

Strategy on nutrition for the Eastern Mediterranean Region 2020–2030



REGIONAL OFFICE FOR THE Eastern Mediterranean

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The development of this nutrition strategy was supervised and coordinated by Dr Ayoub Al Jawaldeh, Regional Advisor, Nutrition, WHO Regional Office for the Eastern Mediterranean, Cairo, Egypt. Ministry of health nutrition focal points, UNICEF, the World Food Programme and the Food and Agriculture Organization of the United Nations were the key project collaborators. Ms Karen McColl, WHO Nutrition Consultant, United Kingdom, was the lead consultant in the development of the strategy.

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### **Executive summary**

Malnutrition in all its forms takes a heavy toll on the health, well-being and sustainable development of populations in WHO's Eastern Mediterranean Region. Some countries, especially those affected by conflict, continue to experience high levels of food insecurity, undernutrition and micronutrient deficiencies. The growth of an estimated 20.2 million children under-5 years of age has been stunted by poor nutrition. At the same time, 53% of women, 45% of men and 8% of school-age children or adolescents are obese. Noncommunicable diseases (NCDs) are now responsible for two thirds of deaths in the Region, and unhealthy diets – along with physical inactivity – are key contributors to this burden.

Throughout this decade the *Regional strategy on nutrition* 2010–2019 and plan of action has been in place to support Member States strengthen or establish action on nutrition. Since the current strategy was adopted in October 2010,<sup>1</sup> there have been significant changes in the nutrition landscape. Many countries in the Region have continued to move through the nutrition and epidemiological transition and the burden of diet-related NCDs has increased, while other countries have seen increases in undernutrition associated with conflict and political instability. Over the same period, there has also been a series of landmark global and regional commitments to tackle malnutrition in all its forms. New global targets on maternal, infant and young child nutrition, as well as global targets on NCDs, have been agreed and integrated into the 2030 Agenda for Sustainable Development. To accelerate progress towards these global targets the United Nations declared a Decade of Action on Nutrition between 2016 and 2025, centred around six key areas for action.

Despite these welcome commitments at the global, regional and national levels, countries are still struggling to implement strategies, policies and regulatory measures to address malnutrition. Much work remains to be done to meet the nutrition and NCD targets. There is now greater recognition that current food systems are failing to deliver nutrition for all and that radical transformation of food systems is needed to improve access to healthy, sustainable diets. Meanwhile, there is a growing body of evidence on the effectiveness, cost–effectiveness and feasibility of policy interventions to improve nutrition, and there is an urgent need to translate this knowledge into action and to disseminate lessons from implementation on the ground. More than ever, there is a need for comprehensive, multisectoral action to address malnutrition in all its forms across the Region.

<sup>&</sup>lt;sup>1</sup> Resolution EM/RC57/R.4 (http://applications.emro.who.int/docs/EM\_RC57\_r4\_en.pdf?ua=1, accessed 18 September 2019.

Given this challenging context, there continues to be strong demand from Member States for WHO technical support to develop strategies and support implementation of policies to improve nutrition. This comprehensive nutrition strategy has been developed to establish a framework for efforts to reach agreed targets on nutrition, diet-related NCDs and sustainable development, as well as to guide implementation of the remainder of the United Nations Decade of Action on Nutrition in the Region.

The vision, overall objective and specific objectives of the nutrition strategy are outlined below.

**Vision:** Countries in the Eastern Mediterranean Region have strengthened action on nutrition to achieve food security, end all forms of malnutrition and improve nutrition throughout the life course by 2030.

**Overall objective**: To support Member States strengthen efforts to ensure universal access to healthy and sustainable diets and implement effective nutrition actions, in order to:

- improve nutrition throughout life course, including for mothers, infants, children, adolescents and older people;
- prevent undernutrition, overweight, obesity and diet-related NCDs; and
- support and protect nutrition in emergency situations.

#### **Specific objectives:**

- 1. To support countries to operationalize a current national nutrition strategy and plan of action in order to achieve global and regional targets<sup>2</sup> and, by 2030, to:
  - reduce the number of children under 5 who are stunted by 50%;
  - reduce and maintain childhood wasting to less than 3%;
  - reduce the prevalence of overweight in children under 5 to not more than 3%;
  - reduce low birth weight by 30%;
  - reduce anaemia in women of reproductive age by 50%;
  - improve rates of early initiation of breastfeeding and continued breastfeeding and, specifically, increase the rate of exclusive breastfeeding in the first 6 months up to at least 70%;
  - halt the rise in diabetes and obesity in adults;
  - halt the rise in overweight in school-age children and adolescents 5–18 years old;
  - reduce mean population intake of salt/sodium by 30%;<sup>3</sup>
  - virtually eliminate industrially-produced trans fats from the food supply.

<sup>&</sup>lt;sup>2</sup> See Section 6 on monitoring and evaluation for information on indicators and interim targets.

<sup>&</sup>lt;sup>3</sup> Countries concerned about iodine deficiency should fully implement universal salt iodization and, if necessary, increase iodine levels as salt intakes are decreased.

- 2. To provide a framework for countries to accelerate efforts to improve nutrition and food security through the six key action areas of the United Nations Decade of Action on Nutrition:
  - Sustainable, resilient food systems for healthy diets
  - Aligned health systems providing universal coverage of essential nutrition actions<sup>4</sup>
  - Social protection and nutrition education
  - Trade and investment for improved nutrition
  - Safe and supportive environments for nutrition at all ages
  - Strengthened governance and accountability for nutrition.

Section 1 of this document sets out the background to the development of this strategy. Section 2 summarizes the health and nutrition situation in the Eastern Mediterranean Region, provides a brief summary of dietary changes and implementation of nutrition action across the Region and outlines recent global and regional developments in the nutrition landscape. Section 3 outlines the vision, objectives, goals and targets of the new strategy. Some important principles and key approaches to underpin the strategy are set out in Section 4. Six key areas for action are set out in Section 5, and a framework for monitoring and evaluation is proposed in Section 6. Section 7 presents conclusions.

<sup>&</sup>lt;sup>4</sup> The overall targets on reduction of stunting and wasting are also relevant to this key area for action.

## 1. Introduction

Malnutrition in all its forms takes a heavy toll on the health, well-being and sustainable development of populations in WHO's Eastern Mediterranean Region. Some countries, especially those affected by conflict, continue to experience high levels of food insecurity, undernutrition and micronutrient deficiencies. The growth of an estimated 20.2 million children under-5 years of age has been stunted by poor nutrition. At the same time, 53% of women, more than 45% of men and 8% of school-age children or adolescents are obese. Noncommunicable diseases (NCDs) are now responsible for two thirds of deaths in the Region, and unhealthy diets – along with physical inactivity – are key contributors to this burden.

The *Regional strategy on nutrition 2010–2019 and plan of action* has supported Member States to strengthen or establish action on nutrition. Many countries in the Region have continued to move through the nutrition and epidemiological transition and the burden of diet-related NCDs has increased, while other countries have seen increases in undernutrition associated with conflict and political instability. Recent years have also seen a series of landmark global and regional commitments to achieve food security and eliminate malnutrition in all its forms, generating unprecedented momentum to improve nutrition, including declaration of a United Nations Decade of Action on Nutrition between 2016 and 2025.

Countries are still struggling, however, to implement strategies, policies and regulatory measures to address malnutrition in all its forms, and much more progress is needed to meet globally agreed targets. It is clear that current food systems are failing to deliver nutrition for all and that radical transformation of food systems is needed to improve access to healthy, sustainable diets.

Meanwhile, there is a growing body of evidence for effective interventions to improve nutrition. More than ever, there is a need to translate this knowledge into comprehensive, multisectoral action to address malnutrition in all its forms across the Region.

Given this challenging context, there continues to be strong demand from Member States of the Region for WHO technical support to develop strategies and support implementation of policies to improve nutrition. This new regional nutrition strategy for 2020–2030 proposes a framework for such efforts to reach the agreed targets on nutrition, diet-related NCDs and sustainable development in the Region.

# 2. The nutrition situation in the Eastern Mediterranean Region

#### 2.1 Regional context

WHO's Eastern Mediterranean Region spans from Pakistan in the east to Morocco in the west, hosting a population of nearly 679 million people in 22 countries characterized by diverse socioeconomic status and health challenges (See Annex 1). Countries vary greatly in terms of income – from among the world's highest to lowest – as well as in terms of access to technology, water, sanitation and electricity. There are also huge disparities within countries, which are reflected in health inequalities.

Crises affect nearly two thirds of countries in the Region, with more than 76 million people directly or indirectly affected by conflict, environmental threats and natural disasters. The Region is home to more than 30 million displaced persons and more than 62 million people need health care as a result of emergencies, mainly due to political conflict. These crises have severe consequences for the well-being of populations and economies, health systems and infrastructure. In some countries, emergencies have reversed health gains of recent decades. Food insecurity has greatly increased in countries affected by conflict, and in Yemen, the conflict has led to the world's largest food crisis.

Diversity across the Region is, in fact, one the biggest challenges to improving the health and nutritional status of its populations.

Poverty, conflict, unhealthy lifestyles and environmental degradation have undermined efforts to reduce and prevent disease, disability and death in the Region. Despite some health gains, progress towards achievement of the Sustainable Development Goals (SDGs) and their related health targets has been uneven and is not on track in some countries. The Region has the highest neonatal mortality rate and the second highest maternal mortality ratio (166 maternal deaths per 100 000 live births) and under-5 mortality rate globally (52 per 1000 live births, of which half are neonatal). There are huge differences between and within countries – more than 90% of neonatal and under-5 deaths occur in only nine countries of the Region, and mostly in remote and rural areas.

The Region continues to experience outbreaks of emerging and re-emerging infectious diseases, which have a significant impact on health and economic development. In addition, NCDs are now responsible for 62% of deaths, causing more than 2.2 million deaths in the Region every year. That figure is projected to increase to more than 3.8 million by 2030 and countries are not on course to reach SDG target 3.4 to reduce by one third premature mortality from NCDs by 2030 (1).

#### 2.2 Regional nutrition situation

The diversity within the Region is also reflected in the nutritional status of its people. The Region suffers from a double burden of malnutrition, with growing food insecurity and high prevalence of undernutrition at the same time as high, and increasing, rates of overweight, obesity and diet-related NCDs. The Region has been experiencing a nutrition transition – a shift towards unhealthy diets and sedentary lifestyles. Table 1 provides information on the stage of transition in countries of the Eastern Mediterranean Region.

#### 2.2.1 Maternal, infant, young child and adolescent nutrition

Despite some progress, poor maternal, infant, young child and adolescent nutrition continues to threaten the health and development of women, adolescents and children in the Region. There remains much scope to improve the nutritional status of these groups in order to reduce disease and prevent premature death, and maximize the development potential of children and the societies in which they live.

Undernutrition was an underlying cause in 45% of deaths of children under-5 years of age in 2015, and nearly one in five (19.3%) babies born in the Region are low birth weight. There is great variation between countries, with the rate increasing to over 30% in Pakistan and Sudan and 45% in Yemen.

In addition, there are still large numbers of children who are too short for their age (stunted) because they are chronically undernourished or who are too thin (wasted) because of acute undernutrition. The prevalence of stunting has declined since 2010 but continues to be high in the Region. In 2018, the growth of 20.2 million children, nearly one in four (24.7%), was stunted. The average rate of stunting in high-income countries was 10%, 23% in middle-income countries and 46% in low-income countries (2). This affects the development of these children and their capacity to contribute to society. Across the Region, 6.4 million children (7.8%) were too thin for their height (moderately or severely wasted) and, of these, 2.7 million were severely wasted (2).

#### Table 1. Stages of nutrition transition in countries of the Region

Stage of transition	Countries
<i>Countries in advanced nutrition transition</i> : High levels of overweight and obesity and moderate levels of undernutrition and micronutrient deficiencies in some population subgroups	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates,
<i>Countries in early nutrition transition</i> : Characterized by moderate levels of overweight and obesity, moderate levels of undernutrition in specific population and age groups, and widespread micronutrient deficiencies	Egypt, Islamic Republic of Iran, Jordan, Lebanon, Morocco, Palestine, Tunisia
Countries with significant undernutrition, including countries in complex emergency situations: Particularly high levels of acute and chronic child malnutrition, widespread micronutrient deficiencies and emerging overweight, obesity and diet-related NCDs in certain socioeconomic subgroups	Afghanistan, Djibouti, Iraq, Libya Pakistan, Palestine (Gaza Strip), Somalia, Sudan, Syrian Arab Republic, Yemen

Meanwhile, 4.7 million children (5.7%) were overweight in 2018, with serious implications for their health and well-being throughout the life course. The prevalence of child overweight in the lower-middle income countries of the Region is twice as high as in other lower-middle income countries in the world (3).

Furthermore, during 2011–2016, only 29% of babies in the Region were exclusively breastfed, with rates only reaching over 50% (the agreed global target) in Afghanistan and Palestine (Fig. 1).

Many children also continue to face the "hidden hunger" of vitamin or mineral deficiencies. Although high-quality, comparable data are scarce, available national data suggest that between 7.4% and 88% of children under 5 and between 7.4% and 40.9% of school-aged children have anaemia (4). Prevalence of vitamin A deficiency among children under 5 is estimated to affect 22% of children in the Region (5) and ranges from 0.5% to 72.9% according to national survey data (6).

Micronutrient malnutrition in adults also continues to be a challenge, particularly among women of reproductive age, where it contributes to poor health outcomes for women and to the inter-generational cycle of malnutrition. Maternal short stature and iron deficiency anaemia contributed to 20% of maternal deaths. Anaemia among women of reproductive age (15–49 years) ranged from 20.0% to 50.4% (surveys between 2011 and 2015) in countries of the Region, but many countries have no data on anaemia prevalence (5).

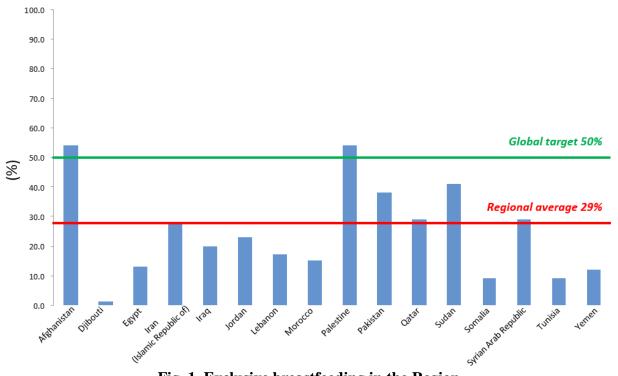


Fig. 1. Exclusive breastfeeding in the Region

Adolescents make up about a fifth of the Region's population, and adolescence is an important phase when young people adopt many lifelong behaviours which may affect their risk of disease in adulthood. Poor nutritional status of adolescent girls has particularly important consequences for those who become pregnant during their teenage years – posing severe risks to the health of the young woman and her child. Iron deficiency anaemia is one of the leading causes of adolescent disability-adjusted life years in low- and middle-income countries of the Region.

Previously, deficiencies of iodine, folic acid, vitamin D and zinc have also been identified as a problem in the Region – particularly among vulnerable groups – but there is a lack of reliable, current data. There has been progress in addressing iodine deficiency across the Region – with more countries declared free of iodine deficiency disorders and many countries achieving universal salt iodization.

#### 2.2.2 Overweight, obesity and diet-related NCDs

While the Region continues to suffer from high rates of undernutrition, the burden of overweight, obesity and diet-related chronic diseases continues to increase due to the nutrition transition towards unhealthy diets and sedentary lifestyles, especially in high-income and middle-income countries.

The age standardized prevalence rate of overweight (including obesity) among adults has been estimated at 49%, with a higher prevalence among women (52.6%) compared to men (45.4%). The average estimate for prevalence of obesity in the Region is 20.8%, with higher prevalence among women (26.0%) than men (15.7%). In some countries, more than 60% of the adult population of the Region is either overweight or obese<sup>5</sup>. The evolution of overweight and obesity is closely linked to physical inactivity and unhealthy diet, with the Region having a high prevalence of physical inactivity in adults (35%) in 2016, the second highest regional prevalence rate in the world (5).

NCDs cause 62% of deaths in the Region, with NCD-related deaths predicted to increase by 25% in the next decade compared to the projected global increase of 17%. Unhealthy diet – along with tobacco use and physical inactivity – is a leading risk factor in these NCD-related deaths. The Region has seen the greatest increase in the prevalence of diabetes and has the highest prevalence rate globally, with 14% of the population affected. More than two in five deaths (45%) are attributed to cardiovascular diseases, and these rates are also among the highest in the world.

#### 2.2.3 Nutrition in emergencies

Food security and access to adequate nutrition in the Region is being seriously undermined in countries affected by emergencies and ongoing conflict.

<sup>&</sup>lt;sup>5</sup> Global Health Observatory Repository (http://apps.who.int/gho/data/view.main.GLOBAL2461A?lang=en, accessed 18 September 2019).

