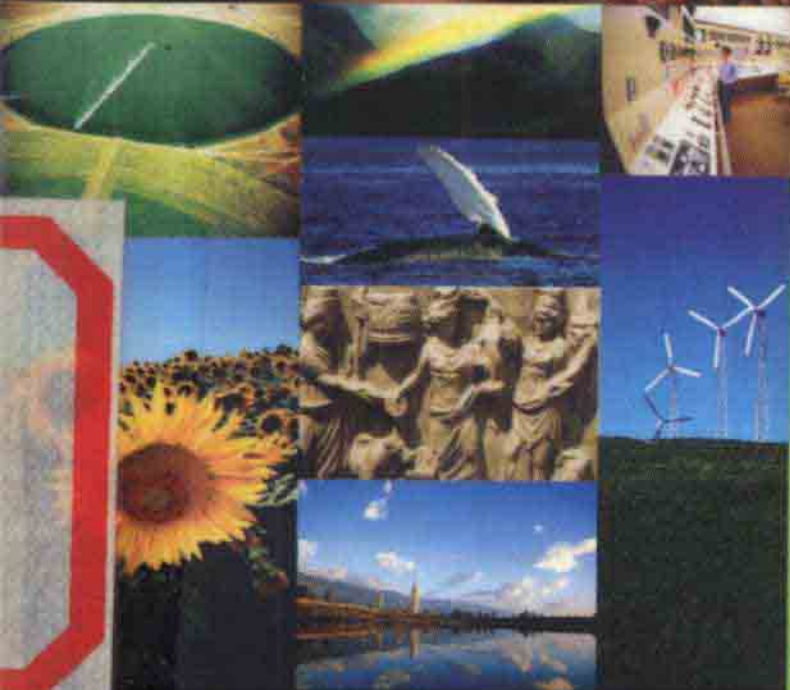




Diet and Health 饮食与健康

Joseph V. Rodricks (美) 著



外语教学与研究出版社
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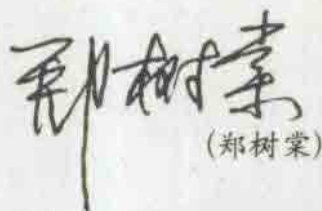
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序 言

英语学习，除了在课堂内下工夫外，课外的阅读也很重要。课外除了读文学类的文章，也要读一些非文学类的文章。这套“小书”就是非文学类的文章，涉及文学以外的许多领域和学科。每本书都由一两个相关的主题构成，图文并茂，融知识性和可读性于一体。这些“小书”谈到的很多东西都和我们的日常生活息息相关；更重要的是“小书”体现了人类要与自然和谐发展的思想，这与我们社会和时代的发展是吻合的。读一些这方面的书不仅有利于学生提高英语水平，拓宽自己的视野，也符合当今大学生要全面发展的要求。在“复合型”人才越来越受重视的今天，我很乐意向大学生朋友推荐这套“小书”。


(郑树棠)

《新视野大学英语》总主编
首届“国家级教学名师奖”获得者

Introduction

Humans consume food to survive: we get energy from calories and balanced nutrition from vitamins and minerals. Even the simplest foods, however, contain hundreds of organic chemicals that affect the human body. Some chemicals enter the body through natural contaminants such as bacteria that cause food to spoil. Still others may be components of chemical additives such as antibiotics and pesticides designed to protect food. Epidemiologists studying the origins of disease often find that illness can be traced to food.

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Diet and Health

饮食与健康

The environment in which human beings exist is chemically complex. No part of that environment, however, is as chemically complex as the food and beverages humans routinely consume. The human diet includes substances that provide nutrition, such as proteins, carbohydrates, fats, vitamins, and minerals. The human diet also includes other natural parts of plant and animal



products, mostly organic (carbon containing) chemicals. These chemicals add flavor and aroma to food. Coffee, for example, contains nearly two hundred organic chemicals—all natural parts of the coffee bean. There are hundreds of thousands of other non-nutritive food substances that people eat. Few of them have been studied.



