

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

changes in some countries in the composition of these food groups. This has been particularly evident in the group of oils, where some countries have seen the introduction of new types of oil, such as palm oil, or the substitution of traditionally used oils, such as olive oil, by soybean oil. Similar trends have also been observed within the group of cereals. In addition, countries that witnessed a decrease in their per capita supply of cereals have also witnessed an increase in their per capita supply of oil.

The contribution of sugar to total caloric supply increased slightly in a few countries, but remained at around 10% of DES for all of the countries.

Many factors specific to the Region could explain these minor structural changes in the food patterns in the countries of the Region. Income is often associated with major changes in diet. While this is true for most countries, the increase in income was not always concomitant with an increase in the percent contribution of animal protein to DES. The increasing inequality in the distribution of incomes in many countries could be one of the reasons to explain this observation. In addition, the engagement of women in paid activity is the lowest in the world in this Region, which could explain to a certain extent the slower change in food patterns. Cultural habits could also explain the high expenditure on fruits and vegetables as a percent of total food expenditure seen in some countries of the Region. On the other hand, food policies and food aid significantly shape consumption patterns in these countries. A few countries still use food subsidies as a means of protecting the less privileged in their societies. Mainly cereals, oils and sugar are subsidized. In combination with the policies of subsidizing cereal producers this contributes to the availability of these foods at lower prices to consumers across the whole society. In addition to all of the above, the food industry and supermarkets are increasing in number in many of these countries, but their impact on food habits has not been assessed yet.

It should be noted that the most populated countries are still practising policies that place many restrictions on imports, including food items. This has recently started to become less strict in some countries, which might influence food habits in the long run.

While Food Balance Sheets are invaluable for studying trends over time and for an overview of food patterns in a certain country, their use is limited when it comes to studying variations at the individual level or when these variations need to be disaggregated by gender, region, or socioeconomic status. With the increase in the number of those living under the poverty line in many countries in this Region, local food consumption surveys are required to obtain information at the micro level. Such information would be fundamental in advising policies and interventions.

Points raised in the discussion

- Food subsidies play an important role in shaping food patterns of the poor in some countries in the Region. To ensure that people eat balanced diets, consideration needs to be given to the foods that are subsidised.
- A high total energy intake is a risk factor for obesity, even if the dietary composition is balanced in terms of the ratio of macronutrients.
- Food Balance Sheet data (FBS) may mask differences between population groups.
- Although food availability has improved in the last 30 years, problems of under nutrition in the Region should not be underestimated.
- In order to develop national FBDG that address the particular nutrition and health concerns of the population, data on actual food consumption patterns are needed.
- Capacities need to be strengthened regarding the use of standardized survey methods for dietary intake that allow inter-country comparisons.

3.4 Summary of diet, nutrition and chronic diseases: Technical Report 916 and the global debate

Dr Chizuru Nishida, WHO Headquarters

Nutrition is coming to the forefront as a major modifiable determinant of chronic diseases, with scientific evidence increasingly supporting the view that alterations in diet have strong effects, both positive and negative, on health throughout life. For example, up to 70% of stroke, up to 80% of cases of coronary heart disease, and up to 90% of type II diabetes could be avoided through changing lifestyle factors. Furthermore, up to 70% of colon cancer and about one-third of other cancers could be prevented by eating healthily, maintaining normal weight and being physically active throughout the lifespan.

Most importantly, dietary adjustments may not only influence present health, but may determine whether or not an individual will develop such diseases as cancer, cardiovascular disease and diabetes much later in life. However, these concepts have not led to a change in policies or in practice. Therefore, to address the growing epidemic of diet-related chronic diseases afflicting both developed and developing countries, the joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases was held in Geneva from 28 January to 1 February 2002.

The overall objective of the Consultation was to review current international recommendations on diet, nutrition and the prevention of chronic diseases, and to update them by evaluating the new scientific evidence and lessons learned from implementing national intervention strategies to reduce the burden of these diseases. The report of the joint WHO/FAO Expert Consultation updated the report of the 1989 WHO Study Group. The main features in the content and approach taken by the Joint WHO/FAO Expert Consultation are summarized as follows:

The primary purpose of the consultation was to examine and develop recommendations for diet and nutrition in the prevention of chronic diseases, but the need for sufficient physical activity was also discussed, and was emphasized in the final report. This emphasis is consistent with the trend to include physical activity as part of diet, nutrition and health.