In 2014–2016, around 10% of the population in the Food and Agriculture Organization of the United Nations (FAO)'s Near East and North Africa Region<sup>6</sup> were undernourished and 12% of the population were affected by severe food insecurity (3). The gap in food security and malnutrition between countries affected by conflict and other countries in the Region has been growing – the level of undernourishment in countries affected by conflict, at 27.2%, is now six times higher than the level in non-conflict countries (4.6%) (3). Prevalence of food insecurity is also almost double in countries affected by conflict (19.0% compared to 9.8%).

Conflict, unrest and population displacement is increasing the prevalence of malnutrition. While 7.5 million children (9.1%) across the Region are wasted, the prevalence was highest in Djibouti, Sudan, Yemen and Somalia and has been increasing in Iraq, Libya, Egypt and Sudan (4). The prevalence of underweight was highest in Afghanistan and Yemen and has been increasing in Djibouti, Sudan, Iraq, Libya and the Syrian Arab Republic (4). The highest rates of stunting were recorded in Yemen, Pakistan, Afghanistan, Sudan and Djibouti, ranging from between 29.7% and 46.5% (4). The lack of access to diverse healthy diets in crisis situations also gives serious cause for concern, as does the impact of emergencies on breastfeeding and infant and young child feeding.

#### 2.2.4 Dietary trends and the food environment

Across the Region, a nutrition transition from traditional diets towards diets that are higher in saturated or trans fats, salt and added sugars – coupled with increased physical inactivity – has been driving the double burden of malnutrition.

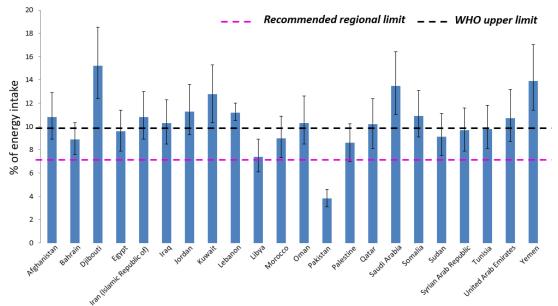
In most countries of the Region, there has been a gradual increase in the calories available in the last few decades, according to FAO food availability data, along with an increase in the supply of fat and in the proportion of calories derived from fat (4). In several countries of the Region – such as the Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, the Syrian Arab Republic and Saudi Arabia – the fat supply almost doubled in the four decades to 2011 (4). Intakes of saturated fat (as a percentage of total calories) is above 10% in many countries and above the regional recommendation of 7% in nearly all countries for which there are data (Fig. 2).

Intakes of trans fats are also above 1% of energy in nearly all countries for which data exist, and contribute to more than 5% of energy in Egypt and Pakistan (Fig. 3). The availability of sugar, in grams per capita per day, is higher that the WHO recommended average intake of 25 g for women and 35 g for men) in all countries for which data are available, except Afghanistan (7) (Fig. 4). Children in many countries of the Region tend to consume food and drink products that are high in sugar and nutrient-poor. Half of adolescents drink, on average, at least one soft drink per day, and this is considerably higher in some countries.<sup>7</sup>

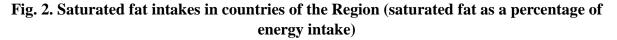
<sup>&</sup>lt;sup>6</sup> These figures relate to the Near East and North Africa Region of FAO, which does not correspond exactly to WHO's Eastern Mediterranean Region.

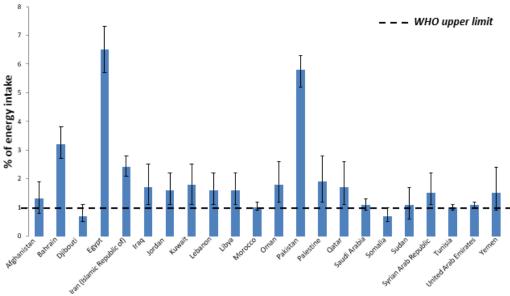
<sup>&</sup>lt;sup>7</sup> Global school-based Student Health Survey data, 2011.

Estimates of sodium intake, based on 24-hour urinary sodium excretions studies carried out in six countries<sup>8</sup> of the Region between 2009 and 2014, suggest that sodium intakes are above the WHO recommended intake of 2 g per day (equivalent to 5 g of salt) in both men and women in all cases.<sup>9</sup>



Source: Micha, R., et al., Global, regional, and national consumption levels of dietary fats and oils in 1990 and 2010: a systematic analysis including 266 country-specific nutrition surveys. BMJ: British Medical Journal, 2014. 348.



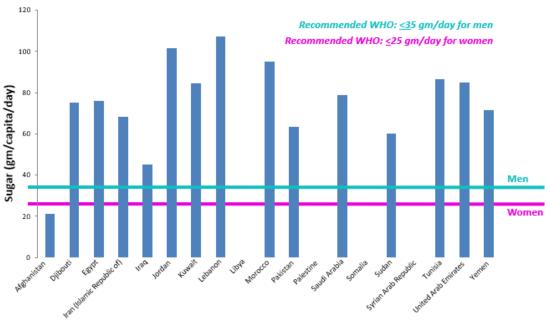


Source: Al Jawaldeh and Al-Jawaldeh (2018) (8)

# Fig. 3. Trans fats intakes in countries of the Region (trans fatty acids as a percentage of energy intake)

<sup>&</sup>lt;sup>8</sup> Islamic Republic of Iran, Jordan, Lebanon, Morocco, Saudi Arabia and United Arab Emirates.

<sup>&</sup>lt;sup>9</sup> Study among women only in the United Arab Emirates.



Source: Based on FAO statistics, 2017.

#### Fig. 4. Per capita sugar supply in countries of the Region (g per capita per day)

#### WHO dietary guidelines for the Eastern Mediterranean Region

WHO recommends for adults a reduction in salt intake to less than 5 g per person per day (2 g per day of sodium). For children, the recommended maximum level of intake of 2 g per day of sodium for adults should be adjusted downwards on the basis of the energy requirements of children relative to those of adults.

The intake of free sugars should be reduced throughout the life-course. WHO recommends less than 10% of total energy intake from free sugars, which is for a person of healthy body weight consuming approximately 2000 calories per day, but ideally less than 5% of total energy intake for additional health benefits. Considering the high prevalence of obesity and diabetes in the Region, WHO recommends that children and women should consume less than 5% (roughly 25 grams per person a day) of free sugars in their diet.

As part of a healthy diet, WHO recommends that less than 30% of total energy intake should be from fats. Unsaturated fats are preferable to saturated fats. Industrial trans fats are not part of a healthy diet. The total calories coming from saturated fats should be less than 10% of the total calorie intake, while trans fats should be less than 1%.

In practical terms, meeting the WHO recommendations for healthy diet and lifestyle, means eating a diet containing a variety of fruits, vegetables, and grain products, especially fibre-rich whole grains; fat-free and low-fat dairy products; legumes, poultry, and lean meats; and fish, preferably oily fish, at least twice a week.

Food and drink companies have increased spending to market their products and food marketing is now ubiquitous across the Region, largely relating to foods high in fat, sugars and/or salt (9). Furthermore, investment in food and drink marketing has grown faster on pan-regional television channels than on national channels (9).

#### 2.2.5 Nutrition policy implementation

Most countries in the Region (89%) now have a comprehensive or topic-specific nutrition policy, according to data from WHO's latest Global Nutrition Policy Review 2016–2017 (10). Nearly four out of five countries (79%) report having a comprehensive nutrition policy that aims to address all forms of malnutrition, while 53% have a policy relating to a specific aspect of nutrition, such as infant and young child

nutrition. Fifty-three per cent of these policies were developed between 2011 and 2014 and 18% developed in 2015 or later; 17% had costed operational plans and 86% had a nutrition coordination mechanism.

The main action areas included in nutrition policies across the Region are infant and young child nutrition (84%), school health and nutrition programmes (84%), healthy diet (84%), vitamin and mineral nutrition (79%), acute malnutrition (53%) and nutrition and infectious diseases (37%) (10).

In relation to infant and young child nutrition, most countries (90%) have implemented interventions on growth monitoring and promotion and breastfeeding counselling (95%), while around half report implementation of the Baby Friendly Hospital Initiative (50%) and actions to address infant feeding in difficult situations (47%), and three quarters (75%) provide complementary feeding counselling. Most countries in the Region have taken some steps to regulate the marketing of breast-milk substitutes, with 17 countries having put some of the provisions of the *International Code of Marketing of Breast-milk Substitutes* into law (11). Of these, however, only six had fully implemented the provisions of the Code with a further four implementing many of the Code's provisions. There is great scope to improve enforcement of the law and increase sanctions and penalties for violation. In addition, implementation of maternity protection is particularly low in the Region – with 92% of countries providing less than 12 weeks of statutory maternity leave by 2014, and none meeting the latest international standard on the duration of paid maternity leave (ILO Convention No. 183), which mandates a minimum leave period of 14 weeks (12).

Another key area of action is school health and nutrition – more than three quarters (79%) of countries in the Region reported having a school health and nutrition programme and these programmes generally aimed to tackle both child undernutrition and overweight or obesity. The most common elements were training for school staff, introduction of standards or rules for foods and beverages available in schools, inclusion of nutrition education in the school curriculum (58% of countries for all) and child growth monitoring in schools (53%). These were followed by provision of school meals/school feeding (47%), physical education in the school curriculum (47%), action on hygienic cooking facilities and clean eating environments (42%), provision of safe drinking-water free of charge (42%) and of adequate sanitation and hygiene (42%), a ban on vending machines in schools (26%), school milk schemes (26%), extra-curricular nutrition education (26%), standards for marketing of foods and non-alcoholic beverages (26%) deworming (21%), school gardens (21%) school fruit and vegetable schemes (16%), distribution of take-home rations (11%) and micronutrient supplementation (11%).

Specifically in relation to action to promote healthy diets and prevent overweight and obesity, the most common actions implemented in the Region were introduction of nutrition labelling (67%) – although only 56% concern nutrient declarations and 17% have introduced front-of-pack nutrition labelling – dissemination of dietary guidelines (65%) and nutrition and diet counselling (56%), followed by programmes to promote

reformulation of foods (47%), rules on nutrition and health claims (41%), media campaigns (39%), a ban on industrial trans fatty acids in food and drink products (24%), fiscal policies – taxes or subsidies (24%), regulation of marketing of food and non-alcoholic beverages to children (22%) and portion size control (12%). More recent data suggest that, in 2017, the adoption of national policies to limit saturated fatty acids and virtually eliminate industrially produced trans fatty acids in the food supply was fully achieved in 12 countries (54.5%) (13). In addition, implementation of fiscal measures (taxes on unhealthy foods, subsidies on healthy foods or removal of subsidies on less healthy foods) had been expanded, most notably with an increase in the introduction of taxes on sugar-sweetened beverages (member countries of the Gulf Cooperation Council, for example, imposed a 50% tax on soft drinks and a 100% tax on energy drinks) (13). Progress in implementation of WHO's Set of recommendations on marketing of food and non-alcoholic beverages to children remains slow and no country in the Region has adopted comprehensive policies restricting marketing of unhealthy food to children (9). In addition, 12 countries implemented at least one national public awareness and motivational communication campaign for physical activity, including mass media campaigns for physical activity behavioural change (13).

Improving access to, and consumption of, healthy, diversified diets is the best way to ensure adequate micronutrient intakes, but where this is not being achieved there is a role for supplementation and food fortification. Specifically in relation to action on vitamin and mineral nutrition, supplementation and food fortification was implemented widely across the Region. Twenty-one countries are implementing vitamin and mineral supplementation for pregnant women (most commonly iron or iron and folic acid), while eight countries report provision of supplements to women of reproductive age (folic acid, iron) and 16 report supplementation in children (vitamin A, iron, micronutrient powder, zinc, iodine) (10). Sixteen countries report fortification of salt, while 12 report fortification of wheat flour and six report fortification of oil, and one country reports fortification of sugar (10). Iron and folic acid were the fortificants most commonly added to wheat flour. A specific regional assessment of wheat flour fortification in 2018 found that 17 countries had some coverage of wheat flour fortified with iron and folic acid, and that this was mandatory in 11 countries (6). Despite this progress, a regional report on wheat flour fortification identified that further action was needed to expand coverage of wheat flour fortification and to ensure that it was effective (6).

Unfortunately, action to prevent and treat acute malnutrition continues to be needed in the Region. Twelve countries were implementing treatment of severe acute malnutrition with nutritional care and treatment of moderate acute malnutrition, while 10 were implementing food distribution programmes – such as emergency food aid programmes, direct food-based transfers, foods for infants and young children – to prevent acute malnutrition. In relation to action on nutrition and infectious diseases, seven countries in the Region report programmes on nutritional care and support for people living with HIV and those with tuberculosis – groups which are particularly vulnerable to undernutrition. In addition, four countries report implementation of deworming programmes to tackle soil-transmitted helminths and other parasites that can contribute to malnutrition.

Effective policy-making and accountability require effective nutrition surveillance and monitoring and evaluation systems. Eight countries have developed nutrition surveillance systems (14), however, nutrition data collection and analysis remain a challenge for the Region.

#### 2.2.6 Regional challenges

Efforts to achieve food security and improve nutrition in the Region face particular challenges. To date, there has been underinvestment in health and nutrition, and resources are unevenly and inequitably distributed. Many countries are still dependent on donor funding, while health systems often rely on out-of-pocket expenditure and health coverage remains limited. There is also a shortage of human capacity, specifically in relation to nutrition, but also for health systems more generally.

Success in improving nutrition by ensuring access to healthy, sustainable diets and to essential nutrition actions requires multisectoral action and adoption of a health-in-all policies approach. To date, little emphasis has been placed on the role of other sectors across the Region, or on social, economic or environmental determinants of nutrition.

Many countries are heavily dependent on imported foods and marketing for food and drink products is often disseminated via pan-regional media outlets across country borders, creating particular challenges for national authorities. As elsewhere, action on nutrition can face strong opposition from vested interests which can weaken political will. Efforts are further undermined by poor awareness of the human and economic cost of malnutrition in all its forms.

In many countries, regulatory action can be undermined by weak or under-resourced mechanisms to adopt, implement and enforce legislation and standards. Throughout the Region health surveillance and information systems need to be strengthened and integrated in order to generate data to inform policy and monitor progress.

Furthermore, several countries in the Region continue to face additional challenges associated with conflict, displaced populations and political unrest. In addition, gender discrimination has significant consequences for the nutritional status, health, well-being and development of women and girls.

#### 2.3 Developments in the nutrition landscape

There have been many significant developments in the nutrition landscape – at both global and regional levels – since 2010. Countries in the Region have made commitments to improve nutrition and are working towards achievement of various global and regional goals to improve the health and well-being of the Region's population.



#### Fig. 5. The triple billion target of WHO's Thirteenth General Programme of Work

#### 2.3.1 Key global developments

In September 2015, the world agreed to eliminate all forms of malnutrition by 2030 when Member States adopted the 2030 Agenda for Sustainable Development and its related goals. Addressing malnutrition in all its forms is firmly embedded in SDG 2 – which aims to end hunger, achieve food security and improve nutrition, and promote sustainable agriculture – and SDG 3 to ensure healthy lives and promote well-being for all at all ages. Improving nutrition will also enable further progress towards achievement of the other SDGs.

The SDGs incorporate previous globally agreed goals on maternal, infant and young child nutrition and on addressing NCDs and their diet-related risk factors. Progress towards these goals has been guided by globally agreed action plans – namely, the *Comprehensive implementation plan on maternal, infant and young child nutrition* (15) and the *Global action plan for the prevention and control of noncommunicable diseases* 2013–2020 (16).

The 2030 Agenda commitments to end malnutrition follow on from a common vision for global action to eradicate hunger and prevent all forms of malnutrition agreed at the Second International Conference on Nutrition (ICN2) in 2014 and set out in the *Rome Declaration on Nutrition (17)* and the accompanying *Framework for Action<sup>10</sup> (18)*. To accelerate efforts towards this common vision, the United Nations General Assembly declared a United Nations Decade of Action on Nutrition from 2016 to 2025.

<sup>&</sup>lt;sup>10</sup> The set of 60 voluntary ICN2 Framework for Action recommended policies and actions are presented for governments to incorporate, as appropriate, into their national nutrition, health, education, agriculture, environment, development, trade and investment plans.

In 2018, WHO also launched the first ever *Global action plan on physical activity 2018–2030: more active people for a healthier world,* which aims to ensure that all people have access to safe and enabling environments and to diverse opportunities to be physically active in their daily lives. It recognizes the role of physical inactivity in development of overweight and obesity and thus the potential contribution of action on physical activity to address malnutrition (19).

