

*Consumer Sovereignty and
Healthy Eating: Dilemmas for
Research and Policy*

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Dimensions of a healthy diet

1. Food is safe
2. Healthy total energy intake plus balance of macronutrients

(e.g. WHO/FAO recommendations)

- Energy from fat <30%
- Saturated fat <10%
- Sugar <10%
- Fruit and vegetables >400g/cap/day

(NB: no recommendation for total energy)

3. Adequate intake of micronutrients (vitamins, antioxidants etc)

Overweight causes and consequences

Cause: more calories in than out!

- In addition to food consumption, reductions in calorie expenditure at work and at home

Consequence:

- Increases in non-communicable diseases—heart disease, cerebro-vascular disease, diabetes, many cancers

*“annual burden on NHS approximately £6b”
Rayner and Scarborough, 2005.*

Developed countries: % of population overweight and obese, 2002/03

Developed	Men Overweight	Men Obese	Women overweight	Women obese	Total overweight +obese
UK	44	22	33	23	61
France	34	10	22	9	37
Germany	44	14	29	12	50
Greece	41	26	30	18	58
Italy	42	9	25	8	42
Japan	25	3	19	4	25
USA	42	28	28	33	66

Developing Countries: Urban Women 20-49, c2002

Country	% overweight + obese	% underweight
Kenya	27.9	7
Nigeria	23.9	13.6
S Africa	61	4.3
Egypt	69.9	0.7
India	26.4	23.1
China	20.5	7.4
Colombia	48.8	2
Mexico	65.4	1.5

What should government do?

“The role of government is to ensure that all consumers are able to exercise the right to choose a healthy diet if they wish”

*Strategy for Sustainable Farming and Food,
p37, Defra, 2002.*

Policies more generally

Policy Rationale: eliminate market failure and reduce health inequalities whilst allowing freedom of choice

Examples of market failure

- Social costs exceed private costs
- Uncertainty and asymmetric information
- Lack of self control

Children are a special case

Policy interventions—provided marginal social benefits exceed marginal social costs

- Information, education and labelling for informed choice
- Internalise the externality
- Tax on excess weight
- Tax on fat foods and subsidy on thin foods

Dilemma: What about changing social norms?

Research and Policy Dilemmas

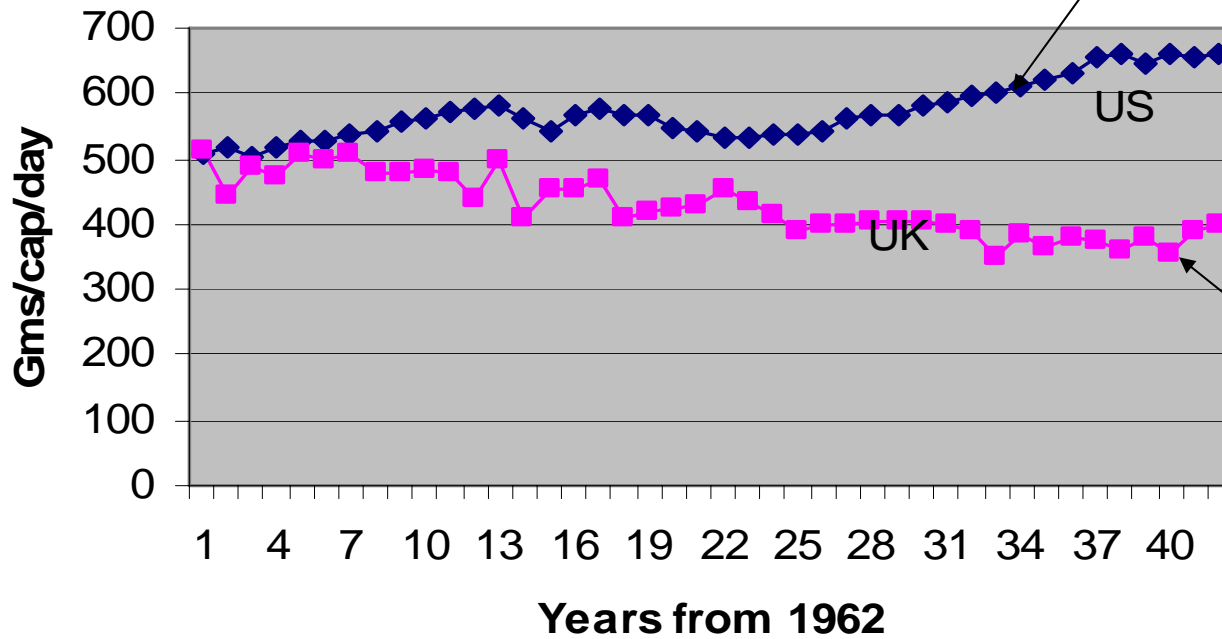
1. What works?

