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Concept document

National Nutrition Week 2022:
"Make healthy food choices easier"

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1. ACRONYMS/ABBREVIATIONS

FBDGs	Food-Based Dietary Guidelines
NCDs	Non-Communicable Diseases
NNW	National Nutrition Week
PA	Physical Activity
SADHS	South Africa Demographic and Health Survey
SSBs	Sugar-Sweetened Beverages
SANHANES	South African Health and Nutrition Examination Survey
UNICEF	United Nations Children Fund
UPFs	Ultra-Processed Foods
WHO	World Health Organization

2. TERMS AND DEFINITIONS

COVID-19: 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: brief, positive dietary recommendation messages that are used to inform healthy consumers how to choose food and beverage combinations that will lead to an adequate eating plan, that meets nutrient needs and that is, at the same time, prudent, for example, which lowers the risk of NCDs. The South African FBDGs are also referred to as the South African Guidelines for Healthy Eating.

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: the foods in each of the food groups share similar nutrients and consumers typically use them in a similar way.

Food guide: 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.

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

Microbiota: the microscopic organisms of a particular environment. The human microbiota consists of a wide variety of bacteria, viruses, fungi, and other single-celled animals that live in the body. They play a beneficial role in the digestion of foods and promote immunity.

Minimally processed foods: foods that have been submitted to cleaning, removal of inedible or unwanted parts, fractioning, grinding, drying, fermentation, pasteurization, cooling, freezing, or other processes that may subtract part of the food, but which do not add oils, fats, sugar, salt or other substances to the original food.

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. NCDs cause over 60% of the world's deaths, 80% of which occur in developing countries like South Africa.

Obesity: an adult whose BMI is 30.0 kg/m2 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, 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 30.0 kg/m2, 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.

Physical activity: any bodily movement produced by skeletal muscles that requires energy expenditure. Physical activity refers to all movement including during leisure time, for transport to get to and from places, or as part of a person's work.

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

Processed foods: products manufactured by industry using salt, sugar, oil or other substances added to natural or minimally processed foods to preserve or to make them more palatable. They are derived directly from foods and are recognised as versions of the original foods. They are usually consumed as a part of or as a side dish in culinary preparations made using whole or minimally processed foods. Most processed foods have two or three ingredients.

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.

Self-efficacy: an individual's confidence in their ability to complete a task or achieve a goal.

Severely obese: a BMI of 35 kg/m2 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 free sugar, for example, fizzy drinks, fruit juice, flavoured milk or drinking yoghurt, sports and energy drinks, iced tea, vitamin-enriched/flavoured 'water'.

Ultra-processed foods (UPFs): these are industrial formulations typically with five or more ingredients. Such ingredients often include those also used in processed foods, such as sugar, oils, fats, salt, anti-oxidants, stabilisers, and preservatives. The main purpose of industrial ultra-processing is to create products that are ready to eat, to drink or to heat, liable to replace unprocessed or minimally processed foods that are 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 (where labelling legislation does not prohibit it), 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, confectionery; mass-produced packaged bread and buns; margarine and spreads; 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 milk, 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 or natural foods: foods obtained directly from plants or animals and do not undergo any alteration following their removal from nature. 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.

Whole food: food that has not been processed or refined 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 balance of nutrients that are found in the original grain seed.

3. INTRODUCTION

National Nutrition Week (NNW) is celebrated every year from 9 – 15 October to create awareness among consumers about the importance of eating healthy. The overarching objective of the NNW 2022 campaign: *"Make healthy food choices easier",* helps adults, adolescents and caregivers to make healthy and affordable food choices every day by eating regular and correctly portioned healthy meals and snacks and by being physically active

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

The objectives of the document are:

a. to provide guidelines for the use of NNW 2022 messages
b. to provide the **rationale** for the 2022 theme
c. to outline the overarching objectives for the campaign
d. to provide quick facts on healthy food choices
e. to outline the main communication **focus areas** of the campaign
f. to highlight the **key concepts** underpinning each focus area in support of the theme
g. to provide **information, statistics and tips** that can 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 2022 MESSAGES

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

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

5. RATIONALE

The prevention and control of non-communicable diseases (NCDs) can be achieved at all ages. Although NCDs are usually associated with elderly people, all ages are at risk, even before birth. These diseases may start in the earliest years of life and keep progressing during childhood, adolescence, and old age[1].

Good nutrition in the first 1,000 days is vital to establishing a child's future health, with impacts that last into adulthood[2]. The first 2 years of a child's life are particularly important, as optimal nutrition during this period lowers morbidity and mortality, reduces the risk of chronic disease, and fosters better development overall[3].

The high prevalence of overweight and obesity can be related to a change in lifestyle, low levels of physical activity, and unhealthy diets based on the interaction between individual characteristics on food choices and obesogenic environments[4]. Increased perception of barriers is associated with decreased participation in both healthy eating and physical activity[5]. Limited time, social norms, and distances from or lack of exercise facilities are common physical activity barriers. Facilitators for physical activity include social support, dog walking, and the availability of affordable facilities. Friends and family are frequently identified as key influencers of eating and physical activity behaviour[6].

Efforts to eat healthy foods are often influenced by certain perceived or encountered barriers, such as the cost of healthy food, and lack of nutrition knowledge, information and skills[7, 8]. Culinary traditions, social pressure, habits, lack of availability of healthy foods, general lack of interest in making a change to one's diet[7], financial uncertainty, lack of time, rationing food within families, lack of transportation, lack of adequate kitchen equipment, and lack of social support networks have also been identified as barriers[8]. Other identified barriers to healthy eating are energy-dense, large portion sizes served at family meals and frequency of eating foods away from home, which was perceived as generally unhealthy[6].

A review of studies showed that breakfast skipping is causally linked to obesity and that late lunch (after 15:00) has a negative effect on microbiota diversity and hinders weight loss. Late dinner (within two hours before bedtime) decreases glucose tolerance[9]. According to the American Heart Association, even when considering a wide range of definitions for meals and snacks, irregular patterns of daily total energy intake appear less favourable for the maintenance of body weight and optimal cardiometabolic health. Intentional eating with mindful attention to the timing and frequency of eating occasions could

[1] Budreviciute A, Damiati S, Sabir DK, Onder K, Schuller-Goetzburg P, Plakys G, Katileviciute A, Khoja S and Kodzius R. Management and Prevention Strategies for Non-communicable Diseases (NCDs) and Their Risk Factors. *Front. Public Health.* 2020. 8:574111. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7726193/
[2] 1000 Days Partnership: http://www.thousanddays.org/about/
[3] https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding#:~:text=The%20first%202%20years%20of,and%20fosters%20better%20development%20overall
[4] Chen P & Antonelli M. Conceptual Models of Food Choice: Influential Factors Related to Foods, Individual Differences, and Society. 2020. *Foods*. 2020. 9: 1898. https://www.mdpi.com/2304-8158/9/12/1898
[5] Ross AM & Melzer T.Beliefs as barriers to healthy eating and physical activity. *Australian Journal of Psychology*. 2016. 68(4): 251-260. https://doi.org/10.1111/ajpy.12103
[6] Seguin R, Connor L, Nelson M, LaCroix A & Eldridge G. Understanding Barriers and Facilitators to Healthy Eating and Active Living in Rural Communities. *Journal of Nutrition and Metabolism.* 2014: Article ID 146502, 8 pages http://dx.doi.org/10.1155/2014/146502
[7] Wongprawmas R, Sogari G, Menozzi D and Mora C. Strategies to Promote Healthy Eating Among University students: A Qualitative Study Using the Nominal Group Technique. *Front. Nutr*. 2022. 9:821016. https://www.frontiersin.org/articles/10.3389/fnut.2022.821016/full
[8] Dave, JM, Thompson DI, Svendsen-Sanchez A & Cullen, KW Health Equity 2017, 1.1. http://online.liebertpub.com/doi/10.1089/heq.2016.0009
[9] Lopez-Minguez J, Gómez-Abellán P & Garaulet M. Timing of Breakfast, Lunch, and Dinner. Effects on Obesity and Metabolic Risk. *Nutrients*. 2019. 11: 2624. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6893547/

lead to healthier lifestyle and cardiometabolic risk factor management. Daily breakfast consumption may decrease the risk of adverse effects related to glucose and insulin metabolism and may be helpful in leading to healthy dietary habits throughout the day[10].