WHO's *Thirteenth General Programme of Work 2019–2023* sets out a triple billion target for ensuring healthy lives and promoting well-being for all at all ages (Fig. 5). This is to be achieved by ensuring that 1 billion more people benefit from universal health coverage, 1 billion more people are better protected from health emergencies and 1 billion more people enjoy better health and well-being. With a specific commitment to addressing the social, economic and environmental determinants of health, WHO's Thirteenth General Programme of Work encompasses the key principle of "leaving no one behind" and its targets are complementary to the targets of the SDGs.

#### 2.3.2 Regional developments

As part of its efforts to achieve the globally agreed goals and targets, the WHO Regional Office for the Eastern Mediterranean has set out its vision for 2023: Health for all, by all, so that everyone in the Region can enjoy a better quality of life (20). *Vision 2023* sets out four strategic priorities for the Region: expanding universal health coverage; addressing health emergencies; promoting healthier populations; and making transformative changes in WHO. Member States are invited to adopt a three-pronged approach that combines a life-course approach with a health-in-all-policies approach and integrated multisectoral action, and WHO is committed to supporting Member States in these efforts.

Throughout the decade, countries of the Region have adopted several specificallytargeted regional frameworks and action plans of matters relating to nutrition and diet-related NCDs. In October 2018 a *Regional framework for action on obesity prevention* 2019–2023 (21) was adopted, translating a series of policy priorities proposed in 2017 (22) into regional commitments. Strategic interventions and progress indicators are recommended in relation to fiscal measures, public procurement, food supply and trade, labelling, marketing, physical activity, mass media campaigns, breastfeeding, reformulation, health sector interventions, assessment and monitoring.

An earlier regional framework on noncommunicable diseases, updated in October 2015 (23), set out strategic interventions in the areas of governance, prevention and reduction of risk factors, surveillance, monitoring and evaluation and health care. Commitments in the area of prevention and reduction of risk factors include: ensuring healthy nutrition in early life and childhood, including breastfeeding promotion and regulating marketing of foods and non-alcoholic beverages to children; reducing average population salt intake in line with WHO recommendations; virtually eliminating trans fat intakes and reducing intake of saturated fatty acids; and promoting physical activity through a life-course approach.

#### Action on nutrition is key to health, economic well-being and sustainable development

Improving nutrition is essential to improving for the health of populations of the Eastern Mediterranean Region and for the economic well-being and sustainable development of its Member States. While malnutrition in all its forms lowers economic productivity and increases health care costs, good nutrition results in higher labour productivity, greater mental capacity and longer, healthier lives. Well-nourished workforces support productive economics, including agriculture and food production. It is estimated that every dollar invested in nutrition brings an economic benefit of US\$ 16 *(24)*. Tackling the chronic malnutrition which stunts the growth of the Region's children, for example, will bring benefits for economic productivity – each added centimetre of adult health is associated with an almost 5% increase in wage rates. Investing in good maternal nutrition and good nutrition in the first 1000 days of life will not only support the healthy growth and development of children, it will also enable them to achieve their full physical, intellectual and human development in adulthood – and, therefore, their economic productivity – as well as preventing the development of costly NCDs later in life.

In addition to being important for economic development, nutrition is central to many other aspects of the 2030 Agenda for Sustainable Development and to achievement of many of the SDGs. Ensuring good nutrition, for example, requires access to safe water and sanitation. Improving the nutrition of girls, women and children will improve schooling and contribute to reducing gender inequalities, while reducing nutrition inequalities will also lessen income inequalities. Transformation of food systems to ensure access to healthy, sustainable diets will reduce greenhouse gas emissions, soil degradation, loss of biodiversity and pressure on the world's oceans, while responsible food consumption will reduce food waste and loss.

Source: Adapted from United Nations Standing Committee on Nutrition (25).

# 3. Vision and objectives of the nutrition strategy for the Eastern Mediterranean Region, 2020–2030

The Strategy on nutrition for the Eastern Mediterranean Region 2020–2030 seeks to leverage the current momentum to improve access to healthy diets and address malnutrition in all its forms. It seeks to turn the commitments of the *Rome Declaration on Nutrition* and the regional *Vision 2023* into concrete action and to achieve the previously agreed goals on health, nutrition and NCDs using the six key areas of the United Nations Decade of Action on Nutrition. In addition, it seeks to contribute to realization of health for all by all in the Eastern Mediterranean Region and achievement of the SDGs and the triple billion target of WHO's Thirteenth General Programme of Work.

The vision, overall objective and specific objectives of the nutrition strategy are outlined below.

**Vision:** Countries in the Eastern Mediterranean Region have strengthened action on nutrition to achieve food security, end all forms of malnutrition and improve nutrition throughout the life course by 2030.

**Overall objective**: To support Member States strengthen efforts to ensure universal access to healthy and sustainable diets and implement effective nutrition actions, in order to:

- improve nutrition throughout life course for mothers, infants, children, adolescents and older people;
- prevent undernutrition, overweight, obesity and diet-related NCDs; and
- support and protect nutrition in emergency situations.

#### **Specific objectives:**

- 1. To support countries to operationalize a current national nutrition strategy and plan of action in order to achieve global and regional targets<sup>11</sup> and, by 2030, to:
  - reduce the number of children under 5 who are stunted by 50%;
  - reduce and maintain childhood wasting to less than 3%;
  - reduce the prevalence of overweight in children under 5 to not more than 3%;
  - reduce low birth weight by 30%;
  - reduce anaemia in women of reproductive age by 50%;

<sup>&</sup>lt;sup>11</sup> See Section 6 on monitoring and evaluation for information on indicators and interim targets.

- improve rates of early initiation of breastfeeding and continued breastfeeding and, specifically, increase the rate of exclusive breastfeeding in the first 6 months up to at least 70%;
- halt the rise in diabetes and obesity in adults;
- halt the rise in overweight in school-age children and adolescents 5–18 years old;
- reduce mean population intake of salt/sodium by 30%;<sup>12</sup>
- virtually eliminate industrially-produced trans fats from the food supply.
- 2. To provide a framework for countries to accelerate efforts to improve nutrition and food security through the six key action areas of the United Nations Decade of Action on Nutrition:
  - Sustainable, resilient food systems for healthy diets
  - Aligned health systems providing universal coverage of essential nutrition actions<sup>13</sup>
  - Social protection and nutrition education
  - Trade and investment for improved nutrition
  - Safe and supportive environments for nutrition at all ages
  - Strengthened governance and accountability for nutrition.

Section 5 provides more information on how policies and programmes in these areas for action can be used to improve nutrition.

<sup>&</sup>lt;sup>12</sup> Countries concerned about iodine deficiency should fully implement universal salt iodization and, if necessary, increase iodine levels as salt intakes are decreased.

<sup>&</sup>lt;sup>13</sup> The overall targets on reduction of stunting and wasting are also relevant to this key area for action.

# 4. Underlying principles and strategic approaches

Action to improve nutrition throughout the Region in the coming decade should be underpinned by some important principles, enshrined in the five key approaches outlined below.

#### Life-course approach

WHO is committed to promoting health and well-being through a life-course approach, which results in a triple dividend – health, social and economic benefits – for people now, for their future and for the next generation. There are many critical points to improve nutrition across the life course, including the nutritional health of women before, during and after pregnancy, nutrition in infancy and early childhood and the adoption of lifelong healthy eating habits during childhood and adolescence. In addition, good nutrition throughout the life course is essential for healthy ageing.

#### Health-in-all-policies approach and integrated multisectoral action

Progress on ending malnutrition in all its forms depends on action beyond the health sector. Policies in many sectors impact on food security and nutrition, including agriculture, environment, social protection, education, transport, infrastructure, public procurement, trade and finance. Action is needed, for example, to transform food systems, implement taxes and improve social protection to improve nutrition through adoption of an integrated, multisectoral approach. WHO is committed to promoting a health-in-all-policies approach to underpin health and nutrition improvements in the Region.

#### The life course approach embedded in WHO strategy

The Global strategy for women's, children's and adolescents' health 2016–2030 enshrines the life-course approach. In the Region, the life-course approach is also embedded in resolution EM/RC64/R.4 to operationalize the adolescent component of the global strategy urging countries to develop and/or update national adolescent health action plans and the Regional framework for action on preconception care 2019–2023 endorsed by the WHO Regional Committee for the Eastern Mediterranean in October 2018.

#### Involving whole of society

Multisectoral action requires the involvement of multiple sectors beyond central and local government with progress depending on the actions of many, varied stakeholders and the adoption of a whole-of-society approach. Relevant stakeholders include individuals, families and communities, intergovernmental organizations and religious institutions, civil society, academia, the media, the voluntary sector and, as appropriate, the private sector and industry. There is a fundamental role for civil society to advocate for nutrition action in order to build broad public support and political will, and to help monitor progress against commitments. Food industry actors have an important role to play in transforming food systems. Robust safeguards are needed to prevent and manage conflicts of interest in policy development and implementation.

#### Addressing determinants of health

It is well recognized that malnutrition is multifactorial and that there are many social, economic and environmental determinants of various forms of malnutrition. There are very stark health inequalities between and within countries in the Region and poor nutrition contributes to these income, gender and other social inequalities. At the regional and country level, it is vital, therefore, that nutrition action address these social, economic and environmental determinants. All efforts to improve nutrition need to pay careful attention to the impact on the most vulnerable – including people in emergency situations, those living in extreme poverty and marginalized and excluded groups – and ensure that as nutrition improves in the Region, no one is left behind.

#### Anchored in a human rights approach

Every man, woman and child has the right to adequate food and nutrition.<sup>14</sup> Countries which are party to the *International Covenant on Economic, Social and Cultural Rights,* therefore, already have a legal obligation to work towards realizing this right. Efforts to achieve food security and improve nutrition should therefore be anchored in a human rights approach, which supports the integration of gender, equity and human rights in national policies and planning.

#### Knowledge sharing and exchange of experience

Country efforts to implement a nutrition strategy should be informed by lessons learned from the experience of others on the ground. Regional cooperation needs to be supported by a platform for learning lessons from other countries in the Region and beyond. There is a clear need to share experiences, including both successes and failures. There is a role for WHO to facilitate the exchange and sharing of experiences

<sup>&</sup>lt;sup>14</sup> The Right to Food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement. The right to adequate food shall therefore not be interpreted in a narrow or restricted sense, which equates it with a minimum package of calories, proteins and other specific nutrients. Committee on Economic, Social and Cultural Rights (*35*).

and to collect and showcase evidence of policy successes, including examples from other WHO regions.

In addition, WHO is committed to pursuing this approach and collaborating with civil society and United Nations partner organizations, including FAO, UNICEF and the World Food Programme (WFP), to support Member States in their efforts to end malnutrition in all its forms.

## 5. Six key areas for action

This nutrition strategy is focused around the six key areas of action of the United Nations Decade of Action on Nutrition:

- Sustainable, resilient food systems for healthy diets
- Aligned health systems providing universal coverage of essential nutrition actions
- Social protection and nutrition education
- Trade and investment for improved nutrition
- Safe and supportive environments for nutrition at all ages
- Strengthened nutrition governance and accountability.

For each of the areas, WHO recommendations for priority actions have been developed, which need to be considered within national contexts. Additional actions may also be appropriate to specific situations. These recommendations reflect WHO's area of expertise, and Member States – as part of a multisectoral approach – will need to work with other United Nations agencies on the other important issues highlighted below, but which are not picked up as recommended priority actions.

Annex 2 sets out the recommendations from the ICN2 Framework for Action for each of the six areas and provides a detailed list of resources to help guide implementation. In this section, relevant regional frameworks, recommendations and guidance are shown in the boxes.

#### 5.1 Sustainable, resilient food systems for healthy diets

The burden of malnutrition facing the Region is closely linked to the state of today's food systems. Dramatic changes in what food is produced, how it is processed, marketed, made available to people and consumed or disposed of have increased the availability of calories and inexpensive food, which has reduced hunger for many but has not always improved access to diverse, micronutrient-rich foods. Meanwhile, foods high in salt, sugars, trans and saturated fats have become cheaper and more widely available. At the same time, today's food systems are important drivers of climate change and other environmental pressures which threaten the future health of the planet and populations. Transformation of food systems is needed, therefore, so that nutritious, safe, affordable and sustainable diets are available to all.

The actions outlined below will contribute to building sustainable, resilient food systems for healthy diets.

- **Reform food systems**: There is an urgent need to reform food systems to improve production of, and access to, foods which comprise healthy diets and to ensure greater sustainably. Two key elements are to strengthen local food supply chains especially in this Region which is heavily dependent on food imports and to increase the diversity of food production, in a sustainable way.
- **Reduce food loss and food waste**: Around a third of all food is lost or wasted every year, reducing the availability of food and negatively impacting the planet and on economic actors in the food chain. Policies to improve transport and storage infrastructure and to promote better industry practice and consumer behaviour are required.
- Reduce intake of saturated fat, sugars, salt and trans fat: Shifting dietary patterns have seen intakes of processed foods high in calories, unhealthy fats, sugars and salt increase across the Region. Policies, including regulatory measures, to improve the food supply by removing trans fats and reducing saturated fats, sugars and salt from food and drink products are needed, along with use of well-designed taxes and subsidies to create incentives for production and consumption of healthier foods and drinks.
- **Improve food safety and address antimicrobial resistance**: Food safety is critical for food security and good nutrition and relies on strong regulatory frameworks and effective food control systems. The active participation of Member States in the work of the Codex Alimentarius Commission and international food safety information exchange networks is important. Multisectoral collaboration between the public health, veterinary, food and environment sectors is needed to address antimicrobial resistance, which is threatening our ability to treat common infectious diseases.

There are other important areas for action to create sustainable, resilient food systems for healthy diets, but which are not the primary focus of this WHO strategy and relate more closely to the work of other United Nations partners. These include enhancing resilient food supply in crisis-prone areas and the management of water for improved nutrition (*36*).

#### Sustainable food systems – Regional framework on health and the environment

Modern food systems take a heavy toll on the environment, threatening the future health of the planet and populations. At the global scale food production is responsible for up to a third of greenhouse gas emissions and is a major source of soil and water pollution. It also accounts for almost three quarters of freshwater use and 40% of land use and contributes to biodiversity loss (26) (27) (28).

At the same time, global environmental change is likely to impact on food systems. The *Regional framework for action on health and the environment 2019–2023*, adopted in October 2018, includes a number of priorities and strategic actions for climate change and health. Identification of the current and future health effects of climate change should take into account the impact of food systems, and development of response strategies, plans and projects need to consider the impact on nutrition.

#### Regional initiatives to support fat, sugar, salt reduction

A number of regional initiatives have been developed to support this type of action. The *Regional framework for action on obesity prevention 2019–2023*, adopted in October 2018, includes the following among the priority areas for action:

- implementation of fiscal measures (implementation of a tax on sugar-sweetened drinks and other taxes and/or subsidies to promote healthy diets, as well as progressive elimination of subsidies on fats/oils and sugar)
- implementation of policies to progressively reformulate foods and beverages to eliminate trans fats and reduce total and saturated fat, salt, sugars, energy and portion size.

The Framework builds on earlier regional policy statements on fat and salt reduction and prevention of obesity, diabetes and cardiovascular disease.<sup>15</sup> To monitor the impact of salt reduction efforts, the WHO Regional Office has issued guidance on obtaining measures of population-level sodium intakes (29).

WHO has developed the REPLACE action package to provide a six-step action package to support governments to ensure the prompt, complete and sustained elimination of industrially-produced trans fats from the food supply.

#### Regional guidance on food safety

The Regional framework for action on health and the environment 2019–2023 sets out strategic actions to manage and minimize food safety risks and strengthen capacities to respond to food safety events. These include mapping food contamination risks, compiling or updating food safety legislation and policies, as well as establishing a coordinated system for monitoring, preparedness and management of food poisoning.

#### **Recommended priority actions**

- Eliminate trans fats through the development of legislation to ban the use of industrially-produced trans fats in the food chain.
- Progressively reduce intakes of salt, sugars and saturated fats by improving the nutritional quality of foods through government-led reformulation programmes.
- Implement a tax on sugar-sweetened beverages and use other taxes and subsidies to promote healthy diets.
- Review food subsidy programmes and progressively eliminate subsidies for all types of fats/oils and sugar.

<sup>&</sup>lt;sup>15</sup> Policy statement and recommended actions for reducing fat intake and lowering heart attack rates in the Eastern Mediterranean Region, 2013; Policy statement and recommended actions to lower national salt intakes and lower death rates from high blood pressure and strokes in the Eastern Mediterranean Region, 2013; Policy statement and recommended actions for lowering sugar intake and reducing prevalence of type 2 diabetes and obesity in the Eastern Mediterranean Region, 2016; Proposed policy priorities for preventing obesity and diabetes in the Eastern Mediterranean Region, 2017.

# 5.2 Aligned health systems providing universal coverage of key nutrition actions

Strong and resilient health systems, which provide universal coverage of key nutrition actions, will play a fundamental role in eliminating malnutrition in all its forms.

The actions outlined below will contribute to aligning health systems to provide universal coverage of key nutrition actions.

