USDA Table of Nutrient Retention Factors, Release 5 (2003)

The USDA Table of Nutrient Retention Factors is the major source of nutrient retention data for US and International food composition databases. Food composition data are needed for the uncooked and cooked forms of foods. However, nutrient data are frequently lacking for cooked foods. The nutrient composition of a cooked food may be calculated from the uncooked food by applying nutrient retention factors. Most public and private sector databases use these retention factors to calculate nutrient values where analytical data for cooked foods are unavailable. The resulting values quantify the nutrient content retained in a food after nutrient losses due to heating or other food preparations. Release 5, of this data set, replaces the previous Release 4, issued in 1998. The data set contains a total of 25 factors for calculating retention of vitamins and minerals and alcohol during food preparation. The carotene retention factors which appeared in Release 4 are no longer being disseminated. Factors for the other 18 food components in Release 4 are unchanged. Factors for 7 new food components have been added to this release. The new components include folic acid, food folate, beta carotene, alpha carotene, beta cryptoxanthin, lycopene and lutein/zeaxanthin. Data being released after careful internal review and will be expanded in future release as data becomes available.

The data set is provided in ASCII delimited and PDF format. In ASCII delimited all fields are separated by carets (^) and text fields are surrounded by tildes (~). Each preparation and processing category has a unique retention code for computer access. The format of the file is as follows:

Field Name	Type	Blank	Description
Retn_Code	A 4	N	4-digit code uniquely identifying the retention factors
Desc	A 35	N	Description of the food category and preparation
Nutr_No	A 3	N	3-digit unique identifier code for a nutrient
NutrDesc	A 60	N	Name of food component
Retn_Factor	N 3.0	N	The specific factor representing the amount of the food component retained during the specified treatment
N	N 2.0	Y	Number of samples
StdDev	N 8.3	Y	Standard deviation