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Skip to main content Skip to main content Nutrition is a critical part of health and development. Better nutrition is related to improved infant, child and maternal health, stronger immune systems, safer pregnancy and childbirth, lower risk of non-communicable diseases (such as diabetes and cardiovascular disease), and longevity. Healthy children learn better. People with adequate nutrition are more productive and can create opportunities to gradually break the cycles of poverty and hunger. Malnutrition, in every form, presents significant threats to human health. Today the world faces a double burden of malnutrition that includes both undernutrition and overweight, especially in low- and middle-income countries. Please send us your comment or question by e-mail. Skip to main content In order to achieve a world free of all forms of malnutrition, WHO supports Member States to ensure universal access to effective nutrition actions and to healthy and sustainable diets. To do this, WHO develops evidence-informed guidelines on the appropriate actions Member States and partners should take to improve nutrition in individuals and populations. Guidelines contain the latest scientific evidence for clinical practice or public health policies and programmes, such as information about the amounts of salt and sugars people should eat, as well as recommendations on infant feeding and iron supplementation, among others. WHO guidelines offer a choice among different interventions or measures that physicians, public health professionals and Member States can make to have an anticipated positive impact on health and nutrition. Each guideline goes through an independent, transparent, evidence-informed, consensual decision-making process. WHO prioritizes the development of new guidelines on an ongoing basis and tracks the process through our nutrition guideline development and process tracking tool. New guidelines can take anywhere from 6 months to 5 years to produce. All guidelines currently in development, as well as those published within the past 12 months are listed in the tool. Skip to main content A healthy diet helps to protect against malnutrition in all its forms, as well as noncommunicable diseases (NCDs), including diabetes, heart disease, stroke and cancer. Unhealthy diet and lack of physical activity are leading global risks to health. Healthy dietary practices start early in life breastfeeding fosters healthy growth and improves cognitive development, and may have longer term health benefits such as reducing the risk of becoming overweight or obese and developing NCDs later in life. Energy intake (calories) should be in balance with energy expenditure. To avoid unhealthy weight gain, total fat should not exceed 30% of total energy intake (1, 2, 3). Intake of saturated fats should be less than 10% of total energy intake, and intake of trans-fats less than 1% of total energy intake, with a shift in fat consumption away from saturated fats and trans-fats to unsaturated fats (3), and towards the goal of eliminating industrially-produced trans-fats (4, 5, 6). Limiting intake of free sugars to less than 10% of total energy intake (2, 7) is part of a healthy diet. A further reduction to less than 5% of total energy intake is suggested for additional health benefits (7). Keeping salt intake to less than 5 g per day (equivalent to sodium intake of less than 2 g per day) helps to prevent hypertension, and reduces the risk of heart disease and stroke in the adult population (8). WHO Member States have agreed to reduce the global populations intake of salt by 30% by 2025; they have also agreed to halt the rise in diabetes and obesity in adults and adolescents as well as in childhood overweight by 2025 (9, 10). Overview Consuming a healthy diet throughout the life-course helps to prevent malnutrition in all its forms as well as a range of noncommunicable diseases (NCDs) and conditions. However, increased production of processed foods, rapid urbanization and changing lifestyles have led to a shift in dietary patterns. People are now consuming more foods high in energy, fats, free sugars and salt/sodium, and many people do not eat enough fruit, vegetables and other dietary fibre such as whole grains. The exact make-up of a diversified, balanced and healthy diet will vary depending on individual characteristics (e.g. age, gender, lifestyle and degree of physical activity), cultural context, locally available foods and dietary customs. However, the basic principles of what constitutes a healthy diet remain the same. For adults A healthy diet includes the following: Fruit, vegetables, legumes (e.g. lentils and beans), nuts and whole grains (e.g. unprocessed maize, millet, oats, wheat and brown rice). At least 400g (i.e. five portions) of fruit and vegetables per day (2), excluding potatoes, sweet potatoes, cassava and other starchy roots. Less than 10% of total energy intake from free sugars (2, 7), which is equivalent to 50g (or about 12 level teaspoons) for a person of healthy body weight consuming about 2000 calories per day, but ideally is less than 5% of total energy intake for additional health benefits (7). Free sugars are all sugars added to foods or drinks by the manufacturer, cook or consumer, as well as sugars naturally present in honey, syrups, fruit juices