## **Farm Policy and the Rise of Chronic Disease**







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### Outline of Talk

- Agriculture systems are producing too much of the wrong kinds of food
- Increased production is a direct result of policy choices
- Rising production of certain foods is closely correlated with a rise in chronic disease worldwide, even in poor countries
- Our current agricultural policies may well be unaffordable from health and economic perspectives



Agricultural policy affects health in surprising ways

On a global level, a complex network of market, policy, and behavioral choices

Agricultural policies  $\rightarrow$  Food System  $\rightarrow$  Nutrition  $\rightarrow$  Health

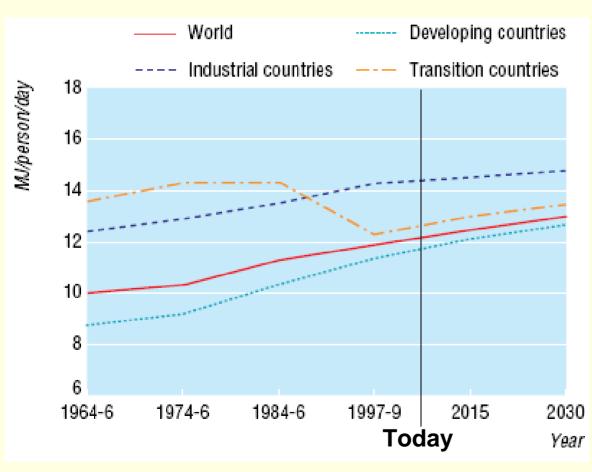
At the individual level, a simple equation governs:

Energy balance = diet + physical activity



### Global dietary energy imbalance

#### Dietary energy availability, 1964-2030



 Agricultural productivity increasing faster in developing countries

 Demographic transition means lower population growth and older populations

 Less physical activity with shift to industry and services, changing leisure

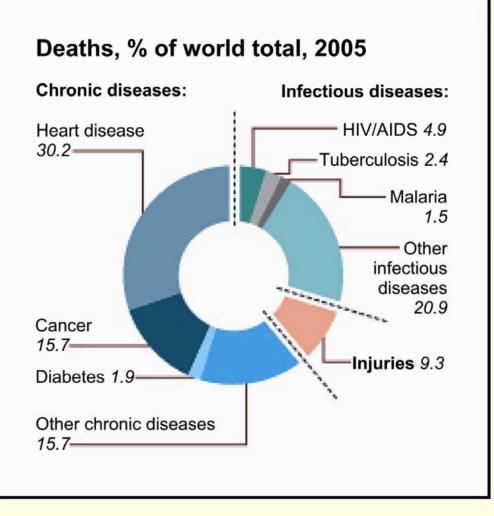
Declining undernutrition



Source: Elinder (2005)



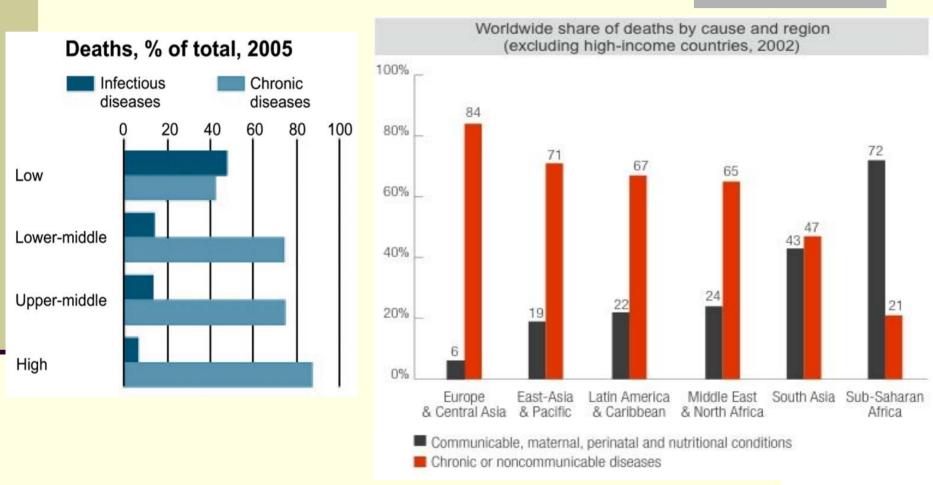
### Shift to chronic disease



Source: WHO adapted from The Economist 8/9/2007

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# The big surprise: chronic disease in the developing world

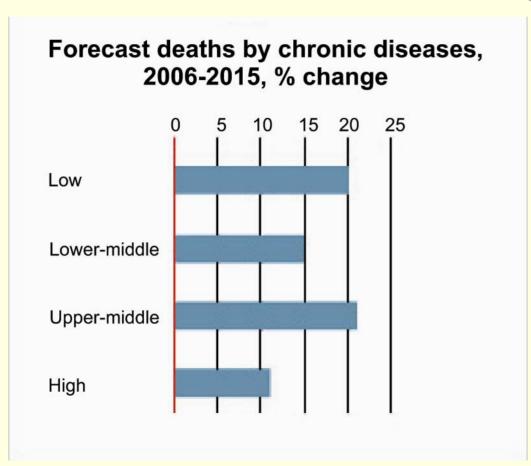




Source: WHO adapted from The Economist 8/9/2007

Source: Suhrcke, et al. (2006)

