

ICS 01.040.01

CCS C53



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/Z 21922-2008

**Fundermental terminology and definition of nutritional
component in foods**

食品营养成分基本术语

Issued on: May 16, 2008

Implemented on: May 16, 2008

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

Foreword

1 Scope

2 Terms and definitions

2.1 General terms

2.1.1 Nutritional component

2.1.2 Nutrient

2.1.3 Essential nutrient

2.1.4 Macronutrient

2.1.5 Micronutrient

2.1.6 Mineral

2.1.7 Trace element (microelement)

2.1.8 Vitamin

2.1.9 Nutrient density

2.1.10 Glycemic index (GI)

2.1.11 Dietary reference intakes (DRIs)

2.1.11.1 Estimated average requirement (EAR)

2.1.11.2 Recommended nutrient intake (RNI)

2.1.11.3 Adequate intake (AI)

2.1.11.4 Tolerable upper intake level (UL)

2.1.12 Nutrient reference values (NRV)

2.2 Terms of food energy and nutritional components

2.2.1 Water

2.2.2 Ash

2.2.3 Food energy

2.2.4 Protein

2.2.5 Amino acid

2.2.5.1 Essential amino acid

2.2.5.2 Semi-essential (conditionally essential) amino acid

2.2.6 Fat

2.2.6.1 Crude fat

2.2.6.2 Total fat

2.2.7 Fatty acid

2.2.7.1 Saturated fatty acid

2.2.7.2 Unsaturated fatty acid

2.2.7.3 Trans fatty acid

2.2.8 Carbohydrate

2.2.8.1 Sugar

2.2.8.2 Oligosaccharide

2.2.8.3 Polysaccharide

2.2.8.4 Non-starch polysaccharides (NSP)

2.2.9 Dietary fiber

2.2.9.1 Soluble dietary fiber

2.2.9.2 Insoluble dietary fiber

2.2.10 Vitamin A

2.2.11 Vitamin D

2.2.12 Vitamin E

2.2.13 Niacin

2.2.14 Folate

2.2.15 Sodium

Annex A (informative) Methods for the determination of dietary fibre and/or its monomeric components

Chinese index of terms

English index of terms

1 Scope

This standardizing guiding technical document specifies the basic terminology of the nutritional components of food. This standardizing guiding technical document applies to all food production, trade, testing and labelling and to other related fields.

This standardization guidance technical document specifies the fundamental terminology and definition of nutritional component in foods. This standardized guidance technical document applies to all food production, operations, testing, labeling and other related fields.

2 Terms and definitions

The following terms and definitions apply to this standard guidance technical document.

2.1 General terms

2.1.1 Nutritional component Nutrients and beneficial ingredients in food, including nutrients, moisture, dietary fiber, etc.

2.1.2 Nutrient A substance that has a specific physiological role in food, can maintain the body's growth, development, activity, reproduction, normal metabolism, lack of which will cause adverse biochemical or physiological changes in the body. It includes five categories: protein, fat, carbohydrates, minerals, vitamins.

2.1.3 Essential nutrient The nutrient which cannot be synthesized or synthesized insufficiently in human body, needs to be obtained from food.

2.1.4 Glycemic index = The area under the glycemic glucose curve within 2 hours after taking the test food which contains 50 g of carbohydrate / The area under the glycemic glucose curve within 2 hours after taking 50 g of glucose or white bread x 100% (1)

2.1.11 Dietary reference intakes, DRIs A set of reference values for daily average dietary nutrient intake, including four items: estimated average requirement (EAR), recommended nutrient intake (RNI), appropriate intake (AI), tolerable upper intake level (UL).

2.1.11.1 Estimated average requirement, EAR The average amount of a nutrient requirement in a particular gender, age, physiological status group.

2.1.11.2 Recommended nutrient intake, RNI The nutrient intake required by the vast majority (97% to 98%) of individuals in a particular gender, age, physiological condition group.

2.1.11.3 Adequate intake; AI The intake of a certain nutrient in a healthy population obtained through observation or experimentation.

2.1.11.4 Tolerable upper intake level; UL The maximum amount of a certain nutrient for an average daily intake, which is not harmful to almost all individuals in the general population.

2.1.12 Nutrient reference values; NRV The abbreviation of "China food label nutrient reference value", which is a reference criterion dedicated for the food label to compare the content of nutrients in food, as well as a nutrient reference value for the consumer to select the food. The nutrient reference value is determined mainly based on Semi-essential amino acid Amino acids that reduce the body's need for certain essential amino acids.

2.2.6 Fat Fat can be expressed as crude fat or total fat due to differences in testing methods. Both are called "fat".

2.2.6.1 Crude fat A general term for a large class of compounds in foods that are insoluble in water but soluble in organic solvents (ether or petroleum ether). In addition to triglycerides, it also includes phospholipids, sterols, pigments, etc. It may be determined by Soxhlet extraction or Rogowski method.

2.2.6.2 Total fat The fat content which is obtained by determining the individual fatty acid content in the food and converting the sum of the fatty acid triglycerides.

2.2.7 Fatty acid A general term for chain carboxylic acids in organic acids, which combine with glycerol to form fat. It is divided into saturated fatty acids and unsaturated fatty acids. The fatty acid content in the food is expressed in g/100 g of food. When using the Soxhlet extraction method to determine the content of crude fat (g/100 g), it may use the formula (3) to calculate the content of the fatty acid in the food (g/100 g). The conversion factors of fatty acid for different foods are as shown in Table 3. Fatty acid content = Content of crude fat in the food x conversion factor of fatty acid... (3) also be indicated as trans-fat on the label.