The rise and fall of the Danish fat tax

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This presentation:

• With effect from October 2011 Denmark was the first country to introduce a tax on saturated fat.
• A year later, the tax was abolished.

What happened?

• Setting the agenda in Denmark: Expert reports on economic tools in nutrition policy
• The fat tax bill
• Public debate: who were the proponents? The adversaries? And what were their arguments?
• Parliamentary debate and decision on the repeal
• Effects of the fat tax on food consumption in Denmark
The nation’s diet: Denmark

For decades, reducing fat in the population’s diet has been a main focus in nutrition and health policy in Denmark.

The first White paper on nutrition policy 1983 included a list of policy measures highlighting taxes and subsidies.

However, the first parliamentary decision on nutrition policy 1984 did not include any such measures, but instead focused on:
1) Improved and coordinated nutrition research.
2) Recommendations re. composition of diet.
3) Quality requirements for foods including colourings and flavourings.
4) Guidelines for public catering.
5) Information.
Setting the agenda in Denmark: Expert report on economic tools in nutrition policy, 2007

Report from the independent institution "Academy of Technical Sciences"

Suggestions:
- Excise taxes on unhealthy products (30%)
- VAT reduction on healthy products (20%)

Expected Consequences:
- 40-50% reduction in prevalence of obesity
- Diminish social inequality in health
- Revenue neutral in long run, but immediate loss of 2 billion DKK
Setting the agenda: Report on Disease Prevention 2009

We can live longer and more healthily

Vi kan leve længere og sundere
Forebyggelseskommissionens anbefalinger til en styrket forebyggende indsats

April 2009

Report from a political commission set up by the government

Suggestions:
• Raise taxes on sugar (+100%) and introduce new tax on saturated fat in dairy products and fats (20 DKK/Kg)

Expected Consequences:
• <1 months increase in life expectancy
• Significant administrative costs for private business and public authorities
• Revenue: approx 1 billion DKK/year
Introducing the fat tax: draft bill January 2011

- Presented by the Liberal-Conservative government
- Explicit aim: “to promote better eating habits and thereby strengthen the health of the population” (News from Parliament)
- Opposition: use revenue on health
- Another governmental motive: the tax will contribute to the financing of lower tax on labor income.
- Danish Food Ministry not involved in the preparation of the bill
- Consultations about the bill with 39 organisations including the food industry, the bank sector, and municipalities. Only four actors with some relation to health.
- Monitoring of effect on state revenue set up
- No monitoring of effects on food consumption, or health
The Danish 2010 reform: “Growth, climate, lower tax”

- This reform envisaged the fat tax, in that it
- **Reduced income tax** rates (23 billion DKK), and financed this partly by
- **Increased tax** on ”behaviours which harm the environment, the climate and health”, thus increasing existing taxes on
  - Energy,
  - Tobacco, Sugared products, ice cream etc, and suggesting a
- **New tax on saturated fats in foods with saturated fat content > 2.3g/100 g**

Forårspakke 2009
Tax on saturated fat

Tax paid on the **weight of saturated fat** in foods with content of saturated fat exceeding 2.3 g/100 g: meat, dairy products, animal fats, edible oils and fats, margarine and spreadable, blended fats

Drinking **milk is exempt** from taxation (less than 2.3g/100g)

Tax rate: DKK 16.00 (€2.15/1.7£) per kg saturated fat + 25% VAT

Price 250 g butter
(saturated fat content 52%)

increases by 2.60 DKK

– an **increase of about 20%**
Public debate: Unintended consequences

The food industry:
• Fat tax places heavy administrative burdens on industry
• Will encourage industry to move jobs abroad.
• The fat tax will increase border trade, and reduce income and jobs in the Danish retail trade.

Agriculture:
• Taxation burdens single parents more than others

Board of Health:
• Increasing price on special foods for undernourished patients

Left wing debaters:
• The tax increases social inequality
Nutrition and health: The Food industry

»No studies have documented unambiguously that the intake of dairy products has a pathogenic effect. In some areas we even see a positive effect of intake of dairy products” says Peter Elwood Professor, Cardiff University – at conference arranged by the Dairy Industry, September 2009.

Director of innovation at Arla, Henrik Jørgen Andersen warns that new products with reduced saturated fat may be harmful to health:

»We have already limited the use of saturated fat in milk, because here we can do it without changing the product itself. But when we take away saturated fat from other products, we have to substitute with something else. The most natural substitute will be carbohydrates, but we know from research that precisely an increased intake of carbohydrates is harmful, so this is a very worrying development”.

Ingeniøren 25. Sept 2009
Cheese intake in large amounts lowers LDL-cholesterol concentrations compared with butter intake of equal fat content.

Hiersted J, Leedo E, Tholstrup T.