Meal planning is associated with a healthier diet and less obesity[11]. Stay-at-home policies and feelings of having more time during COVID-19 seemed to have improved food literacy, i.e., increases in planning, selecting, and preparing healthy foods were found for women and men[12]. The incorporation of activities teaching children how to prepare simple, cost-effective and healthy meals in health promotion programmes could potentially lead to improvement in dietary habits that could be maintained through adulthood[13].

Individual knowledge and parental support have been found to be a positive influence in promoting healthy eating among college students[14]. Meal routines and practices are associated with dietary patterns among young adults, especially home food preparation (i.e. routinely preparing meals at home and preparing meals with vegetables) and meal regularity (i.e. routine consumption of both an evening meal and breakfast).[15] Youth involvement in home meal preparation has been found to be positively associated with improvement in overall dietary quality, increased consumption of fruits and vegetables, greater preference for vegetables, and higher self-efficacy for cooking and choosing healthy foods[16]. In contrast, those factors most strongly associated with poorer dietary patterns included eating on the run, using media while eating (i.e., watching television and/or playing video games) and purchasing food or beverages on campus[16].

In line with increasing evidence emphasising the importance of making healthy food choices for better health and available tools that can enable people to make these choices easier, the theme for the National Nutrition Week 2022 is: ***"Make Healthy Food Choices Easier***".

6. ADDITIONAL USEFUL FACTS

- The WHO and UNICEF recommendation for optimal infant and young child feeding is: Exclusive breastfeeding for the first six months of life; and introduction of nutritionally adequate and safe complementary (solid) foods at six months together with continued breastfeeding up to two years of age or beyond[3]. Along with breastfeeding, complementary feeding contributes to the child's optimal growth and development. Healthy, responsive and opportune complementary feeding is related to the establishment of adequate eating habits, and to protect a child against a high energy intake and consequently against the risk of developing overweight and obesity[3].

- Infants who are breastfed have reduced risks of several diseases including sudden infant death syndrome (SIDS), ear and respiratory infections, and gastro-intestinal illness.

[10] Monica L. Baskin ML, Chiuve SE, Johnson, HM, Kris-Etherton P & Varady, K. Meal Timing and Frequency: Implications for Cardiovascular Disease Prevention A Scientific Statement From the American Heart Association. *Circulation.* 2017. 135:e96–e121. https://pubmed.ncbi.nlm.nih.gov/28137935/

[11] Ducrot P, Méjean C, Aroumougame V, Ibanez2 G, Allès B, Kesse-Guyot E, Hercberg S & Péneau S. Meal planning is associated with food variety, diet quality and body weight status in a large sample of French adults. *International Journal of Behavioral Nutrition and Physical Activity*. 2017. 14(12). https://pubmed.ncbi.nlm.nih.gov/28153017

[12] De Backer C, Teunissen L, Cuykx I, Decorte P, Pabian S, Gerritsen S, Matthys C, Al Sabbah H, Van Royen K and the Corona Cooking Survey Study Group. An Evaluation of the COVID-19 Pandemic and Perceived Social Distancing Policies in Relation to Planning, Selecting, and Preparing Healthy Meals: An Observational Study in 38 Countries Worldwide. *Front. Nutr.* 2020. 7:621726. https://pubmed.ncbi.nlm.nih.gov/33614693/

[13] Chu YL, Farmer A, Fung C, , Kuhle S, Storey KE & Veugelers PJ. Involvement in home meal preparation is associated with food preference and self-efficacy among Canadian children. *Public Health Nutrition*. 2012. 16(1: 108–112. https://pubmed.ncbi.nlm.nih.gov/22578854/

[14] Amore L., Buchthal OV & Banna JC. Identifying perceived barriers and enablers of healthy eating in college students in Hawai'i: a qualitative study using focus groups. *BMC Nutrition*. 2019. (5(16):. https://doi.org/10.1186/s40795-019-0280-0

[15]Melissa N Laska MN, Hearst MO, Lust K, Lytle LA & Story M. How we eat what we eat: identifying meal routines and practices most strongly associated with healthy and unhealthy dietary factors among young adults. *Public Health Nutrition*. 2014. 18(12), 2135–2145. https://pubmed.ncbi.nlm.nih.gov/25439511/

[16] Quelly SB. Helping With Meal Preparation and Children's Dietary Intake: A Literature Review. *The Journal of School Nursing*. 2019. 35(1): 51-60. https://journals.sagepub.com/doi/full/10.1177/1059840518781235

Mothers who breastfeed have a reduced risk for diseases including heart disease, diabetes, and breast cancer[17].

- The health benefits of breastfeeding translate into economic benefits such as lower medical costs to treat illnesses in young children or fewer days away from work to attend to them[18].

- Obesity in later childhood and adolescence is less common among breastfed children[17]. Breastmilk intake is associated with reduced consumption of ultra-processed foods and sugary drinks in the second year of life[19].

- The 2016 SADHS found that 68 per cent of women and 31 per cent of men in the country are overweight or obese. About 20 per cent of women and three per cent of men are severely obese. Approximately 13.3 per cent of children younger than five years are overweight or obese which is more than double the global average of 6.1 per cent [20]. The 2012 SANHANES showed that 14.2 per cent of children aged six to 14 years are overweight or obese[21].

- Leading international experts and professional health organisations recommend increased consumption of plant-based foods, such as vegetables and fruit, legumes, nuts, seeds and whole grains and place emphasis on locally-produced, home-prepared foods. The recommendation is that consumption of meat, processed meat and ultra-processed food that is high in added fat, sugar and salt should be limited and sugary drinks should be avoided[22,23,24,25,26].

[17] Stuebe A. The Risks of not Breastfeeding for Mothers and Infants. *Reviews in Obstetrics & Gynecology.* 2009: 2(4): 222 – 231. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2812877/

[18] Victor O, Prell M, and Cheng X. *The Economic Impacts of Breastfeeding: A Focus on USDA's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),* ERR-261, U.S. Department of Agriculture, Economic Research Service, February 2019. https://www.ers.usda.gov/webdocs/publications/91273/err-261.pdf?v=586

[19] Spaniol AM, da Costa THM, Bortolini GA and Gubert MB. Breastfeeding reduces ultra-processed foods and sweetened beverages consumption among children under two years old. *BMC Public Health.* 2020. 20:330. https://doi.org/10.1186/s12889-020-8405-6

[20] 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

[21] 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-launch%20edition%20(online%20version).pdf

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

[23] 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

[24] International Agency for Research on Cancer (IARC); WHO. 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

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

[26] Hall KD, Ayuketah A & Brychta R et al. Ultra-processed diets cause excess calorie intake and weight gain: An inpatient randomized controlled trial of ad libitum food intake. *Cell Metabolism.* 2019. 30: 1 - 11. https://pubmed.ncbi.nlm.nih.gov/31105044/

- Many pre-packaged foods are processed with high levels of added sugars, sodium, saturated fats, and refined carbohydrates[27,28,29]. These nutrients of concern are connected to an increased occurrence of obesity and chronic nutrition-related diseases[30,31,32,33,34,35].

