol: is a type of fat (also known as a lipid) that the body needs to work properly. Too much bad cholesterol can increase a person's chance of getting heart disease, stroke, and other problems. The medical term for high blood cholesterol is lipid disorder, hyperlipidaemia, or hypercholesterolemia.

Commercially prepared foods: are designed for ease of consumption. Products designated as convenience or ready-to-eat foods are often prepared food that can be sold as hot, ready-to-eat dishes; as room-temperature, shelf-stable products; or as refrigerated or frozen products that require minimal preparation (typically just heating).

COVID-19: is a disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV.'

Food Based Dietary Guidelines: are brief, positive dietary recommendation messages that are used to inform healthy consumers how to choose food and beverage combinations that will lead to a eating plan that is adequate, that meets nutrient needs and that is, at the same time, prudent, for example, which lowers the risk of NCDs.

Food environment: comprises the physical, economic and social factors that impact the availability, accessibility and adequacy of food within a region, or as the everyday stimuli that encourage a consumer's food choices in a particular way.

Food Groups: are the categorisation of foods according to the key nutrients they contain, such as protein, carbohydrate or fat and the way they are typically used.

Food Guide: is a graphic representation of all or some of the messages of Food-Based Dietary Guidelines. It represents the recommended food groups in the suggested proportions for healthy eating.

Grains: a small, hard seed, especially the seed of a food plant such as wheat, maize, sorghum, rye, oats, rice, or millet.

High blood pressure (hypertension): is when blood applies too much force against the walls of the blood vessels. Individuals are classified as hypertensive if their systolic blood pressure is 140 mmHg or higher or if their diastolic blood pressure is 90 mmHg or higher.

Legumes: a family of plants that bear edible seeds in pods, including beans and peas. Examples include peas, chickpeas, lentils, beans and soybeans.

Minimally processed foods: are foods altered by processes such as removal of inedible or unwanted parts, drying, crushing, grinding, fractioning, filtering, roasting, boiling, pasteurisation, refrigeration, freezing, placing in containers, vacuum packaging, or non-alcoholic fermentation. Unprocessed or minimally processed foods include fresh, squeezed, chilled, frozen, or dried fruits and leafy and root vegetables, pre-cut vegetables or fruit; grains such as brown, parboiled or white rice, corn cob or kernel, wheat berry or grain; legumes such as beans of all types, lentils, chickpeas; starchy roots and tubers such as potatoes and cassava, in bulk or packaged; fungi such as fresh or dried mushrooms; meat, poultry, fish and seafood, whole or in the form of steaks, fillets and other cuts, or chilled or frozen; eggs; milk, pasteurised or powdered; fresh or pasteurised fruit or vegetable juices without added sugar, sweeteners or flavours; grits, flakes or flour made from corn, wheat, oats, or cassava; pasta, couscous and polenta made with flours, flakes or grits tree and ground nuts and other oil seeds without added salt or sugar; spices such as pepper, cloves and cinnamon; and herbs such as thyme and mint, fresh or dried; plain yoghurt with no added sugar or artificial sweeteners added; tea, coffee, drinking water. These also include foods made up from two or more items in this group, such as dried mixed fruits, granola made from cereals, nuts and dried fruits with no added sugar, honey or oil; and foods with vitamins and minerals added generally to replace nutrients lost during processing, such as wheat flour or maize meal fortified with iron or folic acid. They may infrequently contain additives used to preserve the properties of the original food. Examples are vacuum-packed vegetables with added anti-oxidants, and ultra-pasteurised milk with added stabilisers.

mRFEI: an environmental indicator of food access or the proportion of 'healthy stores' within a defined neighbourhood relative to all accessible stores. The definition of 'healthy' and 'less healthy' food retailers is based on the Centers for Disease Control and Prevention (CDC) definition, which states that healthy food retailers include grocery stores and supermarkets, while less healthy food retailers are fast-food restaurants.

Non-communicable disease (NCD): is a medical condition or disease that is non-infectious and non-transmissible among people. Currently, NCDs are the leading causes of death and disease burden worldwide. The four main types of NCDs are cardiovascular diseases (like heart attacks and stroke), cancer, chronic respiratory diseases (such as chronic obstructed pulmonary disease and asthma) and diabetes.

Obesity: an adult whose BMI is 30.0 or higher, is obese. A child under five years, whose weight-for-length/height as indicated on the Road-to-Health Booklet is above three standard deviations, the child is obese. A child between five and 19 years, whose BMI-for-age is above two standard deviations, is obese.

Overweight: an adult whose BMI is 25.0 to <30, is overweight. A child under five years, whose weight-for-length/height as indicated on the Road-to-Health Booklet is above two standard deviations, is overweight. A child between five and 19 years, whose BMI-for-age is above one standard deviation is overweight.

Plant-based diet: a diet based largely on foods derived from plants, including vegetables, whole-grains, legumes, nuts, seeds and fruits, with few or no animal products

Processed culinary ingredients: these are substances obtained from unprocessed or minimally processed foods or from nature by processes such as pressing, refining, grinding, milling, and spray drying. The purpose of processing here is to make products used in home and restaurant kitchens to prepare, season and cook unprocessed foods and to make with them varied and enjoyable hand-made dishes, soups and broths, breads, preserves, salads, drinks, desserts and other culinary preparations. Processed culinary ingredients are rarely consumed in the absence of unprocessed or minimally processed foods. Examples are salt mined or from seawater; sugar and molasses obtained from cane or beet; honey extracted from combs and syrup from maple trees; vegetable oils crushed from olives or seeds; butter and lard obtained from milk and pork; and starches extracted from corn and other plants. Products consisting of culinary processed ingredients, such as salted butter, or with added vitamins or minerals, such as iodised salt, and vinegar made by acetic fermentation of wine or other alcoholic drinks, remain in this group. Processed culinary ingredients may contain additives used to preserve the product's original properties. Examples are vegetable oils with added anti-oxidants, cooking salt with added anti-humectants, and vinegar with added preservatives that prevent microorganism proliferation

Processed foods: these are relatively simple products made by adding sugar, oil, salt or other group processed culinary ingredients to unprocessed or minimally processed foods. Most processed foods have two or three ingredients. Processes include various preservation or cooking methods, and, in the case of breads

and cheese, non-alcoholic fermentation. The main purpose of the manufacture of processed foods is to increase the durability of unprocessed or minimally processed foods, or to modify or enhance their sensory qualities. Typical examples of processed foods are canned or bottled vegetables, fruits and legumes; salted or sugared nuts and seeds; salted, cured, or smoked meats; canned fish; fruits in syrup; cheeses and unpackaged freshly made breads. Processed foods may contain additives used to preserve their original properties or to resist microbial contamination. Examples are fruits in syrup with added anti-oxidants, and dried salted meats with added preservatives.

Ready-to-eat food/meals: is food that is already prepared with no mixing of ingredients or other cooking required beyond heating up the food.

Saturated fat: a fat that contains only saturated fatty acids, is solid at room temperature, and comes chiefly from animal food products. Some examples of saturated fat are butter, lard, meat fat, solid shortening, palm kernel oil and coconut oil. Saturated fat contributes to the production of cholesterol by the body, which can increase cholesterol in the blood.

Severely obese: a BMI of 35 or higher is regarded as severe obesity.

Snack: a small amount of food that is eaten between meals, or a very small meal.

