Diet quality, poverty and food policy:
A NEW RESEARCH AGENDA FOR OBESITY PREVENTION IN DEVELOPING COUNTRIES

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It is the best of times; it is the worst of times. Globally, the percentage of people who are underweight has fallen from 32% to 28% in the last decade. Proportionally, more children now have enough to eat. Yet malnutrition in Sub-Saharan Africa is increasing and the Millennium Development Goal to cut hunger in half by 2015 seems far away. On top of this, more and more people in the developing world are becoming overweight or obese. Significant increases in the prevalence of obesity are being reported from numerous developing countries. Worldwide, over 10% of children are already overweight or obese. It is a tale of two malnutritions.

A dual burden of malnutrition

In a low-income community in northeast Brazil, 10% of children are underweight, and 11% of adolescents and 25% of adults are stunted. Yet over 5% of girls and 25% of adults are overweight. Overweight and undernutrition co-exist in 30% of households. In a suburb in northern India, 16% of people are too thin while 28% are overweight. Obesity is growing in the shanty towns of both countries.

Ever since the co-existence of underweight and overweight in the same households was first identified in China, Brazil and Russia, more and more examples of the close proximity of the two types of malnutrition have been emerging. Overweight and obesity are becoming problems of the poor.

In one of Latin America’s poorest countries, Bolivia, more than one quarter of infants are stunted. But between 1994 and 1998 the number of overweight women increased nine percentage points, with the greatest increases seen among women with less education. In Jamaica, overweight in adolescents approaches levels found in the US, while 10% are underweight. In Egypt, over 10% of households contain a stunted child and an overweight mother.

In developed countries, obesity has been concentrated among the poor for decades. But in developing countries, obesity has traditionally been associated with wealth—until now. Although poverty still confers protection from obesity in the lowest income nations, it is now associated with obesity in the economically more advanced developing countries, especially in urban areas and more developed regions.

Overweight and obesity among the poor severely compromise public health gains in developing countries. The conditions increase the risk of developing chronic diseases, notably heart disease, diabetes and some cancers. Diet-related chronic diseases are already a burden in poor countries: 80% of all deaths from cardiovascular disease occur in low- and middle-income nations. As overweight and obesity increase among the poor, so will the burden of chronic disease. The result will be not just an endemic double burden of malnutrition, but a entrenched double burden of disease.

In the US, obesity is also associated with household food insecurity. The correlation is likewise emerging in some developing economies. In the Republic of Korea, for example, food insecure children are more likely to be overweight than food secure children.

Evidence is also emerging that infant undernutrition increases the likelihood of overnutrition later in life. Childhood stunting may be a risk factor for the development of obesity.

There may also be links between overweight and micronutrient deficiency. In rural Mexico, obesity rates increased 78% between 1980 and 1998, and diabetes by 62%. Meanwhile, more than 20% of women have anaemia. This might well be linked with the declining consumption of fruits and vegetables and increasing intake of high-cholesterol foods in the country. The issue is clearly not just a question of excess or deficiency, but of poor quality diets.

An issue of diet quality

High-quality diets benefit everyone at risk from under- or overnutrition. In poorer countries, diet quality has traditionally been equated with sufficient intake of energy and essential nutrients. But with dietary patterns undergoing radical transformations—becoming more concentrated in sugars, saturated
fats and salt while being low in fruits, vegetables and whole grain cereals—it needs to be recognized that malnutrition is not simply caused by a lack of food overall, but by a lack of high-quality foods. Given the rapid spread of this so-called “nutrition transition”, the definition of diet quality now needs to account for both deficiency and excess intake of certain nutrients and foods. A healthy, high quality diet leading to optimal nutrition should contain sufficient energy and nutrients, but also limit the amount of saturated fats, trans fats, cholesterol, sodium and added sugars, and include many servings of fruits, vegetables and whole grain products.

Nutritional research to promote better diets

Researchers have begun to call for public health programmes that simultaneously address problems of underweight and overweight. Yet how can we intervene to control overweight when we are trying, at the same time, to increase the body mass index of the underweight? And how can we best intervene to improve underweight without moving too far towards overweight and obesity?

Given the emerging burden on the poor, this challenge needs to be confronted and integrated interventions developed to address both over- and undernutrition. Such interventions are needed immediately. But to improve our responses over the longer term, we need a coherent research agenda to help better understand the dynamics behind the coexistence of under- and overnutrition.

The nutrition transition has been clearly identified in many countries through an examination of food availability statistics. What is less evident is how this changing supply of basic commodities is affecting dietary patterns across different types of households and among different household members. What shifts in food consumption patterns lead to overweight and obesity in developing countries? How can dietary quality improve without leading to excess energy intake? Does increasing energy intake automatically lead to elimination of micronutrient deficiency or do obesity and micronutrient malnutrition coexist as a result of poor diet quality? How do household income and food prices affect diet quality and obesity? These are the questions we need to address in order to target nutrition and public health interventions more effectively.