The role of reducing intakes of saturated fat in the prevention of cardiovascular disease: where does the evidence stand in 2010?1–4

Arne Astrup, Jørn Dyerberg, Peter Elwood, Kjeld Hermansen, Frank B Hu, Marianne Uhre Jakobsen, Frans J Kok, Ronald M Krauss, Jean Michel Lecerf, Philippe LeGrand, Paul Nestel, Ulf Risérus, Tom Sanders, Andrew Sinclair, Steen Stender, Tine Tholstrup, and Walter C Willett

Am J Clin Nut 2011
University researchers: “A bomb under the fat tax”

- **Science** behind fat tax **obsolete**
- Saturated fat probably **not harmful** to health after all
- Fat in **dairy products** have no harmful effects on health
- Saturated fats will be substituted by **carbohydrates** which are **harmful to health**
- Fat tax risks **increasing type-2 diabetes and heart disease**

» This is perhaps the **most worrying** in our study. The fat tax does not **distinguish** between the **alternatives** to saturated fat – heaven knows what we will end up eating instead. We must fear that we will eat more of what we already eat, which is what we should not eat: **white rice or white bread**. We risk becoming more unhealthy, and we risk to see a rise in heart disease”

*Arne Astrup, February 7th 2011 (Videnskab.dk)*
Political resistance: "A majority of Danes reject higher food taxes"

"Do you agree or disagree with the following?"

- Higher tax on candy, icecream, soft drinks,…
  - Fully agree
  - Disagree
  - Don't know
  - Per cent

- Higher tax on fat foods (e.g. dairy and meat…)
  - Fully agree
  - Disagree
  - Don't know
  - Per cent

Source: Interresearch for Danish Grocers’ Association (DSK), March 2012 / Børsen, April 20, 2012
Parliamentary decision about the repeal

From the proposed bill (Social-democratic/liberal/socialist government):
• “The tax on fat .. Has been criticised for increasing consumer prices, for increasing administrative burdens on businesses and for threatening Danish jobs
• A repeal will contribute to a better social profile (reducing the Gini-coefficient by 0.03%)”

From the former prime-minister (Liberal/Conservative government)
• “…we cannot govern everything to the tiniest detail. ... Today it is much cheaper to live healthy than unhealthy, and if you believe that by using taxes and excises you can regulate the behaviours of the Danes...we have reached a limit”
Effects of the fat tax on food consumption in Denmark: Preliminary estimates

GfK Household ConsumerTracking Scandinavia weekly household panel (cohort) data, January 2009 - December 2011 (Fat tax was implemented by October 1, 2011)

Fats and oils: butter, mixed butter, margarine and vegetable oils

Econometric analysis:
Compare purchased quantities and prices for September, October, November, December 2011 with corresponding months from the previous years

Jensen, JD & Smed, S 2013
Effect of DK fat tax on consumption of fats and oils - preliminary estimates

10-15% reduction in consumption of fats

Jensen, JD & Smed, S 2013
The fat tax has given food suppliers an opportunity for new price structures.

Price change, DKK/kg

<table>
<thead>
<tr>
<th>Product</th>
<th>Theoretical</th>
<th>Supermarkets</th>
<th>Discount stores</th>
<th>Discount stores - signif. dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butter</td>
<td>10.00</td>
<td>12.00</td>
<td>16.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Mixed butter</td>
<td>8.00</td>
<td>12.00</td>
<td>14.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Margarine</td>
<td>6.00</td>
<td>8.00</td>
<td>10.00</td>
<td>16.00</td>
</tr>
<tr>
<td>Oils</td>
<td>4.00</td>
<td>6.00</td>
<td>8.00</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Jensen, JD & Smed, S 2013
Key points in the Danish fat tax history

- **Public Health concerns** was presented as background for the introduction of the fat tax, but was absent in the discussion of the repeal
- The tax had **no strong** proponents
- The tax had many **influential adversaries** (food industry, retail sector, university researchers)
- **No scientific consensus** about the role of saturated fat in health:
  - Opponents to the bill: earlier view on saturated fat is **obsolete**
  - Nordic nutrition recommendations released in 2013: earlier **recommendations** about reducing saturated fat in diet **maintained**.
- **No** coordinated ‘voice’ from **public health**
- Evidence, that the fat tax **had effect** on consumption, has little effect in public debate – so far
- **Market reactions** – price increases beyond tax
- Question of tax on products and **social inequality** was critical
- The tax lacked **legitimacy** in the public eye: is this related to the **Unbalanced taxation** - increase on unhealthy foods but no tax decrease on healthy food?
- **Taxes** on specific products and ingredients are introduced for a **number of reasons** – increasing **revenue** is usually one of them
Read more:

- Jensen, J.D. & Smed, S. 2013. The Danish tax on saturated fat: Short run effects on consumption, substitution patterns and consumer prices of fats. *Food Policy*, 42, (0) 18-31


- Smed, S. & Robertson, A. 2012. Are taxes on fatty food having their desired effects on health? *British Medical Journal* (345) e6885

- ATV Working group (2007) *Economic nutrition policy tools - useful in the challenge to combat obesity and poor nutrition?*. Copenhagen: Danish Academy of Technical Sciences, ATV.