Sodium: the major positive ion (cation) in the fluid surrounding cells in the body. The chemical notation for sodium is Na⁺. When sodium is combined with chloride, the resulting substance is a crystal called table salt. Too much sodium in the diet tends to increase blood pressure. The largest source of dietary sodium comes from sodium chloride or table salt.

Sugar-sweetened beverages: also called **sugary drinks** refer to any beverage with added (free sugar) sugar for example, fizzy drinks, fruit juice, flavoured milk or drinking yoghurt, sports and energy drinks, iced tea, vitamin-enriched/flavoured 'water'.

Total sugar: is the sum total of sugar that is naturally present and added sugar (free sugars).

Type 2 diabetes: is a chronic condition characterised by high blood sugar levels, which occur when the body does not metabolise sugar effectively. In type 2 diabetes, a person's body either resists the effects of insulin — a hormone that regulates the movement of sugar into cells — or does not produce enough insulin to maintain normal blood glucose (sugar) levels.

Ultra-processed foods (UPFs): these are industrial formulations typically with five or more and usually many ingredients. Such ingredients often include those also used in processed foods, such as sugar, oils, fats, salt, anti-oxidants, stabilisers, and preservatives. Ingredients only found in ultra-processed products include substances not commonly used in culinary preparations, and additives whose purpose is to imitate sensory qualities of unprocessed or minimally processed foods or of culinary preparations of these foods, or to disguise undesirable sensory qualities of the final product. Unprocessed or minimally processed foods are a small proportion of or are even absent from ultra-processed products. The main purpose of industrial ultra-processing is to create products that are ready to eat, to drink or to heat, liable to replace both unprocessed or minimally processed foods that are naturally ready to consume, such as fruits and nuts, milk and water, and freshly prepared drinks, dishes, desserts and meals. Common attributes of ultra-processed products are hyper-palatability, sophisticated and attractive packaging, health claims, multi-media and other aggressive marketing to children and adolescents. Examples of typical ultra-processed products are: carbonated drinks; sweet or savoury packaged snacks; ice-cream, chocolate, candies (confectionery); mass-produced packaged breads and buns; margarines and spreads; cookies (biscuits), pastries, cakes, and cake mixes; breakfast 'cereals', 'cereal' and 'energy' bars; 'energy' drinks; milk drinks, 'fruit' yoghurts and 'fruit' drinks; cocoa drinks; meat and chicken extracts and 'instant' sauces; infant formulas, follow-on milks, other baby products; 'health' and 'slimming' products; ready to heat products including pre-prepared pies and pasta and pizza dishes; poultry and fish 'nuggets' and 'sticks', sausages, burgers, hot dogs, and other reconstituted meat products, and powdered and packaged 'instant' soups, noodles and desserts.

Unprocessed (natural) foods: are edible parts of plants (seeds, fruits, leaves, stems, roots) or of animals (muscle, offal, eggs, milk), and fungi, algae and water, after separation from nature (see minimally processed food for examples).

Whole food: food that has been refined or minimally processed and is eaten in its natural state.

Whole-grains (or foods made from them): contain all the essential parts and naturally-occurring nutrients of the entire grain seed in their original proportions. If the grain has been processed (e.g., cracked, crushed, rolled, extruded, and/or cooked), the food product should deliver the same rich balance of nutrients that are found in the original grain seed.

3. INTRODUCTION

National Nutrition Week and National Obesity Weeks (NNOWs) are celebrated every year from 9 – 15 October and 15 – 19 October respectively to create awareness among consumers about obesity and the importance of eating healthy. As from 2021, South Africa will celebrate World Obesity Day with the rest of the world on 4 March, but will still celebrate National Nutrition Week from 9 – 15 October of each year.

This document highlights the concept and supporting messages to be used during National Nutrition Week (NNW) and National Obesity Week (NOW).

The objective of the document is to outline the key messages to be communicated and statistics to be used to ensure consistency in communication.

This document should be used in conjunction with the *Questions and Answers* document.

4. GUIDELINES FOR USE OF THE NATIONAL NUTRITION WEEK AND OBESITY WEEK 2020 MESSAGES

The messages must remain consistent as per this document and associated *Questions and Answers* document. They may be adapted to meet the needs of the target audience.

1. The overall messages should be used in the format stated, with the same wording to avoid mixed messages and confusion.
2. The statistics given should be the statistics used in this document in order to avoid confusion or too many messages.
3. Messages may only be used for generic health promotion and may not be used to promote any specific brands.

5. RATIONALE

Poor diets are among the leading health and societal challenges of the 21st century, leading to disability and death, growing inequalities, staggering healthcare costs and environmental implications¹.

Information provided about food – and how food is promoted and advertised – influences consumer preferences, purchasing behaviour and consumption patterns, both negatively and positively². The rapid spread of more formal supermarkets and fast-food chains influences consumer behaviour and food consumption patterns¹. In high-income countries, non-communicable diseases (NCDs) have also been inversely associated with socio-economic status, with some studies finding increased consumption of fast food among low-income populations³. Preference for unhealthy food is further encouraged and intensified by the low price, as purchasing power is known to be a key determinant in whether an individual is willing and able to pay more for healthy food⁴.

¹ 2020 Global Nutrition Report: Action on equity to end malnutrition. Bristol, UK: Development Initiatives.

<https://globalnutritionreport.org/reports/2020-global-nutrition-report/>

² Ntloedibe M. 2015. Republic of South Africa Retail Foods. Pretoria: Global Agricultural Information Network.

<https://apps.fas.usda.gov/newgainapi/api/report/downloadreportbyfilename?filename=Retailper cent20Foods Pretoria Southper cent20Africaper cent20per cent20Republicper cent20of 11-7-2017.pdf>

³ Ndlovu, N et al. 2018. Assessment of food environments in obesity reduction: a tool for public health action. In: Rispel LC, Padarath A, editors. South African Health Review 2018. Durban: Health Systems Trust. <https://www.hst.org.za/publications/Southper cent20Africanper cent20Healthper cent20Reviews/SAHRper cent202018.pdf>

⁴ Lartey A, Hemrich G, Amoroso L. 2016. Influencing food environments for healthy diets. Rome: Food and Agriculture Organization of the United Nations. <http://www.fao.org/3/a-i6484e.pdf>

The current global pandemic of Coronavirus (COVID-19), and measures taken to reduce its spread, have disrupted food environments around the world⁵. The crisis is also affecting the quality of diets. People are shifting towards greater consumption of heavily processed items (as a result of panic buying for foods with longer shelf life, and supply chain disruptions), with fresh fruits and vegetables less available in some conventional supply chains⁶.

Many pre-packaged foods are processed with high levels of added sugars, sodium, saturated fats, and refined carbohydrates^{7,8,9}. Research has connected these nutrients of concern to increased obesity and chronic nutrition-related diseases^{10,11,12,13,14,15}.

In recent years, Sub-Saharan African countries have undergone a nutrition transition towards a diet high in sugar and saturated fats but low in fibre, which has contributed to the emergence of overweight and obesity as a critical public health problem³.

The prevalence of overweight or obesity among women in South Africa rose from 56 per cent in 1998 to 68 percent in 2016, while the prevalence of underweight in women decreased from six to three per cent¹⁶.

