



高等职业教育“十二五”规划教材



食品专业英语

(第二版)

汪洪涛 陈宝宏 陈成 编

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第二版前言

食品专业英语课程是高职高专院校食品类专业学生的一门专业核心课程。根据高职高专院校培养高端技能型人才的培养目标，专业英语课程的主要任务是引导学生掌握一定的食品专业英语词汇和专业术语，学会专业英语的一些翻译技巧，以提高专业英文文献的阅读和翻译水平，并能够独立翻译和撰写英文摘要。

本教材的编写是在第一版的基础上进行了修订，修订时以突出应用能力、内容力求新颖、更好地服务于师生为主要指导思想。根据高职高专食品类专业学生的培养目标，修订时以食品营养、食品加工和食品安全为主线，新增食品检测新技术单元内容，对原有五个单元（营养素与健康、食品原料、食品保藏、食品加工工艺和食品安全与控制）的课程内容进行了删减和修改，以更好地适应教学需要，同时新增了食品检测新技术单元；新增课文译文部分，以满足一些非食品专业背景的授课教师的教学需要和学生课后学习的需要；增加了课文阅读光盘，以满足多媒体教学的需要；增加附录部分的专业术语和专业词汇量，以便于学生课后学习和查阅，增强该教材的实用性；将每篇课文中的生僻单词在文中进行标注，以便于学生更好地学习，提高学习效率；增加每篇课文后面的练习题形式和阅读材料的趣味性，以提高学生学习兴趣；以附录形式补充一些食品科技英语的翻译技巧，以提高学生专业文献的翻译能力。

本教材修订后语言精炼、操作性强、覆盖面广、难易适中，旨在提高食品类专业学生的专业英语文献阅读和翻译能力，便于高职院校食品类专业师生使用，农产品、水产品、畜牧产品加工类专业及分析专业学生也可选用此教材，亦可供食品行业工程技术人员参考。

本教材由江苏经贸职业技术学院汪洪涛、陈宝宏和陈成共同编写。汪洪涛负责第一单元、第二单元、第五单元课文和课文译文及附录一、二相关内容的编写；陈宝宏负责第三单元和第四单元课文和课文译文的编写；陈成负责第六

单元课文和课文译文及附录三的编写与课文阅读光盘的制作；全教材由汪洪涛统稿。

由于我们的编写水平有限，编写时间仓促，书中难免存在缺点和不足之处，敬请专家和读者提出宝贵意见。

编者

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Unit |

Nutrients and Health

营养与健康

Lesson 1

Text

Nutrition

What we eat as well as how much we eat determines our **nutrition** status to an important extent, and both are influenced by a diversity of external and internal factors. The person who wants to find the answer to the question “what should I eat for good nutrition?” might easily become lost in the maze of informational corridors, confused by the wealth of technical information provided by scientists or misled by simplistic answers provided by those with products to sell. Somewhere in between is some reasonable, commonsense information that we can use to guide us our quest for sound nutrition knowledge.

To begin, we need to learn some definitions of commonly used nutrition terms and find out what sorts of guidelines are available to help us measure the quality of our diets and to develop healthful eating patterns.

The word nutrition is often paired with the word food because the two go

together. They are interdependent, but not interchangeable. Food might be defined as any edible substance that provides **nourishment** when consumed. It is made up of many natural ingredients that have different functions such as providing **odor**, **flavor**, color and nourishment. The ingredients that give us nourishment are called **nutrients**.

These nutrients are categorized as fats, proteins **carbohydrates** (sugars and starches), **minerals**, **vitamins** and water. They are called essential nutrients because we cannot **get along** without them. We need them for energy, for building and maintaining body tissue, and for regulating body processes in the body. Nutrition might be defined as the process whereby we obtain the essential nutrients and use them to make many other substances our bodies need, this process would include eating and digesting food and absorbing and using, or **metabolizing** the nutrients it contains.

We can obtain all of the essential nutrients from food. Thus, it is the nutrients that are essential and the food that normally provides them. Since food is **vital**, we need to know the **nutritive** content of foods, which ones are the best sources of the various nutrients and how to combine them into a healthful diet.

The term good nutrition implies that we are obtaining from our food all of the essential nutrients in the amounts needed to keep our bodies functioning and to maintain optimum health. A very simplified definition of good nutrition might be "eating the right foods in the right amounts."

The work of nutrition scientists involves finding the answer to questions about the nutrients-their function in the body, the amount of each that we need, what happenings when we receive too much or too little-and about food and diet-what foods we should eat and in what amount.