人类赖以生存的环境有着复杂的化学组成。但与我们日常消费的食品和饮料相比，这一环境的任一部分的化学组成都要简单得多。人类食物中含有许多营养成分，如蛋白质、碳水化合物、脂肪、维生素和矿物质；它还包括动植物产品中的天然成分，主要是有机（含碳）化学物质。这些化学物质

可以增加食物的味道与香味。例如,咖啡中含有近200种有机化学物质,所有这些成分都是咖啡豆的天然组成成分。另外,人们还从食物中摄入成千上万种非营养物质,但却很少对它们进行过研究。

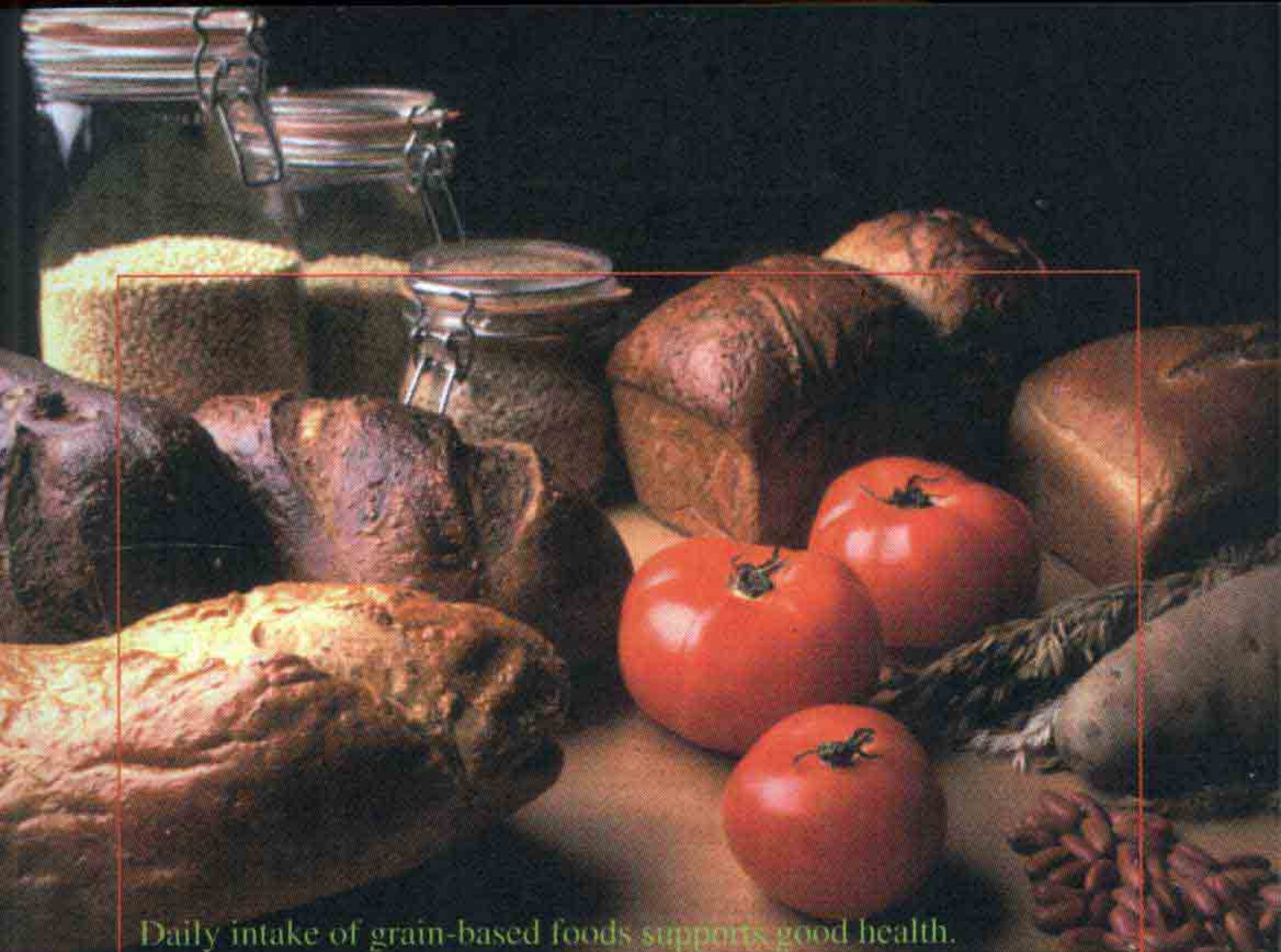
Human beings have never been content to leave their diets alone. Since ancient times they have added various substances to their food. They have used both natural and synthetic substances to change their food and to improve its taste and texture. They have also added substances to add sweetness, color, or fat to their food. In more recent times, people have introduced new food processing and packaging methods. Most of these methods rely on chemical