- **Build strong and resilient health systems**: Health systems need to be strong, resilient and accessible to all, without discrimination and with a special emphasis on the poor, vulnerable and marginalized segments of the population. Universal health coverage which countries have already committed to expanding in the Salalah Declaration on Universal Health Coverage of 2018, and which is the first strategic priority of Vision 2023 for the Region needs to include universal coverage of key nutrition actions.
- **Reduce stunting and wasting among children under 5**: Too many children in the Region are stunted or wasted, particularly in those countries affected by conflict and other crises. Policies, actions and investment are needed to improve coverage of treatment for wasting, improve the integrated management of childhood illnesses, improve disaster and emergency preparedness, improve maternal nutrition and health starting with adolescent girls and promote optimal infant and young child feeding.
- **Integrate health service policies and programmes**: Services that indirectly impact on nutrition include treatment and control of infectious diseases such as malaria, HIV/AIDS and tuberculosis (which can exacerbate, or be exacerbated by, undernutrition) and policies and programmes to ensure adequate support for safe pregnancy and delivery for all women, prevent adolescent pregnancy and to encourage birth spacing.
- **Expand nutrition interventions related to health services**: Other nutrition-related interventions can be delivered through the broader health system, away from health facilities. These can include, where appropriate, periodic deworming for all school-age children, provision of zinc supplementation and provision of iron and vitamin A supplements for pre-school children.

#### WHO recommendations on health service actions to improve nutrition

Many actions to directly or indirectly improve nutrition are delivered through health systems. These include support for breastfeeding, nutrition counselling, management of acute malnutrition, micronutrient supplementation, growth monitoring and screening, diet therapy for obesity and other curative nutrition measures, treatment and control of infectious diseases and reproductive health services.

Key health sector policies and interventions relating to improving nutrition have been set out in the WHO Comprehensive implementation plan for maternal, infant and young child nutrition and the Global action plan for the prevention and control of noncommunicable diseases 2013–2020, which countries are already working to implement. WHO set out a consolidated set of all essential nutrition actions in Essential nutrition actions: mainstreaming nutrition through the life-course in 2019.

The Regional framework for action on obesity prevention 2019–2023 highlights a number of health sector interventions as priority areas for action, including interventions to promote and facilitate behaviour change, provision of dietary counselling for high-risk individuals and on healthy weight gain before and during pregnancy and integrating screening for overweight into primary health care.

The Regional framework for action on noncommunicable diseases also sets out a number of health service interventions, to improve early detection and management of NCDs and improve access to safe, affordable and quality essential medicines and technologies.

To support implementation, the Regional Office is developing a practice manual for management of obesity, hypertension and diabetes through diet therapy, as well as developing healthy lifestyle guidance and self-management skills for delivery through counselling.

#### Regional frameworks on preconception care and malaria

A Regional framework for action on preconception care 2019–2023, adopted in October 2018, sets out a number of strategic actions to improve nutrition.

The *Regional malaria action plan 2016–2020: Towards a malaria-free Region* sets out a goal of, by 2030, interrupting malaria transmission in areas where it is feasible and reducing the burden by more than 90% in areas where elimination is not immediately possible and sets out strategic approaches and relevant actions.

#### **Recommended priority actions**

- Strengthen health systems and implement policies and strategies to achieve universal health coverage of nutrition actions.
- Integrate direct and indirect nutrition actions as set out in WHO action plans on maternal, infant and young child health and NCDs<sup>16</sup> and in the regional frameworks on obesity prevention, NCDs, preconception care and malaria – into health systems, and ensure universal access to these actions.
- Adopt policies and mobilize resources to improve coverage of treatment for wasting, using the community-based management of acute malnutrition approach.
- Integrate disaster and emergency preparedness into relevant policies and programmes.
- Implement appropriate micronutrient supplementation programmes.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> A consolidated set of essential nutrition actions is detailed in *Essential nutrition actions: Mainstreaming nutrition through the life-course* (https://www.who.int/nutrition/publications/essential-nutrition-actions-2019/en/, accessed September 2019).

<sup>&</sup>lt;sup>17</sup> Depending on the context, WHO recommends micronutrient supplementation as follows: Daily iron supplementation for infants and children (6 months to 12 years) living in settings where the prevalence of anaemia in infants and young children is 40% or higher; Intermittent use of iron supplements for preschool or school age children in settings where prevalence in this group is 20% or higher; Daily calcium supplementation for pregnant women in populations with low dietary calcium intake; Iodine supplementation for pregnant and lactating women in countries where less than 20% of households have access to

#### 5.3 Social protection and nutrition education

Nutrition education and clear nutrition information remain important elements of any nutrition strategy, although information and education alone will not be enough to bring about the improvements needed. Measures to protect the nutritional status of the most marginalized, poorest and vulnerable populations, in times of crisis and in the long term, are also needed.

The actions outlined below will contribute to improving social protection and nutrition education.

- **Improve nutrition education and information for behavioural change**: Nutrition education encompasses a wide range of actions to influence consumer awareness, attitudes, social norms, skills, preferences and behaviour. Education is needed in schools and for teachers and those working in health, agriculture and social protection. There is also a role for social marketing campaigns, behaviour change communication and clear information about the nutritional quality of foods.
- **Increase social protection**: Social protection measures such as, for example, cash and food transfers or school feeding programmes are an effective way to reach the most nutritionally vulnerable, including children and pregnant women. It is important that nutrition objectives are built into social protection programmes and, in crisis situations, into humanitarian assistance programmes.

In addition, a regular and adequate income allows people to buy the diverse, safe and nutritious foods needed for a healthy diet and also to access health care and education. Measures to increase income for the most vulnerable and provide decent rural employment, therefore, should be part of multisectoral efforts for nutrition, but are outside the main focus of this strategy.

#### Media campaigns and nutrition labelling standards for better nutrition

The *Regional framework for action on obesity prevention 2019–2023* highlights the role of social marketing and mass media campaigns on healthy diet and physical activity and recommends implementation or revision of standards for nutrition labelling to include mandatory front-of-pack nutrition labelling for all pre-packaged foods. The WHO Regional Office is providing support to Member States seeking to implement front-of-pack labelling.

#### **Recommended priority actions**

- Develop/update and disseminate national dietary guidelines for specific groups (children, adolescents, adults, pregnant and breastfeeding women, older adults).
- Integrate nutrition education into school curricula and into training and education for teachers, health workers and other relevant front-line workers.

iodized salt; Daily oral iron (30 mg to 60 mg of elemental iron) and 400  $\mu$ g folic acid supplementation for pregnant women; Intermittent iron and folic acid supplementation in menstruating women in populations where the prevalence of anaemia among nonpregnant women of reproductive age is 20% or higher; Oral iron supplementation, either alone or in combination with folic acid, to postpartum women in settings where gestational anaemia is of public health concern; Vitamin A supplementation for pregnant women, infants and young children in areas where vitamin A deficiency is a severe public health problem; Zinc supplementation for infants and children with diarrhoea.

- Implement mandatory standards for ingredient listing, back-of-pack nutrient declarations and simplified front-of-pack labelling for all pre-packaged foods.
- Where appropriate, implement school feeding programmes and other forms of nutrition-sensitive social protection (e.g., cash and food transfers) to safeguard vulnerable populations.

#### 5.4 Trade and investment for improved nutrition

In today's globalized world international trade has an important impact on nutrition, particularly in the Eastern Mediterranean Region where many countries rely heavily on imported food.

The actions outlined below will contribute to aligning health systems to enhancing trade and investment for improved nutrition.

- Enhance trade and investment in improved nutrition: It is clear that there is a strong economic case for governments and international institutions to invest in improving nutrition. Such investment needs to explicitly target nutrition improvements (and not, for example, focus on food security alone). All national policies and investments in food and agriculture as well as in infrastructure, public services and human capacity should take nutrition into account in order to ensure food security and enable healthy diets.
- Explore options in international trade for nutrition: Trade policies have the potential to improve nutrition, but they can also increase access to inexpensive, unhealthy foods and can sometimes restrict governments' scope to take policy action to promote healthy diets. There is a need for countries to work together and across sectors, learning from others' experiences within and beyond the Region, to identify the opportunities and risks for nutrition associated with trade policy and to implement complementary policies to offset any risks identified.

#### **Recommended priority actions**

- Establish and monitor national budget commitments to invest in nutrition.
- Conduct a situation analysis of the national food supply (including imported foods) to determine the sources of fats/oils, sugars and salt in the diet and explore the options for using standards, legal instruments and trade policy to improve the national and/or local food supply.

#### Standards, legislation and trade instruments to improve the food supply

The Regional framework for action on obesity prevention 2019–2023 highlights the opportunities to use food standards, legal instruments and other approaches to improve the national and/or local food supply. There may be scope to use compositional standards, tariffs, import restrictions, planning laws, sales bans, where appropriate, to reduce the volume and improve the quality of fats/oils and reduce sugars in the food supply.

#### 5.5 Safe and supportive environment for nutrition at all ages

There has been increasing recognition in recent years of the critical role of supportive environments in improving nutrition.

The actions outlined below will contribute to securing safe and supportive environments for nutrition at all ages.

- Influence the food environment for healthy diets: The environments in which we buy, choose, prepare and eat food can influence what foods are available, affordable and appealing and can, therefore, have an important impact on diets. Measures that influence food environments provide important opportunities to promote healthy diets. There is also an important role for governments to develop or update national dietary guidelines to inform, evaluate and align measures to promote healthy diets.
- **Protect, promote and support breastfeeding**: Investment in breastfeeding support, promotion and protection is one of the most cost-effective and sustainable public health measures available. In 2017, only two countries in the Eastern Mediterranean Region were meeting the global target for exclusive breastfeeding and robust policy action is needed to improve rates across the Region.

#### Regional framework on obesity prevention

The Regional framework for action on obesity prevention 2019–2023 includes many actions to create healthy food environments. It includes, for example, recommendations for regulatory action to influence the relative affordability of foods (taxes/subsidies), the availability of food (nutrition standards for food in public institutions, food reformulation), the appeal of foods (regulating the marketing of foods to children and front-of-pack nutrition labelling, both based on robust nutrient criteria). Many countries across the Region pledged further efforts to prevent obesity in the Region in the Sharjah Declaration on Obesity Prevention in November 2018.

#### Support, promote and protect breastfeeding

Exclusive breastfeeding in the first six months and continued breastfeeding up to two years of age and beyond promotes optimal infant growth and development, protects against stunting, wasting and infection, while reducing the risk of overweight, obesity and diet-related NCDs in later life. Breastfeeding also provides some protection for mothers against obesity and some diet-related NCDs in later life, and is environmentally sustainable.

The recommended steps for governments in the Region are set out in the policy document "The urgent need to fully implement the *International Code of Marketing of Breast-milk Substitutes*". The WHO Regional Office and UNICEF are providing support for the implementation of the Code, and monitoring its implementation using the NetCode protocol, and for the implementation of the Baby-Friendly Hospital Initiative and the newly updated *Ten steps to successful breastfeeding* (Revised 2018).<sup>18</sup> Action is also needed to protect breastfeeding in humanitarian crises and to ratify the International ILO Maternity Protection Convention and implement maternity protection laws, as well as creating an enabling environment for men to share childcare responsibilities.

#### Implementation of WHO recommendations on food marketing to children

The WHO Regional Office continues to provide countries with technical support to implement the WHO Set of Recommendations on Marketing of Foods and Non-alcoholic Beverages to Children. A 2018 report on implementation of the recommendations in the Region emphasizes the importance of a comprehensive approach, building consensus and setting clear definitions for "marketing to children" and "unhealthy food". It also acknowledges that if a comprehensive approach is not feasible, a stepwise approach (focusing initially on at least television and in-school marketing) is preferable to no intervention at all (9). The Regional Office has developed a nutrient profile model to help countries define which food marketing should be restricted (31).

<sup>&</sup>lt;sup>18</sup> Ten steps to successful breastfeeding. Geneva: World Health Organization, 2019 (https://www.who.int/nutrition/bfhi/ten-steps/en/, accessed 18 September 2019).

#### WHO recommendations on wheat flour fortification

The WHO Regional Office is providing support and guidance to countries on food fortification, particularly in relation to fortification of industrially-processed wheat flour (6). Countries are urged to follow the latest WHO recommendations on best practice (32) and to implement a mandatory approach, where possible.

- Reduce childhood overweight and obesity: A broad array of policies and interventions is needed, as set out in the wide-ranging final report of the Commission on Ending Childhood Obesity (*30*). Measures are required, for example, to provide dietary counselling to pregnant women, improve supplementary feeding programmes for infants and young children and create an environment conducive to physical activity from an early age. It is also important to promote breastfeeding and to end the inappropriate promotion of foods for infants and young children and reduce children's exposure to marketing for unhealthy foods.
- Reduce anaemia in women of reproductive age: The Region is not on course to meet the target of reducing anaemia by 50% in this group by 2025. Control of anaemia in women of reproductive age is essential to prevent poor health outcomes for women and their children. In addition to actions relating to non-nutritional causes of anaemia, multisectoral action to improve intake of foods rich in micronutrients, particularly iron, through promotion of healthy and diversified diets, education on iron-rich foods and, where necessary, through fortification and supplementation. Policies should ensure provision of daily iron and folic acid to pregnant women as part of antenatal care, of intermittent iron and folic acid supplementation to menstruating women where the prevalence of anaemia is 20% or higher, and deworming, where appropriate.
- Improve water, sanitation and hygiene: Poor sanitation and hygiene, and a lack of access to safe drinking-water, can have severe consequences for childhood nutrition through their impact on diarrhoeal diseases, intestinal parasites and environmental enteropathy. Action is needed to implement culturally appropriate interventions, including improved household toilets or latrines, improved water supply, safe household water management and promotion of safe hygiene practices, including handwashing with soap.

#### Regional framework for action on health and the environment 2019–2023

The strategic actions set out in the *Regional framework for action on health and the environment 2019–2023* include extending water supply and sanitation services to the underserved and improving service to the underserved and other regulations and management practices for priority water and sanitation as strategic actions, along with monitoring and surveillance.

## **Recommended priority actions**

- Introduce and enforce mandatory guidelines for provision of healthy food in public institutions (e.g. schools, hospitals, military, prison and other government institutions).
- Reinforce the package of policies and interventions to promote, protect and support breastfeeding and appropriate complementary feeding (ensuring it includes full implementation of the *International Code of Marketing of Breast-milk Substitutes* and WHO guidance on ending inappropriate promotion of foods for infants and young children, mandatory implementation of baby-friendly health systems, introduction of maternity protection laws and implementation of a national policy on infant and young child feeding in emergencies).
- Implement the WHO Set of recommendations on marketing of foods and non-alcoholic beverages to children.
- Implement and monitor policies and practices for wheat flour fortification and for salt iodization, in line with the latest WHO recommendations on best practice
- Implement appropriate micronutrient supplementation policies (see 5.2).

## 5.6 Strengthened governance and accountability for nutrition

Success in implementing this strategy will depend on the extent of political commitment and the existence of an enabling policy environment and effective governance mechanisms.

The actions outlined below will contribute to strengthening governance and accountability for nutrition.

- Strengthen/develop governance and coordination mechanisms for food security and nutrition: Strong government leadership, robust nutrition governance, multisectoral participation and comprehensive multisectoral coordination mechanisms at various levels are needed, as well as adequate institutional capacity, the participation of civil society and inter-country collaboration and exchange.
- Advocate for a health-in-all-policies approach in policies and programmes related to nutrition: The actions of many sectors including agriculture, environment, health, trade, education, employment, social welfare, media, urban planning and water, sanitation and hygiene can impact on nutrition. A health-in-all-policies approach is needed to ensure the actions of all these sectors contribute to and reinforce the work of other sectors and incorporate nutrition objectives into their sectoral policies, legal frameworks and programmes.
- **Integrate multisectoral information systems related to food and nutrition**: Reliable data, statistics and information are essential to be able to inform and drive nutrition action and assess progress towards the agreed targets. It is also important for countries to have the capacity to analyse and interpret the information, in order to be able to communicate effectively with decision-makers. Robust integrated multisectoral and sustainable information systems on food, diets and nutrition are

needed to inform and improve policy development and provide accountability. Such systems need technical and financial support and could benefit from countries working together in sub-regional groupings to learn lessons from one another's experience.

### **Recommended priority actions**

- Establish or strengthen national cross-government, multisectoral coordination mechanisms for nutrition, with a clear mandate and allocated funds/resources.
- Develop/update and operationalize a current national action plan on nutrition (including national SMART targets) to give effect to this strategy.
- Establish or strengthen a food and nutrition surveillance system to provide information on nutrition status of populations and on factors that influence nutrition.
- Update and expand national food composition databases, with standardized methodology and reporting in line with WHO recommendations.

### Regional guidance on food and nutrition surveillance systems

In 2013, the WHO Regional Office for the Eastern Mediterranean published technical guidance on the development of food and nutrition surveillance systems to help Member States develop systems that provide regular and updated information on the nutrition status of populations and on factors that influence nutrition (*32*).

