Reducing the Human and Economic Burden of Vitamin & Mineral Deficiencies in Asia: A Role for the Food Industry

Statement by Kul C. Gautam, Deputy Executive Director, UNICEF
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I am delighted to join you at this 10th ASEAN Food Conference, and to share some thoughts on how best the food industry can play a leadership role in reducing the economic burden of malnutrition to help unleash the human potential of this dynamic region for yet another economic miracle in our lifetime.

Many visionary analysts today speak about how the 21st century will belong to Asia. How this ancient land of great civilizations will once again recapture its glory as a continent of not only rich culture and natural beauty, but as a region that prizes and pursues scientific innovations, social progress and economic prosperity.

Our host country, Malaysia, is a shining example of how we can expect the rest of Asia to transform itself into a power-house of economic growth and social progress.

In 50 years since its independence, and especially in the last 3 decades, Malaysia has dramatically reduced poverty, illiteracy, malnutrition, and has joined the ranks of middle-income countries.

From a poverty-stricken land just producing a few raw materials, Malaysia has emerged as a thriving multi-sector economy, poised to become a fully developed nation by 2020.

If Malaysia can do it, so can most other nations of Asia.

So what is holding us back?

Among the factors that are holding back Asia’s progress, I would rank high rates of malnutrition as a key constraint.

It may come as surprise to many of us that Asia as a whole, has higher rates of malnutrition than Africa. In spite of the Green Revolution, the great strides made in industrialization, and poverty reduction, we continue to be a continent of very high rates of malnutrition.

As we know, there are many forms of malnutrition. The most common manifestation is when a child is undernourished because he or she does not get enough calories or important nutrients, such as protein, vitamins and minerals. When this happens, the child does not grow adequately – he or she becomes underweight or stunted.
Unfortunately we are also seeing malnutrition at the other end of the spectrum, where over-nutrition is leading to obesity. In both cases, it is not just a question of quantity, but the quality of the diet that is of fundamental importance.

Today, 170 million children under the age of 5 in developing countries are stunted, and 146 million are underweight. More than two-thirds of these children live in Asia.

And of the 10 million children under 5 who die each year in the world, more than half are attributable to under-nutrition.

Even for the survivors, the consequences of under-nutrition are serious, and result in increased illness, poor cognitive development, and lower productivity.

One malnourished child is an individual tragedy, but multiplied by tens of millions, under-nutrition becomes a global threat to whole societies.

Well-nourished people are not only healthier; they are more intelligent and perform better in school and workplaces. They can be more productive and creative, thus contributing to the wealth and well-being of their countries and the world.

Under-nutrition is a serious obstacle to poverty reduction. It fuels an inter-generational cycle of child mortality, ill health, lack of education and loss of productivity. The vicious cycle of under-nutrition – passed from one generation to the next – can and must be broken.

At the Millennium Summit in New York in 2000, the largest gathering of world leaders in history made a solemn commitment to reduce by half the proportion of people in the world who suffer from hunger, and to reduce the mortality rate among children by two-thirds.

This commitment was articulated as the first and fourth of the eight Millennium Development Goals to be achieved by 2015.

Good nutrition is essential for the achievement of all other MDGs, from universal primary education to improving maternal health to ensuring environmental sustainability.

Many countries are on track to meet the MDGs, but unfortunately many more are not. For all of them sound nutrition is the vital foundation.

A major contributor to the appalling number of avoidable child deaths and disability is a form of under-nutrition which is not visible to the naked eye, but is widespread nevertheless.

For every visibly undernourished child, there are several more battling the hidden nutrition crisis of vitamin or mineral deficiency – the lack of such essentials as iodine, vitamin A, iron, zinc and folic acid.

Vitamin and mineral deficiencies affect an estimated 2 billion people worldwide. These deficiencies are subtle and insidious with devastating effects on children and women in particular. Because these deficiencies are so hard to detect, they are often called *Hidden Hunger*.

The “hidden hunger” due to these micronutrient deficiencies does not produce hunger as we know it. You may not feel it in your belly, but it strikes at the core of your health and vitality. It is especially damaging to human brain, learning ability and productivity.
These deficiencies can cause blindness and brain damage. They can induce stillbirths and abortions. They contribute to the high rates of maternal and child deaths. They make people fatigued and lethargic. They cause the impairment of hundreds of millions of growing minds, and the lowering of national IQs.

Children lose some 13 IQ points when they are iodine deficient. A child’s chances of death from common childhood illnesses such as diarrhea and measles increases by 23% if they are deficient in vitamin A. A woman’s productivity is reduced by 5 to 10 % if she has iron deficiency and anemia.

You can imagine the consequences of these deficiencies in terms of health, school performance, workforce productivity and a nation’s capacity to compete in the global marketplace.

Indeed, the economic losses attributable to micronutrient deficiencies are huge – up to 3% of the GDP of many countries.