and fruit juice concentrates. Less than 30% of total energy intake from fats (1, 2, 3). Unsaturated fats (found in fish, avocado and nuts, and in sunflower, soybean, canola and olive oils) are preferable to saturated fats (found in fatty meat, butter, palm and coconut oil, cream, cheese, ghee and lard) and trans-fats of all kinds, including both industrially-produced trans-fats (found in baked and fried foods, and pre-packaged snacks and foods, such as frozen pizza, pies, cookies, biscuits, wafers, and cooking oils and spreads) and ruminant trans-fats (found in meat and dairy foods from ruminant animals, such as cows, sheep, goats and camels). It is suggested that the intake of saturated fats be reduced to less than 10% of total energy intake and trans-fats to less than 1% of total energy intake (5). In particular, industrially-produced trans-fats are not part of a healthy diet and should be avoided (4, 6). Less than 5 g of salt (equivalent to about one teaspoon) per day (8). Salt should be iodized. For infants and young children In the first 2 years of a child's life, optimal nutrition fosters healthy growth and improves cognitive development. It also reduces the risk of becoming overweight or obese and developing NCDs later in life. Advice on a healthy diet for infants and children is similar to that for adults, but the following elements are also important: Infants should be breastfed exclusively during the first 6 months of life. Infants should be breastfed continuously until 2 years of age and beyond. From 6 months of age, breast milk should be complemented with a variety of adequate, safe and nutrient-dense foods. Salt and sugars should not be added to complementary foods. Practical advice on maintaining a healthy diet Fruit and vegetables Eating at least 400g, or five portions, of fruit and vegetables per day reduces the risk of NCDs (2) and helps to ensure an adequate daily intake of dietary fibre. Fruit and vegetable intake can be improved by: always including vegetables in meals; eating fresh fruit and raw vegetables as snacks; eating fresh fruit and vegetables that are in season; and eating a variety of fruit and vegetables. Fats Reducing the amount of total fat intake to less than 30% of total energy intake helps to prevent unhealthy weight gain in the adult population (1, 2, 3). Also, the risk of developing NCDs is lowered by: reducing saturated fats to less than 10% of total energy intake; reducing trans-fats to less than 1% of total energy intake; and replacing both saturated fats and trans-fats with unsaturated fats (2, 3) in particular, with polyunsaturated fats. Fat intake, especially saturated fat and industrially-produced trans-fat intake, can be reduced by: steaming or boiling instead of frying when cooking; replacing butter, lard and ghee with oils rich in polyunsaturated fats, such as soybean, canola (rapeseed), corn, safflower and sunflower oils; eating reduced-fat dairy foods and lean meats, or trimming visible fat from meat; and limiting the consumption of baked and fried foods, and pre-packaged snacks and foods (e.g. doughnuts, cakes, pies, cookies, biscuits and wafers) that contain industrially-produced trans-fats. Salt, sodium and potassium Most people consume too much sodium through salt (corresponding to consuming an average of 912g of salt per day) and not enough potassium (less than 3.5g). High sodium intake and insufficient potassium intake contribute to high blood pressure, which in turn increases the risk of heart disease and stroke (8, 11). Reducing salt intake to the recommended level of less than 5 g per day could prevent 1.7 million deaths each year (12). People are often unaware of the amount of salt they consume. In many countries, most salt comes from processed foods (e.g. ready meals; processed meats such as bacon, ham and salami; cheese; and salty snacks) or from foods consumed frequently in large amounts (e.g. bread). Salt is also added to foods during cooking (e.g. bouillon, stock cubes, soy sauce and fish sauce) or at the point of consumption (e.g. table salt). Salt intake can be reduced by: limiting the amount of salt and high-sodium condiments (e.g. soy sauce, fish sauce and bouillon) when cooking and preparing foods; not having salt or high-sodium sauces on the table; limiting the consumption of salty snacks; and choosing products with lower sodium content. Some food manufacturers are reformulating recipes to reduce the sodium content of their products, and people should be encouraged to check nutrition labels to see how much sodium is in a product before purchasing or consuming it. Potassium can mitigate the negative effects of elevated sodium consumption on blood pressure. Intake of potassium can be increased by consuming fresh fruit and vegetables. Sugars In both adults and children, the intake of free sugars should be reduced to less than 10% of total energy intake (2, 7). A reduction to less than 5% of total energy intake would provide additional health benefits (7). Consuming free sugars increases the risk of dental caries (tooth decay). Excess calories from foods and drinks high in free sugars also contribute to unhealthy weight gain, which can lead to overweight and obesity. Recent evidence also shows that free sugars influence blood pressure and serum lipids, and suggests that a reduction in free sugars intake reduces risk factors for