### Improving food composition data in the Region

Accurate, relevant and up-to-date data on the composition of foods commonly consumed is of vital importance to understand population diets, inform policy development and monitor the impact of policies. Since 2016, the WHO Regional Office has been supporting Member States to standardize and update food composition databases, in partnership with the European Food Information Resource (EUROFIR) and the Quadram Institute. The training and technical support provided through this project has enabled standardization of methodology and of reporting formats and the sharing of data between Member States to expand the available data on food composition in several countries of the Region (33).

## 6. Monitoring and evaluation framework

In order to ensure that the policies and programmes set out in this strategy are translated into action on the ground, it is important to establish a monitoring and evaluation framework.

Globally, countries are working towards the existing nutrition and NCD goals which have been incorporated into the SDGs. In order to monitor progress, a Global Nutrition Monitoring Framework has been established which defines the indicators for the global nutrition targets (primary outcome indicators, intermediate outcome indicators, process indicators and policy environment and capacity indicators) (*34*). Similarly, countries are already tracking progress towards the NCD goals through the Global Monitoring Framework on Noncommunicable Diseases.

In the shorter term, WHO's Thirteenth General Programme of Work also set out a series of indicators and targets for the period 2019–2023 for stunting, wasting, salt/sodium, raised blood pressure, trans fats and childhood overweight. In addition, there are other targets which relate indirectly to nutrition: ensure access to safe drinking-water for 1 billion more people and ensure access to safe sanitation for 800 million more people.

In addition, throughout the decade countries of the Region have adopted some more specifically-targeted regional frameworks and action plans of matters relating to nutrition and diet-related NCDs. In October 2018 the *Regional framework for action on obesity prevention 2019–2023 (21)* was adopted, translating a series of policy priorities proposed in 2017 (22) into regional commitments. An earlier regional framework on noncommunicable diseases, updated in October 2015 (23), set out progress indicators to assess Member States' progress by 2018.

In order to be coherent with these initiatives – and recognizing that countries are already reporting a series of indicators – a preliminary monitoring framework for this strategy has been drawn up almost entirely on the basis of existing indicators (see Table 2). Further work to elaborate this monitoring framework, including completing the gaps in baseline data, defining indicators and targets for specific objective 2 and the key areas for action, identifying interim targets and process indicators will be required. A list of suggested indicators for actions in the six key areas for action is provided in Annex 3.

This monitoring framework should be adapted to the national context, national SMART commitments and interim targets defined, and whenever available, baseline data provided.

Regional targets for specific objective 1:	Indicator definition and regional baseline	Interim targets
To support countries to operationalize a current national nutrition strategy and plan of action in order to achieve global and regional targets <sup>19</sup> and, by 2030, to:	Baseline 2017: 17 countries have national nutrition policies, strategies or action plans of other policies and plans which focus on nutrition or healthy diet, 12 of which are recently developed	By 2025, 11 countries have updated their national nutrition action plans
<ul> <li>Reduce the number of children under-5 who are stunted by 50%</li> </ul>	Baseline 2018: 24.7% children 0–59 months have height-for-age two standard deviations or more below the WHO child growth standards median <sup>20</sup>	Reduce by 30% by 2023 Reduce by 40% by 2025
<ul> <li>Reduce and maintain childhood wasting to less than 3%</li> </ul>	Baseline 2018: 7.8% children 0–59 months have weight-for-height two standard deviations of more below the WHO Child growth standards median <sup>20</sup>	Reduce to less than 5% by 2023
<ul> <li>Reduce the prevalence of overweight in children under 5 years by 25%</li> </ul>	Baseline 2018: 5.7% children 0–59 months with weight-for-height two standard deviations or more above the WHO child growth standards median <sup>20</sup>	Halt and begin to reverse the increase in childhood overweight and obesity by 2023
<ul> <li>Reduce low birth weight by 30%</li> </ul>	Baseline 2014: 19.31% babies born weighing less than 2500 g at birth <sup>20</sup>	Phased interim targets to be determined
<ul> <li>Reduce anaemia in women of reproductive age by 50%</li> </ul>	Baseline 2017: estimated regional prevalence is 35.7%. Indicators are: Percentage of pregnant women with a haemoglobin concentration of <110 g/L at sea level <sup>21</sup> ; Percentage of non-pregnant women of reproductive age with a haemoglobin concentration of <120 g/L <sup>20</sup>	Phased interim targets to be determined
<ul> <li>Improve rates of early initiation of breastfeeding and continued breastfeeding and, specifically, increase the rate of exclusive breastfeeding in the first 6 months up to at least 70%</li> </ul>	Baseline 2017: 29.3% of infants 0–5 months who are exclusively breastfed on breast milk and no other food or drink, including water (but excluding oral rehydration salts and drops or syrups containing vitamins, minerals and medicine) <sup>20</sup>	Increase to at least 50% by 2025
<ul> <li>Halt the rise in diabetes and obesity in adults</li> </ul>	Baseline: Regional prevalence of raised fasting blood glucose among adults: 13.8%; Regional prevalence of obesity among adults: 25.1%. Definition: Age-standardized prevalence of overweight and obesity in persons aged 18+ defined as body mass index of 25 or more for overweight and of 30 or more for obesity <sup>21</sup> ; Age-standardized prevalence of raised blood glucose/ diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration $\geq$ 7.0 mmol/l (126 mg/dl) or on medication for raised blood glucose)21	Phased interim targets to be determined
<ul> <li>Halt the rise in overweight in school-age children and adolescents 5-18 years old</li> </ul>	Baseline: Prevalence of overweight among children (5-9 years): 29.4%; Prevalence of overweight among adolescents: 26.1% Definition: Prevalence of overweight in school-age children and adolescents is defined as the percentage	Phased interim targets to be determined

#### Table 2. Preliminary monitoring framework

<sup>&</sup>lt;sup>19</sup> For more detailed definition of the indicators used to measure these outcomes (and additional process indicators) see Indicators for the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition, available from: https://www.who.int/nutrition/topics/indicators\_monitoringframework\_miycn\_background.pdf?ua=1 and information on the targets and indicators for the Global Action Plan for Control and Prevention of NCDs, available from: https://www.who.int/nmh/global\_monitoring\_framework/en/, accessed 18 September 2019. <sup>20</sup> This indicator is included in the Global Nutrition Monitoring Framework.

<sup>&</sup>lt;sup>21</sup> This indicator is included in the Global Monitoring Framework on Noncommunicable Diseases.

Regional targets for specific objective 1:	Indicator definition and regional baseline	Interim targets
	of children aged 5–19 years with sex-specific BMI-for- age above +1 SD from the WHO 2007 reference median. Prevalence of obesity in school-age children and adolescents is defined as the percentage of children aged 5–19 years with sex-specific BMI-for- age above +2 SD from the WHO 2007 reference median.	
<ul> <li>Reduce mean population intake of salt/sodium by 30%</li> </ul>	Baseline 2015: Average regional intake of salt is 9.75 g salt per person per day; Definition: Indicator is age- standardized mean population intake of salt (sodium chloride) per day in grams in persons aged 18+ years <sup>21</sup>	Interim target: Reduce salt/sodium intake by 25% by 2023
<ul> <li>Virtually eliminate industrially-produced trans fats have from the food supply</li> </ul>	Baseline 2017: Four countries had implemented a specific measure to ban or virtually eliminate industrial trans fatty acids <sup>22</sup>	Interim target: By 2023, industrially- produced trans fats have been virtually eliminated from the food supply

 $<sup>^{22}</sup>$  Indicator is included in the technical paper on promoting health and well-being (EM/RC65/6 Rev.1) as an indicator to measure the impact of proposed approaches over the period 2019–2023.

## 7. Conclusions

The WHO Regional Office will work closely with countries to translate the regional strategy into national action and explore ways of working in greater coordination with other key partners and United Nations agencies, such as the Food and Agriculture Organization of the United Nations, UNICEF and the World Food Programme, to ensure that nutrition occupies a prominent place in national development plans and that comprehensive, multisectoral support is provided to countries to improve nutrition across the Region. WHO is committed to supporting all countries in their efforts to achieve food security, end all forms of malnutrition and improve nutrition throughout the life course by 2030.

This strategy promotes a health-in-all-policies approach as progress on ending malnutrition in all its forms depends on action beyond the health sector. It recognises the importance of involving the whole of society, including the fundamental role of civil society in advocating for action on nutrition and food industry actors in transforming food systems. Efforts to improve nutrition and ensure food security need also to take into account the social, economic and environmental determinants of malnutrition and the impact on the most vulnerable – populations affected by conflict and emergencies, those living in extreme poverty and marginalized and excluded groups – to ensure that as nutrition improves, no one is left behind and everyone's right to adequate food and nutrition is recognized.

WHO seeks to promote policy dialogue with and between Member States and to work closely with institutions responsible for data collection and analysis to build capacity and ensure that disaggregated data are available and analysed, and solutions are based on country-specific evidence. Informed policy-making and accountability depend on effective mechanisms for nutrition surveillance and monitoring and evaluation, and Member States have identified a need for support in these areas. They have also identified a need for support on data use for advocacy purposes, which is needed to mobilize broad public support for action on nutrition to in turn build political will and help monitor progress towards global and national nutrition targets.

Mapping the risk factors that affect maternal, neonatal, child and adolescent health and increase the burden of diet-related noncommunicable diseases will reduce these risks and provide evidence for policy-making and the strengthening of public health functions in primary health care settings and at the community level to deliver accessible, integrated nutrition services to those who are most vulnerable. Country efforts to implement a national strategy can be informed by the experiences of others on the ground and WHO will facilitate the establishment of knowledge sharing platforms to collect and showcase evidence of policy successes, including examples from other WHO regions. Ultimately the success of any strategy in improving nutrition depends on the level of political will and commitment, the existence of an enabling policy environment and effective government mechanisms to support action on nutrition.

This strategy is intended to help Member States translate knowledge into action and support their efforts to implement strategies, policies and regulatory actions to achieve food security, end all forms of malnutrition and improve nutrition throughout the life course by 2030.

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## Annex 1. Levels of economic development and health challenges in countries of the Region<sup>23</sup>

Health system building blocks	Low-income countries	Middle-income countries	High-income countries
	Afghanistan, Dijbouti, Libya, Pakistan, Somalia, Sudan, Yemen	Egypt, Iraq, Islamic Republic of Iran, Jordan, Lebanon, Morocco, Palestine, Syrian Arab Republic, Tunisia	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates
Governance	Limited ministry of health capacity for evidence-based policy analysis and formulation and strategic planning; inadequate capacity to legislate, regulate and enforce rules and regulations	Limited ministry of health capacity for evidence-based policy analysis and formulation and strategic planning; Inadequate capacity to legislate, regulate and enforce rules and regulations	Limited ministry of health capacity for evidence-based policy analysis and formulation and strategic planning; Inadequate capacity to legislate, regulate and enforce rules and regulations
Financing	Absence of universal health coverage; inadequate allocation to health to provide for basic package to services; high share of out-of-pocket expenditure compared to pre- payment systems; absence of social protection programmes to cover the informal sector	Absence of universal health coverage; high share of out- of-pocket expenditure compared to pre-payment systems; inefficient health protection programmes	Inadequate financing schemes aiming for universal health coverage that include nationals and expatriates
Health workforce	Poor capacity for human resource planning; inappropriate skill mix to address health problems; lack of trained health and hospital managers; system of accreditation of medical institutions not functional	Poor capacity for human resources planning; inappropriate skill mix to address health problems; deficient cadre of trained health/hospital managers; system of accreditation of medical institutions not fully functional	Over reliance on expatriate workforce; resources among GCC countries to produce a balanced workforce are not optimally shared

<sup>&</sup>lt;sup>23</sup> Countries in complex emergencies are faced by additional challenges; including: 1) Governance: weak institutional capacity of ministries of health in post-conflict phase in policy/planning; 2) Financing: limited capacity to efficiently utilize public funds, revitalize social protection schemes; 3) Health workforce: inadequate policies to attract emigrants home, absent human resources plan for rebuilding appropriate workforce, need to revitalize closed or poorly functioning institutions, over reliance on expatriate workforce, limited ministry of health capacity to coordinate donors and ensure aid effectiveness, and lack of trained ministerial staff; 4) Service provision: ineffective primary care and hospital-based services for handling emergencies, inappropriate balance between health services provided by public sector and by nongovernmental organizations; 5) Health information: weak information systems; and 6) Health technologies: lack of fast-track mechanisms for procurement and regulation of technologies for countries in complex emergencies.

Health system building blocks	Low-income countries	Middle-income countries	High-income countries
Service provision	Primary health care services not universally accessible, essential package of services not well implemented; weak district health systems, including poorly functioning referral systems; inadequate recognition of the role of the private sector	Inadequate focus of primary health care programmes on quality, utilization and responsiveness to the changing disease burden and specific needs of the ageing population; escalating costs and limited capacity for cost and cost-effectiveness analysis of health services; inadequate regulation and monitoring of investment in large and complex specialized hospitals and units	Inadequate focus of primary health care programmes on quality, utilization and responsiveness to the changing disease burden and specific needs of the ageing population; escalating costs and limited capacity for cost and cost-effectiveness analysis of health services; inadequate regulation and monitoring of investment in large and complex specialized hospitals and units
Health informationPoorly functioning or fragmented management information and disease surveillance systems; limited capacity for health system research; available information not used for decision-makingLimited capacity for health		Poorly functioning or fragmented management information and disease surveillance systems; management information and disease surveillance systems need strengthening	Poorly functioning or fragmented management information and disease surveillance systems; management information and disease surveillance systems need strengthening
	Limited capacity for health system research	Limited capacity for health system research	Limited capacity for health system research
Health technologies	Lack of national medicines policy; lack of adherence to good procurement practices; inadequate funds for preventive maintenance and repair; suboptimal use of equipment; irrational drug prescribing, dispensing and self-medication	Lack of national medicines policy; lack of adherence to good procurement practices; inadequate funds for preventive maintenance and repair; suboptimal use of equipment; irrational drug prescribing, dispensing and self-medication	Lack of national medicines policy; lack of adherence to good procurement practices; inadequate funds for preventive maintenance and repair; suboptimal use of equipment; irrational drug prescribing, dispensing and self-medication
	Population does not have regular access to essential technologies; lack of appropriate and affordable technologies; procurement of counterfeit technologies; weak vaccine regulation and weak pharmacovigilance system for vaccines	Limited capacity of regulatory authorities to guard the quality, safety and efficacy of medicines, vaccines, clinical technologies and devices; public sector procurement prices are relatively high in some countries; demand for high-tech health services and inappropriate use of technology	Limited capacity of regulatory authorities to guard the quality, safety and efficacy of medicines, vaccines, clinical technologies and devices; public sector procurement prices are relatively high in some countries; demand for high-tech health services and inappropriate use of technology

## Annex 2. The six key areas for action: ICN2 Framework for Action recommendations and relevant information resources

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
SUSTAINABLE,	<b>RESILIENT FOOD SYSTEMS FOR H</b>	IEALTHY DIETS
Food systems for nutrition	Recommendation 9: Strengthen local food production and processing, especially by smallholder and family farmers, giving special attention to women's empowerment, while recognizing that efficient and effective trade is key to achieving nutrition objectives. Recommendation 10: Promote the diversification of crops, including underutilized traditional crops, more production of fruits and vegetables, and appropriate production of animal-source products as needed, applying sustainable food production and natural resource management practices.	<ul> <li>FAO. 2017. Nutrition-sensitive agriculture and food systems in practice: options for intervention. Rome. www.fao.org/3/a-i7848e.pdf</li> <li>FAO. 2016. Commission on Genetic Resources for Food and Agriculture. Voluntary Guidelines for Mainstreaming Biodiversity into Policies, Programmes and National and Regional Plans of Action on Nutrition. Rome. www.fao.org/3/a-i5248e.pdf</li> <li>FAO. 2016. Developing gender-sensitive value chains: a guiding framework. Rome. www.fao.org/3/a-i6462e.pdf</li> <li>FAO. 2014. Developing sustainable food value chains: guiding principles. Rome. www.fao.org/3/a-i3953e.pdf</li> <li>FAO. 2013. The State of Food and Agriculture: food systems for better nutrition.</li> <li>Rome. www.fao.org/docrep/018/i3300e/i3300e.pdf</li> <li>FAO. 2011. Save and grow: a policymaker's guide to the sustainable intensification of smallholder crop production. Rome.</li> <li>www.fao.org/docrep/014/i2215e/i2215e.pdf</li> <li>WHO. 2018. Healthy diet Factsheet N°394.</li> <li>https://www.who.int/nutrition/publications/nutrientrequirements/healthydiet_factsheet/en/</li> </ul>
Food loss and food waste prevention and reduction for better nutrition	Recommendation 11: Improve storage, preservation, transport and distribution technologies and infrastructure to reduce seasonal food insecurity, food and nutrient loss and waste.	<ul> <li>FAO. 2017. Key facts on food loss and waste you should know [online]. Rome. www.fao.org/save-food/resources/keyfindings/en</li> <li>FAO. 2017. SAVE FOOD: Global Initiative on Food Loss and Waste Reduction [online]. Rome www.fao.org/save-food</li> <li>FAO. 2017. Sustainable Development Goal 12: Ensure sustainable consumption and production pattern. Rome www.fao.org/sustainable-development-goals/goals/goal-12/en</li> <li>FAO. 2017. Technical Platform on the Measurement and Reduction of Food Loss and Waste [online]. Rome.</li> <li>www.fao.org/platform-food-loss-waste/food-waste/food-waste-reduction/country-level-guidance/en</li> <li>FAO. 2014. Food wastage footprint: full-cost accounting. Rome. www.fao.org/3/a-i3991e.pdf</li> </ul>