substances that are added to food products to preserve them. Usually these chemicals are added in small amounts.

人类一直都在不懈地改善饮食。自古时起，他们就开始往食物中添加各种物质。他们利用天然和人造物质来改变食物，改善其味道与结构。他们还往食物中添加一些物质，使其更加香甜、更富色彩或含有更多的油脂。在近代，人们又采用了新的食物加工与包装方法。这些方法大部分都依赖于某些化学物质：人们将它们加入食物中使其长时间保存。通常这些化学物质的添加量都不大。





Daily intake of grain-based foods supports good health.

每天摄入以谷物为主的食物有利于健康。

Problems arise when food crops are treated with pesticides. Sometimes these pesticides remain on the food as a residue (a thin covering). Typically, pesticides are not beneficial for humans to eat. In the same way, drugs used in animal care sometimes remain in meat, milk, and eggs. These additives

increase the numbers of chemicals present in the human diet.

但是，当人们给食物作物喷洒农药时，问题就产生了。有时这些农药会残留在食物上，形成薄薄的一层。而通常农药是不适于人们食用的。同样，动物治病防病中使用的药物有时也会残留在肉、奶、蛋中。这些添加成分无疑增加了人类食物中化学物质的含量。

Finally, there are some substances that contaminate the diet. Various microbial agents (such as bacteria) can contaminate improperly treated or protected food. Some microbes can cause serious illness. Industrial chemicals such as lead, mercury, and



