

unlikely to become easier to manage.

Among the micronutrient deficiencies, iron deficiency still affects about 2 billion people worldwide. In developing countries, about half of the pregnant women and a third of the children under five years are anemic. In recent years, no major improvement in the situation has become apparent.

Another diet-related threat to health only recently recognized in developing countries is obesity and its associated disorders (cardiovascular disease, hypertension, stroke, diabetes, cancer etc). Obesity rates are doubling every 5–10 years in many parts of the world, and already affect more than half of the population in some countries.

Priority issues

The impact of existing programs is often limited by a lack of funds, personnel and coordination. It seems that the importance of nutrition for the health and prosperity of a nation is often not recognized appropriately at the levels of government responsible for allocating resources. Numerous countries have expressed an urgent need for help to improve their capacity for formulating, implementing and monitoring activities, especially with regard to food security. The training/education of involved personnel, food producers and consumers is often seen as the

key to overcoming limitations.

As food markets become more and more international, there is increasing concern about the quality of foods sold across national borders. Contaminated foods are frequently blamed for the high frequency of diarrhea in infants. Quality control systems and legislation, efficient analytical laboratories, and regulations for labelling and promotion are some of the measures proposed to ensure that producers meet high standards. Absence of appropriate regulations is also seen as one of the reasons why food fortification is not as widely implemented as it might be.

Although the frequency and duration of breast feeding have increased in some countries, this has not been the case in many others. Particularly in countries where exclusive breast feeding for at least four months is crucial for infant survival, it is not receiving enough attention.

So, what needs to be done to improve the efficacy of current strategies, and speed up the implementation of appropriate programs?

Next steps

I am sure you will agree that the time has come to accelerate meaningful action. In those countries where a plan of action has been established, specific activities

should be singled out for realization, and appropriate resources allocated. A definite timetable for implementation should be set. While initiating new activities, it is essential not to lose sight of the overall objectives. Existing activities should not be neglected.

It is important to ensure political support at the highest level, to encourage collaboration between the public and private sectors, to introduce efficient legislation and monitoring of activities, and to identify priority areas that can benefit from multisectorial actions. Employment and training of appropriate personnel should also be considered.

The involved UN organizations have announced that, to strengthen the implementation of national programs, they will continue with the development of scientifically sound guidelines, the establishment of appropriate norms, criteria and methodologies, and the monitoring of research and progress in global nutrition. – A. Bowley ■

References

1. Progress report on the implementation of the ICN World Declaration and Plan of Action. FAO/WHO, Rome/Geneva 1996.
2. Meeting the nutrition challenge: A call to arms. ACC/SCN Kathmandu, Nepal, March 1997.

■ Feature:

Folic acid fortification in the USA

Since January 1, 1998, the fortification of certain cereal products (Table 1) has become mandatory in the USA after the FDA determined that such fortification at levels between 0.43 mg and 1.4 mg per pound would help to reduce the risk of neural tube birth defects (NTD) and would be safe for all population groups. In addition, the FDA issued regulations authorizing the use of health claims in food labelling that link adequate intake of folic acid by women of childbearing age with reduced NTD risk.

A health claim is considered to be any claim "expressly or impliedly characterizing the relationship of any nutri-

ent to a disease or health-related condition". Health claims may include statements, symbols (e.g. heart), vignettes or other forms of communication, such as third-party endorsements, that suggest, within the context of product labelling, that a relationship exists between a nutrient and a disease or health-related condition. Only health claims specifically authorized by the FDA, and made in conformance with FDA regulations may be used in food labelling. To qualify for a health claim, foods must provide folic acid levels between 10% and 19% of the Daily Value (40 – 75 µg) per reference

amount, and not more than 100% of the Daily Value of preformed vitamin A or vitamin D per serving. Moreover, products must not contain "disqualifying" levels of any one of several specified nutrients. For example, health claims are prohibited for any food containing more than 13g fat, 4g saturated fat, 60mg cholesterol or 480mg sodium per reference amount customarily consumed, per labelled serving size or per 50g (if the reference amount does not exceed 30g or 2 tablespoons).