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
		FAO. 2011. Global food losses and food waste: extent, causes and prevention. Rome. www.fao.org/docrep/014/mb060e/mb060e00.pdf
	Recommendation 14: Encourage gradual reduction of saturated fat, sugars and salt/ sodium and trans-fat from foods and beverages to prevent	WHO Regional Office for the Eastern Mediterranean. 2018. Regional framework for action on obesity prevention 2019-2023. WHO Regional Office for the Eastern Mediterranean. 2017. Proposed policy priorities for preventing obesity and diabetes in the Eastern Mediterranean Region. http://apps.who.int/iris/bitstream/handle/10665/259519/emropub_2017_20141.pdf?sequence=1
reduction excessive intake by consumers and improve nutrient content of foods, as needed.	WHO. 2016. SHAKE the salt habit - Technical package for salt reduction. Geneva.	
		http://apps.who.int/iris/bitstream/10665/250135/1/9789241511346-eng.pdf
	needed.	WHO. 2018. REPLACE Trans fat-free by 2023. An action package to eliminate industrially-produced trans fat from the global food supply.
		https://www.who.int/nutrition/topics/replace-transfat
		WHO. Taxes on Sugary Drinks: Why Do It? 2017.
		http://apps.who.int/iris/bitstream/handle/10665/260253/WHO-NMH-PND-16.5Rev.1- eng.pdf;jsessionid=A671F2B0037F0A9755FBBA89B907E83C?sequence=1
		WHO. Fiscal Policies for Diet and Prevention of Noncommunicable Diseases. Geneva; 2015. http://apps.who.int/iris/bitstream/handle/10665/250131/9789241511247-eng.pdf?sequence=1
Food safety and antimicrobial resistance for	Recommendation 53: Develop, establish, enforce and strengthen, as appropriate, food control systems, including reviewing and	<ul> <li>FAO. 2016. Risk based imported food control manual. Rome. www.fao.org/3/a-i5381e.pdf</li> <li>FAO. 2006. Strengthening national food control systems: guidelines to assess capacity building needs. Rome. www.fao.org/3/a-a0601e.pdf</li> <li>FAO. 2005. Perspectives and guidelines on food legislation, with a new model food law. Rome. www.fao.org/3/a-a0274e.pdf</li> </ul>
legislation and regulat ensure that food produ suppliers throughout to operate responsibly. <i>Recommendation 54:</i> part in the work of the Alimentarius Commiss nutrition and food safe implement, as approp- internationally adopted at the national level.	modernizing national food safety legislation and regulations to	FAO & WHO. 2016. Diagnostic tool for assessing status of national Codex programmes. Rome, FAO, and Geneva, WHO. www.who.int/foodsafety/areas_work/food-standard/DiagnosticTool-En.pdf
	suppliers throughout the food chain	FAO & WHO. 2016. Risk communication applied to food safety: handbook. Rome, FAO, and Geneva, WHO. www.fao.org/3/ i5863e.pdf
	Recommendation 54: Actively take part in the work of the Codex	FAO & WHO. 2016. Understanding the Codex Alimentarius. Rome, FAO, and Geneva, WHO. www.fao.org/3/a-i5667e.pdf FAO & WHO. 2013. Principles and guidelines for national food control systems [online]. www.fao.org/input/download/standards/13358/CXG_082e.pdf
	nutrition and food safety, and implement, as appropriate,	FAO & WHO. 2012. FAO/WHO guide for developing and improving national food recall systems. Rome, FAO, and Geneva, WHO. http://apps.who.int/iris/bitstream/10665/77746/1/9789241504799_eng.pdf
	internationally adopted standards at the national level.	FAO & WHO. 2011. FAO/WHO guide for application of risk analysis principles and procedures during food safety emergencies. Rome, FAO, and Geneva, WHO.
	Recommendation 55: Participate in and contribute to international networks to exchange food safety	http://apps.who.int/iris/bitstream/10665/44739/1/9789241502474_eng.pdf FAO & WHO. 2010. FAO/WHO Framework for developing national food safety emergency response plans. Rome, FAO, and Capeva, WHO
	information, including for managing emergencies.	Geneva, WHO. www.fao.org/docrep/013/i1686e/i1686e00.pdf

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
	Recommendation 56: Raise awareness among relevant stakeholders on the problems posed by antimicrobial resistance, and implement appropriate multisectoral measures to address antimicrobial resistance, including prudent use of antimicrobials in veterinary and human medicine. <i>Recommendation 57</i> : Develop and implement national guidelines on prudent use of antimicrobials in food-producing animals according to internationally recognized standards adopted by competent international organizations to reduce non-therapeutic use of antimicrobials and to phase out the use of antimicrobials as growth promoters in the absence of risk analysis as described in Codex Code of Practice CAC/RCP61- 2005.	<ul> <li>FAO &amp; WHO. 2003. Assuring food safety and quality: guidelines for strengthening national food control systems. FAO Food and Nutrition Paper 76. Rome, FAO, and Geneva, WHO. www.fao.org/3/a-y8705e.pdf</li> <li>WHO. 2017. International Food Safety Authorities Network (INFOSAN) [online]. Geneva. www.who.int/foodsafety/areas_work/infosan/en/</li> <li>WHO. 2017. Strengthening surveillance of and response to foodborne diseases. Stage two booklet: strengthening indicator-based surveillance. Geneva.</li> <li>http://apps.who.int/iris/bitstream/10665/259472/1/9789241513258-eng.pdf</li> <li>FAO. 2016. Drivers, dynamics and epidemiology of antimicrobial resistance in animal production. Rome. www.fao.org/3/a-i6209e.pdf</li> <li>WHO. 2015. Global action plan on antimicrobial resistance. Geneva.</li> <li>http://apps.who.int/iris/bitstream/handle/10665/193736/9789241503_eng.pdf?sequence=1</li> <li>FAO. 2015. FAO Action Plan on Antimicrobial Resistance. Rome. www.fao.org/3/a-mp128e.pdf</li> <li>FAO &amp; WHO. 2015. Codex texts on foodborne antimicrobial resistance. Rome, FAO, and Geneva, WHO. www.fao.org/3/a-i4296t.pdf</li> <li>WHO. 2017. Antimicrobial resistance Factsheet [online]. Geneva. www.who.int/mediacentre/factsheets/fs194/en/</li> <li>WHO. 2017. Antimicrobial resistance Factsheet [online]. Geneva. www.who.int/mediacentre/factsheets/fs194/en/</li> <li>WHO. 2012. Critically important antimicrobials for human medicine. 3rd revision 2011. Geneva. http://apps.who.int/iris/bitstream/10665/77376/1/9789241504485_eng.pdf</li> </ul>
ALIGNED HEAI	LTH SYSTEMS PROVIDING UNIVERS	AL COVERAGE OF ESSENTIAL NUTRITION ACTIONS
Strong and resilient health systems	Recommendation 25: Strengthen health systems and promote universal health coverage, particularly through primary health care, to enable national health systems to address malnutrition in all its forms. Recommendation 26: Improve the integration of nutrition actions into health systems through appropriate strategies for strengthening human resources, leadership and governance, health system financing and service delivery, as well as the provision of essential	<ul> <li>WHO. 2017. e-Library of Evidence for Nutrition Actions (eLENA) [online]. Geneva. www.who.int/elena/en/</li> <li>WHO. 2017. Implementation Plan on Ending Childhood Obesity. Geneva. http://apps.who.int/iris/bitstream/10665/259349/1/WHO-NMH-PND-ECHO-17.1-eng.pdf</li> <li>WHO. 2017. National health workforce accounts: a handbook. Geneva. http://apps.who.int/iris/bitstream/10665/259360/1/9789241513111-eng.pdf</li> <li>WHO. 2017. Preparation for the third High-level Meeting of the General Assembly on the Prevention and Control of Non- communicable Diseases, to be held in 2018. Copenhagen. www.euro.who.int/data/assets/pdf_file/0010/340786/A70_27-en- cover.pdf</li> <li>WHO. 2016. Framework on integrated, people-centred health services. Geneva. http://apps.who.int/gb/ebwha/pdf_files/EB138/B138_37-en.pdf</li> <li>WHO. 2016. Global strategy on human resources for health: workforce 2030. Geneva. http://apps.who.int/iris/bitstream/10665/250368/1/9789241511131-eng.pdf</li> <li>WHO. 2016. Strategizing national health in the 21st century: a handbook. Geneva. http://apps.who.int/iris/bitstream/10665/250221/41/9789241549745-eng.pdf</li> </ul>

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
	medicines, information and monitoring.	WHO. 2015. Anchoring universal health coverage in the right to health: what difference would it make? Geneva.
	Recommendation 27: Promote	http://apps.who.int/iris/bitstream/10665/199548/1/9789241509770_eng.pdf WHO. 2015. Global reference list of 100 Core Health Indicators. Geneva.
	universal access to all direct	
	nutrition actions and relevant	http://apps.who.int/iris/bitstream/10665/173589/1/WHO_HIS_HSI_2015.3_eng.pdf
	health actions impacting nutrition	WHO. 2014. Comprehensive implementation plan on maternal, infant and young child nutrition. Geneva.
	through health programmes.	http://apps.who.int/iris/bitstream/10665/113048/1/WHO_NMH_NHD_14.1_eng.pdf
	Recommendation 28: Implement	WHO. 2014. Indicators for the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition. Geneva.
	the WHO Global Strategy on Infant	www.who.int/nutrition/topics/indicators_monitoringframework_miycn_background.pdf
	and Young Child Feeding, the WHO Comprehensive	WHO. 2014. World Health Assembly resolution WHA67.14 on health in the post-2015 development agenda [online]. Geneva. http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_R14-en.pdf
	Implementation Plan on Maternal,	WHO. 2013. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva.
	Infant and Young Child Nutrition 2012–2025, and the WHO Global	www.who.int/nutrition/publications/infantfeeding/essential_nutrition_actions.pdf
	Action Plan for the Prevention and	WHO. 2013. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva.
	Control of Noncommunicable	http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf
	Diseases 2013–2020 through	WHO. 2011. The Abuja Declaration: ten years on. Geneva. www.who.int/healthsystems/publications/abuja_report_aug_2011.pdf
	commensurate financing and adequate policies.	WHO. 2011. World Health Assembly resolution WHA64.9 on sustainable health financing structures and universal coverage [online]. Geneva.
		http://apps.who.int/medicinedocs/documents/s21474en/s21474en.pdf
		WHO. 2008. The World Health Report: primary health care, now more than ever. Geneva. www.who.int/whr/2008/whr08_en.pdf
		WHO & United Nations Children's Fund (UNICEF). 2003. Global strategy for infant and young child feeding. Geneva, WHO
		http://apps.who.int/iris/bitstream/10665/42590/1/9241562218.pdf
Reduction of	Recommendation 34: Adopt	WHO. 2017. e-Library of Evidence for Nutrition Actions (eLENA) [online]. Geneva. www.who.int/elena/en/
stunting and wasting	policies and actions, and mobilize funding, to improve coverage of	WHO. 2014. Global nutrition targets 2025: stunting policy brief. Geneva. http://apps.who.int/iris/bitstream/10665/149019/1/WHO_NMH_NHD_14.3_eng.pdf
among	treatment for wasting, using the	WHO. 2014. Global nutrition targets 2025: wasting policy brief. Geneva.
children	community-based management of	http://apps.who.int/iris/bitstream/10665/149023/1/WHO_NMH_NHD_14.8_eng.pdf
under five years of age	acute malnutrition approach and improve the integrated	WHO. 2013. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva.
years of age	management of childhood	www.who.int/nutrition/publications/infantfeeding/essential_nutrition_actions.pdf
	illnesses.	WHO. 2013. Guideline: updates on the management of severe acute malnutrition in infants and children. Geneva.
	Recommendation 35: Integrate	http://apps.who.int/iris/bitstream/10665/95584/1/9789241506328_eng.pdf
	disaster and emergency preparedness into relevant policies	WHO. 2012. World Health Assembly resolution WHA65.6 on the comprehensive implementation plan on maternal, infant as young child nutrition. Geneva.
	and programmes.	www.who.int/nutrition/topics/WHA65.6_resolution_en.pdf
	Recommendation 36: Establish	WHO. 2004. Guiding principles for feeding infants and young children during emergencies. Geneva.
	policies and strengthen interventions	

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
	to improve maternal nutrition and health, beginning with adolescent girls and continuing through pregnancy and lactation. <i>Recommendation 37</i> : Establish health policies, programmes and strategies to promote optimal infant and young child feeding, particularly exclusive breastfeeding up to six months, followed by adequate complementary feeding (from six to 24 months).	www.searo.who.int/entity/emergencies/documents/guiding_principles_for_feeding_infants_and_young_children_during_ emergencies.pdf WHO, United Nations Children's Fund (UNICEF) & European Commission (EC). 2017. Global targets tracking tool [online]. Geneva, WHO. www.who.int/nutrition/trackingtool/en/
Health service policies and programmes to improve nutrition	Recommendation 44: Implement policies and programmes to ensure universal access to and use of insecticide-treated nets, and to provide preventive malaria treatment for pregnant women in areas with moderate to high malaria transmission. Recommendation 46: Implement policies and programmes to improve health service capacity to prevent and treat infectious diseases. Recommendation 49: Implement policies and strategies to ensure that women have comprehensive information and access to integral health care services that ensure adequate support for safe pregnancy and delivery.	<ul> <li>WHO Regional Office for the Eastern Mediterranean. Regional framework on pre-conception care</li> <li>WHO Regional Office for the Eastern Mediterranean. Regional action plan on malaria</li> <li>WHO. 2017. e-Library of Evidence for Nutrition Actions (eLENA) [online]. Geneva. www.who.int/elena/en/</li> <li>WHO. 2016. Global strategy on human resources for health: workforce 2030. Geneva</li> <li>http://apps.who.int/iris/bitstream/10665/250368/1/9789241511131-eng.pdf</li> <li>WHO. 2016. WHO recommendations on antenatal care for a positive pregnancy experience. Geneva.</li> <li>http://apps.who.int/iris/bitstream/10665/250796/1/9789241549912-eng.pdf</li> <li>WHO. 2016. Working for health and growth: investing in the health workforce. Report of the High-Level Commission on Health Employment and Economic Growth. Geneva. http://apps.who.int/iris/bitstream/10665/250047/1/9789241511308-eng.pdf</li> <li>WHO. 2013. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva.</li> <li>www.who.int/nutrition/publications/infantfeeding/essential_nutrition_actions.pdf</li> <li>WHO. 2013. Updates on the management of severe acute malnutrition in infants and children. Geneva.</li> <li>http://apps.who.int/iris/bitstream/10665/95584/1/9789241506328_eng.pdf</li> </ul>
Interventions related to health services to improve nutrition	Recommendation 45: Provide periodic deworming for all school- age children in endemic areas. Recommendation 47: Provide zinc supplementation to reduce the duration and severity of diarrhoea, and to prevent subsequent	<ul> <li>WHO. 2017. e-Library of Evidence for Nutrition Actions (eLENA) [online]. Geneva. www.who.int/elena/en/</li> <li>WHO. 2017. Global database on the Implementation of Nutrition Action (GINA) [online]. Geneva. www.who.int/nutrition/gina/en/</li> <li>WHO. 2017. Guideline: preventive chemotherapy to control soil-transmitted helminth infections in at-risk population groups. Geneva. http://apps.who.int/ris/bitstream/10665/258983/1/9789241550116-eng.pdf</li> <li>WHO. 2017. Water, sanitation and hygiene to combat neglected tropical diseases: initial lessons from project implementation.</li> </ul>

