Price policies to promote healthy nutrition

Denmark’s experience with the tax on saturated fat

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Europe day of the 8th Global conference on health Promotion
Helsinki, Finland

History of the Danish fat tax

• First prospective estimates of Danish food tax reform in 2004
• Disease Prevention Commission established in 2008
• General tax reform,
  – Decrease taxation on income financed by, among other things, increased taxation on energy and unhealthy foods as tobacco, sugar-products, ice-cream, sugar sweetened soft-drinks
• The fat tax was adopted almost unanimously by the Danish parliament March 17th, 2011
• The abolition of the fat tax was unanimously agreed upon by the Danish parliament November 10th, 2012 together with an abolishment of an extension of the sugar tax.
• Taxes on soft-drinks are decided to be removed by 2014 together with a decrease in the tax on beer
Structure of the fat tax

- Tax paid on the weight of saturated fat in foods and on saturated fat used for the production of foods when the content of saturated fat exceeds 2.3 g/100 g
- Tax rate: DKK 16.00 (€2.15) per kg saturated fat + 25% VAT

- Price of a 250 g package of butter (with saturated fat content of 52g/100g) increases by €0.33 – an increase of about 20%
- Price of a 250 g package of chips (with saturated fat content of 13.6g/100g) increases by €0.09 – an increase of about 5.7%

How do taxes work?

- Administrative and political challenges
- Market challenges
  - Price setting structure in retail
  - Income effect
    - Lack of resources or willingness to change behaviour same basket available at an extended cost less money to buy unhealthy foods AND healthy foods
  - Substitution effects
    - What kind of substitutes are available?
      - Healthier type?
      - Cheaper brand or cheaper store?
      - Across border trade?
    - Unwanted unexpected adverse health effects
Examples of adverse side effects

- Prospective studies based on estimated price elasticities, taxation of single nutrient

![Graph showing % change of saturated fats, sugar, and fibre](image)

Examples of how to control them

- Prospective studies, based on estimated price elasticities, taxation of multiple nutrients

![Graph showing % change of saturated fats, sugar, and fibre](image)
Effect estimates of the Danish fat tax

- GfK Household Consumer Tracking Scandinavia weekly household panel (cohort) data
- **PRELIMINARY** effects on total consumption of saturated fat, energy and carbohydrates (July 2009 – July 2012)
- Econometric analysis of the market for fats and oils: butter, mixed butter, margarine and vegetable oils (January 2008 – July 2012)
  - Consumption effects
  - Substitution effects between products and stores
  - Price - setting mechanisms

**Consumption of saturated fat**

*(Preliminary - please do not quote!!*)

![Graph showing consumption of saturated fat](image)
Consumption of saturated fat
(Preliminary - Please do not quote!!)

- Orginal data
- Model with season
- Model without season

Hoarding, increase by 34%

Consumption of saturated fat
(Preliminary - Please do not quote!!)

- Orginal data
- Model with season
- Model without season

tax, decrease by 5.9%
Consumption of saturated fat
(Preliminary - Please do not quote!!!)

Hoarding, increase by 30, 30 and 36%

Decrease by 7.9%, 6.0 and 6.1%
Hoarding effects prior to the introduction of the fat tax (fats and oils)

Effect of fat tax on consumption of fats and oils
The fat tax is an opportunity for new price structures

![Bar chart showing the change in fat product prices after tax for different products like Butter, Butter blend, Margarine, and Oils in DKK/kg. The chart compares Theoretical and Supermarkets categories.](image)

Theoretical | Supermarkets
---|---
Butter |
Butter blend |
Margarine |
Oils |
M4 enten 'new price structures' eller 'a new price structure'
Maren; 05-03-2013
Implications

• The fat tax generated revenues for the government about €160 million annually equivalent to €72 annually per household
• The fat tax seems to have affected the consumption of oils and fats with a 10 – 12% decrease – at least in the short term
• VERY PRELIMINARY data analysis suggests a decrease in saturated fat consumption of 6%, no significant differences between social classes
• The tax opened a ‘window of opportunity’ for retailers to restructure their price setting, product sizing and marketing (fats and oils)
• Substitution from supermarkets to discount stores (fats and oils)

Possibilities of a revival of the Danish fat tax?

• We still lack to access the full dietary effects of the fat tax
• A full assessment includes a full cost/benefit approach
  – Costs in terms of: administration cost, extra expenses for the consumers, lost revenue due to increased border trade
  – Benefits in term of saved health care cost and increased well being for consumers due to better health condition
• Inclusion of all partners, nutrition and consumer experts, retail sector, industry, administrative staff in ministries etc.
• Joint European initiative, take account of differences in:
  – Price elasticities and need of dietary regulation
  – Current price levels, VAT and administrative infrastructure
  – Industry structure and price transmission mechanisms
stod også på den sidste eller forrige slide - har rettet den til. så hvis du beholder teksten her også,
kun du tage rettelserne med ned
Maren; 05-03-2013
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Simulation studies on food taxation

On the Danish fat tax