cardiovascular diseases (13). Sugars intake can be reduced by: limiting the consumption of foods and drinks containing high amounts of sugars, such as sugary snacks, candies and sugar-sweetened beverages (i.e. all types of beverages containing free sugars these include carbonated or noncarbonated soft drinks, fruit or vegetable juices and drinks, liquid and powder concentrates, flavoured water, energy and sports drinks, ready-to-drink tea, ready-to-drink coffee and flavoured milk drinks); and eating fresh fruit and raw vegetables as snacks instead of sugary snacks. How to promote healthy diets Diet evolves over time, being influenced by many social and economic factors that interact in a complex manner to shape individual dietary patterns. These factors include income, food prices (which will affect the availability and affordability of healthy foods), individual preferences and beliefs, cultural traditions, and geographical and environmental aspects (including climate change). Therefore, promoting a healthy food environment including food systems that promote a diversified, balanced and healthy diet requires the involvement of multiple sectors and stakeholders, including government, and the public and private sectors. Governments have a central role in creating a healthy food environment that enables people to adopt and maintain healthy dietary practices. Effective actions by policy-makers to create a healthy food environment include the following: Creating coherence in national policies and investment plans including trade, food and agricultural policies to promote a healthy diet and protect public health through: increasing incentives for producers and retailers to grow, use and sell fresh fruit and vegetables; reducing incentives for the food industry to continue or increase production of processed foods containing high levels of saturated fats, trans-fats, free sugars and salt/sodium; encouraging reformulation of food products to reduce the contents of saturated fats, trans-fats, free sugars and salt/sodium, with the goal of eliminating industrially-produced trans-fats; implementing the WHO recommendations on the marketing of foods and non-alcoholic beverages to children; establishing standards to foster healthy dietary practices through ensuring the availability of healthy, nutritious, safe and affordable foods in pre-schools, schools, other public institutions and the workplace; exploring regulatory and voluntary instruments (e.g. marketing regulations and nutrition labelling policies), and economic incentives or disincentives (e.g. taxation and subsidies) to promote a healthy diet; and encouraging transnational, national and local food services and catering outlets to improve the nutritional quality of their foods ensuring the availability and affordability of healthy choices and review portion sizes and pricing. Encouraging consumer demand for healthy foods and meals through: promoting consumer awareness of a healthy diet; developing school policies and programmes that encourage children to adopt and maintain a healthy diet; educating children, adolescents and adults about nutrition and healthy dietary practices; encouraging culinary skills, including in children through schools; supporting point-of-sale information, including through nutrition labelling that ensures accurate, standardized and comprehensible information on nutrient contents in foods (in line with the Codex Alimentarius Commission guidelines), with the addition of front-of-pack labelling to facilitate consumer understanding; and providing nutrition and dietary counselling at primary health-care facilities. Promoting appropriate infant and young child feeding practices through: implementing the International Code of Marketing of Breast-milk Substitutes and subsequent relevant World Health Assembly resolutions; implementing policies and practices to promote protection of working mothers; and promoting, protecting and supporting breastfeeding in health services and the community, including through the Baby-friendly Hospital Initiative. WHO response The WHO Global Strategy on Diet, Physical Activity and Health (14) was adopted in 2004 by the Health Assembly. The strategy called on governments, WHO, international partners, the private sector and civil society to take action at global, regional and local levels to support healthy diets and physical activity. In 2010, the Health Assembly endorsed a set of recommendations on the marketing of foods and non-alcoholic beverages to children (15). These recommendations guide countries in designing new policies and improving existing ones to reduce the impact on children of the marketing of foods and non-alcoholic beverages to children. WHO has also developed region-specific tools (such as regional nutrient profile models) that countries can use to implement the marketing recommendations. In 2012, the Health Assembly adopted a Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition and six global nutrition targets to be achieved by 2025, including the reduction of stunting, wasting and overweight in children, the improvement of breastfeeding, and the reduction of anaemia and low birthweight (9). In 2013, the Health Assembly agreed to nine global voluntary targets for the prevention and control of NCDs. These targets include a halt to the rise in diabetes and obesity, and a 30% relative