

The logo of the University of Sussex, featuring the letters 'US' in a stylized, bold, black serif font.

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SPRU – Science & Technology Policy Research



Healthy Diets and Sustainable Consumption in the EU

Food & Nutrition in the 21st century

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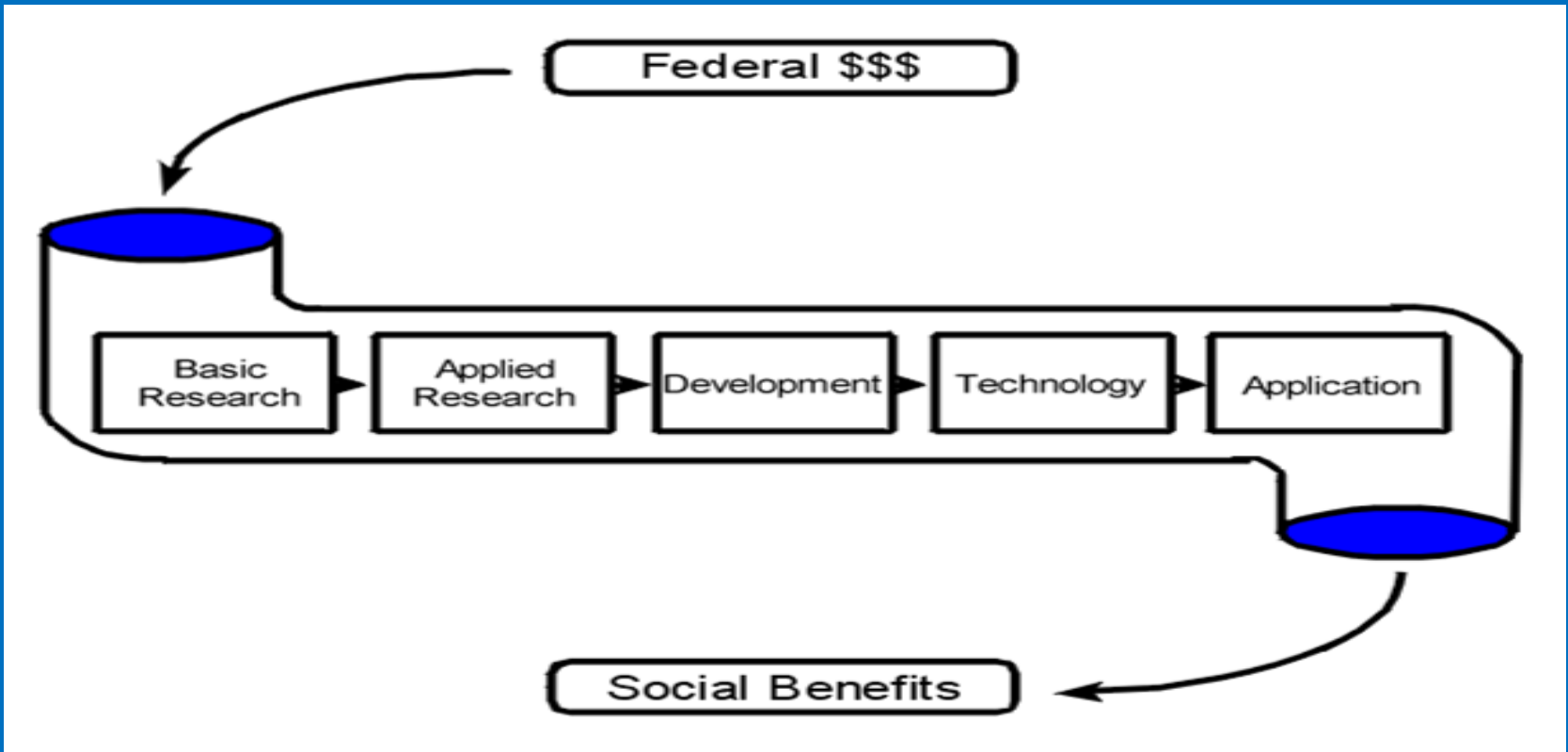
Question:

Under what conditions can R&D and innovation contribute to healthy diets and sustainable consumption in the EU?