To date, nutrition scientists have identified some 40 to 45 substances as essential nutrients. But the list is growing as new nutrients continue to be identified. Nutrients might be divided into two general categories based on the amount that we need. These are the **macronutrients** (carbohydrates, fats, proteins, and water), which we need in relatively large amounts and the **micronutrients** (mineral elements and vitamins), which we need in relatively small amounts. All of the nutrients except for mineral elements and water are classified as organic chemicals because they contain the element carbon. Mineral elements and water are inorganic chemicals because they do not contain carbon.

The vitamins are divided into two general categories based on their solubility in

either water or fat. The fat-soluble vitamins are vitamins A, D, E, and K; the water-soluble vitamins include vitamins C (**ascorbic acid**), niacin, **thiamine**, **riboflavin**, **folacin** (also called folic acid), **pantothenic acid**, **pyridoxine**, vitamin B₁₂ and **biotin**. The mineral elements are divided into two categories based on the quantity of them that we need. **Macroelements** are those needed in relatively large amounts, while **microelements** are those needed in very small amounts. Some examples of macroelements are **sodium**, calcium, and **phosphorus**. Some examples of microelements are iron, iodine, manganese, zinc and fluorine.

Once a nutrient is identified, one of the principal research efforts of nutrition scientist is to determine how much of it is needed by people at various ages and stages of life. Initial studies usually are conducted with laboratory animals, but the information developed in these studies cannot be applied directly to humans since people's needs often are quite different from animals' needs. Human nutrition studies, on the other hand, are time-consuming, costly, and difficult to conduct, especially because of the problems of controlling variables and possibly causing harm to the individuals involved. Because of the obstacles to collecting accurate data, our present knowledge of nutrient needs is incomplete, and the requirements of humans for many nutrients have not been established.

However, the data on human and animal needs currently available are used by nutrition scientists to establish estimates of the amounts of essential nutrients per day that will meet the needs of most health persons. In the United States, the most widely used nutrient guidelines are the recommended dietary allowance (RDA), which are issued by the National Academy of Sciences, National Research Council, Food and Nutrition Board.

The RDA serves as dietary or **nutritional** standards for a wide range of age-weight-sex groups such as infants, children, adolescents, **pregnant** and **lactating** women, and younger and older adults. They are recommendations, not average requirements, for satisfactory levels of **intake** of essential nutrients of population groups of average, healthy people. They do not take account of special needs certain individuals may have due to **genetic** make up, metabolic disorders, **chronic infections**, and other abnormalities, which may result in their needing different levels of nutrients. To allow for individual difference, the usually are set with a generous margin of safety. Thus, they are thought to meet the needs of 95 to 97 percent of the people within each age-sex group.

Vocabulary

nutrition	营养	pyridoxine	吡哆醇,吡哆素,维生素 B ₆
nourishment	食物,滋养品;营养情况	biotin	生物素
odor	气味	macroelement	常量元素
flavor	味,香味,风味,滋味;食用香料,食用香精,调料	microelement	微量元素
nutrient	营养的,滋养的;营养素,营养物	sodium	钠
carbohydrate	碳水化合物,糖类	phosphorus	磷, phosphorous 磷的,亚磷的,含磷的
mineral	矿物质,食品中的痕量物质	nutritional	营养的
vitamin	维生素	pregnant	怀孕的,怀胎的,[喻]孕育着的,充满的,富有的;意义深长的,含蓄的;富于想象力的,有创造力的;富于成果的,多产的
get along	过活,生存	lactate	分泌乳汁;喂奶,授乳;乳酸盐(或酯)calcium ~ 乳酸钙
metabolism	新陈代谢,代谢(作用)	intake	吸入,纳入,收纳;纳入(数)量;(水、气体流入沟、管的)入口;被收纳的东西;[医]摄取 ~ of food 食物摄取
vital	生命的;生机的;维持生命所必需的	genetic	创始的,发生的;遗传学的
nutritive	营养的,滋养的,食品的,食物的	chronic	长期的,慢性的;惯常的,经常的;剧烈的,顽固的;患慢性病的人
macronutrient	宏量营养素	chronic infection	传染,侵染;传染病;影响,感染
micronutrient	微量营养素		
micro-	小,微,微量,百万分之一;放大,扩大,如 microphone, microscope		
ascorbic acid	抗坏血酸		
thiamine	硫胺素		
riboflavin	核黄素,维生素 B ₂		
folacin	叶酸(= folic acid)		
pantothenic acid	泛酸		

Reading Material

Food nutrition and health

An important part related to the function of the products is nutrition and health. Provision of calories has dominated the food industry for many years. Firstly the basic need was to provide calories and then in recent years, the push to reduce calories. Early products in small groceries at the beginning of the 20th century were bread, butter and margarine, sugar, jam, bacon, beef suet-all high energy foods. In