- A systematic evaluation of dietary consumption patterns across 195 countries showed that the leading dietary risk factors for NCD mortality are diets high in sodium, low in whole grains, low in fruit, low in nuts and seeds, low in vegetables, and low in omega-3 fatty acids; each accounting for more than two per cent of global deaths[36]. Furthermore, physical inactivity is one of the leading risk factors for NCD mortality. People who are insufficiently active have a 20 per cent to 30 per cent increased risk of death compared to people who are sufficiently active[37]. In South Africa, 51 per cent of all premature deaths can be attributed to NCDs[38].

- People who perceive barriers such as 'lack of willpower', 'time constraints' and 'taste preferences' are less likely to report healthier dietary behaviours, especially the consumption of vegetables, fruit, fish, breakfast and home-cooked meals, and are more likely to report eating fast food[39]. Price, a commonly reported perceived barrier to healthy eating patterns, has been found not to be significantly associated with vegetable and fruit consumption[40].

- Adults who spent the least amount of time on food preparation tend to be working adults who place a high priority on convenience. Greater amount of time spent on home food preparation was associated with indicators of higher diet quality, including significantly more frequent intake of vegetables, salads, and fruit. Spending less than 1 hour per day on food preparation was associated with significantly more money spent on food away from home (restaurants, coffee shops, and fast food outlets) and more frequent use of fast food restaurants compared to those who spent more time on food preparation[41].

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

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

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

[30] Anand SS, Hawkes C, de Souza RJ, Mente A, Dehghan M, et al. 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*. 2015. 66: 1590-1614. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4597475/pdf/nihms713301.pdf

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

[32] 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/

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

[34] World Health Organization. 2015. Guideline: Sugar intake for adults and children. https://www.who.int/publications/i/item/9789241549028

[35] World Cancer Research Fund International. 2015. Curbing global sugar consumption: Effective food policy actions to help promote healthy diets and tackle obesity. htt*ps://www.wcrf.org/sites/default/files/Curbing-Global-Sugar-Consumption.pdf

[36] GBD 2017 Diet collaborators. Health effects of dietary risks in 195 countries, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet.* April 3, 2019. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30041-8/fulltext

[37] WHO. Physical activity fact sheet. World Health Organization, Geneva, Switzerland. https://www.who.int/news-room/fact-sheets/detail/physical-activity

[38] World Health Organization. 2018. Noncommunicable Diseases (NCD) Country Profiles, 2018. https://www.who.int/nmh/countries/zaf_en.pdf

[39] Pinho MGM, Mackenbach JD, Charreire H. Oppert JM, Bárdos H, Glonti K· Rutter H, Compernolle S, De Bourdeaudhuij I, Beulens JWJ , Brug J & · Lakerveld J. Exploring the relationship between perceived barriers to healthy eating and dietary behaviours in European adults. *Eur J Nutr*. 2018. 57:1761–1770. https://doi.org/10.1007/s00394-017-1458-3.

[40] Mc Morrow L, Ludbrook A, Macdiarmid JI &Olajide D. Perceived barriers towards healthy eating and their association with fruit and vegetable consumption. *Journal of Public Health.* 2016. 39(2): 330–338. https://pubmed.ncbi.nlm.nih.gov/27222235/

[41] Monsivais P, Aggarwal A, Drewnowski A Background: The amount of time spent on food preparation Time Spent on Home Food Preparation and Indicators of Healthy Eating. *Am J Prev Med* 2014. 47(6):796–802. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4254327/

- The manufacturing and consumption of ultra-processed foods are displacing home cooking and the consumption of unprocessed or minimally processed foods**Error! B ookmark not defined.**,[42]. Eating meals prepared away from home has been linked to reduced consumption of healthy foods such as vegetables, fruit and dairy products, and an increase in body weight, body mass index (BMI), waist circumference, and increased risk of obesity, insulin resistance, diabetes mellitus, and depression[43].

- Snacking prevalence (i.e., occasions of snacking), the energy density of snack foods and their contribution to total daily energy intake are increasing. This shift towards an increase in the frequency of eating meals and snacks away from home and the proportion of the food budget spent on foods away from home food coincided with the increasing prevalence of obesity[44].

- In South Africa, from 1994 to 2012, there has been an overall increase in energy intake, sugar-sweetened beverages (SSBs), processed and packaged foods, animal source foods, and added caloric sweeteners, while the consumption of vegetables decreased. In particular, the consumption of processed and packaged food, such as soft (sugary) drinks, sauces, dressings and condiments, and sweet and savoury snacks had the most drastic increase (>50 per cent). These findings show significant changes in food consumption patterns that may be due to changing food environments[45].

- The 2016 SADHS found that the consumption of poor food and drink choices starts at an early age, with 18 per cent of children aged six to eight months consuming salty snacks and four per cent consuming sugary drinks the day or night before the survey. This increased to 64 per cent and 33 per cent, respectively, of children aged 18 to 23 months. Among respondents 15 years and older, the consumption of sugary drinks (including fruit juice) the day or night before the survey was 35.7 per cent. The average volume consumed was 607.2 ml. Fried foods were consumed at least once per week by 36.5 per cent of respondents. Vegetable and fruit consumption the previous day or night was only 48.8 and 59.9 per cent respectively[20].

- Food choices are driven by the adoption of obesogenic behaviours in the teenage years, including irregular breakfast consumption and fewer family meals, increased snacking and low levels of physical activity[46]. A recent focus group discussion survey in South Africa among young males and females aged 10 - 24 years showed that most participants had a reasonable knowledge of the difference between healthy and unhealthy foods and habits. Common unhealthy dietary habits were skipping meals, constant eating, a lack of exercise, and not following a healthy diet. The most listed unhealthy foods by all the groups were takeaways and “junk foods” and these were described as high in sugar and fats. Regarding drinks, SSBs and alcohol were mentioned with an emphasis on water being best. Participants repeatedly spoke about how good unhealthy foods taste and that they were not able to resist these foods, being addicted to them, and completely loving and needing them. Unhealthy foods were described as readily available and cheap in comparison to healthy foods. The difficulty of food affordability was also associated with adolescent autonomy. Advertising on TV and social media as barriers to eating a healthy meal was raised by many participants[47].

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[42] Tiwari A, Aggarwal A & Tang W. Cooking at Home: A Strategy to comply with U.S. Dietary Guidelines at no extra cost. *Am J Prev Med.* 2017. 52(5):616–624. https://www.ncbi.nlm.nih.gov/pubmed/28256283

[43] Matsumoto M, Saito A, Okada C, Okada E, Tajima R & Takimoto H.. Consumption of meals prepared away from home is associated with inadequacy of dietary fiber, vitamin C and mineral intake among Japanese adults: analysis from the 2015 National Health and Nutrition Survey. *Nutrition Journal*. 2021. 20:40 https://doi.org/10.1186/s12937-021-00693-6

[44] Global Panel. 2018. Improving diets in an era of food market transformation: Challenges and opportunities for engagement between the public and private sectors. Policy Brief No. 11. London, UK: Global Panel on Agriculture and Food Systems for Nutrition. https://glopan.org/sites/default/files/Downloads/GlobalPanelPrivateSectorBrief.pdf

[45] Ronquest-Ross L, Vink N, Sigge GO. Food consumption changes in South Africa since 1994. *South African Journal of Science.* 2015; 111(9/10): 1 – 12. https://www.sajs.co.za/article/view/3761

[46] Wrottesley SV, Pedro TM, Fall CHl & Norris SA. A review of adolescent nutrition in South Africa: transforming adolescent lives through nutrition initiative. *South African Journal of Clinical Nutrition*. 2020. 33:4, 94-132. https://www.tandfonline.com/doi/full/10.1080/16070658.2019.1607481

[47] Steyn NP, Steyn S & Drummond L. Summary Report Baseline Information on Diet and Physical Activity amongst Youths and Adolescents for Non-Communicable Diseases Prevention in South Africa. UNICEF. 2022.