The report of the consultation includes a chapter examining global and regional food consumption patterns and trends. It addresses likely implications of nutrient recommendations and dietary guidelines for food supply and production and the need for developing integrated action strategies. The report also includes the criteria used to describe strength of evidence. These were based on the criteria used in the World Cancer Research Fund report on food, nutrition and the prevention of cancer, modified to include results of controlled trials, where relevant and available. Furthermore, the consultation recognized the complex interaction between environmental factors that affect excess weight gain as an important contributing risk factor for many chronic diseases. Therefore, in categorizing risks, the consultation took into consideration consistent evidence on community and environmental factors, which lead to behavioural changes and thereby modify risk.

In updating the population nutrient intake goals, the consultation applied convincing and probable evidence. Convincing evidence is based on epidemiological studies showing consistent associations between the exposures and the disease, with little or no evidence to the contrary. The available evidence is based on a substantial number of studies, including prospective observational studies and where relevant, randomized controlled trials of sufficient size, duration and quality showing consistent effects. Furthermore, association should be biologically plausible. Probable evidence is based on epidemiological studies showing fairly consistent associations between the disease and the exposure, but there are perceived shortcomings in the available evidence or some evidence to the contrary, which make it difficult to make a more definite judgement.

Shortcomings in the evidence may be insufficient duration of trials (or studies), insufficient availability of trials (or studies), insufficient sample sizes; or incomplete follow-up. However, laboratory evidence is usually supportive and association should be biologically plausible. Detailed

features, approaches and contents of the report of the Consultation can be viewed in an article in *Public Health Nutrition*².

In the light of the updated population nutrient intake goals recommended by the joint WHO/FAO expert consultation, national FBDG should be reviewed, or formulated as necessary by adapting recommended population nutrient intake goals to local situations. The goals and recommendations of the joint WHO/FAO expert consultation provide an important scientific basis for developing and implementing global, regional and national strategies for improving the health and nutritional well-being of the world population.

3.5 Overview of the Global Strategy on Diet, Physical Activity and Health and its regional implications

Dr Denise Costa Coitinho, WHO Headquarters

In May 2004, the 57th World Health Assembly endorsed the WHO Global Strategy on Diet, Physical Activity and Health (DPAS) in resolution WHA57.17. The DPAS was developed through an inclusive and extensive process of consultations with all concerned stakeholders, in response to a request from WHO Member States at the 2002 World Health Assembly (WHA55.23). A total of 81 countries attended six regional consultations, and 11 United Nations agencies, 25 international nongovernmental organizations and 25 international industry associations were consulted. The WHO Director-General chaired round-table discussions with senior executives of 13 international companies, and with 13 nongovernmental organizations. An international reference group advised the process. A consultation with countries of the Eastern Mediterranean Region was held in Cairo, 30 April-2 May 2003.

In the resolution, the Health Assembly acknowledged that "... malnutrition, including under-nutrition and nutritional deficiencies, is still a major cause of death and disease in many parts of the world, especially in developing countries, and that this strategy complements the important work of WHO and its Member States in the overall area of nutrition" (WHA 57.17). Members States have expressed their concern that WHO should continue to consider the whole spectrum of nutrition diseases in its work. There are common solutions, common policy options to jointly address these conditions. Keeping the best balance is the challenge and the opportunity to move the nutrition agenda further.

DPAS sets as key principles for action that: strategies and policies should be multisectoral, address all major chronic noncommunicable disease risk factors and have a long-term perspective; its implementation needs to address all age, sex and socioeconomic groups; advocacy must be

²Nishida C et al. The Joint WHO/FAO Expert Consultation on diet, nutrition and the prevention of chronic diseases: process, product and policy implications. *Public health nutrition*, 2004, 7(1A):245-50.