nut-12.1. Describe Any Statistical Method Used to Combine Dietary or Nutritional Data, If Applicable

Example. “To best represent long-term diet, we used cumulative average acrylamide intake as our main exposure measure. That is, 1980 intake was used for follow-up from 1980 to 1984; the average of 1980 and 1984 intake was used for follow-up from 1984 to 1986; the average of 1980, 1984, and 1986 was used for follow-up from 1986 to 1990; and so on. This exposure measure also reduces random within-person measurement error over time. In secondary analyses, we used baseline (1980) acrylamide intake only. In addition, we did a latency analysis for breast cancer because of the large number of cases. We used our repeated measures of acrylamide intake to analyze the effect of latency time (time from exposure to cancer) by relating each measure of acrylamide intake to breast cancer incidence during specific periods of latency time: 0–4, 4–8, 8–12, and 12–16 y”.

Explanation.

A clear description of the statistical methods ensures transparency and enables other researchers to reproduce the study in studies of similar design. Assumptions made when combining data should be stated. Studies occasionally combine 2 dietary data collection methods (e.g., FFQ and 24-h recalls). If so, and in order to allow an appropriate interpretation of results, the report should include the method used to combine the dietary or nutritional data and identify the strengths and weaknesses in this approach. When appropriate, a justification for the chosen method is informative. If dietary patterns are used to represent whole diets, the

theoretical basis for the methods should be justified, and any subjective elements in the method clearly identified (see also Nut-7.2).Where possible, the patterns should be fully characterized and the basis presented for any subjective labels (e.g., correlation or covariance matrices, or factor loadings). The units used should be clearly presented for all variables (e.g., servings per day, portions, grams, millimoles per

liter). The same level of detail is equally important for any covariate considered, and the precision of any numbers given should be considered. A detailed description of the time frame for dietary intake will help the reader appreciate the appropriateness of the data collection methods and of any modeling assumptions. Similarly, when differential absorption of food and supplemental sources is present, additional care should be taken to describe the methods and models and to state the assumptions made.