



Faculty of Science



# 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



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



## Nutrition and health: University researchers

*Am J Clin Nutr.* 2011 Dec;94(6):1479-84. doi: 10.3945/ajcn.111.022426. Epub 2011 Oct 26.

**Cheese intake in large amounts lowers LDL-cholesterol concentrations compared with butter intake of equal fat content.**

Hierpsted J, Leedo E, Tholstrup T.

Department of Human Nutrition, Faculty of Life Sciences, University of Copenhagen, Frederiksberg, Denmark. juliehj@life.ku.dk

... seem to increase plasma total and LDL-... to the high

### The role of reducing intakes of saturated fat in the prevention of cardiovascular disease: where does the evidence stand in 2010?<sup>1-4</sup>

*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"

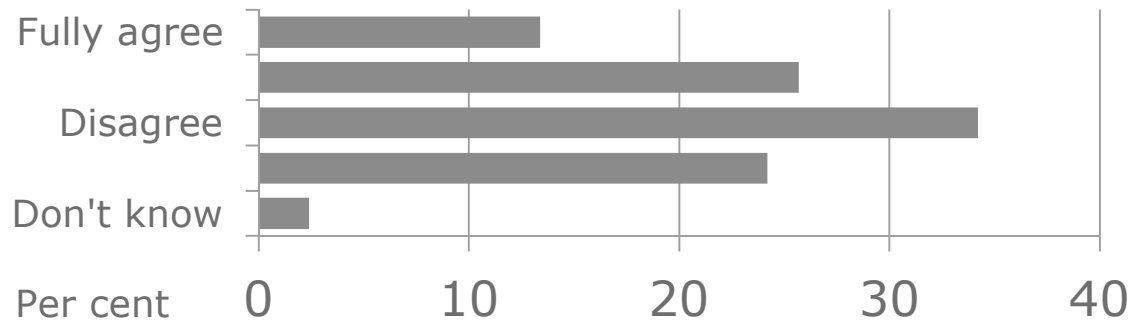
*Arne Astrup, February 7th 2011 (Videnskab.dk)*



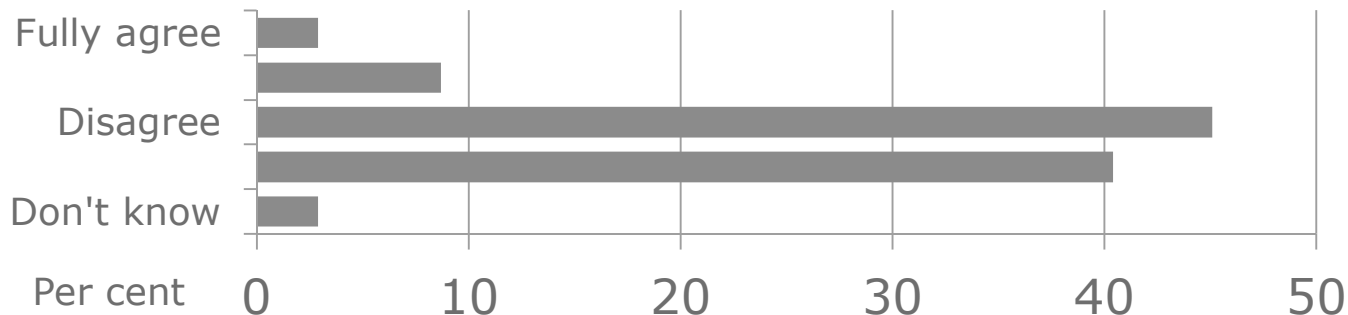
# Political resistance: "A majority of Danes reject higher food taxes"

"Do you agree or disagree with the following?"

