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Regional strategy on nutrition 2010–2019

Although improvements in nutrition have taken place as a result of economic growth and as a natural outcome of health sector development and services, the burden of disease associated with inadequate dietary intake is increasing in many countries of the Region. Malnutrition remains a serious health problem, while diet-related chronic diseases exert a heavy cost and contribute to morbidity and mortality rates. The regional strategy for nutrition 2010–2019 aims to support countries to establish and implement action in nutrition, according to their national situation and resources. The goal of the strategy is to improve the nutritional status of people throughout the life cycle by encouraging countries to reposition nutrition as central to their development agenda.

A draft resolution is attached for consideration by the Regional Committee.

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Executive summary

Although improvements in nutrition have taken place as a result of economic growth and as a natural outcome of health sector development and services, a rapid overview of nutrition programmes in the Region indicate that the burden of disease associated with inadequate dietary intake is the immediate factor causing under-nutrition and that this burden is increasing in many countries of the Eastern Mediterranean Region. Many countries are also experiencing a double burden of disease. Communicable diseases have not been fully controlled while the burden of noncommunicable disease is rising. This nutrition transition is alarming as it has a negative impact on health systems. The major nutrition problems in the Region are protein–energy malnutrition and high prevalence of low birth weight and of micronutrient deficiencies, including iodine deficiency disorders, vitamin A deficiency, iron deficiency anaemia in young children and women of childbearing age and calcium, zinc and vitamin D deficiencies.

Malnutrition remains a major health problem with consequences that are too grave to be ignored. It is the single biggest contributor to child mortality and 15% of the global burden of newborn and child mortality occurs in countries of the Region. Globally, it is estimated that 30% of deaths in children under 5 years of age are attributable to mild to moderate malnutrition. The overall proportion of underweight in children under 5 years of age has increased in the Region, from 14% in 1990 to 17% in 2004. Diet-related chronic diseases exert a heavy cost and contribute to morbidity and mortality rates in the Region, as the burden of overweight, obesity and diet-related chronic diseases increases. It is estimated that noncommunicable diseases in the Region accounted for 52% of all deaths and 47% of the disease burden in 2005; the latter is expected to rise to 60% in 2020.

The regional strategy on nutrition 2010–2019 was developed through a consultative process by the WHO Regional Advisory Committee on Nutrition, which includes representatives from Member States, Food and Agriculture Organization of the United Nations (FAO), UNICEF, World Food Programme, UNRWA, International Council for Control of Iodine Deficiency Disorders, Middle East and North African Nutrition Association and International Union of Nutritional Sciences. The strategy proposes approaches to address the major health and nutrition problems in the Region. It aims to support countries in establishing and implementing action in nutrition in accordance with their national situation and resources. The overall goal of the strategy is to improve the nutritional status of people throughout the life-cycle by encouraging countries to reposition nutrition as central to their development agenda. It provides a framework to assist countries to decide which nutrition actions are appropriate for a particular context and according to the most prevalent health problems. The strategic approaches target undernutrition, micronutrient deficiencies, prevention and control of obesity and noncommunicable diseases. The strategy emphasizes support for the most vulnerable groups and alleviation of poverty and hunger, the root causes of malnutrition. Every effort has been made to direct the focus of Member States to results on the ground; to concentrate on the comparative advantages of the contributions of specialized agencies and donors, particularly in health and nutrition system strengthening; and to support the leadership of governments and the international community to achieve the Millennium Development Goals. The adoption of a life-cycle approach to nutrition by the health sector is in the interests of all.