- Regular physical activity has been shown to improve health and may be effective in reducing the occurrence, severity, and duration of respiratory tract infections[48]. Furthermore, physical activity is associated with better health and prevention of the development of disease, and is an important factor that prevents, manages and controls NCDs, including weight gain and obesity[49].

7. COMMUNICATION FOCUS AREAS AND OBJECTIVES

7.1 **Focus area: Improved healthy food choices by household members throughout the life course**

(a) Communication objectives:
- i) To increase caregivers' knowledge, skill, and self-efficacy to enable the caregiver to choose to practice exclusive breastfeeding for the first six months with the introduction of appropriate and safe complementary foods from 6 months while breastfeeding continues up to two years and/or beyond
- ii) To increase household members' self-efficacy to make healthier choices and to plan and prepare healthy and affordable family meals, including complementary foods

7.2 **Focus area: Eating regular meals and healthy snacks**

(a) Communication objectives:
- i) To increase knowledge on the benefits of consuming regular, healthy meals
- ii) To increase self-efficacy to choose or make available healthy and affordable snack and drink alternatives to UPFs and sugary drinks

7.3 **Focus area: Improved consumption of healthy portions**

(a) Communication objectives:
- i) To increase knowledge on choosing correct portion sizes of food

7.4 **Focus area: Improved physical activity engagement by household members**

(a) Communication objectives:
- i) To increase knowledge on the benefits and ease of regular physical activity
- ii) To increase knowledge on the recommended minimum physical activity targets

To increase self-efficacy to engage in regular physical activity

7.1 Focus area 1: improved healthy food choices by household members

7.1.1 Infants and young children:

(a) Key concepts: Exclusive breastfeeding for infants from birth to six months

- Breastmilk contains all the nutrients your baby needs for the first six months of life
- Breastmilk contains enough water to quench your baby's thirst during the first six months of life, even in hot weather.
- Breastmilk contains special properties that keep your baby healthy

[48] Grande AJ, Keogh J, Silva V, Scott AM. Exercise versus no exercise for the occurrence, severity, and duration of acute respiratory infections. *Cochrane Database Syst Rev*. 2020; (4). https://pubmed.ncbi.nlm.nih.gov/32246780/
[49] Reiner M, Niermann C, Jekauc D, Woll A. Long-term health benefits of physical activity–a systematic review of longitudinal studies. *BMC Public Health*. 2013; 13(1):1-9. https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-13-813

- Baby's tummy (intestine/gut) is not yet ready for any other foods, water or other liquids before 6 months
- Babies may get diarrhoea, constipation, infections and allergies if other foods, or other liquids – including water – are given before the baby is six months old.
- Giving other foods before six months will cause you to produce less breastmilk and your baby will not get all the nutrients they need to grow and develop well.
- Breastfeed as often as your baby wants, both day and night.
- Breastfeed your baby at least eight times in 24 hours. The more your baby feeds, the more milk you will produce.
- Almost all mothers will produce enough milk for their baby not to need anything else for the first six months.

Key messages: Infants and young children

Feed smart from the start! Feeding your child the right type of food from birth until two years old lays the foundation for a healthy brain and body.

- **For the first six months of your baby's life, this is breastmilk only.** Do not give porridge, water or any other liquids. Do not give any other home or traditional medicines or remedies. Only give your baby medicines they receive from the clinic or hospital.

- From the age of six months onwards, in addition to breastmilk, your child will need different types of foods. Vegetables and fruit should form part of each meal. Start with small amounts and building up to five small meals each day.

(b) Key concepts: Introduce complementary feeding at six months and continue breastfeeding until two years and beyond

- Introducing solids at the right time, in the correct amounts and of age-appropriate texture is important.
- Start with small amounts: one to two teaspoons, twice a day.
- Build up to five small meals each day
- For each meal:
  - ¼ cup at nine months; and
  - ½ cup by 12 months
- Give a variety (different kinds) of foods (iron-rich foods, starches, vegetables,
- fruits).
- Iron-rich foods for children aged six to 12 months include fortified infant porridge, mashed beans/chickpeas/lentils, softly cooked/shredded chicken livers, grounded mopane worms, minced meat and egg.
- Homemade foods for infants and young children can be healthier and more affordable than store-bought options. It can also be easy to prepare. Healthy foods from family meals are suitable to use for infants and young children.
- As you prepare your family meals, be sure to include soft, mashed dark-green leafy vegetables like spinach or broccoli, and orange-coloured vegetables such as pumpkin or butternut as frequently as possible. Green and orange vegetables are rich in important vitamins and minerals your child needs. Do not add salt and/or sugar.
- Ensure that cooked, soft porridge for small children is of a thicker consistency. If the child is not growing well, add oil, margarine or peanut butter to the porridge.
- Experiment with different food combinations, tastes, textures and methods of encouraging smaller children to eat if they refuse many foods.
- 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.
- Children older than one years old who are not breastfed require full-cream milk instead of fat-free or low-fat milk. The use of follow-on formula after one year of age/growing-up formula/ formula drinks for young children (one to five years) are not necessary as children this age can drink full cream milk (unless the child has a diagnosed lactose intolerance or cow milk allergy).
- Avoid giving young children sweetened and/or flavoured milk or drinking yoghurt.

- Do not give your child Rooibos tea or any other tea, coffee, creamers, condensed milk, flour water, sugar water, and sugary drinks. Do not give your child unhealthy foods like chips, sweets and sugar. These foods and drinks do not contain any nutrients and will not help your child to grow.

Tips: See the Road-to-Health booklet and the booklet: "How to raise a healthy child" for more information and tips

Key messages:

- **Healthy eating is affordable and helps fight diseases such as COVID-19 and chronic illnesses.**
  - Enjoy a variety of whole foods, i.e., unprocessed or minimally processed foods
  - Buy healthy affordable foods
  - Drink lots of clean, safe water instead of sugary drinks
  - Prepare healthy home meals rather than buying ready-to-eat snacks or meals
  - Practice healthy eating habits, e.g. eat lots of vegetables and small portions of other foods. Eat together without distractions (e.g. cellphones or TV)
- **Protect yourself with vegetables and fruit. Eat more vegetables and fruit through every stage of your life**
- **Eating more vegetables and fruit every day can help protect against diseases, such as heart disease, stroke, cancer and diabetes by**:
  - Reducing blood pressure
  - Reducing cholesterol
  - Supporting weight management
  - Supporting blood sugar management

7.1.2 Children older than five years, adolescents, and adults:

- Ultraprocessed foods and sugary drinks can be high in energy, salt, sugar and fat. This can lead to obesity, diabetes, high blood pressure, heart disease and certain cancers. This can weaken your body against COVID-19 and other diseases.
- Planning, preparing and enjoying healthy home-made meals and snacks is associated with better health. It can prevent overeating at meals or snacking on unhealthy foods which eventually lead can to weight gain.
- Eating healthy home-prepared meals and snacks has many other benefits:
  - It enables one to eat a variety of healthy foods.
  - It enables one to use healthy ingredients and to be able to control what and how much of each ingredient goes into a meal. Many commercially prepared foods and snacks are high in saturated fat, salt, and/or sugar.
  - Knowing what the home-cooked meal contains can help one to prevent food allergies and sensitivities.
  - It helps to avoid being tempted by unhealthy food options in restaurants/canteens/fast food outlets.
  - It helps to save money when planning and preparing breakfast or lunch rather than eating at a restaurant or buying processed foods such as unhealthy snacks and ready-to-eat meals.
  - If meals are planned in advance and pre-prepared, it can help to save time when cooking at home.
  - It makes it easier to exercise portion control and avoid overeating. Many restaurants and fast-food outlets offer portions that are much larger than necessary.
  - Home-prepared meals can also benefit the environment by saving money and reducing the carbon footprint by cutting down on the packaging of processed meals.
  - Sharing the joy of preparing homemade meals can bring people together and gives the entire family the opportunity to talk about their day and to preserve cultural knowledge and history, as recipes are passed on from generation to generation.