## ■ Higher tax on candy, icecream, soft drinks,...



## ■ Higher tax on fat foods (e.g. dairy and meat...



## 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

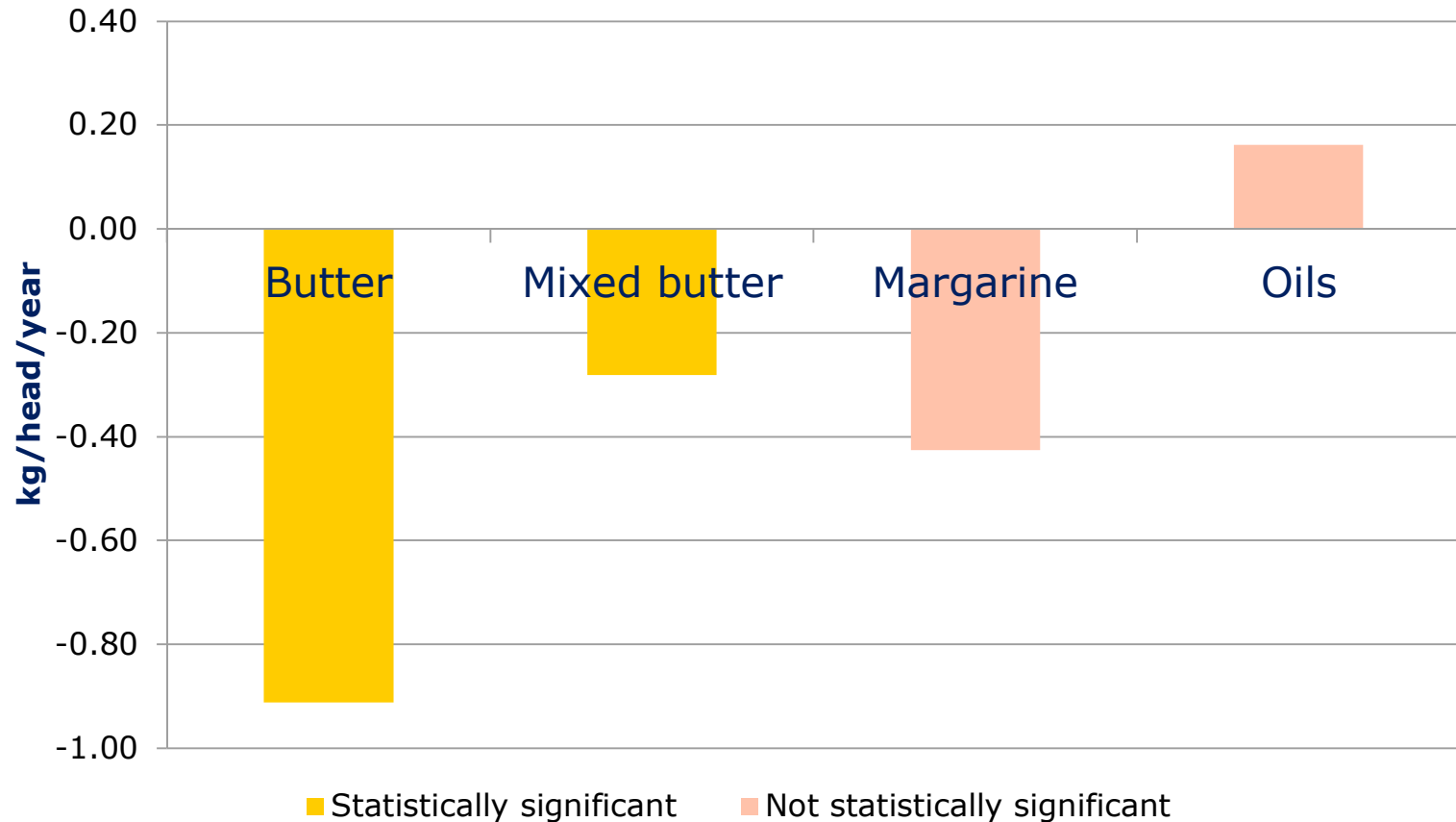
Econometric analysis:

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

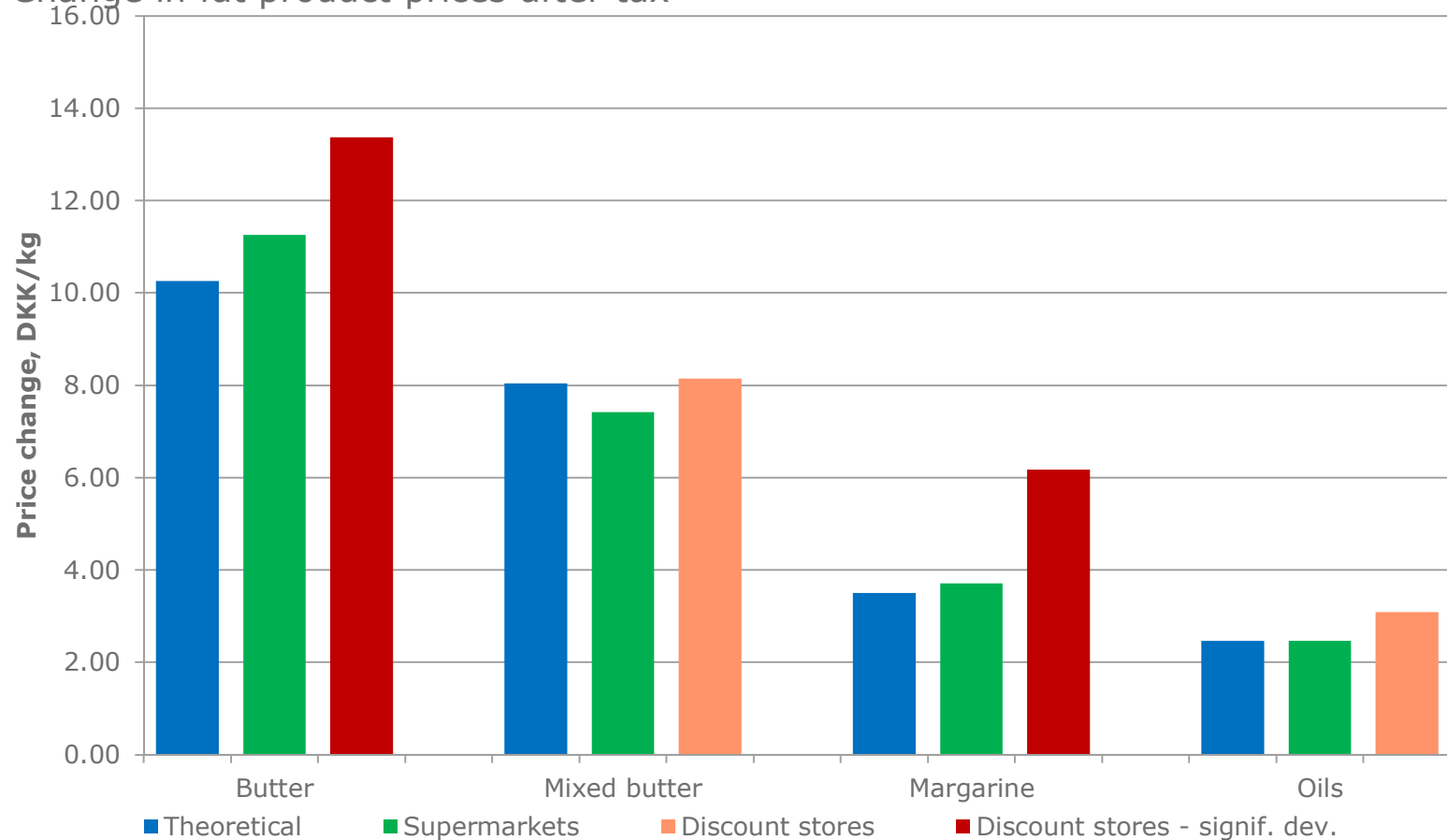
*Jensen, JD & Smed, S 2013*





# The fat tax has given food suppliers an opportunity for new price structures

Change in fat product prices after tax



## 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. 2012. Financial penalties on foods: the fat tax in Denmark. *Nutrition Bulletin*, 37, (2) 142-147
- Smed, S., Jensen, D.J., & Denver, S. 2007. Socio-economic characteristics and the effect of taxation as a health policy instrument. *Food Policy*, 32, (5-6) 624-639
- 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.

