DCP3 Disease Control Priorities

economic evaluation for health

ICN2 Prep Consultation, Rome
November 14, 2013

The Cost of Changing the Food Supply

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Department of Global Health
Seattle, WA

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NOT

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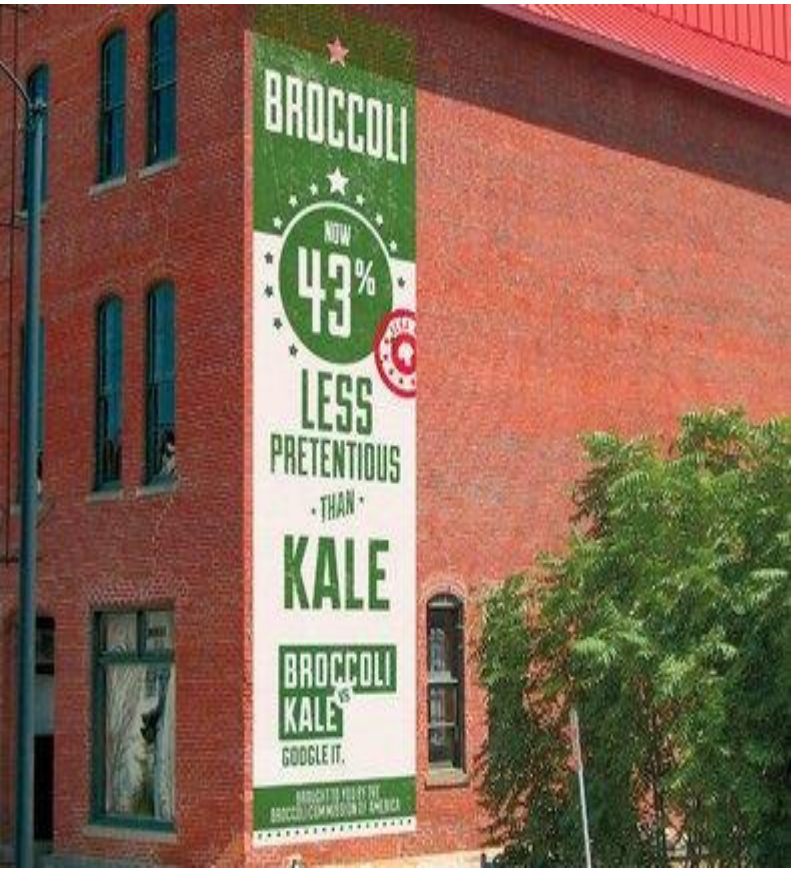
Economic and health benefits of changing the food supply



Fruits and vegetables in U.S.

- Save 127,000 lives
- Reduce health care costs by $17 billion
- Produce $11 trillion in lives saved (VSL method)

Source: Union of Concerned Scientists, 2013

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Main points

- Compare the appropriate costs and benefits
  - What *are* the possible trade-offs?
  - What is the right baseline? **Not** status quo
  - Consider not just health benefits, and not just ag costs
- Make the investment case (cross-sectorally)
- Different roles and responsibilities for public vs private sector

Expenditures on ag/food subsidies

- HICs spent $252 billion in 2011 on agricultural and food subsidies (EU, US, Japan, So. Korea).
- CAP *still* absorbs 40% of EU budget (Anderson et al, 2013)
- 2013 US Farm Bill: direct payments of $4-18 billion/year on commodity crops (corn, wheat, soybeans, cotton, rice), >$9 billion/year in crop insurance subsidies.
- Ag taxation shifting into ag subsidization (India, China)

Source: Anderson, K., Rausser, G. and J. Swinnen, 2013, "Political Economy of Public Policies: Insights from Distortions to Agricultural and Food Markets," *Journal of Economic Literature*, 51(2): 423-477.

Role of Ag Investment

- Private sector requires
  - Competitive returns
  - Term-limited (usually short)
  - Capturable gains
- Public sector should produce
  - Social returns, broadly distributed
  - Over a long time horizon
  - “Enabling environment”
  - Aligned incentives
  - Avoid social harms

What investments are needed for F&V Production?

Farm Level

- Labor or labor-saving mechanization
- Irrigation
- Agribusiness services: financing inputs, technical assistance
- Small-scale post-harvest storage and processing
- Risk management advice

Societal Level

- **R&D for productivity enhancement**
- Upgrade traditional markets
- Crop insurance
- Market infrastructure: distribution facilities, loans, **marketing programs**

Comparing Investments

Private Sector

R&D

$2 billion/year maize (Monsanto, DuPont Pioneer)

$181 million/year for 22 vegetable crops (Monsanto)

Commodity Marketing

$300 million/year for dairy and livestock

Public Sector

R&D

$121 million/year for maize

$13 million/year for green leafy vegetables

Commodity Marketing

5-a-Day

$7 million (est.) required for a major marketing campaign

"Good" or "Bad" policies?

Consumer subsidies: staple food provision, CCTs, home gardens, food vouchers/credits, school feeding

Regulatory: nutritional guidelines, institutional nutrition programs (schools, etc.), nutrition education

Producer: price supports, direct income payments, insurance guarantees

Regulatory: land use, production quotas, marketing restrictions

Factors influencing policy impact on health

- Size (adequacy and stability of payments)
- Targeting (efficiency and equity)
- Elasticities (substitution effects)
- Barriers to altering choice set of producers and consumers
- Administrative costs
- Political acceptability

Conclusions

- Move towards a “do no harm” stance
- Urge transparency in policies (politicians choose inefficient tools if they can be less transparent-EWG)
- Can discriminate among heterogeneous producers, but more distortionary
- In the short-run, for health purposes, prefer nutrition subsidies to ag commodity subsidies
- In the long-run, need allocative shifts in ag (probably not with a health rationale, maybe a development one would fly)