

# 3. TECHNICAL PRESENTATIONS

## 3.1 Food-based dietary guidelines: overview and follow-up

*Dr Chizuru Nishida, WHO Headquarters*

FBDG are not new. The 1992 ICN Plan of Action for Nutrition included nine action-oriented strategies:

1. Incorporating nutritional objectives, considerations and components into development policies and programmes;
2. Improving household food security;
3. Protecting consumers through improved food quality and safety;
4. Preventing and managing infectious diseases;
5. Promoting breastfeeding;
6. Caring for the socioeconomically deprived and nutritionally vulnerable;
7. Preventing and controlling specific micronutrient deficiencies;
8. Promoting appropriate diets and healthy lifestyles;
9. Assessing, analysing and monitoring nutrition situations.

The strategy for point 8 calls on governments “on the basis of energy and nutrient recommendations to provide advice to the public by disseminating qualitative and/or quantitative dietary guidelines relevant to different age groups and lifestyles, and appropriate for the country's population.”

Fifty-four countries, 28% of WHO Member States, including seven countries in the Eastern Mediterranean Region, have incorporated all nine action-oriented strategies in their national plans of action for nutrition.

FBDG are recommended as preventive strategies, because they provide a framework for advice on the selection and consumption of nutritionally adequate, safe, healthy and affordable diets and encourage healthy lifestyles. An FAO/WHO technical consultation was held in Cyprus resulting in the manual “Preparation and use of food-based dietary guidelines” issued in 1995 (TRS 880). Since then WHO has

supported countries through regional workshops in the development of national FBDG. Five workshops were held in South America in 1995–1996, one in India in 1997, and one in the Philippines in 1999.

According to an inventory on the status of development of FBDG in the world in December 2004, 37 only countries had finalized their FBDG, and six countries are preparing theirs. In this Region, three countries declared their willingness to prepare FBDG, based on information obtained in 2001.

The magnitude of malnutrition in the world shows the need for an effective strategy: intra-uterine growth retardation, 30 million/year (23.8% of all births); protein–energy malnutrition, 159 million under-5 children; iodine deficiency disorders, 740 million; vitamin A deficiency, 120 million under-5 children, 3 million under-5 children with xerophthalmia; anaemia, including iron deficiency anaemia, 2 billion; overweight and obesity, 1.2 billion (340 million obese) adults and 16 million children.

In the Eastern Mediterranean Region, the most commonly cited factors affecting nutritional status were infectious diseases and parasites, poverty, changing dietary habits, physical inactivity, and insufficient intake of iron-rich foods.

Some of the emerging issues which countries identified as needing action include globalization of the economy; nutrition transition (overweight and obesity); fetal programming of chronic diseases; the impact of HIV/AIDS; biotechnology such as production and utilization of genetically modified foods; micronutrients beyond the big three (iodine, vitamin A and iron), such as zinc, folate (folic acid), calcium, vitamin C and selenium; and prion diseases such as bovine spongiform encephalopathy.

Examples of existing FBDG posters were shown, as well as core guidelines of the South-East Asia Region:

- Eat enough food to meet body needs and maintain a healthy body weight
- Eat a variety of foods
- Eat clean and safe food
- Eat whole grain cereals, legumes, roots and tubers
- Eat plenty of vegetables and fruit regularly
- Eat moderate amounts of fat in your diet
- Limit salt intake
- Moderate sugar intake

- Avoid or limit alcohol
- Breastfeed as appropriate

For the development of national FBDG, nutrient recommendations can be obtained from FAO/WHO expert consultations on:

- Fats and oils (1993 and updates in 2006)
- Carbohydrates (1997 and updates in 2008)
- Energy (updates in 2001)
- Protein (updates in 2002)
- Diet, nutrition, and the prevention of chronic diseases (2002).

WHO is supporting countries through regional reviews and assessments: Central and Eastern European countries (Hungary, 2004); Eastern Mediterranean Region countries (Cairo, 2004); Latin American countries (2005); Asian countries (2005).

## 3.2 Regional overview of diet-related health problems

*Dr Kunal Bagchi, WHO Regional Office for the Eastern Mediterranean*

Countries of the Eastern Mediterranean Region may broadly be divided into four categories. The first category includes countries that are in an advanced stage of over-nutrition, characterized by overweight and obesity, together with the presence of dietary risk factors for chronic diseases and moderate micronutrient deficiencies. Any of the countries from the Gulf Cooperation Council (GCC) would fit into this category.

The second category includes countries that have moderate levels of over-nutrition with dietary risk factors for chronic diseases, as well as moderate levels of under-nutrition in specific areas and widespread micronutrient deficiencies. A good example is Jordan.