Overweight/obesity can lead to inflammatory and metabolic changes in the body which result in high cholesterol, high blood pressure, insulin resistance, and high blood glucose, which together can develop into NCDs such as diabetes, cardiovascular disease, and cancer^{17,18, 19}.

Increasing numbers of reports have linked obesity to more severe COVID-19 illness and death²⁰. People with pre-existing NCDs also appear to be more vulnerable to becoming severely ill with the coronavirus^{21,5}. These NCDs include cardiovascular disease (e.g. hypertension, persons who have had, or are at risk for, a heart attack or stroke, chronic respiratory disease (e.g. chronic obstructive pulmonary disease (COPD), diabetes or cancer²¹.

⁵ United Nations Systems Standing Committee on Nutrition (UNSCN). 2020. Food Environments in the COVID-19 Pandemic. 5 May 2020. <https://www.unscn.org/en/news-events/recent-news?idnews=2039>

⁶ International Panel of Experts on Sustainable Food Systems (IPES). 2020. COVID-19 and the crisis in food systems: Symptoms, causes, and potential solutions. Communiqué by IPES-Food, April 2020. http://www.ipes-food.org/_img/upload/files/COVID-19_CommuniqueENper cent282per cent29.pdf

⁷ Monteiro CA, Moubarac JC, Cannon G, Ng SW, Popkin B. 2013. Ultra-processed products are becoming dominant in the global food system. *Obesity reviews* 14: 21-28. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/obr.12107>

⁸ Pries AM, Huffman SL, Mengkheang K, Kroeun H, Champeny M, et al. 2016. High use of commercial food products among infants and young children and promotions for these products in Cambodia. *Maternal & Child Nutrition* 12: 52-63. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/mcn.12270>

⁹ Pries AM, Huffman SL, Adhikary I, Upreti SR, Dhungel S, et al. 2016. High consumption of commercial food products among children less than 24 months of age and product promotion in Kathmandu Valley, Nepal. *Maternal & Child Nutrition* 12: 22-37. <https://onlinelibrary.wiley.com/doi/epdf/10.1111/mcn.12267>

¹⁰ Anand SS, Hawkes C, de Souza RJ, Mente A, Dehghan M, et al. 2015. Food Consumption and its Impact on Cardiovascular Disease: Importance of Solutions Focused on the Globalized Food System. A Report From the Workshop Convened by the World Heart Federation. *Journal of the American College of Cardiology* 66: 1590-1614. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4597475/pdf/nihms713301.pdf>

¹¹ U.S. Department of Health and Human Services, US Department of Agriculture. 2015. Scientific Report of the 2015 Dietary Guidelines Advisory Committee. Washington, DC. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4717899/pdf/an011684.pdf>

¹² WHO/FAO. 2003. Diet, nutrition and the prevention of chronic diseases: Report of a joint WHO/FAO expert consultation. Technical Report Series 916. <https://www.who.int/dietphysicalactivity/publications/trs916/download/en/>

¹³ Report of a WHO Forum and Technical Meeting. 2006. Reducing Salt Intake in Populations. https://www.who.int/dietphysicalactivity/Salt_Report_VC_april07.pdf

¹⁴ World Health Organization. 2015. Guideline: Sugar intake for adults and children. <https://www.who.int/publications/i/item/9789241549028>

¹⁵ World Cancer Research Fund International. 2015. Curbing global sugar consumption: Effective food policy actions to help promote healthy diets and tackle obesity. <https://www.wcrf.org/sites/default/files/Curbing-Global-Sugar-Consumption.pdf>

¹⁶ Demographic and Health Survey 2016: Report, national Department of Health (NDoH), Statistics South Africa (Stats SA), South African Medical Research Council (SAMRC), and ICF, 2019. <https://dhsprogram.com/pubs/pdf/FR337/FR337.pdf>

¹⁷ Esser, N., S. Legrand-Poels, J. Piette, A. J. Scheen, and N. Paquot. 2014. Inflammation as a Link between Obesity, Metabolic Syndrome and Type 2 Diabetes. *Diabetes Research and Clinical Practice* 105 (2): 141–50. [https://linkinghub.elsevier.com/retrieve/pii/S0168-8227\(14\)00187-9](https://linkinghub.elsevier.com/retrieve/pii/S0168-8227(14)00187-9)

¹⁸ GBD 2015 Obesity Collaborators. 2017. "Health Effects of Overweight and Obesity in 195 Countries over 25 Years." *New England Journal of Medicine* 377 (1): 13–27. <https://www.nejm.org/doi/pdf/10.1056/NEJMoa1614362?articleTools=true>

¹⁹ WCRF and AICR (World Cancer Research Fund and American Institute for Cancer Research). 2018. Diet, Nutrition, Physical Activity and Cancer: A Global Perspective (A Summary of the Third Expert Report). Continuous Update Project Expert Report. <https://www.wcrf.org/sites/default/files/Summary-of-Third-Expert-Report-2018.pdf>

²⁰ Sattar, N & McInnes, I.B. and McMurray J.V.V. 2020. Obesity a Risk Factor for Severe COVID-19 Infection: Multiple Potential Mechanisms. *Circulation*. <https://www.ahajournals.org/doi/pdf/10.1161/CIRCULATIONAHA.120.047659>

²¹ World Health Organization. 2020. COVID-19 and NCDs. Information Note. WHO. <https://www.who.int/publications/m/item/covid-19-and-ncds>

The theme of the 2019 National Nutrition Week and the National Obesity week was: “Make eating whole foods a way of life”. In line with increasing evidence emphasising the importance of having healthy eating patterns, especially in the context of the challenges of the COVID-19 pandemic for people who are food insecure or who are overweight or obese and/or have comorbidities such as NCDs, the theme for the National Nutrition Week and National Obesity Week 2020 is: **“Good Nutrition for Good Immunity”**

The objectives of National Nutrition Week and National Obesity Week 2020 are to:

- a) Continue to emphasise the health benefits of choosing healthy whole foods from a variety of mostly plant-based foods such as vegetables and fruit, legumes and minimally processed starchy foods
- b) Encourage consumers to make healthy, affordable food choices during and after the COVID-19 pandemic.
- c) Provide consumers with practical tips when planning, buying, preparing and eating food during and after the COVID-19 pandemic.

6. QUICK FACTS

Food, water, sanitation and social security are under severe pressure at the moment. An estimated 265 million people will face acute hunger by the end of 2020, due to the impact of COVID-19²².

The food and hunger crisis that is predicted due to COVID-19 is however not new: prior to this global pandemic, malnutrition was the global disaster that was set to threaten 135 million lives by the end of 2020. COVID-19 only exacerbated this persistent problem and highlighted the shortcomings in the global food system²².

Africa's food system is more vulnerable than any other region to the COVID-19 pandemic. This is because food insecurity was already alarmingly high in multiple countries before the pandemic²³.

A survey by Statistics South Africa showed that approximately 4,3 per cent of respondents indicated that they experienced hunger during the month prior to the start of the national lockdown, which increased to 7,0 per cent by the sixth week of the national lockdown period²⁴. The NIDS-CRAM Wave 1 survey shows that 47 per cent of the respondents ran out of money to buy food in April and that between May and June 2020, 21 per cent respondents reported that someone in the household went hungry in the last 7 days and 15 per cent respondents reported that a child went hungry in the last 7 days²⁵.