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
	episodes in children.	Geneva.
	Recommendation 48: Provide iron	http://apps.who.int/iris/bitstream/10665/255563/1/WHO-FWC-WSH-17.02-eng.pdf
	and, among others, vitamin A supplementation for pre-school	WHO. 2016. Guideline: daily iron supplementation in infants and children. Geneva. http://apps.who.int/iris/bitstream/10665/204712/1/9789241549523_eng.pdf
	children to reduce the risk of anaemia.	WHO. 2015. Water sanitation & hygiene for accelerating and sustaining progress on neglected tropical diseases: a global strategy 2015–2020. Geneva.
		http://apps.who.int/iris/bitstream/10665/182735/1/WHO_FWC_WSH_15.12_eng.pdf
		WHO. 2014. Global nutrition targets 2025: anaemia policy brief. Geneva.
		www.who.int/iris/bitstream/10665/148556/1/WHO_NMH_NHD_14.4_eng.pdf
		WHO. 2013. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva.
		www.who.int/nutrition/publications/infantfeeding/essential_nutrition_actions.pdf
		WHO. 2012. World Health Assembly resolution WHA66.12 on neglected tropical diseases [online]. Geneva.
		www.who.int/neglected_diseases/mediacentre/WHA_66.12_Eng.pdf
		WHO. 2006. Implementing the new recommendations on the clinical management of diarrhoea: guidelines for policy makers and programme managers. Geneva.
		http://whqlibdoc.who.int/publications/2006/9241594217_eng.pdf
SOCIAL PROTE	CTION AND NUTRITION EDUCATIO	N
Nutrition	Recommendation 19: Implement	WHO Regional Office for Europe. 2012. Promoting a healthy diet for the WHO Eastern Mediterranean Region: user-friendly guide.
education and	nutrition education and information	FAO. 2016. Food and nutrition education for healthy diets. Rome. www.fao.org/3/a-c0064e.pdf
information for	interventions based on national dietary guidelines and coherent	FAO. 2014. Nutrition, education and awareness raising for the right to adequate food. Rome. www.fao.org/3/a-i3895e.pdf
behavioural change	policies related to food and diets, through improved school curricula, nutrition education in the health,	FAO. 2013. Promoting healthy diets through nutrition education and changes in the food environment: an international review of actions and their effectiveness. Background paper for the International Conferenceon Nutrition (ICN2). Rome. www.fao.org/docrep/017/i3235e/i3235e.pdf
	agriculture and social protection services, community interventions	FAO. 2013. Challenges and issues in nutrition education. Background paper for the International Conference on Nutrition (ICN2). Rome.
	and point-of-sale information,	www.fao.org/docrep/017/i3234e/i3234e.pdf
	including labelling.	WHO. 2017. Health promoting schools: an effective approach to early action on noncommunicable disease risk factors. Geneva.
	Recommendation 20: Build nutrition	http://apps.who.int/iris/bitstream/10665/255625/1/WHO-NMH-PND-17.3-eng.pdf
	skills and capacity to undertake nutrition education activities,	WHO. 2016. Report of the Commission on Ending Childhood Obesity. Geneva. http://apps.who.int/iris/bitstream/10665/204176/1/9789241510066_eng.pdf
	particularly for front line workers,	WHO. 2015. Healthy diet Factsheet N°394 [online]. Geneva. www.who.int/mediacentre/factsheets/fs394/en/
	social workers, agricultural extension personnel, teachers and health	WHO. 2012. Prioritizing areas for action in the field of population-based prevention of childhood obesity:
	professionals. Recommendation 21: Conduct	a set of tools for Member States to determine and identify priority areas for action. Geneva. http://apps.who.int/iris/bitstream/10665/80147/1/9789241503273_eng.pdf

appropriate social marketing

ampaigns and lifestyle change ommunication programmes to romote physical activity, dietary iversification, consumption of nicronutrient-rich foods such as uits and vegetables, including aditional local foods and taking no consideration cultural aspects, etter child and maternal nutrition, ppropriate care practices and dequate breastfeeding and omplementary feeding, targeted nd adapted for different audiences nd stakeholders in the food ystem.	FAO. 2016. Cash transfers: myths vs. reality. Rome. www.fao.org/3/a-i6460e.pdf
utrition objectives into social rotection programmes and into umanitarian assistance safety net rogrammes. Recommendation 23: Use cash nd food transfers, including school eeding programmes and other orms of social protection for ulnerable populations to improve iets through better access to food which conforms with the beliefs, ulture, traditions, dietary habits nd preferences of individuals in ccordance with national and ternational laws and obligations, nd which is nutritionally adequate or healthy diets.	FAO. 2015. Nutrition and social protection. Rome. www.fao.org/3/a-i4819e.pdf FAO. 2015. The State of Food and Agriculture 2015: social protection and agriculture, breaking the cycle of rural poverty. Rome. www.fao.org/3/a-i4910e.pdf FAO. 2014. Social protection and an enabling environment for the right to adequate food. Rome. www.fao.org/3/a-i3894e.pdf
Recommendation 24: Increase accommendation 24: Increase accome for the most vulnerable accept jobs.	<ul> <li>FAO. 2017. Decent rural employment toolbox [online]. Rome. www.fao.org/rural-employment/toolbox/en/</li> <li>FAO. 2016. Incorporating decent rural employment in the strategic planning for agricultural development. Rome. www.fao.org/3/a-i5471e.pdf</li> <li>FAO. 2015. Decent work indicators for agriculture and rural areas: conceptual issues, data collection challenges and possible</li> </ul>
uli hi uli nc nc nc nc nc	herable populations to improve ts through better access to food ch conforms with the beliefs, ture, traditions, dietary habits d preferences of individuals in cordance with national and ernational laws and obligations, d which is nutritionally adequate healthy diets.

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Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
employment	promotion of self-employment.	areas for improvement. Rome. www.fao.org/3/a-i5060e.pdf
		FAO. 2015. Understanding decent rural employment. Rome. www.fao.org/3/a-bc270e.pdf
		FAO. 2012. Decent rural employment for food security: a case for action. Rome. www.fao.org/docrep/015/i2750e/i2750e00.pdf
TRADE AND IN	VESTMENT FOR IMPROVED NUTRIT	TION
Sustainable investments for nutrition	Recommendation 4: Increase responsible and sustainable investment in nutrition, especially at country level with domestic finance; generate additional resources through innovative financing tools; engage development partners to increase Official Development Assistance in nutrition and foster private investments as appropriate. <i>Recommendation 8</i> : Review national policies and investments and integrate nutrition objectives into food and agriculture policy, programme design and implementation, to enhance nutrition sensitive agriculture, ensure food security and enable healthy diets. <i>Recommendation 17</i> : Encourage governments, United Nations agencies, programmes and funds, the World Trade Organization and other international organizations to identify opportunities to achieve global food and nutrition targets, through trade and investment	<ul> <li>FAO. 2017. Nutrition-sensitive agriculture and food systems in practice: options for intervention. Rome. www.fao.org/3/a-i7848e.pdf</li> <li>FAO. 2016. Compendium of indicators for nutrition-sensitive agriculture. Rome. www.fao.org/3/a-i6275e.pdf</li> <li>FAO. 2015. Designing nutrition-sensitive agriculture investments: checklist and guidance for programme formulation. Rome. www.fao.org/3/a-i5107e.pdf</li> <li>WHO. 2017. The double burden of malnutrition policy brief. Geneva. www.who.int/iris/bitstream/10665/255413/1/WHO-NMH-NHD-17.3-eng.pdf</li> </ul>
International trade for nutrition	policies. Recommendation 17: Encourage governments, United Nations agencies, programmes and funds, the World Trade Organization and other international organizations to identify opportunities to achieve	<ul> <li>FAO. 2017. Strengthening sector policies for better food security and nutrition results: trade. Policy guidance note 9. Rome www.fao.org/3/a-i7910e.pdf</li> <li>FAO. 2015. The State of Agricultural Commodity Markets: trade and food security, achieving a better balance between national priorities and the collective good. Rome. www.fao.org/3/a-i5090e.pdf</li> <li>FAO. 2006. Trade reforms and food security: country case studies and synthesis. Rome. www.fao.org/docrep/009/a0581e/a0581e00.htm</li> </ul>

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Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action	
	global food and nutrition targets, through trade and investment policies. <i>Recommendation 18</i> : Improve the availability and access of the food supply through appropriate trade agreements and policies and endeavour to ensure that such agreements and policies do not have a negative impact on the right to adequate food in other countries.	FAO. 2003. Trade reforms and food security: conceptualizing the linkages. Rome. www.fao.org/3/a-y4671e.pdf FAO & World Trade Organization (WTO). 2017. Trade and food standards. Rome, FAO, and Geneva, WTO. www.fao.org/3/a- i7407e.pdf WHO. 2006. World Health Assembly resolution WHA59.26 on international trade and health [online]. Geneva. http://apps.who.int/gb/ebwha/pdf_files/WHA59-REC1/e/Resolutions-en.pdf	
SAFE AND SUP	PORTIVE ENVIRONMENTS FOR NU	TRITION AT ALL AGES	
Influencing the food environment for healthy diets	Recommendation 13: Develop, adopt and adapt, where appropriate, international guidelines on healthy diets. <i>Recommendation 15</i> : Explore regulatory and voluntary instruments – such as marketing, publicity and labelling policies, economic incentives or disincentives in accordance with Codex Alimentarius and World Trade Organization rules – to promote healthy diets. <i>Recommendation 16</i> : Establish food or nutrient-based standards to make healthy diets and safe drinking-water accessible in public facilities such as hospitals, childcare facilities, workplaces, universities, schools, food and catering services, government offices and prisons, and encourage the establishment of facilities for breastfeeding.	<ul> <li>WHO Regional Office for the Eastern Mediterranean. 2017. Proposed policy priorities for preventing obesity and diabetes in the Eastern Mediterranean</li> <li>WHO Regional Office for the Eastern Mediterranean. 2018. Implementing the WHO recommendations on the marketing of food and non-alcoholic beverages to children in the Eastern Mediterranean.</li> <li>WHO Regional Office for the Eastern Mediterranean. 2016. Nutrient profile model for the marketing of food and non-alcoholic beverages to children in the WHO Eastern Mediterranean Region.</li> <li>FAO. 2016. Handbook on food labelling to protect consumers. Rome. www.fao.org/3/a-i6575e.pdf</li> <li>FAO. 2016. Influencing food environments for healthy diets. Rome. www.fao.org/3/a-i6484e.pdf</li> <li>FAO &amp; FHI 360. 2016. Minimum dietary diversity for women: a guide to measurement. Rome, FAO. www.fao.org/3/a-i5486e.pdf</li> <li>FAO &amp; University of Oxford. 2016. Plates, pyramids and planets: developments in national healthy and sustainable dietary guidelines, a state of play assessment. Rome, FAO. www.fao.org/3/a-i5640e.pdf</li> <li>FAO &amp; WHO. 1996. Preparation and use of food-based dietary guidelines. Geneva, WHO. www.fao.org/docrep/x0243e/x0243e00.htm</li> <li>FAO &amp; WHO. 1985. Guidelines on nutrition labelling. Rome, FAO.</li> <li>WHO. 2018. Healthy diet Factsheet N°394. Geneva. www.who.int/mediacentre/factsheets/fs394/en/</li> <li>WHO. 2013. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva. http://apps.who.int/iris/bitstream/10665/94384/1/9789241506236_eng.pdf</li> </ul>	
Protect, promote and support	Recommendation 29: Adapt and implement the International Code of Marketing of Breast-milk	WHO. 2017. Double-duty actions for nutrition policy brief. Geneva. http://apps.who.int/iris/bitstream/10665/255414/1/WHO- NMH-NHD-17.2-eng.pdf	

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action
breastfeeding	Substitutes and subsequent relevant World Health Assembly resolutions.	WHO. 2017. Guideline: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services. Geneva.
	Recommendation 30: Implement policies and practices, including	http://apps.who.int/iris/bitstream/10665/259386/1/9789241550086-eng.pdf WHO, 2017. NetCode toolkit for ongoing monitoring and periodic assessment of the Code. https://www.who.int/nutrition/netcode/toolkit/en/
	labour reforms, as appropriate, to promote protection of working mothers.	WHO, 2018. Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services: the revised Baby-Friendly Hospital Initiative. Implementation Guidance.
	Recommendation 31: Implement policies, programmes and actions	WHO. 2016. World Health Assembly resolution WHA69.9 on ending inappropriate promotion of foods for infants and young children [online]. Geneva.
	to ensure that health services promote, protect and support breastfeeding, including the Baby-	http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_R9-en.pdf WHO. 2014. Global Nutrition Targets 2025: Breastfeeding policy brief. Geneva. http://apps.who.int/iris/bitstream/10665/149022/1/WHO_NMH_NHD_14.7_eng.pdf
	Friendly Hospital Initiative. Recommendation 32: Encourage	WHO. 2011. Guidelines on optimal feeding of low birth-weight infants in low- and middle-income countries. Geneva. www.who.int/entity/maternal_child_adolescent/documents/9789241548366.pdf
	and promote – through advocacy, education and capacity building –	WHO. 2004. Guiding principles for feeding infants and young children during emergencies. Geneva. http://apps.who.int/iris/bitstream/10665/42710/1/9241546069.pdf
	an enabling environment where men, particularly fathers, participate actively and share	WHO. 2003. Infant and young child feeding: a tool for assessing national practices, policies and programmes. Geneva. www.who.int/nutrition/publications/inf_assess_nnpp_eng.pdf
	responsibilities with mothers in caring for their infants and young	WHO. 1981. International code of marketing of breast-milk substitutes. Geneva. www.who.int/entity/nutrition/publications/infantfeeding/9241541601/en/index.html
	children, while empowering women and enhancing their health and nutritional status throughout the life	WHO & United Nations Children's Fund (UNICEF). 2017. Tracking progress for breastfeeding policies and programmes: glob breastfeeding scorecard 2017. Geneva, WHO, and New York, UNICEF
	<i>Recommendation 33</i> : Ensure that policies and practices in emergency situations and humanitarian crises promote, protect and support breastfeeding.	www.who.int/nutrition/publications/infantfeeding/global-bf-scorecard-2017/en/
Childhood overweight	Recommendation 38: Provide dietary counselling to women	WHO. 2017. Double duty actions for nutrition policy brief. Geneva. www.who.int/iris/bitstream/10665/255414/1/WHO-NMH- NHD-17.2-eng.pdf
and obesity	during pregnancy for healthy weight gain and adequate nutrition. <i>Recommendation 39</i> : Improve child	WHO. 2017. Guideline: assessing and managing children at primary health-care facilities to prevent overweight and obesity i the context of the double burden of malnutrition. Updates for the integrated management of childhood illness (IMCI). Geneva http://apps.who.int/iris/bitstream/10665/259133/1/9789241550123-eng.pdf
	nutritional status and growth, particularly by addressing maternal exposure to the availability and	http://apps.wno.int/iris/bitstream/10665/259133/1/9789241550123-eng.pdf WHO. 2017. Implementation Plan on Ending Childhood Obesity. Geneva. http://apps.who.int/iris/bitstream/10665/259349/1/WHO-NMH-PND-ECHO-17.1-eng.pdf