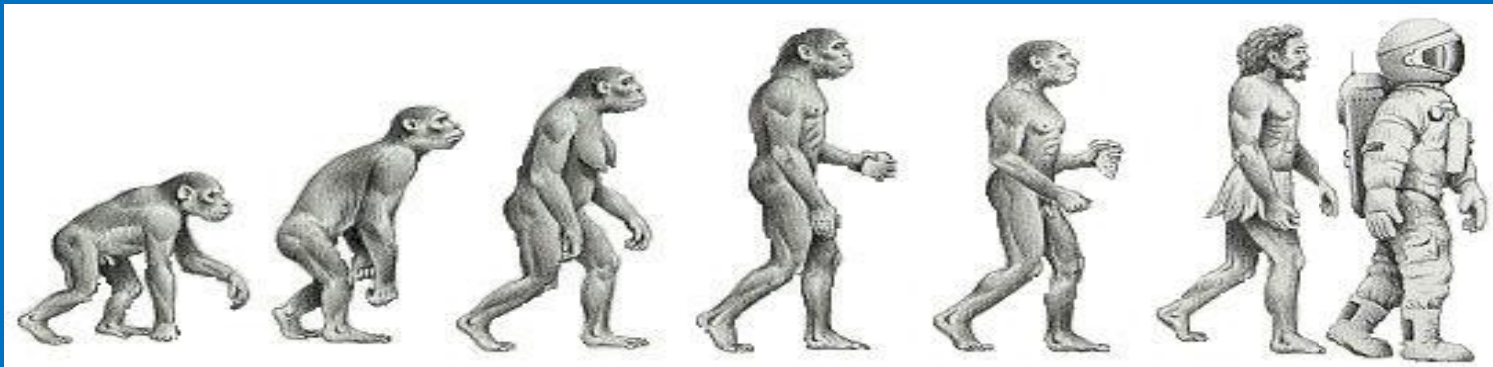
- given that over the last ~50 years they have often taken us in the opposite direction.

Assumptions open to question:

1. Technological and product innovation in the food industry can attain nutritional and economic goals?
2. Scientific research can and should drive innovation. Pielke's model of a linear, science-push model of innovation is:



Orthodox approaches assume that the slogan used for the Chicago World Exhibition of 1933 is correct: **‘Science Finds, Industry Applies, Man Conforms’**.



“you can’t stop progress” ... *The Economist*

One can not impede scientific progress.”
- President Ahmadinejad



The forces of innovation and technological change are **vectors**, not **scalar** factors. They are **directional!**

Decisions about *directions* are not narrowly technical or scientific.

Debates have focused on:

How fast? And: Who leads?

Neglecting:

Which way? Why?

What alternatives? Who chooses?

Choices about which **'benefits'** to pursue and which **'risks'** to try to diminish or avoid are critical to the future of innovations.

Responsibility for those choices can no longer be left to corporate R&D managers or to marketing executives. Customers and public policy-makers demand more input to those choices.

In a discussion of **Healthy Diets and Sustainable Consumption**,

the critical issue concerns contested choices about:

1) which **benefits** should be targeted and

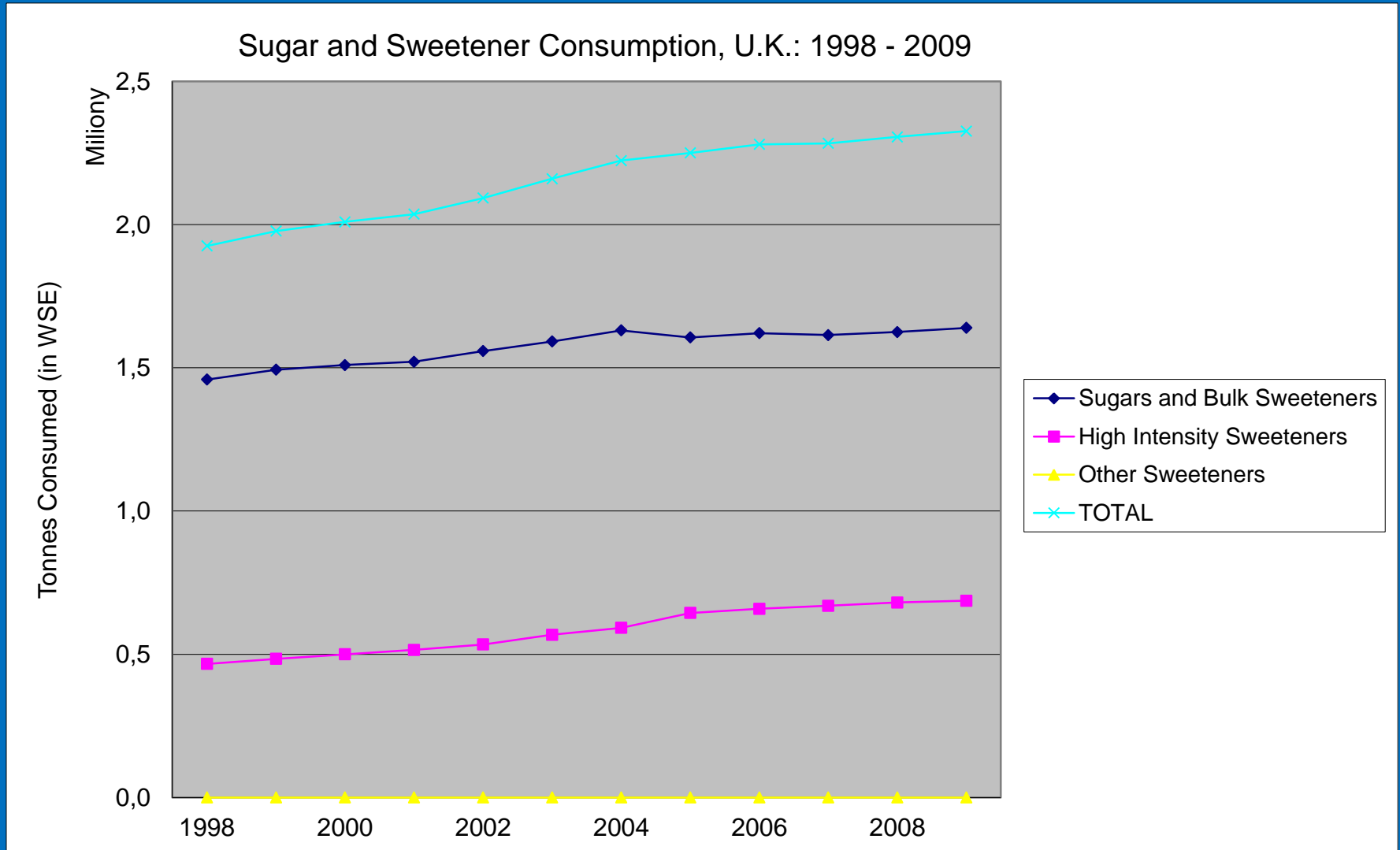
2) which types of **risks** reduced or avoided?

Innovations have often taken cheap, plentiful and healthy ingredients, and to processed them into more expensive and less healthy products, that provide 'added [commercial] value', but which harm public health.

Too many processed foods are loaded with starches, sugars and fats, dosed with colourings and flavourings, generating unsustainably **risky** diets and epidemics of obesity, diabetes and cancers.

The main direction has often been innovations to increase 'effective demand' for their products and 'profitability'. The chosen **benefits** have been **saleability** and **cost reduction**. Future innovations must deliver safer products and healthier diets produced less harmfully and wastefully.

The answer to the obesity epidemic is not just more choice of low calorie products:



The food and agricultural systems in the EU should be re-directed to provide incentives for the production and consumption of healthier diets, with improved ecological performance. This can be achieved by institutional innovations, changes in public policies for innovation and regulation, to provide new incentives for re-directed corporate strategies eg **traffic lights**.

Institutional reforms:

1) EU and national policy-makers should implement the Codex provisions on ‘**risk assessment policy**’ and extend those discussion symmetrically also to include ‘**benefit assessment policy**’.

The Codex Alimentarius set new provisions on **Risk Assessment Policy** in 2003, and in 2007 all Codex Member States committed themselves to identical provisions in the following terms:

Replace the *Red Book* model

Science



Risk
assessment



Values, interests
and
practicalities



Risk
management

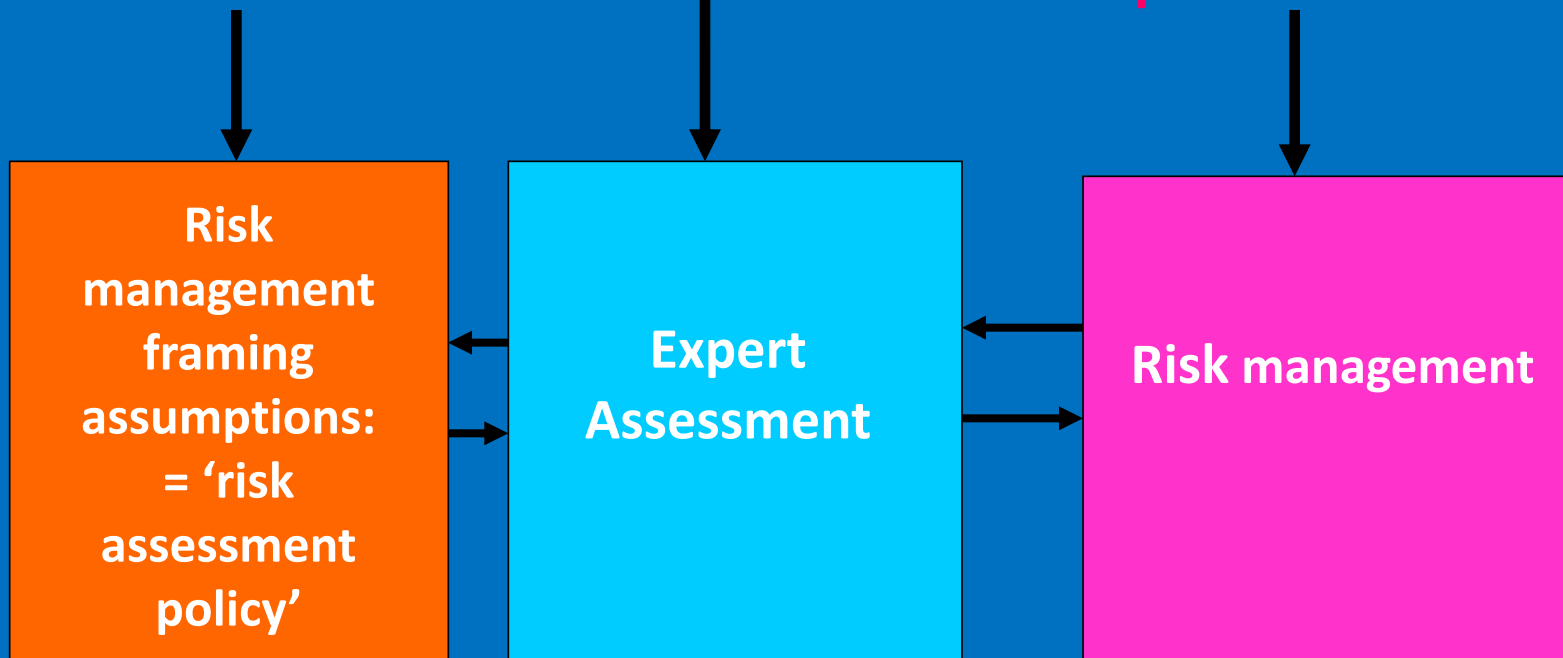


With 'co-dynamic' model of reciprocal links between science and policy

**Socio-economic
and political factors**

**Scientific
factors**

**Technical, economic,
social
and political factors**



“Determination of risk assessment policy should be included as a specific component of risk management. Risk assessment policy should be established **by risk managers in advance** of risk assessment, **in consultation with risk assessors and all other interested parties**...

The mandate given by risk managers to risk assessors should be as clear as possible.”

For example, the acceptability of food additives should be judged not just by the benefits they provide producers, but also whether or not their use benefits consumers.

The assessment of risks should not just focus on toxicological risks but also impacts on public health nutrition. For example, the use of colourings, flavourings and emulsifiers have contributed significantly to increasing intakes of fats and sugars, but those risks have not yet been taken into account by the regulatory system - innovation policies have also ignored those considerations.

Those policies are now unsustainable.

2) re-construct and integrate regulatory policy regimes covering both agriculture and the food industries, and

3) couple risk and benefit assessment policies (**BAPs** & **RAPs**) with innovation and regulatory policies; and set both **in consultation with...all other interested parties**. So innovative food products should be more than 'no less safe or healthy' than those already on the market, they should be 'safer and healthier', with improved environmental performance.

The food industry should respond by providing:

- healthier diets and
- improved services.

cf Electrolux transformed itself from a manufacturer of appliances into an 'energy services' company. Why has no-one in the food sector pursued a similar strategy?