Evidence on policy effectiveness

There is almost none, even in a developed country context

- nutritional labelling of packaged groceries probably helps a bit
- restrictions on advertising to children can be justified
- limiting children's access to soft drinks and snacks in schools reduces overall consumption
- collaboration with industry can reduce salt and sugar intake from processed foods

Fruit and Vegetable Availability



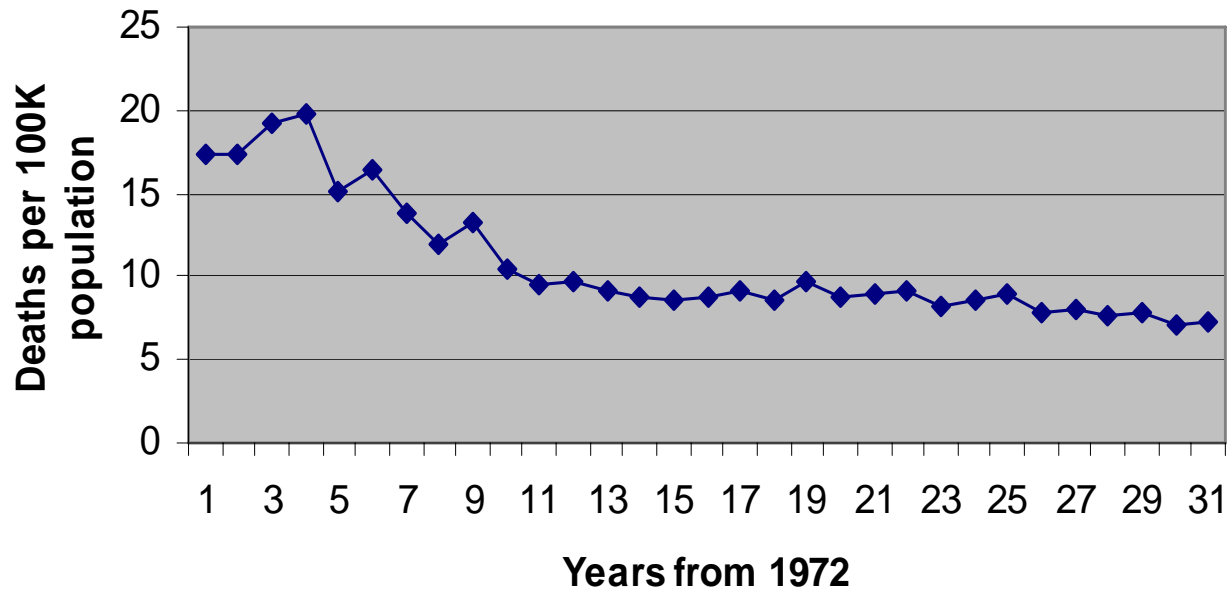
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US