FDA regulations require that health claims conform to the following specifications:

- They must specify the nutrient using the terms "folate", "folic acid" or "folacin", alone or coupled with the phrase "a B vitamin".
- They must specify the NTD condition using the terms "neural tube defects", "birth defects spina bifida or anencephaly", "birth defects of the brain or spinal cord anencephaly or spina bifida", "spina bifida and anencephaly, birth defects of the brain or spinal cord", "birth defects of the brain or spinal cord" or "brain or spinal cord birth defects".
- They must not imply that folic acid intake is the only risk factor for NTD.
- They must not attribute a specific degree of risk reduction to folic acid intake.
- They may state that some women may reduce their risk of a NTD pregnancy by maintaining adequate intakes of folic acid during their childbearing years.
- They may state that folic acid needs to be consumed as part of a healthful diet.
- They must not state that a given amount of folic acid from one food source is more effective in reducing NTD risk than a lower amount from another source.

In addition, FDA regulations specify other information that may be included as part of the claim.— A. Bowley ■

Table 1: Products in the USA that, since January 1, 1998, must be fortified with folic acid (as well as B₁, B₂, niacin and iron)

Product	Fortification level mg/pound (mg/kg)
Enriched bread, rolls and buns	0.43 (0.946)
Enriched wheat flour	0.7 (1.54)
Enriched self-rising wheat flour	0.7 (1.54)
Enriched bromated wheat flour	0.7 (1.54)
Enriched corn grits	0.7–1.0 (1.54–2.2)
Enriched corn meals	0.7–1.0 (1.54–2.2)
Enriched farina	0.7–0.87 (1.54–1.91)
Enriched rice	0.7–1.4 (1.54–3.08)
Enriched macaroni products	0.7–1.2 (1.54–2.64)
Enriched nonfat milk macaroni products	0.7–1.2 (1.54–2.64)
Enriched noodle products	0.7–1.2 (1.54–2.64)

■ Feature:

Latin American millers support wheat and corn flour fortification

At the meeting of the Latin American Millers Association (Asociación Latinoamericana de los Industriales Molineros, ALIM) held in Lima in November 1997, the delegates unanimously accepted a declaration stating their position regarding efforts to combat hidden hunger. A translation of this declaration is reproduced on page 6.

ALIM is a regional association of national milling organizations, each of which represents 60–100% of milling capacity in its respective country. Officials at the World Bank recently praised ALIM for its vital cooperation in helping to promote iron fortification in the region. Many countries in Latin America and the Caribbean (LAC) already have legislation for iron and vitamin fortification. But only a few of them actually implement and monitor it. It has been suggested that the reasons for this might be the lack of financial and

political incentives to industry (e.g. tax relief, import licences, subsidies, loans for equipment, positive press coverage).

Cereal fortification in LAC today

Table 1 shows the situation as regards legislation on the fortification of cereals in Latin America and the Caribbean. Figure 1 shows which American countries currently implement cereal fortification.

One country where wheat flour fortification has been introduced with great success is Chile, where bread is a widely consumed staple. Legislation regulating the fortification of wheat flour with niacin, riboflavin, thiamin, calcium and iron was passed there in 1951. The purpose originally was to correct deficiencies of the B vitamins. Fortification has been practised continuously since then under the control of the Ministry of Health. Today, iron deficiency anemia is practically eliminated (prevalence about 1%)

in school children, adolescents, adults and elderly. This is considered to be mainly due to the intake of fortified bread. Only two population groups still have a higher prevalence: children between 6 and 24 months, and pregnant women. A problem with iron overload has not been encountered.

Mandatory fortification of wheat and corn flours with iron and vitamins began on a national scale in Venezuela in 1993. These two cereals account for 45% of the total calorie intake of the population. Precooked corn flour contains vitamin A (2'700RE/kg) and ferrous fumarate (50mg/kg) as well as niacin, riboflavin and thiamin. Wheat flour intended for bread contains the same B-vitamins and 20mg/kg iron, but no vitamin A. The impact so far has been a two-thirds reduction in the prevalence of iron deficiency anemia. To ensure the successful implementation of