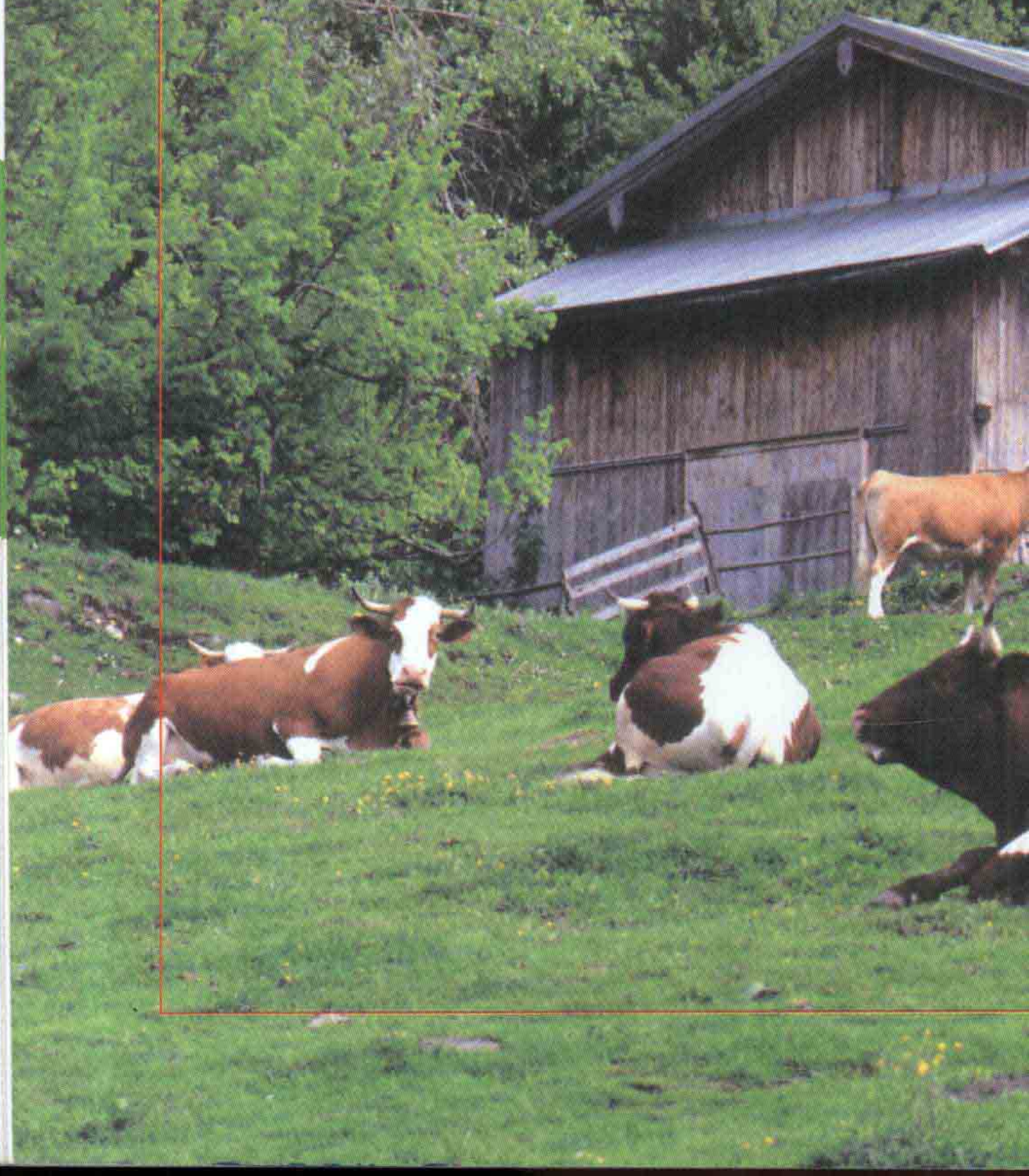
PCBs can also enter the food chain. These chemicals are dangerous although many foods naturally contain small amounts of some of these substances.