7.1.3 Implementation tips from registered nutrition professionals (dietitians/nutritionists) for use by supporting staff/media/public:

(a) Tips to plan and prepare quick, healthy and affordable home meals:

- Practise forward planning - leaving you healthier and financially stable. Plan the amount of money you have available for food and draw up a budget for food. Have an amount in mind and do your best to stick to it. Look at past receipts as a starting point.
- Always draw up a menu plan and a shopping list. Create a menu plan for the week ahead for breakfast, lunch and dinner. Be realistic. If you only have 20 minutes to prepare a meal, then do not choose a complicated recipe.
- Use the guidelines for healthy eating and the food guide when planning meals that are mostly plant-based, i.e., vegetables, fruit, legumes and preferably minimally processed starchy foods. Choose a variety of foods that are affordable and in season.
- Consider meat-free days during the week. Dry beans, peas, lentils and soya can be used in many dishes, such as salads, soups and stews. They are high in protein and can also be added as a meat extender to “stretch” the quantity of the dish.
- Include fatty fish such as canned pilchards and sardines as an affordable option of protein and good fats.
- Try to eat a variety of vegetables and fruit in different colours if possible.
- If you have the capacity, double the amounts when preparing regularly eaten foods such as brown rice or dry beans/peas/lentils. You can also do the same with your favourite family recipes so that these leftovers can be eaten on the other days of the week or can be frozen or thawed when needed.
- Plan to use leftovers for a few breakfasts, lunches or dinners throughout the week to reduce time spent cooking.
- Be mindful about the amount of fat/oil, sugar and/or salt that is added in food preparation and use these items sparingly as far as possible. Use fresh/dried herbs and spices (not spice salts) to flavour dishes. Use cooking methods such as boiling, steaming, grilling and baking instead of frying. Avoid overcooking vegetables!
- During cooking, assess if an ingredient in a recipe can be fully or partially substituted with another more economical ingredient.
- Cook with the right size pot: Try to use a pot or pan that is the same size as the stove plate or gas hob, to prevent wasting electricity or gas.
- Cook with a lid on: When making a stew or soup, keep the lid on. This way the food cooks faster and less electricity is used.
- Think about your cooking options: Use the stove top or microwave instead of the oven to save electricity. Hay or wonder boxes are very effective for slow-cooking beans, lentils, rice or stews as they do not use electricity.
- Practice portion control when dishing up meals or packing food boxes for school or work.
- Adhering to the correct portion sizes will result in non-perishable foods lasting longer**.**
- Involving children in food preparation (maybe by asking them to read the recipe out loud or mix ingredients) is not only a fun thing to do but also a great way to teach them healthy eating habits.

- Make mealtime a time of sharing and being together as a family – try to eat at least one meal per day together, preferably at the table. 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.

(b) Budget tips when buying groceries:

- Plan when you will go shopping – if you shop when you are hungry, you may buy unnecessary and unhealthy food.
- Always use a shopping list as a reminder to choose healthy foods and to stick to the food budget.
- Dry beans, peas, lentils and soya are more affordable and are not subjected to VAT.
- Buy locally produced foods and look out for specials: look for discounts, coupons, and sales, especially on store brands, which usually cost less.
- Compare unit prices (rand per gram/kilogram) listed on price tags to find the cheaper brand.
- Buy in bulk, if possible, as single-size items are often more expensive than buying in bulk. Dry products and frozen foods keep well for a longer period and can be bought in bulk.
- Check the use by date / best before date/expiry date and quality of food you buy, especially when it is on sale.

Many people think that eating healthy is expensive, but it doesn't have to be.

Here a few healthy options that you can buy for the same price (or even less) as the unhealthy option

- two slices of brown bread with a boiled egg and sliced tomato versus one Kota (egg, polony, chips, achaar) or a Bunny chow or a hamburger
- one cup (250 ml) homemade popcorn versus a small packet of crisps (36 g)
- one litre milk or maas versus two litre fizzy drink
- one piece of grilled chicken and vegetables or salad versus two pieces of deep-fried crumbed chicken and a portion of chips
- one bag of apples versus one slab of chocolate (150g)

(c) Do you think your budget won't allow you to eat more vegetables and fruit? Try these tips:

- Vegetables and fruit that are in season are usually much more affordable to buy. Find out what types of vegetables and fruit grow well in your area.
- To prevent food spoiling and wasting money, you can buy vegetables and fruit that stay fresh for longer such as butternut, carrots, cabbage, beetroot, onions, apples and oranges.
- Buy fruit and vegetables in bulk especially when they are on special. You can cut them up and freeze them to use later. They are also VAT zero rated.
- If a freezer is available, consider frozen vegetables as an affordable option.
- Make vegetable soup or stew with vegetables before they spoil to prevent food waste.
- Certain vegetables such as spinach, carrots, tomatoes and green beans are relatively easy to grow. Homegrown vegetables can be much cheaper than store-bought vegetables.

7.1.4 Resources/examples/toolkits:

- Infographic: *"Make healthy feeding choices for your baby"* *https://drive.google.com/drive/folders/1PEb8G8D9pXUVyeRbwfkvBTEUSgKOeQGA?usp=sharing*
- Infographic: "*Feed smart from the start*" *https://drive.google.com/drive/folders/1MrvGufxPwljQzeAbezy-Wvi4ChY1A79K?usp=sharing*
- Road-to-Health Book /Side-by-Side*: "The Caregiver Message Book: How to Raise a Healthy and Happy Child"* *https://drive.google.com/drive/folders/1OIxhSQgeK6VZkj9blcG2B0p25MwUhQo7?usp=sharing*

Supporting Breastfeeding in the Workplace. A Guide for Employers and Employees. https://drive.google.com/drive/folders/1OIxhSQqeK6VZkj9blcG2B0p25MwUhQo7?usp=sharing

- Infographic*: "Healthy eating does not have to be expensive and time-consuming"* https://drive.google.com/drive/folders/1PEb8G8D9pXUVyeRbwfkvBTEUSgKOeQGA?usp=sharing

7.2 Focus area 2: eating regular meals and healthy snacks

7.2.1 Regular meals

7.2.1.1 Key concepts

- Setting and keeping to a plan of regular, healthy meals helps people to stay healthy, maintain a healthy weight and prevent hunger. It helps to prevent overeating at meals or snacking on unhealthy foods during the day which can lead to the development of obesity, diabetes and heart disease.
- The goal is to eat at least every four to five hours during the day in order to re-energise one's body and keep blood sugar levels consistent and for optimal digestion of food.
- Skipping meals can lead to feelings of hunger and low blood sugar (like dizziness, shaking or loss of concentration).
- Eating regularly means that if one chooses to eat three meals per day, that this is done most days of the week.