reduction in the intake of salt by 2025. The Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020 (10) provides guidance and policy options for Member States, WHO and other United Nations agencies to achieve the targets. With many countries now seeing a rapid rise in obesity among infants and children, in May 2014 WHO set up the Commission on Ending Childhood Obesity. In 2016, the Commission proposed a set of recommendations to successfully tackle childhood and adolescent obesity in different contexts around the world (16). In November 2014, WHO organized, jointly with the Food and Agriculture Organization of the United Nations (FAO), the Second International Conference on Nutrition (ICN2). ICN2 adopted the Rome Declaration on Nutrition (17), and the Framework for Action (18) which recommends a set of policy options and strategies to promote diversified, safe and healthy diets at all stages of life. WHO is helping countries to implement the commitments made at ICN2. In May 2018, the Health Assembly approved the 13th General Programme of Work (GPW13), which will guide the work of WHO in 2019-2023 (19). Reduction of salt/sodium intake and elimination of industrially-produced trans-fats from the food supply are identified in GPW13 as part of WHO's priority actions to achieve the aims of ensuring healthy lives and promote well-being for all at all ages. To support Member States in taking necessary actions to eliminate industrially-produced trans-fats, WHO has developed a roadmap for countries (the REPLACE action package) to help accelerate actions (6). References (1) Hooper L, Abdelhamid A, Bunn D, Brown T, Summerbell CD, Skeaff CM. Effects of total fat intake on body weight. *Cochrane Database Syst Rev*. 2015; (8):CD011834. (2) Diet, nutrition and the prevention of chronic diseases: report of a Joint WHO/FAO Expert Consultation. WHO Technical Report Series, No. 916. Geneva: World Health Organization; 2003. 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(17) Rome Declaration on Nutrition. Second International Conference on Nutrition. Rome: Food and Agriculture Organization of the United Nations/World Health Organization; 2014. (18) Thirteenth general programme of work, 2019-2023. Geneva: World Health Organization; 2018. Skip to main content Malnutrition, in all its forms, includes undernutrition (wasting, stunting, underweight), inadequate vitamins or minerals, overweight, obesity, and resulting diet-related noncommunicable diseases. In 2022, 2.5 billion adults were overweight, including 890 million who were living with obesity, while 390 million were underweight. Globally in 2022, 149 million children under 5 were estimated to be stunted (too short for age), 45 million were estimated to be wasted (too thin for height), and 37 million were overweight or living with obesity. Nearly half of deaths among children under 5 years of age are linked to undernutrition. These mostly occur in low- and middle-income countries. The developmental, economic, social and medical impacts of the global burden of malnutrition are serious and lasting, for individuals and their families, for communities and for countries. The developmental, economic, social and medical impacts of the global burden of malnutrition are serious and lasting, for individuals and their families, for communities and for countries. Overview Malnutrition refers to deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients. The term malnutrition addresses 3 broad groups of conditions: undernutrition, which includes wasting (low weight-for-height), stunting (low height-for-age) and underweight (low weight-for-age); micronutrient-related malnutrition, which includes micronutrient deficiencies (a lack of important vitamins and minerals) or micronutrient excess; and overweight, obesity and diet-related noncommunicable diseases (such as heart disease, stroke, diabetes and some cancers). There are 4 broad sub-forms of undernutrition: wasting, stunting, underweight, and deficiencies in vitamins and minerals. Undernutrition makes children in particular much more vulnerable to disease and death. Low weight-for-height is known as wasting. It usually indicates recent and severe weight loss because a person has not had enough food to eat and/or they have had an infectious disease, such as diarrhoea, which has caused them to lose weight. A young child who is moderately or severely wasted has an increased risk of death, but treatment is possible. Low height-for-age is known as stunting. It is the result of chronic or recurrent undernutrition, usually associated with poor socioeconomic conditions, poor maternal health and nutrition, frequent illness, and/or inappropriate infant and young child feeding and care in early life. Stunting holds children back from reaching their physical and cognitive potential. Children with low weight-for-age are known as underweight. A child who is underweight may be stunted, wasted or both. Inadequacies in intake of vitamins and minerals, often referred to as micronutrients, can also be grouped together. Micronutrients enable the body to produce enzymes, hormones and other substances that are essential for proper growth and development. Iodine, vitamin A, and iron are the most important in global public health terms; their deficiency represents a major threat to the health and development of populations worldwide, particularly