1. Introduction

Health, nutrition and population policies play a pivotal role in economic and human development and in poverty alleviation. According to the World Bank, improved economic growth has enabled improvements in health outcomes, creating a virtuous cycle—good health boosts economic growth—and economic growth enables further gains in health (*1*). Nutrition will remain a key element in ensuring security: adequate food is literally "vital" in keeping people alive as a basic need and human right. However, evidence is increasingly showing that increased wealth does not essentially lead to alleviation of hunger or child undernutrition, or to the reduction of micronutrient deficiencies. Undernutrition coexists with high rates of overweight, obesity, diabetes, cardiovascular disease and some types of cancer. World Health Assembly resolution WHA62.14 on reducing health inequities through action on the social determinants of health (*2*) called on Member States to tackle health inequities. Implementation of this resolution is key to addressing the root causes of malnutrition, including poverty and inequality, and to improving livelihoods, especially of the most vulnerable groups. According to the monitoring of progress towards achievement of the Millennium Development Goals, significant progress has been made over the years in a large number of countries in the Region in improving infant and young child nutrition (*3*).

Although many countries in the Region have nutrition policies or action plans, most have not been fully implemented and do not have a clear strategic path for implementation. The Region still faces many challenges in the formulation and implementation of strategies and action plans that are holistic in their approach to nutrition. This paper presents an analysis of the regional nutrition situation and its causes and consequences and stresses the importance of a regional nutrition strategy. It defines the priority areas of action, which include monitoring, advocacy, strengthening the implementation of nutrition programmes, promoting community participation and mobilizing resources. Specifically, and in order to reduce the burden from nutrition-related diseases, unhealthy dietary patterns and physical inactivity need to be addressed. Public awareness of the determinants and impact of noncommunicable diseases, including overweight and obesity, needs to be increased through formal nutrition education at all levels, social marketing campaigns and incorporating positive messages in the media. Improving nutrition is widely regarded as an important intervention in emergency situations. Measures include provision of micronutrients through fortified powders or directly through supplements. Management of moderate and severe cases of malnutrition to save lives of infants and children requires well trained health workers.

Following the 1992 recommendations of the International Conference on Nutrition and the World Declaration and Plan of Action for Nutrition, many countries in the Region developed national nutrition plans of action. However, most of these plans have not been fully implemented. The purpose of this strategy is to improve the nutritional status of the people in the Region by encouraging countries to reposition nutrition as central to their development agenda and to provide a framework to help countries decide what nutrition actions are appropriate for a country's circumstances and health problems. It will support Member States in identifying, developing, prioritizing and adopting nutrition interventions that will help in achieving Millennium Development Goals 1, 4 and 5. It also addresses the emerging issue of obesity and diet-related noncommunicable diseases. The adoption of a life-cycle approach to nutrition by the health sector is in the interests of all.

2. Situation analysis

2.1 Global situation

Malnutrition presents significant challenges to human health, especially in developing countries. Child undernutrition is still estimated to cause 30% of all deaths of children under 5 years of age. Worldwide, malnutrition accounts for 11% of the global burden of disease, leading to long-term poor

health and disability and poor educational and developmental outcomes. 186 million children in the world are estimated to be stunted (*4*) and 20 million to suffer from the most deadly form of severe acute malnutrition each year. Nutritional risk factors, including underweight, suboptimal breastfeeding and vitamin and mineral deficiencies, particularly of vitamin A, iron, iodine and zinc, are considered responsible for 3.9 million deaths (35% of total deaths) and 144 million disability-adjusted life years (DALYS) (33% of total DALYS) in children below 5 years of age (*4*).

Food insecurity is the most pressing problem in the field of nutrition, especially for vulnerable populations, such as children and women and people living with HIV, tuberculosis and other communicable diseases. However, many Member States also face the rising challenge of overnutrition and obesity. It is estimated that excess body mass index (BMI) is responsible for more than 30 million DALYs, mostly from ischaemic heart disease and type II diabetes (*5*). The prevalence of obesity has been increasing constantly in recent years, with large geographic variations, in some parts of the world affecting the poor more than the wealthy (*6*). As a result, nutrition-related noncommunicable diseases have become a major threat to public health in low-income and middle-income countries (*7*).