(a) Breakfast

- Breakfast especially is an important meal.
- Breakfast is the first meal of the day that breaks the fast after the longest period of sleep and is consumed within two to three hours of waking. It consists of food from at least one food group and precludes consumption of a beverage only. Breakfast may be consumed at any location, such as home, school, work, a restaurant or while travelling. This also means that breakfast food does not have to be eaten all at once, but can be spread within the two to three hours after waking.
- Eat a healthy breakfast regularly, on most days of the week.
- People who skip breakfast are more likely to consume unhealthy foods and beverages and tend to overeat throughout the day.
- Eating breakfast has many health benefits:
  - Forms part of a healthy lifestyle – people who eat breakfast regularly tend to be more active and follow a healthier lifestyle
  - Can provide important nutrients such as fibre, vitamins and minerals
  - Contributes to healthy eating choices throughout the day
  - Helps to achieve and maintain a healthy body weight
  - Helps to prevent type 2 diabetes, heart disease and high blood pressure
  - Improves alertness, mood, academic performance and learning behaviour

(b) Lunch

- Eating lunch - about three to four hours after breakfast raises your blood sugar level in the middle of the day, which gives you the energy you need for the rest of the day.
- If a person is feeling sluggish, eating even a small lunch can renew energy and help one feel refreshed and ready to take on the next several hours.
- Eating lunch also enables one to focus and concentrate during the rest of the afternoon.
- If one's schedule changes for some reason, it helps to have a healthy snack on hand for times when lunch needs to wait.

(c) Dinner / Supper

- Many people tend to overeat at dinner because they have not eaten enough throughout the day.
- Make sure there is no more than a four- to five-hour window between lunch and dinner. Some people will need to eat a snack between lunch and dinner because eating dinner at 4 or 5 pm is not always realistic.

(d) Create a healthy plate for meals

- There are many ways to spread the intake of recommended amounts of food from all the food groups during the day. Most of the meal should consist of unprocessed or minimally processed plant-based foods, for instance: vegetables and/or fruit, legumes and where possible minimally processed starchy foods. The foods should be low in sugar, salt and fat.

- When having meals, aim for*:*
  - Half a plate of vegetables and/or salad
  - A quarter plate of skinless chicken, baked or grilled fish, lean meat, eggs, cooked dry beans, split peas or lentils. Low-fat milk, maas or unsweetened low-fat yoghurt or low-fat cheese, can be included as an option for breakfast or lunch.
  - A quarter plate of starchy food such as rice, samp, pap, potatoes, sweet potatoes or brown bread.

- Aim to include more vegetables and fruit in meals every day, for example:

  - Add cut fruit to cereal or low-fat, unsweetened yoghurt.
  - Add chopped-up vegetables, such as onions, tomatoes and spinach to eggs or to potatoes.
  - Put vegetables in sandwiches, such as cucumber, tomato and lettuce (see examples of fillings below)
  - Replace starchy foods with vegetables, such as mashed gem squash or cauliflower.
  - Add cabbage and/or spinach or pumpkin to pap.

- The portions of the different food in a breakfast/lunch plate/box should be similar to the portions for a healthy plate. See 7.3.2 (a) for the guide for estimating portion size.

7.2.1.2 Implementation tips from registered nutrition professionals (dietitians/ nutritionists) for use by supporting staff/media/public:

(a) Examples of healthy breakfast or lunch options

The following table show options that can be included for breakfast or lunch. The food options in the far left column can be combined with any of the options in the next columns. Examples include:

- Freshly cooked or leftover maize meal porridge, with left-over vegetables or with low-fat milk or maas
- oats/mabele/maize meal porridge with milk
- brown bread sandwich with peanut butter/pilchards/baked beans/boiled egg
- unsweetened, low-fat yoghurt with sliced fruit

Table 1: Examples of a healthy breakfast or lunch

Examples of minimum food for breakfast or lunch	Low-fat milk or unsweetened low-fat yoghurt or maas	Fruit	Boiled egg/ Omelette	Fish, /chicken/ lean meat	Vegetables	Dry beans/ peas/lentils	Peanut butter	Low fat cottage cheese/ mozzarella	Soft margarine
Maize meal / Mabele porridge	☺	☺	☺	☺	☺	☺	☺		
Oats porridge	☺	☺					☺		
Muesli (low in sugar)*	☺	☺							
High-fibre cereal (low in sugar)*	☺	☺							
Brown bread	☺	☺	☺	☺	☺	☺	☺	☺	☺
Omelette/scrambled or boiled egg	☺	☺						☺	☺
Home-made smoothie (low in sugar)	☺	☺			☺		☺		
*Breakfast options									

- A packed breakfast or lunch made at home can be healthy and tasty and allows you to choose the foods and ingredients. If lunch is eaten in a restaurant or canteen, then it should consist of healthy food options.
- Examples of a grab-and-go or a 'packed' breakfast or packed lunch by using the options given in **Table 1**:
    - a piece of fruit to go and a packed brown bread sandwich with peanut butter (do not add butter/margarine *and* peanut butter and where possible, to make use of peanut butter with no added salt/sugar)
    - lightly blended smoothie made the night before from low-fat milk, unsweetened low-fat yoghurt/maas and fruit or vegetables
    - leftover rice mixed with unsweetened low-fat yoghurt, dried fruit and nuts. Sprinkle with cinnamon
    - Overnight oats (Add a mix of your favourite fruit and nuts to oats and yoghurt and milk and leave to soak overnight)

- Examples of fillings for sandwiches for breakfast or lunch:
    - left-over meat and/or vegetables from the night before. For instance, combine left-over chicken with avocado or sweetcorn or with low-fat yoghurt and mango chutney (be wary of sugar and salt content in chutneys) or with low-fat mayonnaise, tomato and lettuce
    - tuna with low-fat mayonnaise and sweetcorn, spring onion, red onion, or cucumber or with lettuce and tomato or with sweetcorn, bell pepper, tomato and lettuce
    - grated mozzarella or reduced-fat cheese with left-over coleslaw, onion or tomato, or tomato and lettuce
    - low-fat cottage cheese with grated carrot, pineapple or apples
    - boiled egg and low-fat mayonnaise with lettuce or a curried egg with carrot and lettuce
    - avocado and banana
    - hummus and grated carrot or with roasted peppers
    - peanut butter on its own or with apple or raisins

- The examples given in **Table 1** apply to infants and young children from the age of six months except for nuts/trail mix. Foods that cause choking should be avoided. Ensure that cooked, soft porridge for small children is of a thicker consistency and is enriched with oil, margarine or peanut butter.

(b) Tips to pack a hygienic breakfast/lunch box:

- Follow hygienic food preparation methods. This is especially important when food will be stored for many hours before being eaten. Remember the 5 keys to safer food (*See infographic – Five keys to safer food)*:
    - keep clean;
    - separate raw and cooked;
    - cook thoroughly;
    - keep food at safe temperatures; and
    - use safe water and raw materials
- Prepare the breakfast/lunches the night before and store them in the fridge so they can be safely consumed the next day.
- In summer, freeze water bottles overnight to have ice-cold water throughout the day. This also can help to keep a breakfast/lunch box cool.
- Bring a cooler or store food or snacks in the refrigerator at work.

7.2.2 Healthy snacks

7.2.2.1 Key concepts:

(a) Most healthy eating plans allow for one or two small snacks a day.
(b) Ultra-processed snacks are often high in sugar, salt and fat. Limit foods such as sweets, chocolates, crisps, biscuits and sugary drinks.