Undernourished people have weaker immune systems, and may be at greater risk of severe illness due to the virus¹. The current global pandemic of COVID-19, and measures taken to reduce its spread, have disrupted food environments around the world⁵.

In addition to this, Sub-Saharan Africa is experiencing a double burden of malnutrition (DBM) with high levels of undernutrition and a growing burden of overweight/obesity and diet-related NCDs. Several studies in different provinces of South Africa show that DBM exists on a household level with undernutrition among children and overweight/obesity among mothers^{26,27}, in the same household or early stunting with adolescent obesity in the same socio-geographic population²⁸. The 2016 South African Demographic and Health Survey (SADHS) found that 68 per cent of women and 31 per cent of men in the country are overweight or obese¹⁶. The 2012 South African Nutrition and Health Examination Survey (SANHANES) showed that 14.2 per cent of children aged six

²² Anthem P. Risk of hunger pandemic as COVID-19 set to almost double acute hunger by end of 2020 [Internet]. World Food Programme Insight. 2020 [cited 2020 May 1]. Available from: <https://insight.wfp.org/covid-19-will-almost-double-people-in-acute-hunger-by-end-of-2020-59df0c4a8072>

²³ Food and Agricultural Organization of the United Nations (FAO). 2020. FAORAF Methodology Guide For Covid-19 Country Assessments Of Impacts On Agriculture, Food Security And Nutrition.

²⁴ Statistics South Africa. 2020. Results from Wave 2 survey on the impact of the COVID-19 pandemic on employment and income in South Africa. Statistics South Africa. <http://www.statsa.gov.za/publications/Report-00-80-03/Report-00-80-03May2020.pdf>

²⁵ Wills G, Patel L, van der Berg S & Mpeta B. 2020. Household resource flows and food poverty during South Africa's lockdown: Short-term policy implications for three channels of social protection. NIDS-CRAM Wave 1 2020. <https://cramsurvey.org/wp-content/uploads/2020/07/Wills-household-resource-flows-and-food-poverty-during-South-Africa-per-centE2per-cent80per-cent99s-lockdown-2.pdf>

²⁶ Modjadji P & Madiba S. 2019. The double burden of malnutrition in a rural health and demographic surveillance system site in South Africa: a study of primary schoolchildren and their mothers. BMC Public Health. 19:1087 <https://doi.org/10.1186/s12889-019-7412-y>

²⁷ Tydeman-Edwards R, Van Rooyen FC, Walsh C M. Obesity, undernutrition and the double burden of malnutrition in the urban and rural Free State, South Africa. Heliyon 4 (2018) e00983. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6278724/pdf/main.pdf>

²⁸ Kimani-Murage EW. 2013. Exploring the paradox: double burden of malnutrition in rural South Africa, Global Health Action, 6:1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3556706/pdf/GHA-6-19249.pdf>

to 14 years are overweight or obese²⁹. With COVID-19, the quality of diets is also being affected with a greater shift towards heavily processed items, with fresh fruit and vegetables less available in conventional food supply chains⁶. Some of the restrictive measures such as lockdowns, social distancing, and travel restrictions to reduce the spread of infection in many countries also impact on people living with NCDs by limiting their activity, ability to secure healthy foods, and access to preventive or health promotion services³⁰.

The increasing consumption of cheap processed foods and reduced physical activity are among the key drivers of the double burden of malnutrition³¹. The consumption of processed foods is increasing at the expense of fresh and minimally processed foods resulting in diets that are of low nutritional quality, energy-dense and high in sugars, salt, and fats³².

Overweight/obesity lead to inflammatory and metabolic changes in the body which result in high cholesterol, high blood pressure, insulin resistance, and high blood glucose, which together can develop into NCDs such; as diabetes, cardiovascular disease, and cancer^{17,18,19}. Diabetes is the second leading cause of death among adults and the number one leading cause of death among women in the South Africa³³. The Global Burden of Disease data suggest that, by 2025, 72.3 per cent of NCD related illness and deaths will occur in low-middle-income countries³⁴. Poor metabolic health, including obesity and diabetes, is strongly linked to worse COVID-19 outcomes, including risk of hospitalisation and death¹.

In Italy, a recent report revealed that the majority (96.2 per cent) of patients who have died in hospital from COVID-19 had comorbidities, primarily NCDs; the most prevalent NCDs among these patients were hypertension (69.2 per cent), type 2 diabetes (31.8 per cent), ischaemic heart disease (28.2 per cent), chronic obstructive pulmonary disease (16.9 per cent), and cancer (16.3 per cent)³⁵. An association between COVID-19 severity and NCDs has also been reported in Spain³⁶ China³⁷ and the USA³⁸

BMI might also be associated with the severity of COVID-19^{39,40}. In China, patients with severe COVID-19 and non-survivors typically had a high BMI (>25 kg/m²)⁴¹. Patients in New York City with a BMI ≥ 35 and aged < 60 years were 2.2 and 3.6 times more likely to be admitted to acute and critical care than patients in the same age category who had BMI < 30⁴².

²⁹ Shisana O, Labadarios D, Rehle T, et al. *The South African National Health and Nutrition Examination Survey SANHANES-1*. Cape Town: HSRC Press; 2013. [http://www.hsrc.ac.za/uploads/pageNews/72/SANHANES-launchper cent20editionper cent20\(onlineper cent20version\).pdf](http://www.hsrc.ac.za/uploads/pageNews/72/SANHANES-launchper cent20editionper cent20(onlineper cent20version).pdf)

³⁰ WHO.2016. Non-communicable diseases in emergencies. Geneva: World Health Organization. <https://www.who.int/ncds/publications/ncds-in-emergencies/en/>

³¹ Onyango AW, Jean-Baptiste J, Samburu B, Moeng-Mahlangu TL. 2019. *Ann Nutr Metab*;75:127–130. <https://www.karger.com/Article/Pdf/503671>

³² Food and Agriculture Organization, International Fund for Agricultural Development, UNICEF, World Food Programmes and World Health Organization. 2018. *The State of Food Security and Nutrition in the World 2018. Building climate resilience for food security and nutrition*. Rome, Food and Agriculture Organization. <http://www.fao.org/3/I9553EN/i9553en.pdf>

³³ Statistics South Africa (Stats SA). *Mortality and causes of death in South Africa, 2016: Findings from death notification*. 2018. Statistics South Africa. <http://www.statssa.gov.za/publications/P03093/P030932016.pdf>

³⁴ Afshin A, Forouzanfar MH, Reitsma MB, et al, and the GBD 2015 Obesity Collaborators. Health effects of overweight and obesity in 195 countries over 25 years. *N Engl J Med* 2017; 377: 13–27. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5477817/>

³⁵ Istituto Superiore di Sanità. Characteristics of SARS-CoV-2 patients dying in Italy. Report based on available data on April 29, 2020. COVID-19. 2020. https://www.epicentro.iss.it/en/coronavirus/bollettino/ReportCOVID-2019_29_april_2020.pdf

³⁶ Instituto de Salud Carlos III. Informe COVID-19 nº 28. 04 de mayo de 2020. Informe sobre la situación de COVID-19 en España. 2020. <https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/EnfermedadesTransmisibles/Paginas/InformesCOVID-19.aspx>

³⁷ Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. 2020. The epidemiological characteristics of an outbreak of 2019 novel coronavirus diseases (COVID-19)—China, 2020. *China CDC Weekly*; 2: 113–22. <http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51>

