

## 11. Vietnam

### ***Successful micronutrient programs: Micronutrient-deficiency control strategies in Vietnam***

N. X. Ninh, N. C. Khan, N. D. Vinh, and H. H. Khoi

Vitamin A deficiency, iron-deficiency anemia, and iodine-deficiency disorders have been reduced during the past decade but still remain issues in Vietnam. Since the early 1990s, the Ministry of Health has implemented a nationwide program for the control of vitamin A deficiency. An implementation network has been set up from the commune to the central level by a strong preventive health structure with the active participation of mass organizations. A comprehensive strategy has been developed, including nutrition education; universal distribution of vitamin A capsules to target children, in combination with national immunization days, and to lactating mothers in the community; and promotion of the production and consumption of vitamin A-rich foods at the household level. The data in 1994 and in 2000 showed that the prevalence of clinical xerophthalmia was lower than the cutoff point established by the World Health Organization for a public health problem; however, the prevalence of subclinical vitamin A deficiency was still high in 2000 (11% in children and 50% in lactating mothers).

The groups highly vulnerable to iron-deficiency anemia are women of childbearing age and children (53% of pregnant women, 40% of nonpregnant women, and 60% of children under 24 months old suffered from iron-deficiency anemia in 1994). The iron-deficiency anemia control program has consisted

of supplementation of women with iron/folic acid tablets while providing them with nutrition education, together with the prevention of intestinal parasites, especially hookworm. However, the program has been implemented in only 1,282 out of more than 10,000 communes in the whole country so far; moreover, there is no policy for iron supplementation of children under two years of age.

Iodine-deficiency disorders are also very widespread in Vietnam. More than one-quarter (27%) of school-aged children had goiter in 1995; the prevalence was reduced to 14.9% in 1998. There is geographic and ecologic variation in goiter prevalence. Since 1999, universal salt iodization has been adopted by government legislation. By 2001, at the country level, 61% of households used iodized salt; however, the rate of usage was rather low in the Mekong River Delta, and about 30% of people in this region were reported to have low levels of urinary iodine ( $< 10 \mu\text{g}/\text{dl}$ ).

In the coming years, greater attention should be paid to more sustainable measures. Food fortification with micronutrients may be an important approach. Iron-fortified fish sauce, which was proved to have both efficacy and effectiveness in community-based trials, will be developed on a larger scale, while other vehicles, such as sugar, instant noodles, and processed complementary foods, should be considered for micronutrient fortification. As committed by the National Nutrition Strategy, ratified by the government, we are making ongoing efforts to combine different strategies to maintain success and sustain further achievements.

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The authors are affiliated with the National Institute of Nutrition, Hanoi, Vietnam.