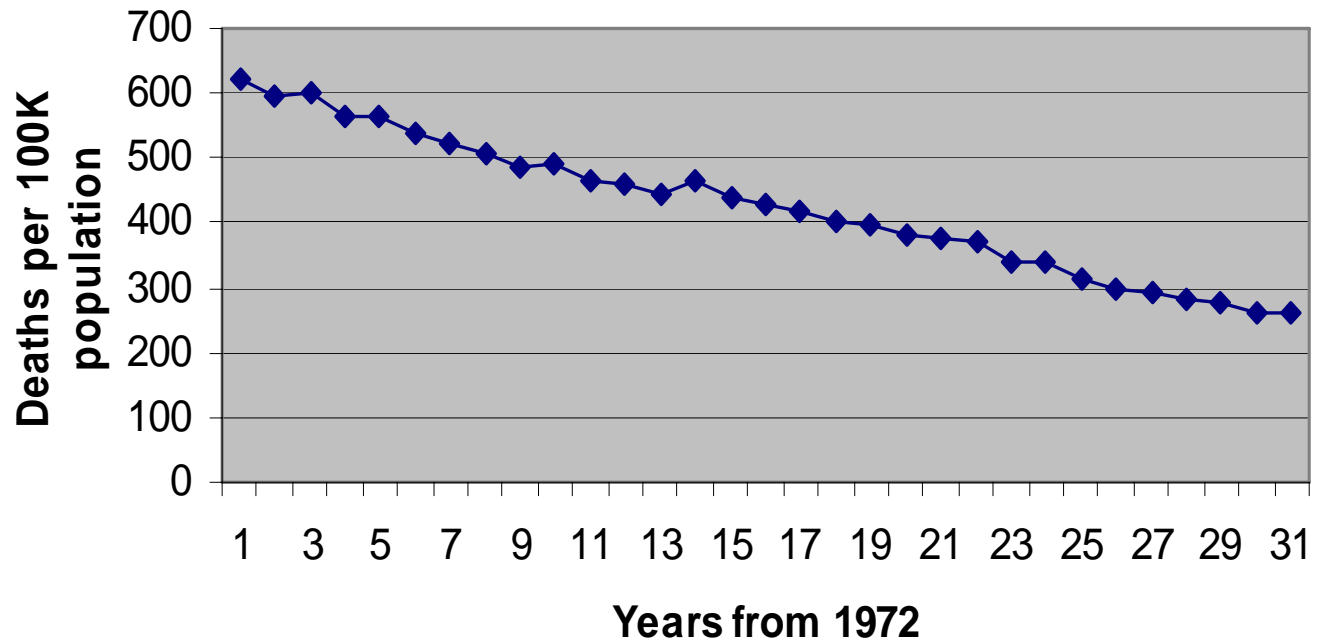
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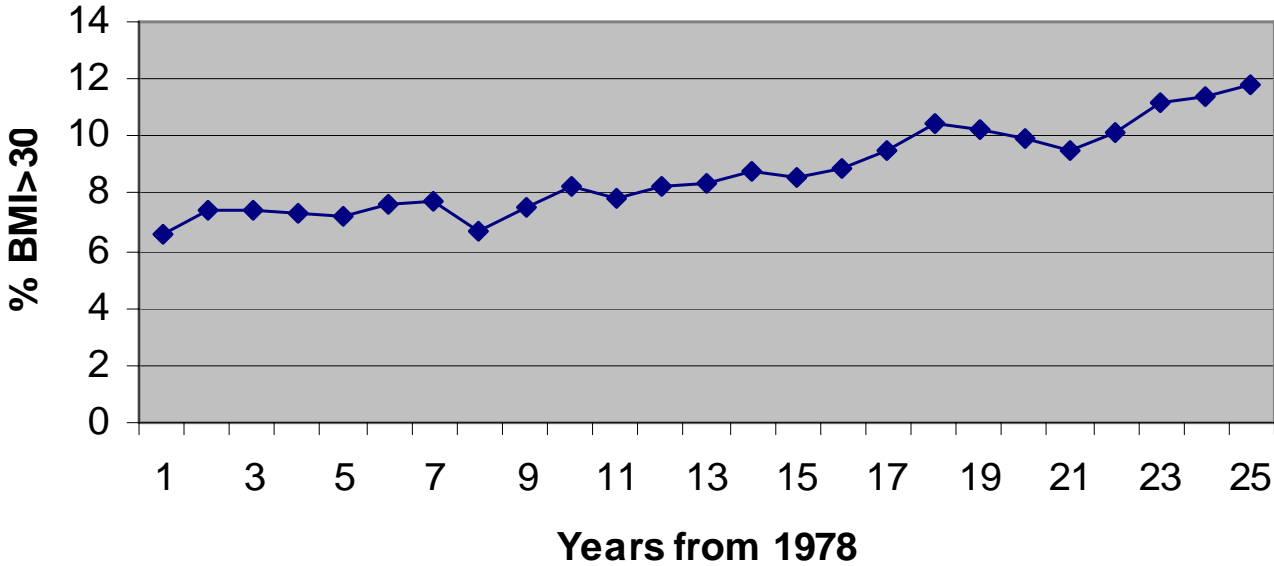
Finland Diabetes Deaths



