Nut-8.2. Data sources and measurements: describe and justify food-composition data used; explain the procedure to match food composition with consumption data; describe the use of conversion factors, if applicable.

Example 1. “Total vitamin A was expressed both as retinol equivalents (REs) and as retinol activity equivalent (RAEs) according to the following conversion factors: RE = 1 mg all-trans retinol + 1/6 mg dietary all-trans b-carotene + 1/12 mg other dietary provitamin A carotenoids; RAE = 1 mg all-trans retinol + 1/12 mg dietary alltrans b-carotene + 1/24 mg other dietary provitamin A carotenoids. Total vitamin A values were calculated with and without separation of b-carotene isomers in those foods that displayed data for both trans and cis b-carotene. To calculate vitamin A in REs and RAEs without isomer separation the conversion factor used for all-trans b-carotene was adopted for the values of total b-carotene (trans plus cis b-carotene). Data are shown in the Brazilian Vitamin A Database as micrograms per 100 g edible portion on a fresh-weight basis”.

Explanation

In studies of energy, nutrient, and other food component intakes, the food-composition database or other food-composition data need to be described, preferably also giving a reference to the database. Appropriate guidance is needed (e.g., search strategy or references) indicating whether data are directly derived from peer reviewed publications, monitoring programs, or new analyses. In multicenter studies covering >1 country, the handling of country-specific nutrient values should be described. Factors that influence the quality of the nutrient intake data, such as number of missing values in food-composition data and how these were treated, should be reported. In addition, if applicable, how foods were matched across countries and food databases should be reported. Any conversion factors applied to the consumed food amounts (e.g., raw-to-cooked or precursor-to-bioactive) should be reported, as well as any data handling influencing the food component concentrations (e.g., nutrient retention, yield, or bioactivity).