

In the Name of God, the Compassionate, the Merciful

Message from

DR HUSSEIN A. GEZAIRY

REGIONAL DIRECTOR

WHO EASTERN MEDITERRANEAN REGION

to

**THE JOINT WHO/UNICEF/MI/PAMM STRATEGY DEVELOPMENT
WORKSHOP ON FOOD FORTIFICATION WITH SPECIAL REFERENCE TO
IRON FORTIFICATION OF FLOUR**

Muscat, Oman, 26–31 October 1996

Your Excellency, Ladies and Gentlemen, Dear Colleagues,

It is with great pleasure that I welcome you here, for this Strategy Development Workshop on Food Fortification with special reference to iron fortification of flour, which has been organized jointly by WHO, UNICEF, Micronutrient Initiative and the Programme against Micronutrient Malnutrition.

I would like to express here my heartfelt thanks to the Government of Oman and in particular His Excellency Dr Ali Bin Mohammad Bin Moosa, the Minister of Health, for so kindly agreeing to host this important workshop. This is certainly an expression of the

importance attached by the Government of Oman to food fortification in the struggle to control micronutrient deficiency, especially iron deficiency and anaemia.

The countries of the Eastern Mediterranean Region face a multitude of nutritional problems, many of which have a cumulative effect on physical and intellectual development, thus affecting work performance and, ultimately, a society's socioeconomic development.

In most countries, growth failure and undernutrition still affect up to a third of pre-school children. At the other end of the spectrum, obesity and diet-related chronic diseases place an ever-increasing burden on society, threatening not only affluent people but also the urban poor. Iodine deficiency affects at least 16 of the 23 countries in the Region, and several countries face vitamin A deficiency and rickets. All countries of the Region are affected by iron deficiency and anaemia.

Iron deficiency anaemia is a serious public health problem, with grave consequences for psychological and physical development, behaviour and work performance. It is the most common nutritional disorder, both in the Eastern Mediterranean Region and in the world as a whole. Iodine deficiency disorders and vitamin A deficiency also affect substantial numbers, while less well known deficiencies such as vitamin D and zinc should not be neglected.

Iron-deficient individuals are significantly less productive than workers with normal haemoglobin levels. Even mild anaemia can decrease performance in physical labour. An impaired work capacity results in a reduced ability to care for the family, reduced productivity, and reduced income. Anaemia in pregnant women can lead to intrauterine growth retardation, low birth weight, increased perinatal mortality and increased maternal morbidity and mortality.

Morbidity from infectious diseases is increased in iron-deficient populations because the immune system is affected adversely. This is compounded by vitamin A deficiency, even in sub-clinical form. And last, but not least, iron deficiency and its anaemia negatively affect cognitive behaviour and learning capacity. It is estimated that iron

deficiency results in a 10–15 point reduction in a child's potential intelligence quotient or I.Q., although this must be seen in the light of other nutritional deficiencies prevalent in the Region, which also have a negative effect on learning capacity, notably iodine deficiency.

Iron deficiency is a function of the body's requirements, losses from the body and dietary intake. The total dietary iron intake in the Region is generally below recommended levels. This situation is made even worse by the high consumption of foods rich in iron-absorption inhibiting factors, such as tea and unleavened bread. In addition to dietary factors, childbearing patterns, parasitic infections and consanguinity contribute to the high prevalence of iron deficiency anaemia in the Region.

Most countries in the Region have programmes that aim at routine supplementation of pregnant women with iron/folate tablets. It is however clear from the persistently high prevalences of anaemia that no real improvements have been achieved to date.

In view of the persistence of the problem and the lack of real progress in reaching the target of reduction of anaemia by 30% of 1990 levels, WHO and UNICEF called a consultation of experts, in October last year, to develop effective strategies for control of iron deficiency, suitable to this Region.

The consultation recommended that such strategies should address improvement of the iron intake, enhanced absorption of the iron consumed, and reduction of iron losses. The consultation agreed that the strategies to be used are dietary measures, including changing eating behaviour, supplementation of vulnerable groups with iron tablets, food fortification and public health measures. Based on these strategies, the consultation developed guidelines for iron deficiency control programmes, with priorities for intervention in different socioeconomic settings. The guidelines are currently being published as a WHO/UNICEF document.

The consultation recognized that fortification of suitable foodstuffs, notably flour, had been the single most effective means of improving iron intake in developed countries and recommended that countries explore the feasibility of flour fortification as a long-term strategy.

In the Eastern Mediterranean Region, great success has been achieved in the last five years in the iodization of salt to control iodine deficiency disorders. The experiences gained in this successful effort to fortify a much consumed food will certainly be of use for the new fortification activities now envisaged, such as fortification of flour with iron, and possibly with other important micronutrients such as vitamin A or folic acid.

Many of the issues addressed in salt iodization will also need to be addressed here: mandatory versus voluntary fortification, legislation and standards, technological issues, and monitoring and evaluation. Some of you may already be members of a national committee for control of iodine deficiency disorders or universal salt iodization. Here in Oman, I am informed a national committee on food fortification has already been formed, and is actively involved in all issues relating to fortification.

In view of the interest expressed by several countries and the many technical queries received, WHO and its partners, UNICEF, the Micronutrient Initiative and the Programme against Micronutrient Malnutrition, decided to organize the present workshop to share the experiences already gained in countries within and outside the Region and to address the issues involved in food fortification, ranging from the practical details at the technical level to the broader issues of legislation, monitoring and evaluation.

I am confident that you will benefit fully from this workshop to learn about all aspects of food fortification and to exchange ideas and experiences with each other and with the experts from outside the Region. And I certainly hope that technical cooperation and networking will continue after this workshop so that sustainable mechanisms can be put in place.

Many of you are representing your country as a team. This will I am sure, enable you to take immediate action on return to your respective countries.

The true beneficiaries of your work will be the people of the countries in the Eastern Mediterranean Region who will, I trust, not need to carry the burden of micronutrient deficiencies for much longer.

I wish you all a very fruitful workshop and an enjoyable stay in this beautiful country.