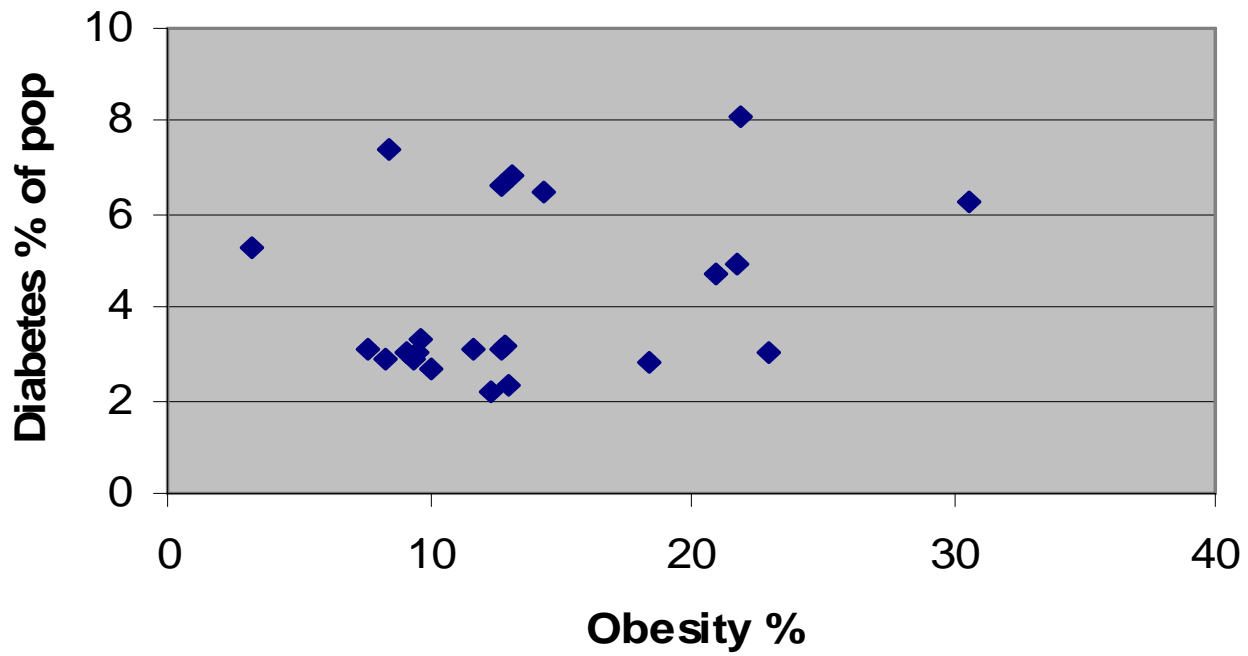
Finland Circulatory system deaths



Finland Obesity



Cross Country Analysis



Research and Policy Dilemmas

1. What works?
2. More fundamentally, how do people choose their diets and health status?

Weight and Health Determination

1. $utility = f(\text{health, appearance, leisure, consumption of foods})$
2. $health = f(\text{weight, exercise, smoking, alternative treatments})$
3. $weight = f(\text{energy intake} - \text{energy output})$
4. $energy\ intake = f(\text{weight} - \text{ideal weight, price of different foods, income, energy output, lifestyle, preferences for foods—link to culture})$
5. $ideal\ weight = f(\text{demand for health, demand for appearance--culture})$
6. $energy\ output = f(\text{occupation, lifestyle, weight, ideal weight, exercise})$

Basic Dilemma on Diet and Health Relationships

- Complicated
- Multiple disciplines involved
- Endogeneity

Biology and Economics

Epidemiology effectively changes one variable holding all else constant (e.g. salt increases blood pressure).

Allowing for the fact that people eat foods, not nutrients, that diets are chosen to optimise health and utility from consumption and therefore a change in the intake of one food influences intake of all others, Chen et al, (2002) find increase in salt intake reduces blood pressure.

“Recommended changes in one nutrient may induce people to alter their consumption of other health inputs as well. The extent to which they choose to do so depends on factors such as preferences, wages, prices, and income. The everyday health consequences of following the recommendation may differ from the laboratory result.” Shogren (forthcoming)

Conclusion

There's plenty still to be done!