7.2.2.2 Implementation tips from registered nutrition professionals (dietitians/nutritionists) for use by supporting staff/media/public:

- Choose fresh or frozen vegetables and fruit as snacks, for example:
  - a medium-sized apple cut into pieces and dipped in peanut butter and yoghurt (two teaspoons of peanut butter and ¾ cup of low-fat, unsweetened yoghurt)
  - a medium-sized banana
  - one cup steamed or raw green beans
  - one cup blueberries
  - one cup grapes
  - one cup carrots, broccoli, celery sticks, or bell peppers (or combinations of any of these) with two tablespoons hummus, low-fat yoghurt or low-fat cottage cheese
  - Boiled or roasted mielie (corn on the cob)

- Keep a container of chopped vegetables, like cucumber, carrots, celery sticks or a bowl of cherry tomatoes in the fridge or several ready-to-eat washed whole fruits in a bowl on the counter. These are often also more affordable than soft drinks, chips and sweets.

- Mash banana for babies between six and eight months. For babies aged nine to 13 months, offer pieces of soft fruit like paw-paw or mango. For toddlers and older children, you can give naartjie segments or pieces of cooked carrot as easy and affordable snacks.

- Offer older children frozen baby peas but note that these can be a choking hazard for younger children.

- Other healthy snack options for older children, adults and adolescents include:
  - Unflavoured and low-salt popcorn
  - Unsalted or low-salt pretzels
  - Low-salt wholewheat crackers
  - Unsalted nut trail mix
  - Low-salt or unsalted nuts
  - Unflavoured, low-fat / fat-free yoghurt or low-fat maas
  - Unsalted mopani worms
  - Biltong (ostrich or game)

7.2.3 Choose water rather than sugary drinks

7.2.3.1 Key concepts:

- Tap water is much cheaper than any other drink.
- Water has no sugar or kilojoules.
- Drinking water helps you maintain a healthy weight.
- Drinking water may help prevent headaches, fatigue and irritability. Water is the ideal drink to help meet the body's fluid needs. If water that was lost from the body is not replaced, signs of dehydration will be evident. Fatigue, irritability, increased thirst, dry mouth, dry skin, dizziness and headaches are some of the symptoms of dehydration. It is therefore important to drink clean, safe water to replace these losses.
- Drinking lots of water during the day will help with digestion and prevent constipation.
- Drinking sugary drinks contribute to weight gain due to their high added sugar content, low satiety and potential incomplete compensation for total energy leading to increased energy

intake. In addition, because of their high amounts of sugar and large quantities consumed, sugary drinks may increase the risk of developing diabetes and cardiovascular disease.

- Sugary drinks include sugary fizzy drinks, fruit juices, sports drinks, sweetened milk or yoghurt-based drinks, sweetened iced teas, sweetened flavoured drinks (e.g., flavoured water) and energy drinks. They provide empty kilojoules and can contribute to weight gain. Furthermore, energy drinks contain large amounts of caffeine and other stimulants which may lead to dehydration, heart complications, such as irregular heartbeat and heart failure, anxiety (feeling nervous and jittery) and insomnia (unable to sleep).

7.2.3.2 Implementation tips from registered nutrition professionals (dietitians/nutritionists) for use by supporting staff/media/public:

Tips for caregivers of children six months to five years of age:

- From the age of six months, give your baby clean, safe-to-drink water from a cup during the day. Boil the water and cool before you give it to your child. Do not give your child Rooibos tea or any other tea, coffee, creamers, condensed milk, flour water, sugar water, and cold drinks. These foods and drinks do not contain any nutrients and will not help your child to grow.
- Offer food first and then liquids as liquids fill the tummy and the child tends not to eat adequate quantities of food for optimal growth.

(a) Tips for older children, adolescents and adults:

- Make water the drink of choice. Choose a glass of water rather than having a sugary drink.
- Start your day with a glass of water.
- Increase your daily water intake when the weather is hot.
- Keep a reusable water bottle with you and make sure to refill it regularly. This will also help one to sip on water instead of sugary drinks and will also provide a visual reminder to drink more water.
- Take a bottle of clean, safe water to school or work.
- Try setting reminders using your cell phone or notes at your desk to drink water regularly.
- There are no health benefits to drinking more water than what is needed; when excess water is consumed it will be excreted as urine.
- Make it a habit to drink water with meals instead of sugary drinks.
- Add fresh slices of lemon, cucumber or lime, mint leaves or pieces of fresh fruit or berries to your water or unsweetened rooibos or herbal teas. Prepare flavoured water in advance and refrigerate and /or add ice.
- Drink one to two glasses of water 30 minutes before exercising and sip water for a few hours afterwards.
- Put the number of water bottles you would like to drink the next day in the refrigerator.
- Drink a glass of water before and / or after brushing your teeth.
- If you do not have access to clean, safe water, purify water by boiling it for three minutes or by adding one teaspoon of bleach to 25 litres of water and leaving it to stand for two hours before using.
- Store drinking and cooking water in separate clean containers.
- Save water! Clean, safe water is a scarce resource.

7.2.3.3 Resources/examples/toolkits:

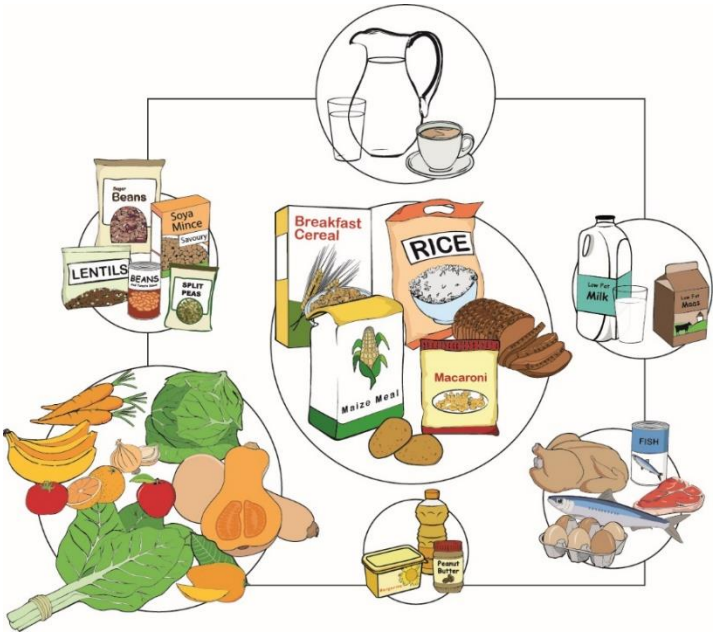
- Infographic: "*Easy ways to make healthier choices for breakfast and lunch"* *https://drive.google.com/drive/folders/1PEb8G8D9pXUVyeRbwfkvBTEUSgKOeQGA?usp=sharing*

- Infographic: *"In need of a healthy snack between meals?* *https://drive.google.com/drive/folders/1PEb8G8D9pXUVyeRbwfkvBTEUSgKOeQGA?usp=sharing*
- Infographic: *"Create a healthy plate"* https://drive.google.com/drive/folders/1MrvGufxPwljQzeAbezy-Wvi4ChY1A79K?usp=sharing
- Infographic: "*Helping hand for health"* *https://drive.google.com/drive/folders/1MrvGufxPwljQzeAbezy-Wvi4ChY1A79K?usp=sharing*
- Infographic: *"Five keys to safer food"* *https://drive.google.com/drive/folders/1OIxhSQqeK6VZkj9blcG2B0p25MwUhQo7?usp=sharing*
- Infographic: *"Rethink your drink – choose water!"* *https://drive.google.com/drive/folders/1OIxhSQqeK6VZkj9blcG2B0p25MwUhQo7?usp=sharing*
- *National Guide for Healthy Meal Provisioning in the Workplace* *https://drive.google.com/drive/folders/1OIxhSQqeK6VZkj9blcG2B0p25MwUhQo7?usp=sharing*

7.3 Improved consumption of healthy portions

7.3.1 Key concepts

- Eating too much food causes weight gain. This can occur because the portion size of foods is too big compared to the amount of food that a person needs. This is called portion distortion.
- The food groups illustrated in the South African Guidelines for Healthy Eating's Food Guide are illustrated in different sized circles to remind a person that plenty of foods should be eaten from some groups (depicted as larger circles), while others, should be eaten sparingly (depicted in smaller circles).
- The food guide illustrates foods that are the best choices for most days. Most of what is eaten should include 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. Sugar, salt and food and drinks high in sugar or salt are not essential to a healthy eating plan and are therefore not illustrated in the Food Guide.



