

Experiences from German National Nutrition Monitoring

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The German national nutrition monitoring comprises so far the cross-sectional studies National Nutrition Survey (NVS) I and II, the German Nutrition Survey (GeNuS) 1998 as well as the longitudinal NEMONIT study. These studies were carried out between 1985 and 2015 and covered mainly the adult population. Additionally, specific studies on children were conducted.

The NEMONIT study provides the latest information on food consumption, nutrient intake as well as other aspects of nutritional behaviour on a nationwide basis. For this longitudinal survey, a subgroup of about 2,000 NVS II participants (18-80 years) was recruited and annual data collection took place from 2008 to 2015. Time trend analysis of food consumption and macronutrient intake over a 6-year period (2006-2012) shows that consumption of fruit and fruit juices decreased among women and men, whereas consumption of water, soft drinks and coffee/tea increased (Gose et al. 2016). Furthermore, increased consumption of confectionery and animal fats was observed among women. There were no changes in energy and protein intakes, but carbohydrate intake declined while fat intake increased over time. Therefore, food consumption remained relatively stable within this study group.

Due to the experiences of NEMONIT and NVS II, some conclusions for the next representative assessment of the nutritional behaviour of the German population can be drawn:

1. For the assessment of current food consumption data, it is sufficient to conduct representative nutrition studies in intervals of about 8 years.
2. To provide results on food consumption with a sufficient statistical accuracy and a detailed description of the nutritional behavior of the German population a sample size of 10,000 participants is appropriate.
3. For statements on the nutritional status, especially on critical nutrients the determination of physiological samples (blood and urine) is crucial.

The studies conducted so far within the German national nutrition monitoring show some differences with regard to study design, e. g. recruitments procedures or dietary assessment methods. European recommendations with regard to study design and methods as guidance are needed to support comparisons at national level and across countries. For the comparison of studies over the years methodological developments also need to be considered.

For the next German national nutrition survey experiences from the national nutrition monitoring as well as European recommendations will be taken into account to provide representative and precise data on food consumption and other nutritional behaviour which can be used for comparisons at national and European level.

References

Gose M, Krems C, Heuer T, Hoffmann I. Trends in food consumption and nutrient intake in Germany between 2006 and 2012: results of the German National Nutrition Monitoring (NEMONIT). *Br J Nutr* 115 (8), 1498-1507, 2016.