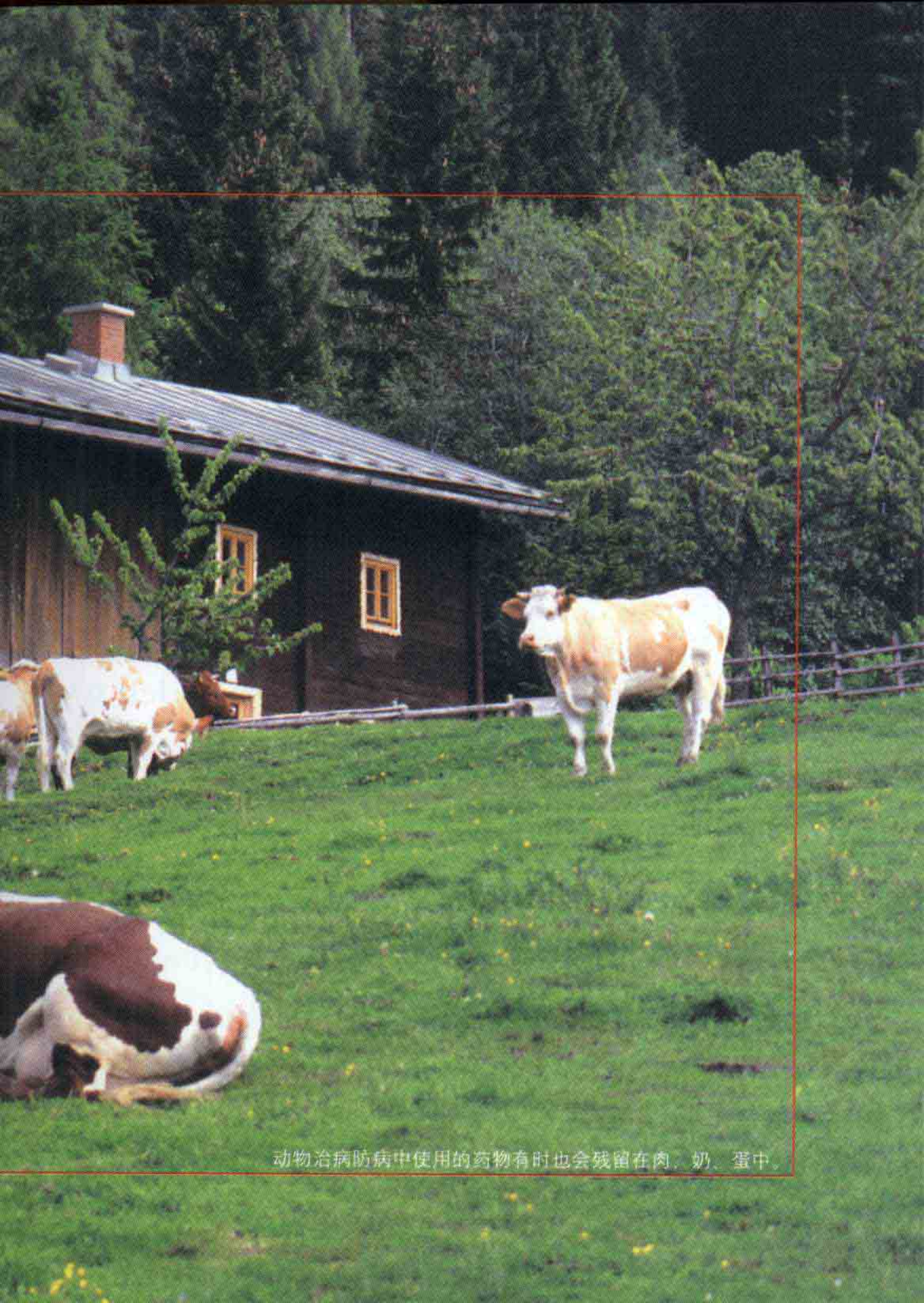
最后，还有些物质会污染食物。如果食物处理或保存不当，它们就有可能受到各种微生物（如细菌）的污染，其中一些还会导致严重的疾病。工业化学物，如铅、汞与多氯化联苯，也能侵入食物链。尽管许多食物本身就包含少量的这类物质，它们还是极具危险性的。

There are six main questions that must be answered to understand the role of diet in human health: (1) What levels of calorie and nutrient intake increase



Drugs used in animal care sometimes
remain in meat, milk, and eggs.





动物治病防病中使用的药物有时也会残留在肉、奶、蛋中。

health benefits and lower the risk of disease? (2) What natural, non-nutritive parts of the diet pose risks to health—or improve health—and at what levels? (3) What contaminants—either natural or industrial in origin—are dangerous, and at what levels are they dangerous? (4) Do substances added to the human diet pose health risks? (5) Which people are most affected by substances added to the diet, and in what amounts? What factors—such as age, sex, genetics—affect an individual's risk of being affected by factors in the diet? (6) What diet is best for promoting health and preventing disease?

要理解饮食对人类健康的作用，
我们必须得先弄清 6 个主要问



题：(1) 人们摄入多少卡路里的热量与营养成分才能对健康有利，并降低生病的危险？(2) 食物中哪些天然非营养成分会对人类健康造成威胁，哪些则有利于健康？摄入多少才会如此？(3) 哪些污染物，不管是天然的，还是源自工业生产，会威胁人类健康？到何种程度会如此？(4) 人类食物中添加的物质是否会影响健康？(5) 哪些人群最易受食物添加剂的影响？产生不良影响的添加量是多少？哪些因素，比如年龄、性别或遗传，会决定一个人受食物成分影响的程度？(6) 哪种饮食最有利于改善健康状况，并防止疾病的发生？



Three investigative tools are used to study these questions. Studies in human