Our food, our health: Healthy diet and safe food in the Netherlands

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The report addresses the relation between diet and health in the Netherlands. The main questions addressed are: How healthy is the Dutch diet? How safe is Dutch food? What health gains are to be expected through better diet and eating habits and by reducing overweight?

In answering these questions, a pragmatic definition of the terms ‘healthy diet’ and ‘safe food’ is applied. A healthy diet relies on both the composition and the quantity of food consumed. With regard to food safety, the emphasis is not only on possible microbiological or chemical contamination, but also on potentially harmful naturally-occurring constituents. Where the amount of such substances is below the level which could be considered harmful to human health, the term ‘safe food’ is applied.

Unfavourable fatty acid composition of the diet increases the risk of cardiovascular diseases. Despite product improvements by the manufacturers and an increase in fish consumption, only 5% of the Dutch population adheres to the recommended fatty acid composition. Insufficient consumption of fruit and vegetables increases the risk of coronary heart diseases, stroke and some forms of cancer (lung, breast and stomach cancer).

In general, an unfavourable dietary composition contributes approximately twice as much to the total mortality as overweight: 10% against 5% of the annual deaths in the Netherlands. If disease and mortality are considered in combination, using a weighing factor for the severity of the disease, the health loss due to unfavourable dietary intake and composition is about 128,000 - 246,000 DALYs (Disability Adjusted Life Years, or healthy life years lost). This corresponds with a loss in average life expectancy of Dutch people who are forty years of age of about 1.2 years.

With regard to microbial foodborne infections there are several hundreds of thousands (and probably more than one million) cases of gastroenteritis attributable to contaminated food each year. Foodborne infections caused by known pathogens are also responsible for several hundred cases of severe disease, such as toxoplasmosis and Guillain-Barré syndrome, with between 20 and 200 people dying from the consequences of a food infection each year. Expressed in DALYs, the estimated health loss due to foodborne infections involving known pathogens is approximately 1,000 to 4,000 per annum.

For the chemical constituents of food, allergens and contaminants contribute most to the estimated health loss. It is estimated that 2% of the adult population suffer from some form of food allergy, while the figure rises to 6% among children. Most cases involve allergenic constituents in common foods such as shellfish, milk, fish, wheat, peanuts, etc. For the other chemical constituents particularly natural toxins and process contaminants such as PAH and acrylamide provide a health risk. The estimated theoretical annual health loss attributable to chemical substances is approximately 1,500 to 2,000 DALYs.