The enormous impact of vitamin and mineral deficiencies is largely invisible, silently trapping people, communities and entire countries in a cycle of poor health, poor education, poor productivity and poverty.

It is clear that if countries do not act now to reduce micronutrient malnutrition, they will not be able to achieve most of the Millennium Development Goals.

Three-quarters of the people affected by micronutrient malnutrition globally live here in Asia. The economic and human costs of this malnutrition are staggering and tragic.

Here is the annual cost due to iron deficiency anemia and folic acid deficiency alone in Asia:

- over 3,000 women die during pregnancy and delivery
- almost 140,000 children die during the perinatal period
- more than 100,000 babies are born with birth defects
- and, over $12 billion is lost in productivity

It is thus clear that malnutrition is both a cause and a consequence of poverty. Persistence of high rates of malnutrition, despite substantial advances in social and economic development, reflects the unevenness of development and inability to reach the pockets of underserved populations.

It is also a reminder that economic development alone does not automatically lead to improvement in nutrition.

Poor social and economic status of women is a key contributor to the high rates of malnutrition in Asia. Persistently high rates of maternal anaemia, elevated fertility rates and accompanying maternal mortality ratios are indicators of inequity and poor access to nutrition, health services and resources for women.

I’m sure you will agree that too few of us are aware of the scale and severity of hidden hunger of vitamins and minerals, and what it means for individuals and for nations.

And even fewer of us are aware that there is also some good news – that there are cost-effective, simple solutions to tackle this massive problem.
And this is really what I am most interested to talk to you about today, because actually, a big part of the solution is in your hands.

In the industrialised countries, the problem of hidden hunger or vitamin and mineral deficiencies was largely controlled by investments made decades ago. It could now be controlled worldwide by means that are tried and tested, available and affordable.

That is why the World Bank says that, *The control of vitamin and mineral deficiencies is one of the most extraordinary development-related scientific advances of recent years. Probably no other technology available today offers as large an opportunity to improve lives and accelerate development at such a low cost and in such a short time.*

Improving the micronutrient status of people can be done with relatively modest investment. For example, over the last decade, 70% of the world’s population was reached with iodised salt with an annual public investment of only $0.03 cents per person.

The cost of two vitamin A capsules required to protect a child under 5 from disease and death is only $0.04 cents per person per year.

Fortifying flour with iron and folic acid can cost less than $0.02 cents per person per year.

Thus for less than $1 per person per year, we could meet the essential vitamin and mineral requirements of young children and women of child bearing age. This would result in significant improvements in child survival, health, learning abilities, and growth – contributing to improved productivity and socio-economic development of nations.

When we speak of adding vitamins and minerals to the diet, we speak of parts per million. Including tiny amounts of vitamins and minerals in processed foods that are eaten every day by vulnerable populations, does not burden health care systems, it costs only a few cents per person per year, and requires little or no change in consumer behaviour.

It was such factors that led the Copenhagen Consensus of some of the world’s leading economists, including Nobel Prize laureates, to conclude that eliminating vitamin and mineral deficiency through food fortification and micronutrient supplementation would have an exceptionally high ratio of benefits to cost as an investment in the development of nations, second only to prevention and control of HIV/AIDS.

The benefit of expanding food fortification worldwide is already clear. The technology is simple. The cost is pennies per metric ton. Indeed, addressing micronutrient deficiencies using this approach costs less than 0.3% of GDP.

The enormous global success in addressing iodine deficiency, including in several countries of Asia, is an inspiring example of how a public-private partnership can be mobilized to achieve great results.

Some of the world’s poorest countries – including Bangladesh, Cameroon, Laos, Nigeria and Viet Nam – have surpassed the 70% mark for households consuming adequately iodised salt. The
People’s Republic of China, which made a commitment to universal salt iodisation following the World Summit for Children in 1990, is iodising 90% of its salt.

Thanks to such progress, today 90 million new-born children are protected every year against the threat of mental impairment.

Progress in salt iodization is an example of a public health success story in which the key actors have been the food industry. A global movement to expand this experience to other food vehicles is growing.

Following the introduction of mandatory folic acid fortification, serious birth defects in USA, Canada and Chile went down by more than one-third in less than 5 years. Such dramatic evidence that there are solutions that can have a huge impact in a short time provides us not only a health and economic justification, but a moral imperative for action.

Today, in Asia, where micronutrient malnutrition affects more than half the population, food fortification can offer the widest population coverage and daily protection against multiple deficiencies.

Since implementation is mainly through the food production and distribution system, food fortification is sustained by the market, freeing public resources to target those who continue to need public assistance.

We believe that as the food industry modernizes and consolidates, as technology exchange and transfer proliferate, as changing food consumption patterns and urbanization give more people access to centrally processed foods, the time is just right for a South-East Asian initiative aimed at accelerating the fortification of staple foods with essential micronutrients.

