Rising Food Prices Increase Hidden Hunger

by Howarth Bouis

February 3, 2011: The FAO Food Price Index has risen for the seventh consecutive month, exceeding its mid-2008 peak. 2008 was the year we saw food riots in many countries and millions more people pushed below the poverty line. Though food prices plummeted by the end of 2008, they have since been trending upwards again (see graph).

The FAO Cereal Price Index, which includes staples such as rice, wheat, and maize, rose to 245 points in January 2011, the highest since July 2008. Poor people are especially dependent on food staples for survival. What are the consequences of these rising food prices on the diets of the poor?

When food prices rise, effects on how income is allocated depends on the extent to which households are net producers or buyers of food. The poor, who are generally net buyers of food, will continue to consume relatively high amounts of staple foods and thus be forced to spend more of their income on these foods as prices increase. As a result, they have less money to spend on non-staple foods (such as vegetables, fruits, and animal products) and other non-foods items. This is illustrated in the following chart, which is based on data from rural Bangladesh.

This has serious implications for dietary quality. While staples are the main source of energy, it is the non-staple foods that are rich in the essential micronutrients that people need to be healthy and productive.

As an example, given a food price increase of 50% across the board (holding incomes constant), simulations suggest that iron intakes for Filipino women would decline from 7 mg iron/day to about 5 mg iron/day. This means that the percentage of Filipino women meeting their daily iron requirements would decline from 30% to only 5% as a result of the price increase. An already serious situation where 70% of Filipino women are iron deficient would be exacerbated so that 95% of women would not get enough iron. This lack of dietary iron is not visibly manifested—pictures of iron-deficient girls and women are not splashed across the front page. There is no obvious sign of the hunger deprivation that we see in children at refugee camps during a famine. But this hidden hunger (micronutrient malnutrition) is no less dire both in terms of direct impact on human health and in the avenues it opens up for illness and
disease to take hold. Iron deficiency during childhood and adolescence impairs mental development and learning capacity. In adults, it reduces the capacity for physical labor. Severe anemia, mostly caused by iron deficiency, increases the risk of women dying in childbirth.

Women and girls may already receive a disproportionately low share of the household share of non-staple foods and are therefore likely to be most vulnerable to poorer nutrition and health due to rising food prices. Poor micronutrient status not only has adverse direct consequences for mothers but also may have an impact on the nutritional status for their children, affecting infants during fetal development and lactation. We know that the damage caused by hidden hunger during the 1000 days (-9 to 24 months) of a child’s life is irreversible.

As rising food prices increasingly place nutritious non-staple foods beyond the reach of the poor, deficiencies of other essential nutrients such as vitamin A and zinc will also increase. The global public health problem of hidden hunger will get worse.

The long-term solution to reducing hidden hunger is to increase the incomes of the poor. This would allow for a substantial improvement in dietary quality through increased consumption of non-staple foods. Yet, food prices are likely to continue to rise over the long-term thus making it more difficult for the poor to afford nutritious foods.

New agricultural technologies to reduce hidden hunger must be implemented. These include the following promising approaches:

- **Biofortification**: the process of breeding new varieties of staple food crops with increased levels of minerals and vitamins that poor communities can grow and eat.
- **Fortification of fertilizers**: the application of minerals, such as zinc and selenium, to soils that are then taken up by food crops.
- **Novel crops**: introducing new foods that are richer in specific vitamins or minerals that are lacking in a particular food system.

None of these approaches alone are a magic bullet, but they are sustainable and cost effective and can be combined with supplementation, fortification, and other strategies that reduce hidden hunger.

The cost-effectiveness and pay-off of strategies to reduce micronutrient malnutrition are undisputed. The time has come to redirect agricultural investments toward improving dietary quality in order to overcome this great public health tragedy of our time.