³⁸ Richardson S, Hirsch JS, Narasimhan M, et al. 2020. Presenting characteristics, comorbidities, and outcomes among 5700 patients hospitalized with COVID-19 in the New York City area. *JAMA*. <https://jamanetwork.com/journals/jama/fullarticle/2765184>

³⁹ Kluge HHP, Wickramasinghe K, Rippin HL, Mendes R, Peters DH, Kontsevaya A, Breda J. 2020 Prevention and control of non-communicable diseases in the COVID-19 response. *The Lancet*. Published online May 8, 2020 [https://doi.org/10.1016/S0140-6736\(20\)31067-9](https://doi.org/10.1016/S0140-6736(20)31067-9)

⁴⁰ World Obesity Federation. 2020. Obesity and COVID-19 policy statement. 27th March 2020. http://s3-eu-west-1.amazonaws.com/wof-files/Obesity_and_COVID-19_policy_statement.pdf

⁴¹ Peng YD, Meng K, Guan HQ, et al.2020. Clinical characteristics and outcomes of 112 cardiovascular disease patients infected by 2019-nCoV. *Zhonghua Xin Xue Guan Bing Za Zhi*; 48: E004. <https://pubmed.ncbi.nlm.nih.gov/32120458/>

⁴² Lighter J, Phillips M, Hochman S, Sterling S, Johnson D, Francois F and Stache, A. 2020. Obesity in Patients Younger Than 60 Years Is a Risk Factor for COVID-19 Hospital Admission. *Clinical Infectious Diseases*. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7184372/pdf/ciaa415.pdf>

Consuming healthy foods has a rapid anti-inflammatory effect, even in the presence of obesity pathology⁴³. Over the years, research has shown that a healthy diet can reduce the risk of NCDs such as obesity, high blood pressure, heart disease, diabetes and chronic respiratory disease⁴⁴. Another reason NCDs need to be carefully managed, especially during the COVID-19 era is because of the ongoing research suggestive of long-term effects post-infection. Patients who previously recovered from the (SARS) virus which shows similarities to the Corona virus, showed abnormalities in lipids, heart function and glucose metabolism⁴⁵.

A healthy dietary pattern which is diverse and abundant with vegetables and fruit, wholegrains, nuts, and seeds; plain drinking water, modest amounts of animal source foods and minimal amounts of processed meats is important for good health^{46,47,48,49,50}, including immunity⁵. Consumption of ultra-processed food that is high in fat, sugar and salt should be limited and sugary drinks should be avoided^{46,47,49}.

Now, more than ever, the importance of wider access to healthy foods should be a top priority and individuals should be mindful of healthy eating habits to reduce susceptibility to and long-term complications from COVID-19⁵¹, try to maintain a healthy weight, do exercise during free time and get an adequate amount of sleep⁵².

Numerous studies have found that obesity is also linked to the number of fast food outlets in a neighbourhood. Gauteng province was also found to be highly obesogenic, especially in less affluent areas where there were more fast food outlets compared to more affluent areas³. Fast food outlets, small shops and restaurants play an important role in day-to-day provisioning among the urban poor in Gauteng, with 55 per cent of households sourcing food from these outlets at least once a week or more often, especially in the inner city⁵³.

COVID-19 can be the impetus needed for the public to take their nutrition more seriously and for public and private partnership alignment to create social safety nets, food supply chains and urban food environments that are robust enough to support the nutrient requirements of its communities. The only alternative is a country that will become increasingly crippled by the burden of nutrition-related morbidities and suboptimal economic growth⁵⁴.

⁴³ Connaughton, R.M., McMorrow, A.M., McGillicuddy, F.C., Lithander, F.E., Roche, H.M., 2016. Impact of anti-inflammatory nutrients on obesity-associated metabolic-inflammation from childhood through to adulthood. *Proc. Nutr. Soc.* 75, 115–124. <https://doi.org/10.1017/S0029665116000070>

⁴⁴ Bruins MJ, Van Dael P & Eggersdorfer M. 2019. The Role of Nutrients in Reducing the Risk for Noncommunicable Diseases during Aging. *Nutrients*. 11(1): 85. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6356205/pdf/nutrients-11-00085.pdf>

⁴⁵ Bansal M. 2020. Cardiovascular disease and COVID-19. *Diabetes & Metabolic Syndrome: Clinical Research & Reviews*. 14: 247e250 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7102662/pdf/main.pdf>

⁴⁶ Willett W, Röckström J, Loken B. 2019. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *Lancet*. 393: 447–92. <https://www.ncbi.nlm.nih.gov/pubmed/30660336>

⁴⁷ World Health Organization. A healthy diet sustainably produced. Information sheet. November 2018. <https://apps.who.int/iris/bitstream/handle/10665/278948/WHO-NMH-NHD-18.12-eng.pdf?ua=1>

⁴⁸ International Agency for Research on Cancer (IARC); WHO. 2015. IARC Monographs evaluate consumption of red meat and processed meat. Press Release No. 240. 26 October 2015. http://www.iarc.fr/en/mediaKcentre/pr/2015/pdfs/pr240_E.pdf

⁴⁹ de Oliveira Otto MC, Anderson CAM, Dearborn JL et al. 2018. Dietary diversity: implications for obesity prevention in adult populations: a science advisory from the American Heart Association. *Circulation*; 138: 11. e160–e168. <https://www.ahajournals.org/doi/10.1161/CIR.0000000000000595>

⁵⁰ Hall KD, Ayuketah A & Brychta R et al. 2019. Ultra-processed diets cause excess calorie intake and weight gain: An inpatient randomized controlled trial of ad libitum food intake. *Cell Metabolism*. 30: 1 - 11. [https://www.cell.com/cell-metabolism/pdf/S1550-4131\(19\)30248-7.pdf](https://www.cell.com/cell-metabolism/pdf/S1550-4131(19)30248-7.pdf)

⁵¹ Butler, MJ & Barrientos RM. 2020. The impact of nutrition on COVID-19 susceptibility and long-term consequences. *Brain, Behavior, and Immunity*, <https://doi.org/10.1016/j.bbi.2020.04.040>

⁵² Naja F & Hamadeh R. Nutrition amid the COVID-19 pandemic: a multi-level framework for action. 2020. *European Journal of Clinical Nutrition*. <https://doi.org/10.1038/s41430-020-0634-3>

⁵³ Rudolph M, Kroll F, Ruysenaar S, Dlamini T. 2012. The State of Food Insecurity in Johannesburg. Urban Food Security Series No 12. Kingston and Cape Town: Queen's University and African Food Security Urban Network. http://www.afsun.org/wp-content/uploads/2013/09/AFSUN_12.pdf

⁵⁴ World Hunger Day 2020: Challenging False Narratives in a Global Crisis: Reflections on Human Rights, Inequality and Securing Food Systems. Available from: <https://www.comchest.org.za/>

7. MESSAGES

The following key messages are to be used with the theme: “Good Nutrition for Good Immunity” to help consumers to be mindful when shopping for and when preparing and eating meals.