A food policy approach

To integrate responses to under- and overnutrition most effectively, we also need to go beyond the traditional approach to nutrition interventions and take a closer look at broader food policy. There are many factors fuelling changes in diets: the globalization of trade, finance, information, and culture; technological changes in food production, processing and distribution; higher incomes; demographic shifts; and urban growth. These determinants of dietary change are all influenced by public policy, and by food policy in particular.

A food policy approach allows us to place under- and overnutrition in the same frame and consider the tradeoffs between them. How to ensure improved diet quality through consumption of micronutrient-rich meat while not encouraging excess intake of saturated fats? A food policy approach allows us to think more broadly about the need to address health, poverty and environmental concerns. Take fish. How to increase global demand for fish consumption while ensuring rising prices do not push fish out of the reach of the poor and that fishing activities do not damage the environment?

Food policy research can help us identify positive solutions. Fruits and vegetables are an essential part of a healthy diet, rich in micronutrients and protective against chronic diseases. There is also some evidence that eating fruits and vegetables helps control energy intake. Research conducted at the International Food Policy Research Institute provides insight into the constraints to higher consumption among the poor. In most developing countries, there is an enormous gap between mean intake of fruits and vegetables and the WHO recommendation of 400 grams per capita per day. In Sub-Saharan Africa, low-income households are more sensitive to price than higher-income households. Fruit and vegetable consumption increases steadily as income increases, but as income grows, consumption of fruits and vegetables increases at a slower pace. The policy implication is clear: income growth will contribute to greater consumption of fruits and vegetables but economic growth alone is unlikely to help developing countries reach recommended levels. Food policies are needed to alleviate price and availability constraints that prevent poor households from consuming more fruits and vegetables, and to encourage all households to eat more. The approach would address poor diet quality among the underweight and overweight alike.

A food policy research agenda

In 2004, the 192 Member States of the World Health Organization called for action on the nutrition transition. The Global Strategy on Diet, Physical Activity and Health requests countries to implement policies promoting healthier diets alongside malnutrition reduction. To facilitate the development of such
policies, the Strategy calls for more research on the production, availability, processing and consumption of food and the policies that affect them.

The lack of research is hampering efforts to develop food policy recommendations to redirect the nutrition transition towards optimal diets and good health. This is especially pressing given concerns expressed by the G77 countries that WHO Strategy recommendations would negatively affect their agricultural economies and small farmers. While the tactics of certain special interests against the Strategy have rightly outraged public health campaigners, there is a legitimate concern: developing countries need to continue to develop their agricultural economies and support the livelihoods of small producers. This is another advantage of a food policy approach: it allows us to place both the food economy and food consumption in the same frame.

To move forward, two research questions are vital. First, how is the globalization of food systems driving diet change? We need to identify how agricultural production, international trade, food processing, and new patterns of food retailing are affecting the price and availability of food, and how this in turn is shaping diets. Second, what are the “win-win” solutions for both agriculture and diet quality? We need to find policies and programmes to move rural development and healthy diets forward hand-in-hand. Farmers need markets for high-value food products like fruits and vegetables, and those at risk from under- and overnutrition need their products.

A closer examination of pricing policies would be one place to start. As pointed out by Gillespie and Haddad, governments engage in numerous direct and indirect methods to affect food prices, from direct subsidies that lower the purchase price, to subsidies and taxes on various inputs. We need to review how food prices are affecting dietary patterns and then identify how food price policies could be reoriented to encourage the consumption of healthier foods.

Another area in need of attention is food retailing. The rapid emergence of supermarkets is having a more profound effect on the market for fruit and vegetables in many developing countries than international trade. Supermarkets are also major channels for the sales of highly-processed foods. Understanding how the concentrated procurement systems associated with large chains affect small farmers is critical; likewise, we need to identify the impact of supermarkets on food consumption habits and examine if supermarkets could be a vehicle to improve diet quality.

Trade and finance liberalization is also having an important impact. Changing trade patterns in the edible oils market is affecting national economies; we now need to examine how these emerging trade patterns are affecting the mix of more and less healthy oils in the global marketplace. Armed with this information, we could better identify policies needed to reorient the food system towards healthier outcomes.

We now have an opportunity to confront a real threat to sustainable economic development: poor quality diets associated with obesity, chronic diseases and premature death. Well-targeted research is one mechanism to help prevent these problems becoming an even more severe burden on poor countries and poor people.

References


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