

High meat consumption is stable between 2006 and 2014 in the NEMONIT study

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Background

Meat is an important food for human nutrition containing protein and other essential micronutrients such as minerals and vitamins. However, high intake of meat has been linked to chronic diseases. In comparison with the recommendations of the German Society for Nutrition (300-600 g per week), the consumption of meat, meat products and sausages is too high in Germany, especially in men (Krems et al. 2012, DGE 2014). Moreover, the environmental sustainability of meat consumption has become a concern for several reasons like climate change, resource inefficiency and animal welfare.

The aim of this study is to analyse the trend in consumption of total meat as well as poultry, red meat, and meat products and sausages over the last years in the Germany National Nutrition Monitoring (NEMONIT).

Methods

A sample of 2.837 participants (baseline age: 14-80 years) was recruited from the nationally representative German National Nutrition Survey II (2005-2007). Food consumption was assessed annually by two telephone 24-h recalls in the NVS II and the 6 years of NEMONIT (2008-2014/2015), respectively. In the trend analysis 1.617 individuals who participate in the NVS II and in least three of the six NEMONIT study years were included. Time trends of meat consumption were analysed by generalised estimating equation (GEE) model.

Results

Total meat consumption remained unaltered between 2006 and 2014 in men and women of the NEMONIT cohort. Also poultry consumption showed no trend in both sexes. The consumption of red meat decreased slightly in men (-0.91 g/year; 95 %-CI: -1.64/-0.19), but not in women. Meat products and sausages consumption increased slightly over the eight-year study period in women (0.57 g/year; 95 %-CI: 0.14/1.00), but not in men. The stratified analysis for age, school education, urban/rural region and attitudes towards animal welfare and organic production showed no different trends in meat consumption, exception in men less than 60 years (red meat consumption: -1.38 g/year; 95 %-CI: -2.29/-0.47).

Conclusion

Meat and meat products consumption remains stable on a high level over the eight-year study period within the NEMONIT cohort. Even for people who attach importance to organic production and animal welfare, no different trends have been identified. Due to the adverse effects of high meat consumption on health and sustainability, a shift to diets with less meat is necessary.

References

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