2.2 Regional situation

The burden of disease associated with inadequate nutrition continues to grow in countries of the Eastern Mediterranean Region. Over the past three decades the Region has witnessed significant social, economic, demographic and political changes that have greatly influenced the nature, scope and magnitude of health and nutrition problems and the burden of disease and related risk factors in most countries, and in the Region as a whole**.** While problems of undernutrition still exist, the burden of overweight, obesity and diet-related chronic diseases is increasing due to nutrition transition, which is alarming as this has a negative impact on health systems in the Region**.** The Region faces other challenges that contribute generally to malnutrition, including in-country inequalities, limited natural resources (e.g. water and agricultural land), recurrent drought conditions, high population growth rates, conflict and HIV in some countries. The key nutrition challenges facing the Region are malnutrition, micronutrient deficiencies, obesity and noncommunicable diseases, and foodborne diseases.

a) **Malnutrition**. Malnutrition remains a major health problem with consequences that are too grave to be ignored. It is the single biggest contributor to child mortality and 15% of the global burden of newborn and child mortality occurs in countries of the Region. It is estimated that 50% of deaths in the Region in children under 5 years of age is attributable to mild to moderate malnutrition (*8*). The consequences of early childhood malnutrition are irreversible and intergenerational. It is implicated in poor mental and cognitive development and consequently has adverse consequences for adult health. Malnutrition in women of reproductive age increases the maternal mortality ratio and the risk of low birth weight for their children. The mean maternal mortality ratio was estimated to be 210 per 100 000 live births in the Region in 2005, representing only a 20% reduction from the levels of 1990 (*9*) Unless policies and priorities are changed, the scale of the problem will prevent many countries from achieving the targets of the Millennium Development Goals. The overall proportion of underweight in children under 5 years of age has increased in the Region, from 14% in 1990 to 17% in 2004. (*3*). Subsequent to the global food and price crisis which started in early 2008, the nutrition situation of infants and children under 5 years of age has further deteriorated in countries in complex emergency situations, and also in other countries.

b) **Micronutrient deficiencies**. Several micronutrient deficiencies are still being reported from many countries of the Region (iron, iodine, zinc, calcium, folic acid and vitamins A and D), particularly among vulnerable groups, including children and women of childbearing age. It is estimated that more than one third of the population in the Region is anaemic (*10*); a total of 149 million people in the Region are estimated to be iron-deficient or anaemic according to WHO criteria; 83 million of them are anaemic women. Data on anaemia rates in preschoolers, pregnant women and women of

childbearing age from 1995 to 2001 show no improvement in the overall situation (*11*). Iron deficiency anaemia is a serious public health problem for many countries; the prevalence in Bahrain reached 48.3% among children under 5 years of age and 41.6% among children between 5 and 14 years (*11*). In women of childbearing age the prevalence of anaemia was also reported to be approximately 40% in both Oman and Bahrain.

Vitamin A deficiency is considered a public health problem in several countries, affecting preschoolers, school-age children and women of reproductive age. Vitamin A deficiency is highly prevalent with 0.8 million preschool-age children estimated to have night blindness and 13.2 million preschool-age children with serum retinol levels <0.70 µmol/l (*12*).

Iodine deficiency is recognized as a significant public health problem in 18 countries, and one third of the population is estimated to be at risk of developing iodine deficiency disorders, which have dramatic consequences for the fetal brain and for cognitive and functional development in early childhood (*13*).

c) **Obesity and noncommunicable diseases**. The epidemiology of noncommunicable diseases, such as cardiovascular disease, diabetes and cancer and the risk factors for these diseases are closely related to food consumption, dietary patterns, nutrition and lifestyles. Reports present alarming figures for the prevalence of obesity and noncommunicable diseases. In 2005, it was estimated that noncommunicable diseases accounted for 52% of all deaths and 47% of the disease burden; the latter is expected to rise to 60% in 2020 (*14*). Among the population aged 20 years and older, the prevalence of diabetes is reported to be 11%, hypertension 26%, dyslipidemia 50%, overweight and obesity 65% and physical inactivity 77% (*15*). This rise in noncommunicable diseases is paralleled by a rise in the direct cost of health care resources needed for disease management. Indirect costs (such as the loss of economic activity due to illness and premature deaths associated with noncommunicable diseases) and the intangible costs (such as social and personal loss) are even greater.