- a) Make eating whole foods a way of life
- b) Choose healthy options when shopping/buying groceries
- c) Choose healthy options when buying cooked/ready-to-eat food items/meals
- d) Practice healthy habits when preparing meals and when eating

7.1 MAKE EATING WHOLE FOODS A WAY OF LIFE

1. During regular daily life, it is often not easy for many individuals to find time to prepare healthy home-cooked meals. Spending more time at home during lockdown, offers the opportunity to prepare home cooked meals from whole foods.
2. A healthy eating plan with a variety of foods makes meals interesting and enjoyable.
3. Most of what is eaten should consist of a variety of whole, mostly unprocessed or minimally processed foods from plants, for instance vegetables, fruits, starchy foods and legumes as illustrated in the **Food Guide (see Annexure I for the Guidelines for Healthy Eating and the Food Guide)**. This indicates that nearly 80 per cent of what we eat should be a variety of unprocessed or minimally processed foods from these food groups.
4. Eat plenty of vegetables and fruit every day. The WHO recommends that you should eat *more than five portions* (400 grams) of vegetables and fruit combined per day. No single vegetable or fruit provides all the nutrients you need so eat a variety of types and colours of vegetables and fruits every day.
5. Eat dry beans, peas and lentils regularly, i.e. at least four times per week.
6. Drink lots of clean safe water. Avoid drinking sugary drinks.
7. Use fat, sugar, salt, or foods high in sugar and/or salt sparingly
8. Babies should be given only breastmilk for the first six months of life. Breastmilk contains all the energy, vitamins and other nutrients and water in the correct amounts that the baby needs. They should not be given any other food or fluids, not even water, except for medicine prescribed by a doctor or nurse. From the age of six months, appropriate and culturally acceptable complementary foods should be introduced and breastfeeding continued until the child is at least two years old.
9. Young children who are no longer breastfed require full-cream milk instead of fat-free or low fat milk. Avoid giving young children sweetened and/or flavoured milk or drinking yoghurt. The use of follow up formula after 1 year of age is not necessary as children can drink full cream milk.

Tips when planning and preparing healthy meals

(See the following links for healthy, tasty and also for affordable recipes:

<https://nutritionconfidence.files.wordpress.com/2020/07/nutrient-dense-lockdown-recipes-mandela-day-with-cards.pdf>;

<https://www.nutritionweek.co.za/NNW2016/docs/NNW2016per cent20Recipeper cent20collection.pdf>

and <http://www.heartfoundation.co.za/recipes/>)

- a) Try to prepare *only* unprocessed or minimally processed plant-based food (vegetables and fruit, starchy food and legumes) for at least one full day every week. Use the **Food Guide (See Annexure I)** to guide the proportions of variety of food to be prepared.
- b) Try to include a variety of vegetables and fruit in daily meal plans – not only on weekends. Frozen, dried and indigenous vegetables and fruit should be included where possible. Include both cooked and raw vegetables and salads in meals.
- c) Portion sizes of vegetables can be more generous if a variety of fruits is not available. Add extra vegetables to recipes such as stews, curries, stir-fries, salads, soups, sandwiches, brown rice, whole-wheat pasta dishes or to egg dishes (scrambled eggs or omelettes). Baby spinach,

- tomatoes, carrots, beetroot and sundried tomatoes are some of the vegetables that are easy to add to dishes.
- d) Using fresh vegetables to cook large batches of soups, stews or other dishes will make them last longer and provide meal options for a few days. These can also be frozen where possible and then quickly reheated.
 - e) 'Vegify' your favourite recipes by swapping some of the animal-based foods with whole plant-based alternatives. Meat can be replaced with vegetables like mushrooms, aubergine/brinjal or eggplant and baby marrow/courgette or with legumes like lentils, beans and chickpeas.
 - f) Dry beans, peas, lentils and soya can also be used in many dishes, such as salads, soups and stews.
 - g) A child's Road-to-Health Book /The Caregiver Message Book: How to Raise a Healthy and Happy Child, gives some ideas on types of foods, quantities and textures for children from six months to five years.
 - h) Experiment with different food combinations, tastes, textures and methods of encouraging smaller children to eat if they refuse many foods.
 - i) Get children into the habit of eating raw vegetable sticks or fruit when they are hungry between meals.
 - j) When feeding a young child, foods that can cause choking should be avoided, for instance nuts and seeds, whole grapes and large pieces of raw vegetables. Ensure that cooked, soft porridge for small children is of a thicker consistency and is enriched with oil, margarine or peanut butter.
 - k) Children are more likely to enjoy eating vegetables when they have eaten a variety from an early age (i.e. from six months) and when they see their parents enjoying vegetables.

Remember to prepare and store food safely:

- (a) Wash hands with soap and water before handling food, keep surfaces and utensils clean;
- (b) Wash vegetables and fruit with water before eating them
- (c) After shopping, refrigerate all perishable foods as soon as possible (below 5°C)
- (d) Cook food thoroughly (70 °C), especially meat, poultry, eggs and seafood.
(see Annexure II for more information on the '5 Keys to Safer Food')

7.2 CHOOSE HEALTHY OPTIONS WHEN SHOPPING/BUYING GROCERIES

1. Plan your menu: write out a basic meal plan for the week and the groceries you'll need for it
(See NNOW2019 for information how to compile a meal plan: <https://www.nutritionweek.co.za/NNW2019/professionals>).
2. Canned foods can be a nutritious and convenient option when fresh foods aren't available. However, salt, sugar, and preservatives are sometimes added during the canning process. Draining and rinsing foods can lower their salt and sugar contents. To avoid extra sugar, choose fruits that are canned in water or juice instead of syrup. It is therefore important to read the label.
3. Use a freezer if that is available: frozen fruits and vegetables can be a cost-effective option or buy fresh vegetables or fruit in bulk if it is available at a good price and freeze.
4. Avoid buying prepared food: If you have time, prepare food yourself instead of buying prepared or frozen meals. Thirty minutes will give you enough time to bring together simple, tasty meals.

If possible, freeze what you don't immediately need (See the following link for more information on how to freeze foods:

https://nchfp.uga.edu/tips/summer/home_food_freezing.html

Tips when buying groceries on a budget:

- a) Look out for specials: look for discounts, coupons, and sales, especially on store brands, which usually cost less.
- b) Compare unit prices (rand per gram/kilogram) listed on price tags to find the cheapest brand.
- c) Buy in bulk when you can (e.g., purchase a whole chicken instead of just chicken breasts)
- d) Eggs are a good source of protein and nutrients.
- e) Dried and canned beans, peas and lentils are great sources of vegetable protein and fibre and can be used in a variety of meals such as stews, soups and salads;

- f) Canned vegetables, with no added salt or sugar are good alternatives to ensure a sufficient intake of vegetables.
- g) Canned tuna, sardines and pilchards contain healthy fats which play an important role in the immune system, particularly in regulating inflammation.
- h) Long-lasting fruit and vegetables such as citrus fruits and root vegetables are full of vitamins and minerals needed for a good immune system.
- i) Read the label and look out for the following:
 - Look for the table with the nutritional information on the food label at the back of the container and find the words: 'Saturated fats', 'Total sugar' and 'Sodium' and see how much of it the food contains.
 - Product ingredients are listed by quantity, from the highest to lowest amount. That means that the first listed ingredient is what the manufacturer used the most.
 - Read the 'ingredient list' together with the 'nutrition information table' in order to interpret what the food was made of and how much saturated fat and/or added sugar and/or sodium (salt) it contains. Eating less saturated fat, added sugar and/or sodium (salt) is important because it helps reduce your risk to develop a non-communicable disease.
 - Do not fall for low-sugar, reduced-fat or other health claims. Sometimes the fat is replaced with sugar or vice versa (also not healthy). Also, check the sodium/salt content, often low or reduced fat or sugar options can be higher in salt.