- Many people do not eat the correct amount of food from each of the food groups and may take in too much energy from food which may lead to weight gain. For instance, some people do not eat enough vegetables and then eat too much starchy food or meat.
- A portion is the amount of food that a person eats of one food at one time. The recommended number of portions of food from each food group varies according to a person's age, gender, size, health and activity levels.
- Some terms are controlled by law, such as serving and daily serving (in the food labelling regulations). A serving is the amount a manufacturer defines for use on the 'per serving' column of a nutritional label and should not be interpreted as a portion, as this information is not controlled by law. The serving size can be distorted by the manufacturer as a way to market the food.

7.3.2 Implementation tips from registered nutrition professionals (dietitians/nutritionists) for use by supporting staff/media/public:

(a) Use your hand to estimate how much food to eat for meals and snacks

- A clenched fist (one cup): Whole fruit, one medium or two smaller pieces, for instance, plums, apricots or fig
- The palm of your hand (90g cooked): Skinless chicken, baked or grilled fish or lean meat
- Two cupped hands (one cup): Cooked or raw vegetables, grapes or berries, cooked dry beans, split peas or lentils
- A small handful (¼ cup): Raisins, other dried fruit (two to three pieces), nuts
- A cupped hand (½ cup): Starchy foods such as cooked pap, samp, rice, potato, sweet potato and pasta;
- A clenched fist (30g) for ready-to-eat high bran cereals.
- Size of a hand: one slice of bread
- A thumb (one tablespoon = three teaspoons): Hard cheese or peanut butter
- one cup: Low-fat milk, maas or low-fat, unsweetened yoghurt
- A tip of the thumb (one teaspoon): All oils, margarine or mayonnaise

Aim for at least three portions of vegetables and two portions of fruit every day!

(b) The following tips may help to control oversized portions:

- Use smaller plates, bowls, and serving utensils. Plates with a darker-coloured rim can also help since one will tend to only serve food on the lighter-coloured portion of the plate.
- Use a smaller glass to limit the amount of drinks consumed at a time.
- Avoid being tempted by second and third helpings. Serve the correct portion amounts on individual plates, instead of putting serving dishes on the table. Keeping excess food out of reach may discourage unintentional overeating.
- Be aware that your body may only experience feeling "full" sometime after eating your meal. Eat slowly, and pay attention to your body's internal cues to avoid overeating.
- Stick to regular meal and snack times.
- Many restaurants serve more food than is appropriate for one person. Control the amount eaten by sharing a meal with a friend or asking the waiter to put half the meal in a "doggie bag" or "take away container", before it is brought to the table. Alternatively order a salad and a starter as the main meal.
- Snack foods that are bought in bulk, should be portioned into individual-size bags**.** Store large containers out of sight in a storage closet.
- When eating or snacking in front of the TV, put a small amount in a bowl or container and leave the rest stored away.
- Keeping healthier foods within easy reach means you'll eat more of those foods**.** Place fruit in a bowl on the counter and serve cut vegetables as the family arrives home from school or work.

7.3.3 Resources/examples/toolkits:

- Infographic: "*Helping hand for health"* *https://drive.google.com/drive/folders/1MrvGufxPwljQzeAbezy-Wvi4ChY1A79K?usp=sharing*

7.4 Improved physical activity engagement by household members

7.4.1 Key concepts:

- Regular physical activity, such as walking, cycling, wheeling, doing sports or active recreation, provides significant benefits for health, for instance it:
    - Reduces your risk of cardiovascular disease, type 2 diabetes and metabolic syndrome by:
        - Lowering your blood pressure by 4-9 mmHg which is almost as much as some antihypertensive medications
        - Lowering cholesterol levels and improving 'good' cholesterol levels
        - Lowering blood sugar
        - Improving blood circulation
    - Exercises your heart, keeping it strong.
    - Reduces your risk of some cancers.
    - Helps to control your weight, if you follow a healthy energy-restricted diet, by decreasing body fat, increasing muscle mass and increasing metabolic rate.
    - Strengthens your bones and muscles.
    - Improves your mental health and mood as it relieves stress, tension, anger and depression as a result of 'feel good' hormones being released during physical activity.
    - Improves your ability to fall asleep quickly and sleep well.
    - Improves mental acuity and wellness since physical activity increases blood flow and hence oxygen to the brain.
    - Delays or prevents chronic diseases associated with ageing, improves your ability to do daily activities and prevents falls, especially if you are an older adult.
    - Smokers who exercise are twice as successful in their attempts to quit.
    - Increases your longevity. When you are physically inactive, your body slowly loses strength, stamina and ability to function optimally.
- Some physical activity is better than doing nothing. By becoming more active throughout the day in relatively simple ways, people can easily achieve the recommended activity levels.

7.4.2 Implementation tips:

Be Active! The following tips may help to be physically more active

- Engage in any form of physical activity for 30 minutes daily
- Start slowly and set realistic goals to work towards
- Engage in community physical activities to encourage participation by others
- Choose a form of physical activity that should be enjoyable, for instance:
    - Brisk walking
    - Walking up the stairs instead of taking a lift
    - If you use a car, park the car far away from the shopping/mall entrance
    - Take opportunities to stand more, e.g., when speaking on the phone
    - Taking a walk during lunch breaks
    - Playing active games with family and/or friends
    - Dancing, cycling, swimming and skipping

7.4.3 Resources/examples/toolkits:

WHO guidelines on physical activity and sedentary behaviour[50]
https://drive.google.com/drive/folders/1OIxhSQgeK6VZkj9blcG2B0p25MwUhQo7?usp=sharing

8. NNW 2022 COLLABORATORS

- National and provincial Departments of Health
- Department of Basic Education
- Department of Social Development
- South African Military Health Services (SAMHS)
- Grow Great Campaign
- United Nations Children Fund (UNICEF)
- World Health Organisation (WHO)
- The Association for Dietetics in South Africa (ADSA)
- The Nutrition Society of South Africa (NSSA)
- The Heart and Stroke Foundation SA (HSFSA)
- Healthy Living Alliance (HEALA)
- School of Public Health, University of Witwatersrand

9. WEBSITES FOR MORE INFORMATION ABOUT NNW 2022

- National Nutrition Week: www.nutritionweek.co.za
- The national Department of Health: www.health.gov.za
- The Association for Dietetics in South Africa (ADSA): www.adsa.org.za
- Grow Great Campaign: www.growgreat.co.za
- United Nations Children's Fund (UNICEF): www.unicef.org/southafrica/
- The Nutrition Society of South Africa: www.nutritionsociety.co.za
- The Heart and Stroke Foundation SA: www.heartfoundation.co.za

10. HASHTAGS FOR NNW 2022

#NNW2022_ZA
#NationaNutritionWeek2022_ZA
#HealthyFoodChoices
#HealthyBreakfast
#HealthyLunch
#HealthySnacks
#InfantFeeding
#EasierHealthyFoodChoices

[50] WHO guidelines on physical activity and sedentary behaviour. Geneva: World Health Organization; 2020. https://www.who.int/publications/i/item/9789240015128