We see the food industry as not only a partner but as the lead actor in the production and distribution of fortified foods, playing a leadership role in ending this tragic hidden hunger.

We have seen dramatic evidence of impact in countries where private companies and governments have taken concerted and collaborative action. We are pleased to acknowledge that some member countries of ASEAN are among the global leaders in this regard (e.g. Indonesia and Philippines). We encourage them to share their experiences and good practice in forums such as this ASEAN Food Conference.

What, specifically, do we want the food industry to do? Here are my 5 requests to you:

- We are counting on large-scale and medium producers to begin fortifying staple foods at standards of high quality that will reach the broadest market, now.
- Use your powerful marketing capabilities to build an appreciation for the benefits and increased demand for good quality fortified foods.
- Apply your innovative genius and energy to reach consumers at the base of the socio-economic pyramid – especially those vulnerable populations in peri-urban and rural areas.
- Share your technical expertise and help transfer technology.
- Apply your production, distribution and marketing skills to make fortified cereal flour, complementary foods for infants and other fortified products more widely available, while protecting the very best food for babies – breastfeeding.
We are not asking you to do this alone. We will join you and support you through complementary public policy interventions as you apply your market-based approaches to tackle this major public health issue. UN organizations like UNICEF, WHO, FAO, WFP and the World Bank and Asian Development bank are ready to partner with you.

Given our experience and strong relationships internationally and in countries, we will work with governments to help establish appropriate national policies, standards and legislation to make fortification of staple foods mandatory. This is already the case in Indonesia and the Philippines in the ASEAN region.

We are committed to promote food fortification at the international, regional and national levels and help those that are fortifying to gain recognition for their efforts. Working with our international partners such as The Global Alliance for Improved Nutrition (GAIN), the Micronutrient Initiative (MI) and the Flour Fortification Initiative (FFI), we can link you to technical and financial resources.

If you want to know more about what you need to do to set up food fortification, there are world class experts right here in this room who can help you get the state-of-the-art technical information and policy advice.

We can also help mobilise civil society to create demand for fortified products and to extend access to these products by vulnerable populations who live outside the normal reach of market channels.

In fact, following this morning’s plenary presentations, there will be a concurrent session entitled, ‘Flour Fortification: Enriching Nations through Public-Private Partnerships’ starting at 10:30. I invite you to attend that session if you would like to learn more about how flour fortification can address hidden hunger.

At the opening of this conference yesterday, a number of speakers emphasized the importance of food safety and food quality. Others highlighted the need for harmonizing food safety standards. Generally these safety issues are raised in the context of whether or not different ingredients added to the food are toxic or harmful for human health.

Today, I would like us to think about the opposite of this problem – i.e. how do we make sure that foodstuff that we consume is adequately fortified with essential life-saving and life-enriching vitamins and minerals.

When it comes to food safety and quality, omission of nutritious ingredients from our foods is as much of a safety issue as the addition of unhealthy ingredients. There is no excuse not to fortify certain foods with known and proven beneficial micronutrients that are highly cost-effective.

We would like to see ASEAN taking the lead for scaling-up food fortification through enhanced regional cooperation, by sharing lessons learned, capacity development, building economies of scale and harmonization of approaches and standards.
In this context, we welcome the proposal to establish an ASEAN Food Safety Forum linking industry, government, scientists and consumer groups. We urge that this forum also include in its mandate the need to promote universal food fortification with high impact micronutrients to avoid harmful effects of unfortified foodstuff.

Dear friends, can we envision a region, say by 2015, where the birth of an underweight baby or the death of a mother in childbirth is a rare event? Where most infants are healthy and grow every day with a smile on their face as they actively engage in the unfolding world around them? And, where children go to school and are not constrained by the invisible plight of hunger, iodine and iron deficiency in their capacity to learn and achieve their full potential?

I believe that in this region with remarkable economic growth, even more remarkable potential and vast human and natural resources, this is eminently achievable.

Knowledge sharing, building economies of scale and capacity, and coordinated standards, hold the potential to enhance the excellent work many of you are already doing at national, sub-national and regional levels.

By working together, we can achieve more for the well being of all, but particularly for those most vulnerable. Regional cooperation that complements national actions can indeed be an effective tool for enhancing our efforts to reduce poverty, achieve the MDGs and improve the well being of women and children.

The facts are known, the solutions are available, and the cause is one in which many individuals and organisations – industry, governments, the medical and scientific community, civil society – can be involved.

Progress is not only possible, but essential. The cost of inaction is too high a price to pay.

And when so much can be achieved for so many, and for so little, it would be a matter of global disgrace if hidden hunger is not brought under control in the next few years.

We count on you all to do your part to end hidden hunger and help build a world that is truly fit for all our children.

Thank you.