**Sick societies**

**Mexican diabetes devastation.**

*It is essential to tax soda*

One of the powerful images produced by the Alliance for Healthy Food, the Mexican public interest coalition supported by scientists whose mission is to reduce rates of malnutrition, obesity and diabetes.

*The Update team reports:*

Diabetes, uncommon in Mexico until the 1980s, is now the second most common cause of death after heart disease. Its rocketing rates run in parallel with the very rapid penetration of ultra-processed food products and in particular sugared soft drinks, as a result of the NAFTA ‘free trade’ agreements.

In 2012, estimates indicate that more than 80,000 Mexicans died from diabetes. According to Mexico’s National Health and Nutrition Survey of 2006, 14 per cent of the population aged 20+ suffer from diabetes. Diabetes is closely linked with obesity – so closely that the two conditions are often called ‘diabesity’ – and Mexico now has almost the highest rates of obesity in the world. One in three Mexican children and seven of every ten adults are now overweight or obese. More details, including of the campaigns waged by the leading civil society organisation *El Poder del Consumidor*, are in the pdfs accessible above.
Diabetes as well as obesity is devastating the health of Mexicans of all classes. This image is taken from an interview with a lower middle class soda drinker carried out by El Poder del Consumidor.

**Mexican diabesity forecast to cost 150 billion pesos by 2017**

The economic impacts of diabetes on families, livelihoods and the health system, as well as the devastation to health, are enormous. A report published this January by the Mexican Institute for Competitiveness estimates that the total cost of diabetes associated with overweight and obesity is more than 85 billion pesos per year (around $US 5.8 billion), representing 63 billion pesos (around $US 4.3 billion) for treatment, and 22 billion pesos (around $US 1.5 billion) for loss of income due to absence from work and premature death. By 2017, the Mexican National Institute of Public Health reckons that the national cost of obesity and its associated diseases, notably diabetes, will rise to 150 billion pesos, or $US 10.2 billion.

Research now shows the crisis that Mexico confronts today. But what circumstances will future generations face? A study being carried out by Rafael Meza of the department of epidemiology at the University of Michigan, US, projects how Mexican children will experience the diabetes epidemic in their lifetime. The information here is taken from an interview with him to discuss the results of a study he is currently preparing for publication. He develops mathematical models to map the impacts of preventive strategies on the burden of chronic diseases. He has now calculated the chances that Mexican children born today will be diagnosed with diabetes over the course of their lifetime.

**A half of Mexican children may suffer diabetes**

He ran two models. The first is based on diabetes incidence estimates from 2005. The second uses incidence estimates from 2010. Both models use mortality rate data from 2010. He estimates that the lifetime risk that a Mexican child born in 2010 will be diagnosed with diabetes is between 37 per cent, or more than one-third, and 53 per cent, or more than a half, depending on the model used.
His findings are consistent with research carried out at the US Centers for Disease Control and Prevention (1). This estimates that there is a 33-39 per cent lifetime risk of being diagnosed with diabetes among the US population as a whole born in 2000. Among US-born Latinos the risk is higher, increasing to about 50 per cent.

Diabetes will certainly cause devastating health, social and economic consequences for Mexico’s future generations. Given that even by his most conservative estimate one in three Mexican children will grow up to be diagnosed with diabetes, Rafael Meza’s work is a call to action. He urges the need for comprehensive public policies that focus on preventing obesity and diabetes.

**A high soda tax could save a million lives by 2030**

These policies clearly must include fiscal measures, such as Mexico’s soda tax. Enacted in January 2014, it places a 1 peso per litre, or 10 per cent, excise tax on all sugar-sweetened drinks. Applauded by international and national academics, civil society and the Pan American Health Organization, the tax is a cost-effective measure that should curb the prevalence of overweight, obesity, and diabetes in Mexico. Rafael Meza agrees that the tax is a rational and promising preventive measure against obesity and diabetes, given the colossal levels of soda consumption in Mexico (an average of 163 litres per person per year) and the convincing evidence causally linking consumption of sugar-sweetened soft drinks with increased diabetes risk and premature mortality.

In a study carried out with colleagues Tonatiuh Barrientos-Gutiérrez, Rosalba Rojas and others from Mexico’s National Institute of Public Health, he estimates that by 2030 the current 10 per cent tax should reduce the number of diabetes cases by between 400,000 and 630,000, and that a 20 per cent tax would prevent between 800,000 and 1,275,000 cases. He uses these projections to demonstrate the dramatic impact that public policy action can have in controlling the diabetes epidemic.

Rafael Meza’s estimates of lifetime risk of diabetes, together with the projections of his soda tax impact study, show that the soda tax, and other public health actions to prevent more diabetes cases, are imperative and urgent. But is the Mexican government ready, willing and able to take sufficiently strict, timely, adequate and comprehensive action? The answer must be yes, for the sake of the well-being of the people of Mexico and for the future of the country as a whole.

**Reference**


*The Update team. Mexican diabetes devastation. It is essential to tax soda. [Sick Societies][Update]. World Nutrition March 2015, 6, 3, 137-139*