Overweight and obesity are potent risk factors for cardiovascular diseases and type 2 diabetes and are major contributors to premature deaths. These metabolic disorders are increasing dramatically among adults in the Region. Compiled data for adults aged 15 years and older from 16 countries show the highest levels of overweight in Kuwait, Egypt, United Arab Emirates, Saudi Arabia, Jordan and Bahrain, with the prevalence of overweight/obesity ranging between 74% and 86% in women and 69% and 77% in men (*15*). These data indicate a much higher prevalence of obesity among adult women whereas overweight is more marked among adult men. The escalating level of overweight and obesity among children and adolescents is of particular concern given the evidence linking childhood and adolescent obesity to increased risk of obesity and morbidity in adulthood.

Increased consumption of unhealthy foods compounded with increased prevalence of overweight in middle-to-low-income countries is typically referred to as the nutrition transition. It occurs in conjunction with epidemiological transition and has serious implications in terms of public health outcomes, risk factors, economic growth and international nutrition policy. Nutrition transition is malnutrition ensuing not from a need for food, but the need for high quality nourishment. Foods rich in vitamins, minerals and micronutrients, such as fruit, vegetables and whole grains, have been substituted by foods heavy in added sugar, saturated fat and sodium. This trend, which began with the processing of foods in the industrialized countries, has spread to developing countries. Still stressed and struggling with hunger, the latter are now dealing also with health problems, including malnutrition, associated with obesity.

d) **Foodborne diseases.** Although food safety has been addressed at regional level through the regional action plan to address food safety in the 21st century (resolution EM/RC46/R.6), foodborne diseases continue to pose a serious threat to achieving good nutritional status. Diseases of zoonotic origin represent a considerable public health burden and challenge, with salmonellosis and

campylobacteriosis the most commonly reported foodborne illnesses (*16*). The lack of hygiene standards and control measures in food preparation and the use of waste water and polluted water, especially in rural areas, are some of the underlying determinants. In recent years, food safety has come to the forefront of the public health agenda, following global events such as the avian influenza outbreaks and contamination of milk with melamine. In several countries, this has facilitated intersectoral collaboration between the different ministries and assessment of food safety structure and systems, resulting in some cases in the establishment of food and drug administrations or interministerial committees to address food safety.

2.3 Country nutrition profiles

Over the past three decades the Region has witnessed significant social, economic, demographic and political changes that have greatly influenced the nature, scope and magnitude of health and nutrition problems and the burden of disease and related risk factors in most countries, and in the Region as a whole. The Region can be divided into four groups, or country clusters, with regard to nutrition stages and dominant nutrition problems, major risk factors and underlying causes, programme interventions and gaps in response to these problems, and enabling environment factors for improved action. These four groups can be categorized as: countries in advanced nutrition transition stage; countries in early nutrition transition stage; countries with significant undernutrition; and countries in complex emergency. Some countries appear in more than one group.

a) Countries in advanced nutrition transition

These countries have high levels of overweight and obesity, and moderate levels of undernutrition and micronutrient deficiencies in some population subgroups: Islamic Republic of Iran and Tunisia and all member countries of the Gulf Cooperation Council (GCC) except Yemen.

b) Countries in early nutrition transition

These countries are characterized by moderate levels of overweight and obesity, moderate levels of undernutrition in specific population and age groups, and widespread micronutrient deficiencies: Egypt, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Palestine and Syrian Arab Republic.

c) Countries with significant undernutrition

These countries have particularly high levels of acute and chronic child malnutrition, widespread micronutrient deficiencies, and emerging overweight, obesity and malnutrition of affluence in certain socioeconomic subgroups: They are Djibouti, Iraq, Pakistan, Yemen and population subgroups in GCC member countries, Islamic Republic of Iran, Palestine (Gaza) and Tunisia.

d) Countries in complex emergency

The countries in complex emergency situations with severe child and maternal undernutrition and widespread micronutrient deficiencies are: Afghanistan, Somalia and Sudan.

