WORLD HEALTH ORGANIZATION Regional Office for the Eastern Mediterranean ORGANISATION MONDIALE DE LA SANTE Bureau régional de la Méditerranée orientale





In the Name of God, the Compassionate, the Merciful

Message from

DR HUSSEIN A. GEZAIRY REGIONAL DIRECTOR WHO EASTERN MEDITERRANEAN REGION To the INTERREGIONAL TOTAL DIET STUDY WORKSHOP Cairo, Egypt, 28–31 October 2007

Ladies and Gentlemen, Dear Colleagues,

On behalf of the World Health Organization, it is my pleasure to welcome you to this Interregional Total Diet Study workshop jointly organized by WHO Regional Office for the Eastern Mediterranean and WHO Regional Office for Europe. I am very pleased to see the strong mutual cooperation between the two regional offices in the field of total diet studies.

I would especially like to thank colleagues from WHO headquarters, Regional Office for Europe, Food and Agriculture Organization of the United Nations and experts from New Zealand who will be sharing their experience in this important workshop.

Widespread contamination of water, soil and air by chemicals and industrial pollutants means that the animal products and crops we use for food are often exposed to toxic substances. The number of chemicals on the open market today is huge. Many of these chemicals can reach the food supply chain. Many toxic chemicals occur naturally in food and the environment. Human exposure to these toxic chemicals can, potentially, affect all major organs of the body, including promoting or causing cancer, kidney and liver dysfunction, hormonal imbalance, immune system suppression, musculoskeletal diseases, birth defects, premature births, impeded nervous and sensory system

development, reproductive disorders, mental health problems, cardiovascular disease, genito-urinary diseases and dementia.

Most of the potential effects of these chemicals are chronic in nature, appearing after years of exposure and therefore cannot easily be linked to individual foods. While unsafe levels of chemicals in food may cause serious health problems, they also pose threats to trade and the environment. For that reason, it is imperative to assess chemical exposure to humans through diet and nutritional imbalances. The responsibility and obligation to make these assessments often rests with ministries of health.

To ensure the safety of the population and to get a sound, objective and transparent picture of the risks associated with food, such as pesticides, heavy metals, environmental contaminants and naturally occurring toxins, two complementary approaches are used.

The first is to monitor individual foods for compliance with national and international regulatory standards. The second approach is to measure the actual dietary consumption intake of these chemicals by the population and compare these intakes with toxicological reference points such as Acceptable Daily Intake (ADI) or Provisional Tolerable Weekly Intake (PTWI). This provides a direct link to the health of the population, thus total diet studies are a key public health risk assessment tool which provides the most reliable way to estimate the dietary intake exposure to toxicants by population group.

In the WHO Eastern Mediterranean Region, the Regional Committee adopted, in 1999, the Regional Plan of Action for Food Safety in the 21st Century. In this plan the Member States agreed to assess their current food safety infrastructure and problems at national level and to carry out a country diagnosis in order to prepare a country profile. They also agreed to develop, strengthen and implement effectively their national food safety programmes; to continue to monitor and evaluate their food safety activities; and finally to initiate a coordinated effort to improve food control systems. Emphasis was placed in many countries on monitoring individual foods for compliance with national or international regulatory standards, along with food certification in the country of origin.

Following the adoption of the plan, a number of new initiatives have been taken at national and regional level. One of these initiatives includes total diet studies, which several countries in the Region have attempted to conduct. Total diet studies enable countries to get a snapshot of the safety and quality of the food supply. They can help them to monitor chemicals present in food and to estimate dietary exposures and characterize the associated risk to public health. Total diet studies can also help identify possible risk communications and risk management options. In addition, the agreement on the application of Sanitary and Phytosanitary measures (SPS agreement) of the World Trade Organization (WTO) required that health and safety requirements related to food be based on scientific risk assessment. Toxicological information and exposure of the population to the chemical are the two essential components. Exposure assessment of large population groups is accurately obtained by using total diet studies.

The objectives of this total diet study training workshop are to promote and support total diet studies in all Member States, to help prepare new people to conduct total diet studies, to update you on recent developments in the field of total diet studies, to promote reliable and comparable total diet studies through harmonized approaches and exchange of international best practices and expertise, to establish a network of national counterparts for undertaking regional total diet study projects, and to promote electronic submissions and use of total diet study data from the WHO Global Environmental Monitoring System/Food Contamination Monitoring and Assessment Programme (GEMS/Food).

Ladies and Gentlemen, Dear Colleagues,

I expect that the technical exchange and your deliberations during the workshop sessions will indeed lead to a concrete plan of action to conduct and perform risk assessments and ensure that the national food safety system is effective in protecting public health and promoting food safety and trade, in order to achieve the goal of SAFE FOOD FOR ALL. I would like to thank our colleagues from FAO, WHO headquarters, Regional Office for Europe and international experts. Finally it only remains for me to wish you a successful workshop, and a pleasant stay in this beautiful city of Cairo.