### Chronic disease deaths to increase





Source: WHO adapted from The Economist 8/9/2007

### What is the role of agricultural policy?

#### Alters the makeup of the food supply

 $\rightarrow$ 

#### **Production Policy**

Price support Direct income payments

#### **Input Policy**

Investment in infrastructure Subsidies for chemical inputs Research support Credit subsidies Water subsidies



#### → <u>Trade Policy</u>

Tariffs & NTB's Export promotion Market access arrangements

#### → Consumption Policy

Nutrition programs Food aid Marketing support



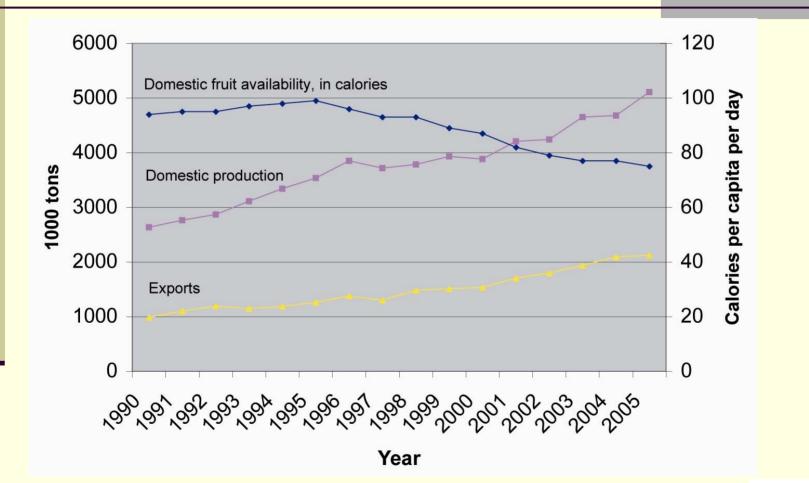
### US agricultural policy effects on health

- Corn and sugar subsidies and trade barriers
  - Cheaper sweeteners, fat, processed food and meat
- Research emphasizes higher yields, size, shelf life; not nutrition
- Ignores fruits & vegetables
  - US import demand raises world prices
  - Less availability of fruit and vegetables in producing countries



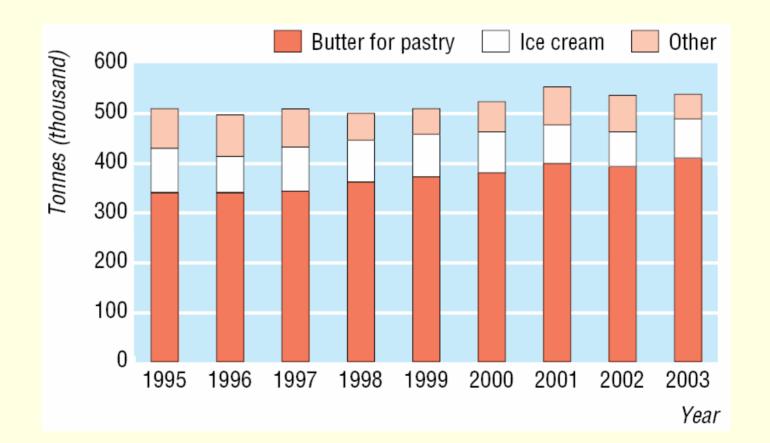


## Chilean fruit production, exports and consumption, 1990-2005





### The EU and dairy

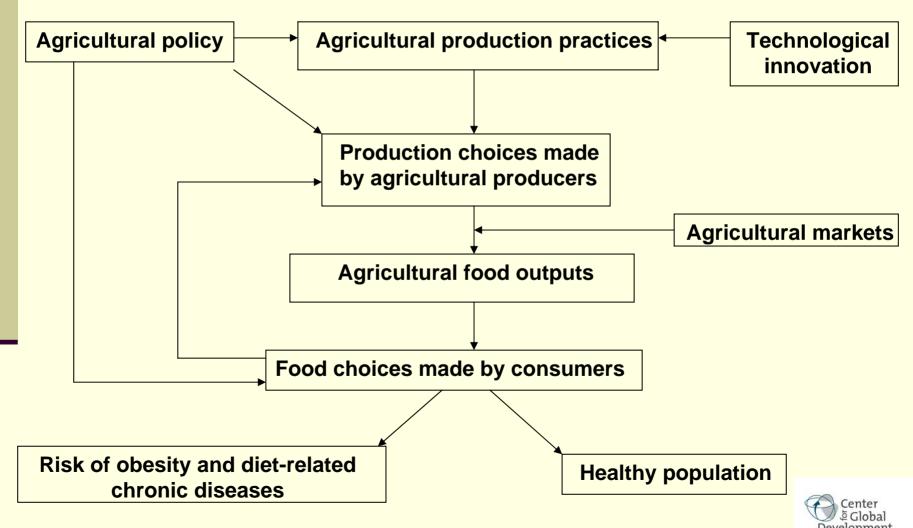


EU butter sold at subsidized rates to food processing industry



Source: Elinder (2005)

### Basic framework of policy levers



### A costly agricultural policy

- \$350 billion to support agriculture in OECD countries (2003)
- Chronic diseases cost EU and US a combined \$1.7 trillion in 2005
- How to better align agriculture and health needs?
- Can developing country health systems afford current agricultural policies?