The characterization of the Region into four broad country clusters aims to provide a summary tool to capture commonalities and differences among countries and to guide, to a certain extent, strategic planning and the development of nutrition policies and programmes at regional and country level. However, nutrition transition also affects an increasing number of countries and socioeconomic groups within countries. Nutrition-related risk factors for noncommunicable diseases are increasing rapidly in low-income and medium-income countries. Economic differences have widened among countries and emergency and humanitarian crisis affects several countries. The recent global food and economic crisis, while affecting all countries, has particularly affected Djibouti, Somalia and Sudan in the Horn of Africa and Afghanistan, Pakistan and Yemen.

3. Current response and challenges

Social, economic, demographic and political changes have greatly influenced the nature, scope and magnitude of health and nutrition problems and the burden of disease and related risk factors in most countries in recent years. Significant progress has been made over the past three decades in a large number of countries in the Region in improving infant and young child nutrition. In the Middle East/North Africa, UNICEF reported in 2006 that six countries (Djibouti, Jordan, Oman, occupied Palestinian territory, Syrian Arab Republic and Tunisia) were on track to meet the Millennium Development Goals targeting reduction in the proportion of underweight children under 5 years of age; 12 countries had contained underweight prevalence rates at or below 10%; and six countries were not on track to meet the Millennium Development Goals (Afghanistan, Iraq, Pakistan, Somalia, Sudan and Yemen) (*3*). Nevertheless, as noted in section 2, the overall proportion of underweight in under-5 children has continued to rise, and the nutrition situation of infants and children under 5 is thought to have further deteriorated following the food crisis of 2008 (*17*).

The World Health Assembly has endorsed numerous resolutions on infant and young child nutrition, including nutrition and HIV/AIDS and the Codex Alimentarius Guidelines for use of nutrition and health claims, notably WHA55.25, WHA58.32, WHA59.21, WHA61.20 and most recently WHA.63.23. Action following Regional Committee resolutions EM/RC57/R.9 and EM/RC49/R.12 has resulted in significant progress in promoting salt iodization and reducing prevalence of iodine deficiency disorders. Lack of data on neural tube defects, due to the absence of nutrition surveillance in most countries, is a major challenge.

Although many countries in the Region have nutrition policies or action plans, most have not been fully implemented and do not have a clear strategic path for implementation. The Region still faces many challenges in the formulation and implementation of nutrition strategies and action plans that are holistic in their approach to addressing nutrition issues. The Region suffers from:

- absence of clear political commitment for nutrition action and/or failure to turn political commitment for nutrition problems into tangible action;
- absence of a policy framework and institutional capacity to plan, implement and monitor sustainable nutrition programmes that respond to the basic causes of malnutrition which are linked to the social determinants of health;
- chronic conflict and natural disasters which prevent some countries from making or maintaining progress;
- disproportionate allocation of health budgets, often at the expense of preventive strategies such as nutrition;
- abandonment of traditional diets in favour of “fast” foods, resulting in the reduction of dietary diversity and, often, a less nutritious diet; and
- absence of nutrition expertise in related sectors and lack of intersectoral coordination.

A complex set of other factors affect nutritional status, including food safety, changing lifestyle patterns and decreased food production and availability. Food distribution and catering in many countries is concentrated in the hands of a few operators, who influence product supply, safety and price. The media, advertising and retail sectors and the food industry have a powerful influence on dietary choices, sometimes in opposing those recommended by public health specialists. Urban design, too, often discourages recreational activities, such as walking or cycling, and the increasing use of television and computers encourages sedentary leisure activities, thus adding physical inactivity as an underlying factor contributing to the many health challenges.

A regional nutrition strategy with a clear plan of action is clearly urgently needed to respond to the challenges, while taking into consideration the nutrition and food security profile for each country, and

to guide strategic planning and the development of nutrition policies and programmes at regional and country level.