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action	
	marketing of complementary foods, and by improving supplementary feeding programmes for infants and young children. <i>Recommendation 40</i> : Regulate the marketing of food and non- alcoholic beverages to children in accordance with WHO recommendations. <i>Recommendation 41</i> : Create a conducive environment that promotes physical activity to address sedentary lifestyle from the early stages of life.	<ul> <li>NHD-17.3-eng.pdf</li> <li>WHO. 2016. Fiscal policies for diet and prevention of noncommunicable diseases. Geneva. http://apps.who.int/rirs/bitstream/10665/250131/1/9789241511247-eng.pdf</li> <li>WHO. 2016. Guidance on ending the inappropriate promotion of foods for infants and young children. Geneva.</li> <li>www.who.int/nutrition/topics/guidance-inapproriate-food-promotion-iyc-backgroundprocess.pdf</li> <li>WHO. 2016. Report of the Commission on Ending Childhood Obesity. Geneva.</li> <li>http://apps.who.int/rirs/bitstream/10665/204176/1/9789241510066_eng.pdf</li> <li>WHO. 2014. Comprehensive implementation plan on maternal, infant and young child nutrition. Geneva.</li> <li>http://apps.who.int/rirs/bitstream/10665/13048/1/WHO_NMH_NHD_14.1_eng.pdf</li> <li>WHO. 2014. Global nutrition targets 2025: childhood overweight policy brief. Geneva.</li> <li>http://apps.who.int/rirs/bitstream/10665/149021/2/WHO_NMH_NHD_14.6_eng.pdf</li> <li>WHO. 2013. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva.</li> <li>www.who.int/nutrition/publications/infantfeeding/essential_nutrition_actions.pdf</li> <li>WHO. 2013. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva.</li> <li>www.who.int/rirs/bitstream/10665/44399/1/9789241506236_eng.pdf</li> <li>WHO. 2010. Global recommendations on physical activity for health. Geneva.</li> <li>http://apps.who.int/rirs/bitstream/10665/44399/19789241509279_eng.pdf</li> <li>WHO. 2010. Set of recommendations on the marketing of foods and non-alcoholic beverages to children. Geneva.</li> <li>http://apps.who.int/rirs/bitstream/10665/44399/19789241500210_eng.pdf</li> <li>WHO. 2010. World Health Assembly resolution WHA63.14 on the marketing of food and non-alcoholic beverages to children. Geneva.</li> <li>http://apps.who.int/rirs/bitstream/10665/443416/19789241500210_eng.pdf</li> <li>WHO. 2010. World Health Assembly resolution WHA63.14 on the marketing of food and non-alcoholic beverages</li></ul>	
Anaemia in women of reproductive age	Recommendation 42: Improve intake of micronutrients through consumption of nutrient-dense foods, especially foods rich in iron, where necessary, through fortification and supplementation strategies, and promote healthy and diversified diets. Recommendation 43: Provide daily iron and folic acid and other micronutrient supplementation to	<ul> <li>WHO. 2017. e-Library of Evidence for Nutrition Actions (eLENA) [online]. Geneva. www.who.int/elena/en/</li> <li>WHO. 2017. Guideline: preventive chemotherapy to control soil-transmitted helminth infections in at-risk population groups. Geneva. http://apps.who.int/iris/bitstream/10665/258983/1/9789241550116-eng.pdf</li> <li>WHO. 2016. Guideline: daily iron supplementation in infants and children. Geneva. http://apps.who.int/iris/bitstream/10665/204712/1/9789241549523_eng.pdf</li> <li>WHO. 2016. WHO recommendations on antenatal care for a positive pregnancy experience. Geneva. http://apps.who.int/iris/bitstream/10665/250796/1/9789241549912-eng.pdf</li> <li>WHO. 2014. Comprehensive implementation plan on maternal, infant and young child nutrition. Geneva. http://apps.who.int/iris/bitstream/10665/113048/1/WHO_NMH_NHD_14.1_eng.pdf</li> <li>WHO. 2014. Global nutrition targets 2025: anaemia policy brief. Geneva.</li> </ul>	

pregnant women as part of	http://apps.who.int/iris/bitstream/10665/148556/1/WHO_NMH_NHD_14.4_eng.pdf
	11(p.//apps.who.in/ins/bitstrean/10005/140550/1/WHO_NMH_NHD_14.4_eng.pdf
	WHO. 2012. World Health Assembly resolution WHA65.6 on the comprehensive implementation plan on maternal, infant and young child nutrition [online]. Geneva. www.who.int/nutrition/topics/WHA65.6_resolution_en.pdf
	WHO. 2011. Guideline: intermittent iron and folic acid supplementation in menstruating women. Geneva. http://apps.who.int/iris/bitstream/10665/44649/1/9789241502023_eng.pdf
	WHO & FAO. 2006. Guidelines on food fortification with micronutrients. Geneva, WHO, and Rome, FAO. http://apps.who.int/iris/bitstream/10665/43412/1/9241594012_eng.pdf
ion and Recommendation 51: Invest in and	WHO. 2017. e-Library of Evidence for Nutrition Actions (eLENA) [online]. Geneva. www.who.int/elena/en/
to safe drinking water, with the	WHO. 2017. Guidelines for drinking-water quality: fourth edition incorporating the first addendum. Geneva. http://apps.who.int/iris/bitstream/10665/254637/1/9789241549950-eng.pdf
support of international partners, as appropriate. <i>Recommendation 52</i> : Implement	WHO. 2015. Improving nutrition outcomes with better water, sanitation and hygiene: practical solutions for policy and programmes. Geneva.
	http://apps.who.int/iris/bitstream/10665/193991/1/9789241565103_eng.pdf
	WHO. 2015. Sanitation safety planning: manual for safe use and disposal of wastewater, greywater and excreta. Geneva.
participatory approaches to ensure	http://apps.who.int/iris/bitstream/10665/171753/1/9789241549240_eng.pdf
universal access to adequate sanitation and to promote safe hygiene practices, including hand washing with soap.	WHO. 2015. World Health Assembly resolution WHA68.14 on maternal, infant and young child nutrition: development of the core set of indicators [online]. Geneva. http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_DIV3-en.pdf
	WHO. 2013. Ending preventable child deaths from pneumonia and diarrhoea by 2025: the integrated Global Action Plan for Pneumonia and Diarrhoea (GAPPD). Geneva. http://apps.who.int/iris/bitstream/10665/79200/1/9789241505239_eng.pdf
	WHO. 2013. Essential nutrition actions: improving maternal, newborn, infant and young child health and nutrition. Geneva. www.who.int/nutrition/publications/infantfeeding/essential_nutrition_actions.pdf
	WHO. 2012. World Health Assembly resolution WHA65.6 on the comprehensive implementation plan on maternal, infant any young child nutrition [online]. Geneva www.who.int/nutrition/topics/WHA65.6_resolution_en.pdf
	WHO. 2006. WHO guidelines for the safe use of wastewater, excreta and greywater. Volume 4: excreta and greywater use agriculture. Geneva. http://whqlibdoc.who.int/publications/2006/9241546859_eng.pdf
	prevalence of anaemia is 20% or higher, and deworming, where appropriate. Recommendation 51: Invest in and commit to achieve universal access to safe drinking water, with the participation of civil society and the support of international partners, as appropriate. Recommendation 52: Implement policies and strategies using participatory approaches to ensure universal access to adequate sanitation and to promote safe hygiene practices, including hand

Governance and coordination mechanisms for food security and nutrition	Recommendation 1: Enhance political commitment and social participation for improving nutrition at the country level through political dialogue and advocacy. Recommendation 3: Strengthen and establish, as appropriate, national cross-government, inter- sector, multi-stakeholder	<ul> <li>FAO. 2017. Nutrition-sensitive agriculture and food systems in practice: options for intervention. Rome. www.fao.org/3/a-i7848e.pdf</li> <li>FAO. 2015. Key recommendations for improving nutrition through agriculture and food systems. Rome. www.fao.org/3/a-i4922e.pdf</li> <li>FAO. 2014. Acting on food insecurity and malnutrition: food security and commitment and capacity profile. Rome. www.fao.org/3/a-i3998e.pdf</li> <li>WHO. 2016. Addressing and managing conflicts of interest in the planning and delivery of nutrition programmes at country level. Geneva. http://apps.who.int/iris/bitstream/10665/206554/1/9789241510530_eng.pdf</li> </ul>
	sector, multi-stakeholder mechanisms for food security and	programmes at country level. Geneva. http://apps.who.int/iris/bitstream/10665/206554/1/9789241510530_eng.pdf WHO. 2010. NLIS country profile indicators interpretation guide. Geneva.

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action	
	nutrition to oversee implementation of policies, strategies, programmes and other investments in nutrition. Such platforms may be needed at various levels, with robust safeguards against abuse and conflicts of interest.	http://apps.who.int/iris/bitstream/10665/44397/1/9789241599955_eng.pdf	
	<i>Recommendation 6</i> : Promote inter- country collaboration, such as North- South, South-South and triangular cooperation, and information exchange on nutrition, food, technology, research, policies and programmes.		
	Recommendation 7: Strengthen nutrition governance and coordinate policies, strategies and programmes of United Nations system agencies, programmes and funds within their respective mandates.		
Policies and programmes related to nutrition	Recommendation 2: Develop – or revise, as appropriate – and cost National Nutrition Plans, align policies that impact nutrition across different ministries and agencies, and strengthen legal frameworks and strategic capacities for nutrition. Recommendation 8: Review national policies and investments and integrate nutrition objectives into food and agriculture policy, programme design and implementation, to enhance nutrition sensitive agriculture, ensure food security and enable healthy diets.	<ul> <li>FAO. 2017. FAOLEX: legislative and policy database [online]. Rome. www.fao.org/faolex/en/</li> <li>FAO. 2017. Nutrition-sensitive agriculture and food systems in practice: options for intervention. Rome. www.fao.org/3/a-i7848e.pdf</li> <li>FAO. 2016. Compendium of indicators for nutrition-sensitive agriculture. Rome. www.fao.org/3/a-i6275e.pdf</li> <li>FAO. 2015. Designing nutrition-sensitive agriculture investments: checklist and guidance for programme formulation. Rome. www.fao.org/3/a-i5107e.pdf</li> <li>FAO. 2015. Key recommendations for improving nutrition through agriculture and food systems. Rome. www.fao.org/3/a-i4922e.pdf</li> <li>WHO. 2017. A Country Planning Cycle Database: a World Health Organization resource [online]. Geneva. www.nationalplanningcycles.org/</li> <li>WHO. 2017. Global database on the Implementation of Nutrition Action (GINA) [online]. Geneva. www.who.int/nutrition/gina/en/</li> <li>WHO. 2014. Planning and costing nutrition actions: the OneHealth Tool. Geneva. http://apps.who.int//iris/bitstream/10665/138171/1/WHO_NMH_NHD_NPU_14.1_eng.pdf</li> <li>WHO. 2013. Global nutrition policy review: what does it take to scale up nutrition? Geneva. http://apps.who.int//iris/bitstream/10665/138171/1/WHO_NMH_NHD_NPU_14.1_eng.pdf</li> <li>WHO. 2013. Global nutrition policy review: what does it take to scale up nutrition? Geneva. http://apps.who.int//iris/bitstream/10665/138171/1/WHO_NMH_NHD_NPU_14.1_eng.pdf</li> </ul>	
2	,	http://apps.who.int/iris/bitstream/10665/84408/1/9789241505529_eng.pdf WHO, United Nations Children's Fund (UNICEF) & European Commission (EC). 2017. Global targets tracking tool [online].	

Key area for action	ICN2 Framework for Action recommendations	Resources to inform and support implementation of the key areas for action	
		Geneva, WHO. www.who.int/nutrition/trackingtool/en/	
Multisectoral information systems related to food and nutrition	Recommendation 5: Improve the availability, quality, quantity, coverage and management of multisectoral information systems related to food and nutrition for improved policy development and accountability.	<ul> <li>FAO. 2015. Information systems for food security and nutrition. Rome. www.fao.org/3/a-au836e.pdf</li> <li>FAO, International Food Policy Research Institute (IFPRI) &amp; World Food Programme (WFP). 2017.</li> <li>Food Security Information Network [online]. Rome, WFP. www.fsincop.net/</li> <li>WHO. 2017. Nutrition Landscape Information System (NLiS) [online]. Geneva. www.who.int/nutrition/nlis/en/</li> <li>WHO. 2015. Global reference list of 100 Core Health Indicators. Geneva.</li> <li>http://apps.who.int/iris/bitstream/10665/173589/1/WHO_HIS_HSI_2015.3_eng.pdf</li> <li>WHO. 2015. World Health Assembly resolution WHA68.14 on maternal, infant and young child nutrition: development of the core set of indicators [online]. Geneva. http://apps.who.int/jris/bitstream/10665/113048/1/WHO_NMH_NHD_14.1_eng.pdf</li> <li>WHO. 2014. Comprehensive implementation plan on maternal, infant and young child Nutrition. Geneva.</li> <li>http://apps.who.int/iris/bitstream/10665/113048/1/WHO_NMH_NHD_14.1_eng.pdf</li> <li>WHO. 2014. Indicators for the Global Monitoring Framework on Maternal, Infant and Young Child Nutrition. Geneva.</li> <li>www.who.int/nutrition/topics/indicators_monitoringframework_miycn_background.pdf</li> <li>WHO. 2012. World Health Assembly resolution WHA65.6 on the comprehensive implementation plan on maternal, infant and young child nutrition. Geneva.</li> <li>www.who.int/nutrition/topics/indicators_monitoringframework_miycn_background.pdf</li> <li>WHO. 2012. World Health Assembly resolution WHA65.6 on the comprehensive implementation plan on maternal, infant and young child nutrition [online]. Geneva. www.who.int/nutrition/topics/WHA65.6_resolution_en.pdf</li> <li>WHO, United Nations Children's Fund (UNICEF) &amp; European Commission (EC). 2017. Global targets tracking tool [online]. Geneva, WHO.</li> </ul>	

# Annex 3. List of suggested indicators<sup>24</sup> for actions in the six key areas for action

Key area for action	Action	Indicator
Sustainable, resilient food systems for healthy diets	Adopt national policies to reformulate foods and beverages	National policies to reformulate foods and beverages to reduce total and saturated fat, salt, sugars, energy and portion size, adapted to the national context, have been implemented to cover a substantial proportion of processed foods
	Use taxes and subsidies to promote healthier diets	Country has introduced additional taxes (other than a sugar-sweetened beverage tax) and/or subsidies to promote healthier diets
	Progressively eliminate subsidies for all types of fats/oils and sugar	Country has eliminated subsidies for all types of fats/oils and sugar
	Implement mandatory guidelines for public procurement of healthy food	Country is implementing mandatory guidelines for procurement of food in schools, hospitals, government establishments or other public institutions
	Provide guidance and training for caterers on healthy public procurement	Guidance has been developed and training provided on healthy public procurement
Aligned health systems providing universal coverage of essential	Ensure contingency and emergency preparedness plans in nutrition and food security are in place	Country has developed contingency plans and preparedness in nutrition and food security enabling them to respond effectively and protect the nutritional status of the population, particularly the most vulnerable, in any emergency situation
nutrition actions	Integrate effective nutrition actions – as set out the WHO Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition and the Global Action Plan on NCDs – into health systems and implement policies to ensure universal access to these actions	Essential nutrition actions are mainstreamed into health systems, as appropriate to the national context
	Establish national targets for reduction of stunting and children among children under five years of age	National targets have been established for reduction of stunting and wasting among children under five years have been established
	Provide access to daily iron and folic acid supplementation as part of antenatal care	Proportion of women who consumed any iron-containing supplements during their current or previous pregnancy within the past 2 years <sup>21</sup>

<sup>&</sup>lt;sup>24</sup> Some examples of actions for the six key areas for action are listed below, along with suggested indicator definitions for each of these. These indicators could be adapted to the national context and transformed into SMART commitments and adopted. SMART commitments are specific, measurable, achievable, relevant and time-bound. To be transformed into SMART commitments, the "indicators" would need to be explanded to be explicit about who is responsible and expressed in a way that is measurable and within a defined timeframe.

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Key area for action	Action	Indicator
	Implement programmes to deliver at least yearly delivery of anti- helminthic treatment to school-age children in areas endemic for soil- transmitted helminths	Programmes to deliver at least yearly delivery of anti-helminthic treatment to school-age children in areas endemic for soil-transmitted helminths are in place
	Improve coverage of diarrhoea treatment with oral rehydration solution	The proportion of children aged 0-59 months who had diarrhoea in the previous 2 weeks and who received oral rehydration solutions
Social protection and nutrition education	Carry out national public awareness campaigns on diet and physical activity	Country has conducted at least one recent national public awareness campaign on diet and physical activity
	Implement and are enforcing a front-of-pack nutrition labelling scheme	Country has implemented and are enforcing a simplified, interpretive front-of- pack nutrition labelling scheme
	Increase the density of trained nutrition professionals	Number of trained nutrition professionals per 100 000 population the country in a specified year <sup>21</sup>
Trade and investment for improved nutrition	Increase responsible and sustainable investment in nutrition by developing a budget and cost analysis with clear investment plan for the implementation of national nutrition policies/strategies/ action plans	National budget has been allocated for implementation of national nutrition policies/strategies/action plans; Annual budget allocated to nutrition investments as a percentage of the overall national budget
Safe and supportive environments for nutrition at all ages	Increase availability of breastfeeding counselling services	Country has national programmes that include provision for delivering breastfeeding counselling services to mothers of infants aged 0–23 months, through health systems or other community-based platforms <sup>21</sup>
	Implement the Baby-Friendly Hospital Initiative to increase the proportion of births in baby-friendly facilities	Proportion of babies born in facilities designated as baby-friendly in a calendar $\ensuremath{year^{^{21}}}$
	Implement maternity protection laws or regulations	Country has maternity protection laws or regulations in place that are compliant with the provisions for leave duration, remuneration and source of cash benefits in Convention No, 183 <sup>21</sup>
Strengthened governance and	Nutritional surveillance system in operation	Country has a functioning system for generating reliable data on nutrition for monitoring and evaluation
accountability for nutrition	Establish, strengthen or maintain multisectoral coordination mechanisms for nutrition	Multisectoral groups or organizations that oversee, coordinate or harmonize nutrition-related work have been established; Baseline 2017: 18 countries had one or more multisectoral coordination mechanisms

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Malnutrition takes a heavy toll on the health, well-being and sustainable development of populations in WHO's Eastern Mediterranean Region. Some countries continue to experience high levels of food insecurity, undernutrition and vitamin and mineral deficiencies. At the same time, half of the population is overweight or obese and unhealthy diets are a major risk factor for noncommunicable diseases, responsible for two thirds of deaths in the Region. In recent years, countries have made landmark commitments to end malnutrition in all its forms, and global targets to improve nutrition and reduce premature deaths due to diet-related noncommunicable diseases are included in the Sustainable Development Goals. At the halfway point of the United Nations Decade of Action on Nutrition 2016–2025, a new strategy on nutrition for the Eastern Mediterranean Region for the period 2020–2030 has been developed to support countries translate these commitments into action.