Remember: Take precautions when leaving home:

- a) Take a shopping list. Avoid browsing, spending too much time in the store, and touching things unnecessarily by making a list of the food you are going to buy (**See NNOW 2019 how to compile a shopping list and menu plan:** <https://www.nutritionweek.co.za/NNW2019/professionals>)
- b) Keep a safe distance from shoppers and shop employees. Shopping at off-peak hours or shopping at a grocery store that limits the number of shoppers may make social distancing easier.
- c) Follow official guidance to stay safe (See www.sacoronavirus.co.za for more information): Wear a mask when leaving your home, don't touch your face, and wash or sanitise your hands often. Above all, stay home if you have symptoms of COVID-19 or if you're a high-risk individual.

7.3 CHOOSE HEALTHY OPTIONS WHEN BUYING COOKED/READY-TO-EAT FOOD ITEMS/MEALS

1. Many commercially produced ready-to-eat food items/meals are high in saturated fat, salt, and/or sugar.
2. Many restaurants and fast food outlets offer portions that are much larger than necessary.
3. Fried meal options that are sold at 'fast food outlets' often consist of refined starchy food and/or meat and are often high in fat and salt. These meals typically do not include any vegetables.
4. Eating home-cooked meals can make it easier to exercise portion control and to avoid overeating.

Tips when buying cooked/ready-to-eat meals:

- a) Many restaurants now provide nutrition information. Look for items that are lower in kilojoules, saturated fat, total sugar and sodium on their websites or on provided in-store on menus, information sheets or on display.
- b) Keep portion sizes small, for instance choose the smallest food and drink options or children sized options.
- c) Where possible, select an item from the menu and avoid the "all-you-can-eat" buffet.
- d) Share a main dish. Ask for smaller plates and divide the meal.
- e) Order a side dish or a starter instead of a main dish. These meals are served in smaller amounts and on smaller plates.
- f) Steamed, grilled, or roasted dishes have fewer calories than foods that are fried in oil or cooked in hard fats. Remember that basting sauces can also be high in kilojoules and salt.
- g) Fried and coated foods, such as crispy chicken sandwiches or burgers and breaded fish or chicken fillets, are high in fat and kilojoules.

- h) Choose healthier side dishes, for instance instead of fries choose a salad with a low-fat dressing or a baked potato, steamed rice, or cooked vegetables or add a fruit and low-fat, unsweetened yoghurt option with the meal
- i) Choose a salad as main dish, for instance with grilled chicken, fish or cheese. If needed, use small amounts of low-fat salad dressing. Avoid fried toppings.
- j) Choose whole-wheat or brown bread or rolls, and whole-wheat pasta dishes. Select fresh fruit instead as dessert.
- k) Pack fruit, sliced vegetables, low-fat cheese, trail packs or unsalted nuts to eat during long trips so that it is not necessary to stop for food, only for leg stretches.
- l) Avoid 'specials' where the meal is served with a drink high in sugar or high in sugar and fat (for instance milkshakes)
- m) Rethink your drink – choose water! Instead of choosing a sugary drink, rather choose water which is healthy and does not contain any kilojoules.
- n) Do not just clean the plate, decide to save some for another meal. Take leftovers home in a container and refrigerate right away.

7.4 PRACTICE HEALTHY HABITS WHEN PREPARING MEALS AND WHEN EATING

During long periods of stress we may find ourselves eating more or less than we need to. Plus, staying at home for longer periods may also lead us to snack out of boredom or forget to eat. Practising healthy eating habit can be a useful strategy to maintain a healthy relationship with food and to change unhealthy eating behaviours, for example binge eating.

Tips for healthy eating habits:

- (a) Enjoying a healthy eating plan also means preparing food in healthy ways, for instance using cooking methods such as boiling, steaming, grilling and baking instead of frying. Avoid overcooking vegetables!
- (b) Be mindful about the amount of fat/oil, sugar and/or salt that are added in food preparation and use these items sparingly as far as possible. Use herbs and spices to flavour dishes.
- (c) Make a conscious decision before eating - how you feel: are you rushed, stressed, sad, bored or hungry? Try to drink a glass of water and wait a few minutes to find out if you are really hungry.
- (d) Practice portion control to avoid overeating (**See Annexure III for the Portion Control Guide**).
 - Avoid cooking too much food, unless extra food is stored in the fridge for the next day or is frozen.
- (e) Serve out portions onto a plate instead of eating straight from the container. Use smaller plates.
- (f) Reserve time for eating:
 - Try to eat regularly, this means three meals per day, most days of the week. Try not to skip meals as this can lead to feelings of hunger and low blood sugar (like dizziness, shaking or loss of concentration). Breakfast especially is an important meal.
 - Don't eat on the run – try to sit down and enjoy your food.
 - Involve family members with food preparation and make meal time a time of sharing and being together as a family. Try to eat at least one meal per day together.
- (g) Avoid distractions while eating - turn off the TV, phone, tablet or computer, books or magazines which can make one less aware of what and how much one is eating.
- (h) Take time to enjoy the flavours, smell, colour and textures of food before swallowing. This may also help prevent overeating by giving your gut time to send messages to the brain to say you're full.
- (i) Put down your utensil after each bite until you have enjoyed and swallowed what you already have in your mouth.
- (j) Do not skip meals when you are hungry. Skipping meals can result in you overeating at the next meal or not eating enough for the day. It can also slow down your metabolism.

8. SOCIAL MEDIA MESSAGES

- a) Did you know? Eating healthy food and drinking water can help you fight COVID-19 and other diseases.
- b) Healthy food is affordable and can help you fight diseases such as COVID-19.
- c) Buy mostly whole (unprocessed/minimally processed) foods. You can also grow your own vegetables.
- d) Unhealthy food can lead to overweight, diabetes and heart disease, high blood pressure and certain cancers. Enjoy a variety of healthy foods to help you fight diseases such as COVID-19.
- e) Enjoy family time! Preparing healthy meals at home can be fast and tasty. Vegetables can cook in less than 15 minutes.
- f) Practice healthy habits when eating and drink lots of clean, safe water.
- g) Hi Mom! Did you know breastmilk can help protect your baby against diseases such as COVID-19. Breastfeed exclusively without giving other food or water for the first six months. Continue breastfeeding together with solid foods from six months to two years or more. Remember to: practice respiratory hygiene, wear a mask and wash hands with soap and water regularly.
- h) Continue breastfeeding together with a variety of solid foods from six months to two years or more.
- i) Healthy eating needs heroes. Be a champion and encourage others to make healthier choices.
- j) Feeling the pinch? It's possible to have a healthy, low cost food basket.