4. Regional strategy on nutrition 2010–2019

The regional strategy on nutrition 2010–2019 is the first nutrition strategy to be developed in the Region. Its development was led by WHO, in consultation with all Member States as well as United Nations agencies, academia and civil society. The World Declaration and Plan of Action for Nutrition 1992 guided the technical issues of nutrition policy and programme development.

Goal

The overall goal of the nutrition strategy for the Eastern Mediterranean Region is to improve the nutritional status of people throughout the life-cycle through encouraging countries to reposition nutrition as central to their development agenda. It aims to support countries in establishing and implementing action in nutrition according to their national situation and resources. It provides a framework to assist countries to decide which nutrition actions are appropriate for a particular context and according to the most prevalent health problems. It will enable Member States to identify, develop, prioritize and adopt nutrition interventions which will contribute to achieving the targets of the Millennium Development Goals, in particular goal 1 targeting poverty and hunger, goal 4 targeting child mortality, and goal 5 targeting maternal health. It also addresses emerging issues of overnutrition to overcome increasing rates of obesity and diet-related noncommunicable diseases.

Objectives

1. To increase political commitment and enhance nutrition assessment, monitoring and evaluation.

Targets

- All countries have developed a national nutrition strategy and plan of action.
- All countries have developed a nutrition surveillance system with an efficient monitoring and evaluation mechanism.

2. To reduce the prevalence of wasting and stunting among children, especially children under 5 years of age, and of undernutrition among women.

Targets

- Prevalence of underweight among children reduced by 30%.
- Prevalence of low birth weight reduced by 30%.
- Child mortality reduced by 50%.
- Maternal mortality reduced by 20%.
- Percentage of women exclusively breastfeeding for the first 6 months increased by 50%.
- Percentage of women adopting complementary feeding practices from 6 months to 2 years increased by 50%.

3. To reduce the prevalence of micronutrient deficiencies.

Targets

- Prevalence of iron deficiency anaemia among preschool-aged and school-aged children, women of reproductive age women and the elderly reduced by 30%.
- Prevalence of calcium and vitamin D deficiencies among women of childbearing age, lactating women, children and the elderly reduced by 50%.
- Prevalence of vitamin A deficiency among children under 5 years of age and pregnant and lactating women reduced by 50% or eliminated.
- Iodine deficiency disorders reduced by 50% or eliminated.
- Prevalence of neural tube defects among newborn infants reduced by 50%.

4. To reduce the prevalence of diet-related noncommunicable diseases.

Target

- Obesity in children, adolescents and adults reduced by 35%.

5. To build capacity for emergency preparedness in nutrition.

Target

- All countries have developed contingency plans and preparedness in nutrition and food security enabling them to respond effectively and in a timely manner to any emergency.

6. To improve food safety.

Targets

- National legislation and regulations to meet the international food safety standards of the Codex Alimentarius adopted and implemented.
- Incidence of foodborne diseases reduced by 50%.

7. To ensure a safe, healthy and sustainable food supply.

Target

- Access of the poor to healthy and safe food increased by 50%.

Strategic approaches

Approach 1: **Strengthening political commitment, legislation and multisectoral approaches to ensure healthy and sustainable food supply.**

- Increasing political commitment to national nutrition programmes.
- Promoting the development of national food and nutrition policies and including the prevention of malnutrition in development strategies.
- Strengthening technical and managerial capacities for nutrition programmes in the health sector.
- Allocating adequate budget for the prevention and control of nutrition-related diseases.
- Engaging all national and international stakeholders that can contribute to addressing nutrition-related diseases while keeping a strong public health leadership.

