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# Food composition database development for between country comparisons

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## Abstract

Nutritional assessment by diet analysis is a two-stepped process consisting of evaluation of food consumption, and conversion of food into nutrient intake by using a food composition database, which lists the mean nutritional values for a given food portion. Most reports in the literature focus on minimizing errors in estimation of food consumption but the selection of a specific food composition table used in nutrient estimation is also a source of errors. We are conducting a large prospective study internationally and need to compare diet, assessed by food frequency questionnaires, in a comparable manner between different countries. We have prepared a multi-country food composition database for nutrient estimation in all the countries participating in our study. The nutrient database is primarily based on the USDA food composition database, modified appropriately with reference to local food composition tables, and supplemented with recipes of locally eaten mixed dishes. By doing so we have ensured that the units of measurement, method of selection of foods for testing, and assays used for nutrient estimation are consistent and as current as possible, and yet have taken into account some local variations. Using this common metric for nutrient assessment will reduce differential errors in nutrient estimation and improve the validity of between-country comparisons.

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