9. NATIONAL NUTRITION WEEK AND NATIONAL OBESITY WEEK 2020 COLLABORATORS

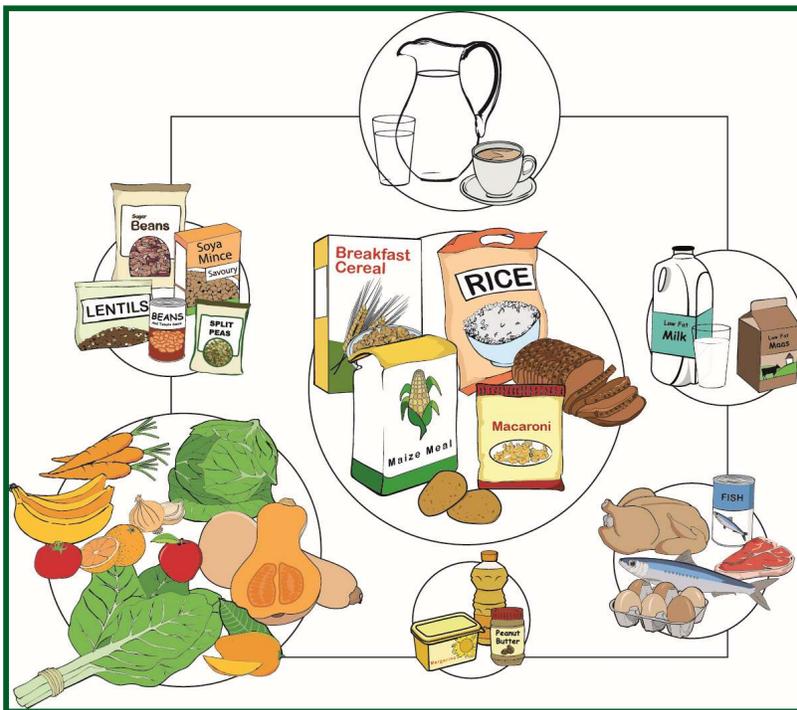
- a) National and provincial Departments of Health
- b) Department of Basic Education
- c) South African Military Health Services (SAMHS)
- d) Department of Social Development
- e) Grow Great Campaign
- f) Liezel Engelbrecht (Personal capacity)
- g) Lenore Spies (Personal capacity)
- h) United Nations Children Fund (UNICEF)
- i) Clinton Health Access Initiative
- j) The Association for Dietetics in South Africa (ADSA)
- k) The Cancer Association of South Africa (CANSAs)
- l) The Nutrition Society of South Africa (NSSA)
- m) The Heart and Stroke Foundation SA (HSFSA)
- n) Stellenbosch University, Faculty of Medicine and Health Sciences, Department of Global Health, Division of Human Nutrition
- o) World Wildlife Fund (WWF)

10. WEBSITES FOR MORE INFORMATION ABOUT NNOW

- (a) www.nutritionweek.co.za
- (b) The national Department of Health: www.health.gov.za
- (c) The Association for Dietetics in South Africa (ADSA): www.adsa.org.za
- (d) Grow Great Campaign: www.growgreat.co.za
- (e) United Nations Children's Fund (UNICEF): <https://www.unicef.org/southafrica/>
- (f) The Cancer Association of South Africa (CANSAs): www.cansa.org.za
- (g) The Nutrition Society of South Africa: www.nutritionandsociety.co.za
- (h) The Heart and Stroke Foundation SA: www.heartfoundation.co.za

SOUTH AFRICAN GUIDELINES FOR HEALTHY EATING (FBDGs) FOR ADULTS AND CHILDREN FIVE YEARS AND OLDER AND THE FOOD GUIDE

- a) Enjoy a variety of foods.
- b) Be active.
- c) Make starchy foods part of most meals.
- d) Eat plenty of vegetables and fruit every day.
- e) Eat dry beans, split peas, lentils and soya regularly.
- f) Have milk, maas or yoghurt every day.
- g) Fish, chicken, lean meat or eggs can be eaten daily.
- h) Drink lots of clean, safe water.
- i) Use fats sparingly. Choose vegetable oils rather than hard fats.
- j) Use sugar and foods and drinks high in sugar sparingly.
- k) Use salt and food high in salt sparingly.



This picture depicts the Food Guide. The size of the circles reflects the proportional volume that those foods should contribute to the total daily intake.

5 KEYS TO SAFER FOOD

Five keys to safer food



Keep clean

- ✓ Wash your hands before handling food and often during food preparation
- ✓ Wash your hands after going to the toilet
- ✓ Wash and sanitize all surfaces and equipment used for food preparation
- ✓ Protect kitchen areas and food from insects, pests and other animals

Why?

While most microorganisms do not cause disease, dangerous microorganisms are widely found in soil, water, animals and people. These microorganisms are carried on hands, wiping cloths and utensils, especially cutting boards and the slightest contact can transfer them to food and cause foodborne diseases.



Separate raw and cooked

- ✓ Separate raw meat, poultry and seafood from other foods
- ✓ Use separate equipment and utensils such as knives and cutting boards for handling raw foods
- ✓ Store food in containers to avoid contact between raw and prepared foods

Why?

Raw food, especially meat, poultry and seafood, and their juices, can contain dangerous microorganisms which may be transferred onto other foods during food preparation and storage.

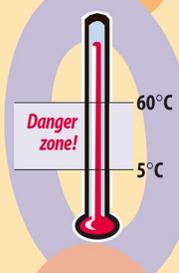


Cook thoroughly

- ✓ Cook food thoroughly, especially meat, poultry, eggs and seafood
- ✓ Bring foods like soups and stews to boiling to make sure that they have reached 70°C. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer
- ✓ Reheat cooked food thoroughly

Why?

Proper cooking kills almost all dangerous microorganisms. Studies have shown that cooking food to a temperature of 70°C can help ensure it is safe for consumption. Foods that require special attention include minced meats, rolled roasts, large joints of meat and whole poultry.



Keep food at safe temperatures

- ✓ Do not leave cooked food at room temperature for more than 2 hours
- ✓ Refrigerate promptly all cooked and perishable food (preferably below 5°C)
- ✓ Keep cooked food piping hot (more than 60°C) prior to serving
- ✓ Do not store food too long even in the refrigerator
- ✓ Do not thaw frozen food at room temperature

Why?

Microorganisms can multiply very quickly if food is stored at room temperature. By holding at temperatures below 5°C or above 60°C, the growth of microorganisms is slowed down or stopped. Some dangerous microorganisms still grow below 5°C.



Use safe water and raw materials

- ✓ Use safe water or treat it to make it safe
- ✓ Select fresh and wholesome foods
- ✓ Choose foods processed for safety, such as pasteurized milk
- ✓ Wash fruits and vegetables, especially if eaten raw
- ✓ Do not use food beyond its expiry date

Why?

Raw materials, including water and ice, may be contaminated with dangerous microorganisms and chemicals. Toxic chemicals may be formed in damaged and mouldy foods. Care in selection of raw materials and simple measures such as washing and peeling may reduce the risk.



Knowledge = Prevention

WHO/SE/PHE/FOS/91.1
Distribution: General
Original: English

Design: Marilyn Langford, Illustration: Janet Phipps/WHO

PORTION CONTROL GUIDE

PORTION CONTROL GUIDE




Clenched fist = 1 cup: Cooked pap, rice, samp, pasta, potato, fruit

Size of palm:

Meat
Fish
Chicken
Dry beans, split-peas
lentils



Handful:

Nuts
Raisins



2 Handfuls:
Vegetables



Choose your portion with caution!!



Thumb:

Peanut butter
Hard cheese

Tip of thumb = 1 teaspoon:

All oils, mayonnaise, margarine



Use your hand to estimate portion size