Approach 2: **Promoting and protecting the nutritional well-being of women and children and ensuring good nutrition throughout the life-cycle for all age groups.**

- Promoting optimal fetal nutrition, which includes: ensuring appropriate maternal nutrition and micronutrient supplementation before and during pregnancy; and providing counselling on diet and food safety to pregnant women.
- Protecting, promoting and supporting breastfeeding and timely, adequate and safe complementary feeding of infants and young children by implementing the global strategy on infant and young child feeding.
- Promoting the development of pre-school and school nutrition, including: advocating for nutrition-friendly schools; promoting education in nutrition; providing healthy options in canteens and other food distribution points in schools; encouraging schools to adopt physical activity and nutrition policies in line with the global strategy on diet, physical activity and health;and establishing fruit and vegetable distribution schemes.
- Promoting nutrition counselling through primary health care centres and private sector clinics to control obesity and malnutrition during childhood.

- Promoting and protecting nutritional well-being among other age groups, in particular adolescents and women, as well as groups with special needs, such as people with physical and mental disabilities and the elderly.

Approach 3: Promoting food with adequate micronutrient content.

- Promoting healthy food consumption patterns to ensure diversity in the diet, and nutrition education and supplementation programmes, especially for children and women.
- Encouraging food-based strategies in order to address micronutrient deficiencies, such as bio-fortification and food fortification.
- Promoting de-worming of schoolchildren.

Approach 4: Providing comprehensive information and education to the public

- Establishing national food-based dietary guidelines and monitoring their implementation.
- Promoting nutritional knowledge and appropriate attitudes and practices of caregivers towards food, social and dietary customs, family/child care and feeding practices as well as household hygiene.
- Introducing nutrition labelling schemes that support healthy choices at the point of purchase.
- Raising awareness of the link between nutrition and safe food and water.

Approach 5: **Promoting implementation of the WHO global strategy on diet, physical activity and health.**

- Strengthening national policies on nutrition, physical activity and obesity.
- Increasing physical activity in schools.
- Supporting physical activity through transportation policy, increasing resources for nutrition and physical activity programmes, and ensuring that adequate infrastructure for physical activity exists and barriers to achieving a physically active community are removed.
- Promoting healthy diets.
- Promoting healthy foods in chain restaurants and school canteens.

Approach 6: Improving nutrition services and capacity-building in the health sector, including emergency situations and support to vulnerable groups.

- Engaging and educating primary health care and other health workers in nutrition assessment and the provision of counselling on diet, food safety and physical activity, in addition to protection, promotion and support of breastfeeding and complementary feeding, as well as promoting use of the WHO child growth standards and hospital nutrition.
- Improving standards of service delivery for the prevention, diagnosis and treatment of nutrition-related diseases through establishing efficient outpatient and inpatient nutrition services, with adequate population coverage.
- Improving nutritional care and support in emergency situations and under conditions of humanitarian crisis.

Approach 7: Strengthening food safety

- Updating and implementing national legislation and regulations to meet the international food safety standards of the Codex Alimentarius.
- Conducting awareness campaigns to educate the public about safe food practices.

- Enforcing food safety laws to prevent foodborne diseases throughout the food supply chain.
- Monitoring water safety and sanitation through expanding the development of water safety plans, in order to reduce the incidence of waterborne diseases, supporting initiatives to increase community coverage with clean water for drinking and washing, and ensuring the use of water of drinking quality in the food processing chain.

Approach 8: Ensuring a safe, healthy and sustainable food supply

- Establishing, in collaboration with partners and Member States, adequate policies in agriculture and fisheries, food processing, marketing and distribution.
- Improving safety nets and social protection programmes and aim to increase the incomes and assets of those living below a certain level of income either directly through money transfers, especially for vulnerable groups or indirectly via market interventions or government pricing policies.
- Increasing self-sufficiency in nutrition at all levels, promoting poverty alleviation programmes, including school feeding and income-generating activities, and expanding social protection programmes that support vulnerable groups and people with special needs, including older persons, people with disability and mental health problems, widows and orphans.
- Scaling up production and processing of local foods.
- Improving the bioavailability of nutrients and promoting foods rich in micronutrients.