The third category includes countries with significant under-nutrition reflected in both acute and chronic child and maternal malnutrition, as well as emerging over-nutrition in specific population groups, for example, affluent urban populations. Pakistan is a good example.

The fourth category includes countries with severe child and maternal under-nutrition and widespread micronutrient deficiencies. Essentially these are countries that are experiencing humanitarian crises, such as Afghanistan. Under-nutrition continues to affect a large proportion of children in countries of the Region. The high prevalence of stunting and wasting demonstrates this fact.

Food and dietary habits have changed over the years in the Region, coupled with an increasingly sedentary lifestyle. The availability of total fat in selected countries of the Region has increased according to data taken from FAO Food Balance Sheets for different years. Traditional foods are being replaced by fast foods, soft drinks and increased consumption of meat. The proportion of energy derived from cereals and cereal products has decreased. The sharp decline in the cost of vegetable oils and sugar has put such products in direct competition with cereals as the cheapest food ingredients. More high-fat and high-energy foods are incorporated in the diet.

The average overweight and obesity prevalence rate reaches over 30% among the entire adult population in the Region. The modern environment has allowed overweight and obesity to increase at alarming rates, posing a major public health challenge.

Among the noncommunicable chronic diseases, diabetes mellitus is reaching pandemic proportions in several countries. The regional prevalence of type 2 diabetes mellitus is estimated to range between 7% and 25%. The prevalence of diabetes has increased steadily over the past ten years in the GCC countries. The prevalence of hypertension is estimated to be around 26% in the Region.

A large proportion of the adult and young population in the countries of the Region smokes including 62% of adult males, 48% of adult females, and 26% of young males. Cardiovascular diseases account for the highest number of deaths in the Region. Total mortality from cancer has been estimated to be around 8%.

The close relationships between obesity, diabetes mellitus, hypertension, smoking and physical activity are demonstrated through information compiled from countries. It is estimated that 40%-45% of obese individuals develop type 2 diabetes, 85%-90% of all diabetics are overweight and obese, and 85%-90% of all diabetics are physically inactive.

Obesity appears to be the most important single target variable to control if the incidence of diabetes and other noncommunicable diseases is to be reduced. Control of obesity would help reduce prevalence of hypertension and reverse the lipid disturbances associated with obesity.

The issue of physical activity as it relates to diet and chronic disease in the Eastern Mediterranean Region countries was also addressed. The experience of the Regional Office, based on data available from countries, indicates that when obesity is a common feature in a cultural group, strong negative social pressure limits the involvement of population groups in weight control programmes. A tolerant attitude towards being overweight develops and some individuals even harbour

an image of being attractive despite their obesity. Exercise is not part of a daily routine for the men and women living in many countries of the Region. Even among the obese population, exercise is not popular and is often combined with a low level of knowledge and poor attitude.

A number of needs and concerns exist. First, there is a general lack of standardized and representative data on chronic diseases in countries of the Region. Efforts have been made to establish data-gathering surveillance systems, but their linkages to food and diet have to be strengthened. Second, there is limited awareness regarding appropriate diets at the individual, community, school and government level. Third, negative effects of mass media messages result in increased consumption of processed and fast food and sweetened soft drinks. Increased tobacco consumption and lack of physical activity are other concerns.

### 3.3 Regional overview of food consumption patterns

*Dr Fatima Hachem, FAO Regional Office for the Near East*

Countries in the Near East have witnessed many changes in the past 40 years, including a tremendous increase in the population and an improvement of income, as well as socioeconomic and political changes that have greatly influenced the way people eat in this Region. Many countries were food insecure in the 1960s, as is shown by the FAOSTAT Daily Energy Supply (DES) figures and the numbers of the undernourished. The situation has improved greatly since then and the DES has increased in all countries, reaching that of the industrialized countries for some. The share of total energy of proteins and fats has also increased, but has stayed within the international recommendations of 10%-15% for proteins and less than 30% for fat, except for Lebanon, Syrian Arab Republic and some GCC countries in which fat contribution to total calories exceeded the recommended 30%.

A closer look at the composition of DES by macronutrients reveals that for most countries the contribution of proteins stayed almost unchanged with vegetable proteins being the main contributor to total protein calories. On the other hand, the fat contribution to total caloric supply remained unchanged for most countries except for Kuwait, Lebanon, Saudi Arabia, Syrian Arab Republic and the United Arab Emirates. Here again, the major increase came from vegetable fats.

Supply of major food groups per capita has also seen an increase, which was more pronounced in some countries than others. Countries, which are identified as low income have seen the lowest increase in food supply per capita.

The structure of food supply shows that minor changes have occurred among the major food groups. However there have been major