



Minister Veerman receives first book of PROFETAS research findings Mankind benefits from eating less meat

If people were to eat more vegetable proteins instead of animal proteins, this would result in multiple – and much-needed – benefits. Such a 'protein transition' will positively affect sustainable energy production, sustainable water use, biodiversity, human health and animal welfare. Collective vegetarianism is not required, but good-tasting, high quality meat substitutes ought to be used more often in place of meat. This is the most important finding of a comprehensive study of more sustainable protein production by nineteen economists, consumer researchers, food technologists, sociologists, political scientists, ecologists and chemists from three universities. The research findings are published in the book *Sustainable Protein Production and Consumption: Pigs or Peas?*. On **Wednesday, April 12**, the first copy of this book will be presented to Minister Veerman of the Dutch Ministry of Agriculture, Nature & Food Quality. The target audience however is much wider, including all 'stakeholders in the food chain, from policy makers to consumers.'

The study is called PROFETAS (*Protein Foods, Environment, Technology And Society*) and was financed by the Dutch National Science Foundation NWO and the Technology Foundation STW, the Ministry of Agriculture, Nature and Food Quality and private companies. The researchers are from Vrije Universiteit Amsterdam, Wageningen University & Research Centre and the University of Twente.

Facts about meat

- to produce 1 kg of animal protein, 3 to 10 kg of plant protein is required, depending on the particular animal species and circumstances;
- one kg of beef requires 15 m³ water, one kg of lamb requires 10 m³, while for one kg of grain 0.4 to 3 m³ is sufficient;
- 75 percent of available fresh water, 35 percent of available land and 20 percent of all energy resources are currently used for food production;
- between 1950 and 2000, the world's population doubled from 2.7 to 6.7 billion people while meat production increased fivefold from 45 to 233 billion kg per year. The FAO predicts a global population of 9 billion people in 2050, and meat production of 450 billion kg per year.

Novel Protein Foods

The PROFETAS-researchers are arguing for a 'protein transition': we must eat less meat and partly replace our protein requirements with so-called *Novel Protein Foods* (NPFs). These NPFs are based on plant proteins that are derived from, for example, peas or soya. While we don't all have to adopt a vegetarian diet, a change in production is necessary, and above all, a change in mentality. It is true that in Western countries meat substitutes are increasingly popular, but the consumption of meat remains persistently high. Even in industrializing countries such as China and Brazil, where meat consumption used to be low, meat consumption is rising rapidly. To achieve real change - a transition - this trend must be reversed on a global scale.

Even more advantages

A protein transition has many additional advantages. A conservative estimation by the researchers found that because so much land would become available to cultivate biomass, a quarter of the world's current energy consumption could be sustainably met from this energy source. Moreover, this can be achieved without affecting grasslands (with extensive meat production) and nature areas, such as tropical rainforests. A protein transition can also help to put a meat industry plagued by animal diseases and crises back on the rails. Approximately one third of the global trade in cattle and meat is currently afflicted by outbreaks of diseases, causing billions of euros damage. Finally, a protein transition will also have a positive influence on people's health, through the reduction of many meat-related and obesity-related diseases.

NOTE FOR EDITORIAL DEPARTMENTS

The first copy of the book, *Sustainable Protein Production and Consumption: Pigs or Peas?*, will be presented to Minister Veerman at the Ministry of Agriculture, Nature & Food Quality, Bezuidenhoutseweg 73, in The Hague, on **Wednesday April 12**, at **10:00**.

Additional information about the NWO PROFETAS programme is available at www.profetas.nl. Additional information about the book is available at www.springer.com/sgw/cda/frontpage/0,11855,5-198-72-106797220-0,00.html; you can also contact the publisher (Uitgeverij Springer), Esther Verdries, T 078 657 6230 E esther.verdries@springer.com.

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