Approach 9: Research, monitoring and evaluation

- Developing national nutrition surveillance systems to monitor nutrition interventions and assess nutritional status, food availability and consumption and the physical activity patterns of populations.
- Conducting situation analysis, assessing needs and ensuring quality of data.
- Evaluating the impact of programmes and policies aimed at reducing the burden of food and nutrition-related diseases, by establishing input, process and output indicators in different socioeconomic population groups and by calculating the cost–effectiveness of interventions.
- Monitoring the characteristics of the food environment, including nutritional quality, food prices and marketing practices.
- Assessing the impact of sectoral policies on health and nutrition using health impact assessment methods in order to achieve better intersectoral collaboration in integrating health in all policies, whether targeted at diet, food supply or food safety.
- Conducting systematic reviews to enhance the understanding of the role of nutrition, food safety and lifestyle factors in disease development and prevention and to strengthen the evidence base for interventions and policies.
- Determining the micronutrient composition of local foods, both raw and cooked, with special emphasis on identifying micronutrient-rich traditional foods.

5. Conclusion

The overall goal of the regional nutrition strategy is to improve the nutritional status of people throughout the life-cycle through encouraging countries to reposition nutrition as central to their development agenda. The strategy will support Member States in enforcing or establishing and implementing action in nutrition according to their national situation and resources. Efforts have been made to make the strategic approaches relevant to each country in the Region. The strategy focuses on

improving the nutritional status of the population, particularly in early life, by preventing and treating malnutrition among pregnant women and children aged up to 2 years, promoting adequate micronutrient intake, integrating actions to address the determinants of obesity and noncommunicable diseases, promoting safe and healthy food choices, providing comprehensive nutrition information and education to consumers, improving nutrition services in the health sector, monitoring and evaluating progress and outcomes using the WHO child growth standards and increasing political commitment. Attention is also given to emergency preparedness. Essential to the process of implementation is the building of institutional capacity to manage nutrition programmes by encouraging partnerships between governments, universities, communities, and nongovernmental organizations, and between governments and the corporate sector, which occupies a central role in the nutritional content of processed foods and in fortifying foods and producing healthy food choices.

The Regional Office will work closely with Member States and provide technical support, in coordination with other key partners and United Nations agencies, to ensure that nutrition occupies a prominent place in national development plans and related programmes to achieve health and nutrition security for all people. WHO will work with policy-makers and decision-makers to promote investment in nutrition as a pressing need that is essential to save the lives of people from malnutrition and noncommunicable diseases and that is also cost-effective. Advocacy with civil society and communities is crucial. The Regional Office will continue to host the Regional Advisory Committee on Nutrition and will monitor implementation of the strategy and plan of action, in coordination with the various organizations involved in nutrition and health.

6. Recommendations to Member States

1. Review and update national health policies, strategies and plans in relevant areas to ensure that nutrition is identified and integrated as a priority, and review and/or develop a national nutrition strategy and action plan in line with the regional strategic approaches.
2. Increase political commitment to prevention and reduction of malnutrition in all its forms.
3. Strengthen and expedite the sustainable implementation of the national nutrition strategy for all age groups.
4. Develop or update policy frameworks in order to address the double burden of malnutrition and allocate adequate human and financial resources to ensure implementation.
5. Develop and/or strengthen legislative, regulatory and/or other effective measures to promote nutrition.
6. Scale up interventions to improve nutrition status among all age groups, especially infants and children, in an integrated manner, including the protection, promotion and support of breastfeeding and timely, safe and appropriate complementary feeding as core interventions, prevention and management of severe malnutrition, and control of vitamin and mineral deficiencies.
7. Integrate the WHO child growth standards into child health programmes to ensure their implementation.
8. Ensure that national and international emergency preparedness and response plans follow the evidence-based operational guidance for emergency relief staff and programme managers to save lives of people through providing healthy and balanced food for all age groups.
9. Strengthen nutrition surveillance systems and improve use and reporting of the agreed indicators in order to monitor progress in achievement of the Millennium Development Goals.

10. Implement measures for prevention of malnutrition as specified in the WHO/UNICEF joint statement on community-based management of severe acute malnutrition, most importantly improving water and sanitation systems and hygiene practices to protect children against communicable disease and infections.

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