children and pregnant women in low-income countries. Overweight and obesity is when a person is too heavy for his or her height. Abnormal or excessive fat accumulation can impair health. Body mass index (BMI) is an index of weight-for-height commonly used to classify overweight and obesity. It is defined as a person's weight in kilograms divided by the square of his/her height in meters (kg/m). In adults, overweight is defined as a BMI of 25 or more, whereas obesity is a BMI of 30 or more. Among children and adolescents, BMI thresholds for overweight and obesity vary by age. Overweight and obesity result from an imbalance between energy consumed (too much) and energy expended (too little). Globally, people are consuming foods and drinks that are more energy-dense (high in sugars and fats) and engaging in less physical activity. Diet-related noncommunicable diseases (NCDs) include cardiovascular diseases (such as heart attacks and stroke, and often linked with high blood pressure), certain cancers, and diabetes. Unhealthy diets and poor nutrition are among the top risk factors for these diseases globally. In 2022, approximately 390 million adults aged 18 years and older worldwide were underweight, while 2.5 billion were overweight, including 890 million who were living with obesity. Among children and adolescents aged 5-19 years, 390 million were overweight, including 160 million who were living with obesity. Another 190 million were living with thinness (BMI-for-age more than two standard deviations below the reference median). In 2022, an estimated 149 million children under the age of 5 years were suffering from stunting, while 37 million were living with overweight or obesity. Nearly half of deaths among children under 5 years of age are linked to undernutrition. These mostly occur in low- and middle-income countries. Every country in the world is affected by one or more forms of malnutrition. Combating malnutrition in all its forms is one of the greatest global health challenges. Women, infants, children, and adolescents are at particular risk of malnutrition. Optimizing nutrition early in life including the 1000 days from conception to a child's second birthday ensures the best possible start in life, with long-term benefits. Poverty amplifies the risk of, and risks from, malnutrition. People who are poor are more likely to be affected by different forms of malnutrition. Also, malnutrition increases health care costs, reduces productivity, and slows economic growth, which can perpetuate a cycle of poverty and ill-health. On 1 April 2016, the United Nations (UN) General Assembly proclaimed 2016-2025 the United Nations Decade of Action on Nutrition. The Decade is an unprecedented opportunity for addressing all forms of malnutrition. It sets a concrete timeline for implementation of the commitments made at the Second International Conference on Nutrition (ICN2) to meet a set of global nutrition targets and diet-related NCD targets by 2025, as well as relevant targets in the Agenda for Sustainable Development by 2030 in particular, Sustainable Development Goal (SDG) 2 (end hunger, achieve food security and improved nutrition and promote sustainable agriculture) and SDG 3 (ensure healthy lives and promote wellbeing for all at all ages). Led by WHO and the Food and Agriculture Organization of the United Nations (FAO), the UN Decade of Action on Nutrition calls for policy action across 6 key areas: creating sustainable, resilient food systems for healthy diets; providing social protection and nutrition-related education for all; aligning health systems to nutrition needs, and providing universal coverage of essential nutrition interventions; ensuring that trade and investment policies improve nutrition; building safe and supportive environments for nutrition at all ages; and strengthening and promoting nutrition governance and accountability, everywhere. WHO aims for a world free of all forms of malnutrition, where all people achieve health and wellbeing. According to the 2016-2025 nutrition strategy, WHO works with Member States and partners towards universal access to effective nutrition interventions and to healthy diets from sustainable and resilient food systems. WHO uses its convening power to help set, align and advocate for priorities and policies that move nutrition forward globally, develops evidence-informed guidance based on robust scientific and ethical frameworks, supports the adoption of guidance and implementation of effective nutrition actions, and monitors and evaluates policy and programme implementation and nutrition outcomes. This work is framed by the Comprehensive implementation plan on maternal, infant, and young child nutrition, adopted by Member States through a World Health Assembly resolution in 2012. Actions to end malnutrition are also vital for achieving the diet-related targets of the Global action plan for the prevention and control of noncommunicable diseases 2013-2020, the Global strategy for women, children, and adolescents health 2016-2030, and the 2030 Agenda for sustainable development. Skip to main content

Nutrition program in nursing. What basic classes are required for nursing. What classes are required for nursing. Nursing nutrition class. Is nutrition a prerequisite for nursing. Nursing class. What do nursing classes consist of. Nursing nutrition.