Healthy diet benefits uneven

Modest health gains and high economic cost may detract from chronic disease prevention in some countries

Policies promoting a healthy diet to stave off chronic disease will bring a different balance of health benefits and economic consequences in developed and developing parts of the world, according to a modelling study published this week in *The Lancet*.

Based on case-studies from the UK and Brazil, the analysis suggests that modest benefits and a negative knock-on effect on agricultural economies may act as a deterrent against efforts to promote healthy foods in some countries.

“Our analysis suggests that the UK would accrue substantial health benefits and associated low costs from adoption of a diet low in saturated fat from animal sources,” write Karen Lock, of the London School of Hygiene and Tropical Medicine, UK, and colleagues. “Conversely, Brazil would experience little health benefit but far more striking economic costs from such a policy.”

An analysis of both health and economic impacts of a nationwide shift in dietary habits has not been attempted before, note Lock and colleagues.

They argue that policy makers should be aware of the wider implications of efforts to meet healthy diet guidelines. “Knowledge of the effects of dietary change on both national health and wealth, and of winners and losers from policy change, are essential to secure a sustainable food policy to maximise health benefits and minimise potential risks.”

The article is part of a series published in the journal this week, where public health scientists put forward recommendations for strategies to monitor and tackle the rise in rates of chronic disease in low- and middle-income countries. Publication of the series is part of preparations for the UN High Level Summit on Non-Communicable Diseases scheduled for September 2011.

Globally, six in every 10 deaths are caused by chronic diseases, a proportion expected to rise over the next few decades. Diets high in saturated fat and sugar but low in nutritional value — a risk factor for heart disease, diabetes, and some cancers — are becoming more popular in many developing countries, which currently account for at least 80% of all deaths from non-infectious causes.

The trend is linked with changes in agricultural and trade policy that date from the 1980s, explain the authors. But even though these systems are linked to health by a complex web of interactions, research into the impact of dietary policies has overlooked this piece of the puzzle, creating a ‘disconnect’ in policies and priorities between agriculture and health sectors.

Their analysis probes this relationship in the UK, a high-income country and major importer of animal foods where rates of heart disease are high, and Brazil — a middle-income country and major consumer, producer and exporter of agricultural products, where dietary habits are changing rapidly.

The authors created a model of how a change to the WHO-recommended level of saturated fat consumption (10% of total energy intake) would affect cardiovascular disease risk, assuming that all saturated fats came from animal food products. In a separate model they also used scenarios to estimate the impact of this change on various sectors of the economy including labour supply and productivity, domestic consumption of meat and dairy products, and trade of these products.

Promoting healthy diets would reduce the years of life lived with disability related to heart disease by 7% in the UK, and by 3% in Brazil. By contrast, Brazil would suffer an economic loss of up to 0.08% GDP, double that of the UK. This is down to the countries’ different profile of dietary habits as well as agricultural production and trade, with a reduced demand for animal products hitting the Brazilian economy harder.

Not all policies had the same impact, according to the model. For both countries, cutting down on all foods from animal sources had a smaller economic effect than reductions targeting either meat or dairy products alone. In the UK, cutting down on meat but not dairy had a smaller economic effect, but the opposite was the case for Brazil.

Lock and colleagues stress the limitations of the model, which simplifies the relationship between health and economic effects, but see it as an example of a more holistic method to assess health policies promoting lasting changes in diet. “Public health policy makers need to judge whether present agriculture and trade are contributing to — or detracting from — efforts to attain dietary goals, and how agricultural policy interventions could help achieve dietary goals.”

World Health Organization information on chronic diseases and health promotion

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