当代研究生英语阅读教程

Active English Reading for Postgraduates

2

主　编　施发敏

高等教育出版社
HIGHER EDUCATION PRESS

当代研究生英语阅读教程

Active English Reading for Postgraduates

2

主　编　施发敏
副主编　李媛媛　唐烈军
编　者　（以下按姓氏笔画排列）
李媛媛　张　文　胡远瑾
姜　霞　施　慧　唐烈军

教育出版社
ION PRESS

图书在版编目(CIP)数据

当代研究生英语阅读教程. 2/施发敏主编. —北京：高等教育出版社，2009.9
ISBN 978-7-04-028150-7

Ⅰ. 当… Ⅱ. 施… Ⅲ. 英语-阅读教学-研究生-教材
Ⅳ. H319.4

中国版本图书馆 CIP 数据核字(2009)第 162072 号

策划编辑 周俊华　　**责任编辑** 李 晨　　**封面设计** 顾凌芝　　**责任印制** 尤 静

出版发行	高等教育出版社	**购书热线**	010-58581118
社　　址	北京市西城区德外大街 4 号	**免费咨询**	400-810-0598
邮政编码	100120	**网　　址**	http://www.hep.edu.cn
总　　机	010-58581000		http://www.hep.com.cn
		网上订购	http://www.landraco.com
经　　销	蓝色畅想图书发行有限公司		http://www.landraco.com.cn
印　　刷	北京凌奇印刷有限责任公司	**畅想教育**	http://www.widedu.com
开　　本	850×1168　1/16	**版　　次**	2009 年 9 月第 1 版
印　　张	19	**印　　次**	2009 年 9 月第 1 次印刷
字　　数	485 000	**定　　价**	29.00　元

本书如有缺页、倒页、脱页等质量问题，请到所购图书销售部门联系调换。

物料号　28150-00

前言
FOREWORD

《当代研究生英语阅读教程》(Active English Reading for Postgraduates)是根据《非英语专业研究生英语教学大纲》和当代研究生英语发展及时代要求的原则,本着有效地提高学生的英语阅读能力、全面提升研究生英语语言素养的目的而编写的。

语言文化知识的获取离不开真实的语言学习环境。中国学生在本土学习英语,要想创建真实的语言环境并非易事,而阅读是语言和文化学习的重要手段和途径。通过阅读,学生可以身临其境,获取大量语言知识,从而发展和提升英语综合应用能力。与此同时,通过广泛接触内容丰富、文体不同的文章,学生会进一步扩大和掌握英语词汇,熟悉各种语言现象和写作技巧,全面提升整体英语水平。

为此,我们特地编写了《当代研究生英语阅读教程》。该教程内容经过严格的筛选和科学的设计,在选材、内容编排、练习设计等方面体现以下特点。

既注重时代性,又突出经典性

注重时代性。本教程很多文章选自近年国外权威的报刊、杂志,具有鲜明的时代感,主要体现在选择当今社会的热门话题,例如:能源危机、环境保护、国际经济、金融海啸、器官再造等,主题丰富,语言地道,既体现时代特色,又注重文化内涵及思想深意,反映时代发展,展现语言魅力。

突出经典性。在注重时代性的同时,本教程也注重从经典的英文原版著作中选材,内容涉及哲学、经济学、文学、历史、文化、心理学等方面,充分体现其经典性。通过阅读这些文章,学生可充分体验经典的魅力,品味英

语国家的文化，培养文化意识，提高对不同文化的理解，培养在跨文化交际情境中恰当、得体地使用地道英语的能力，从而达到拓宽知识视野、提高文化素养的目的。

融知识性和可读性于一体

本教程分为两册，内容新颖、材料真实、题材广泛，涉及工业、农业、文学、医学、艺术、历史、科学、教育、能源、环境、社会等36个主题。选文兼顾不同学科，融知识性、趣味性和可读性于一体。为更好地体现可读性和趣味性，我们特地安排了4个“轻松阅读”单元，相信将会极大地激发学生的兴趣，让学生在感知英语语言魅力的同时，其科学素养和人文精神在潜移默化中得到培养。

本教程按主题设计单元，可满足学生不同的阅读需求。学生既可以根据自己的具体学习情况和兴趣爱好进行选择性地阅读，提高知识深度和广度；还可以循序渐进，按本教程的内容安排，系统地进行学习。

练习形式多样，突出综合技能培养

练习设计注重综合技能培养，所有练习富有启发性和挑战性，既有词汇层面的，也有篇章理解方面的，还有要求学生归纳总结方面的，从而达到全面提升英语综合应用能力和提高学习策略与创新思维能力的目标。

本教程不仅适用于在校研究生，对各类同等学力申请硕士人员、出国留学生及广大英语爱好者也同样具有一定的参考价值。

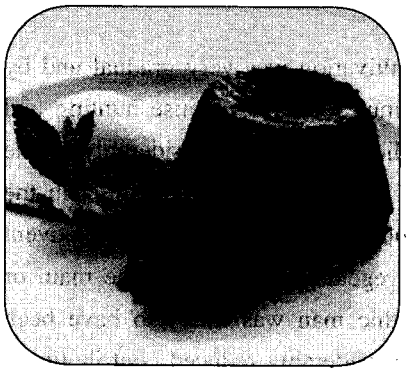
在本教程的编写过程中，我们参阅了大量图书资料和网上资料，特向这些资料的作者、编者和出版者表示衷心的感谢。同时，我们还得到了高等教育出版社的大力支持，对此我们深表谢意。

由于编者水平有限，难免有错误与疏漏之处，恳请广大读者及同行专家不吝赐教。

编　　者
2009年7月

目录
CONTENTS

Unit 1 Food and Diet



FOOD is any substance, usually composed of carbohydrates, fats, proteins and water, that can be eaten or drunk for nutrition or pleasure. In nutrition, the diet is the sum of food consumed by a person or other organism. Dietary habits are the habitual decisions an individual or culture makes when choosing what foods to eat. Individual dietary choices may be more or less healthy. Dietary habits and choices play a significant role in health and mortality, and can also define cultures and play a role in religion.

Part 1 Reading Comprehension (Skimming and Scanning)

Food: Past and Present

What is food? Looked at in biological terms, it would appear that food is merely a source of energy and nutrients essential for life; however, viewed from an *anthropological* (人类学的) perspective, it becomes evident that food has played a central role in human history. While the everyday quest for food shaped the life of prehistoric man, the onset of the production of a reliable and sufficient supply of food is likely to have led to the rise of civilizations and to human population expansion. Furthermore, the ability of man to colonize almost every part of the world is at least in part due to his adaptability with regard to food. Not only are humans *omnivorous* (杂食的), they have also shown remarkable ingenuity in identifying and preparing nutritious foods out of unpromising materials. For example, bitter *cassava* (木薯), a root crop that contains toxic levels of *cyanide-producing* (产生氰化物) compounds, comprises, after thorough processing, the major food

item in the diet of millions of people worldwide.

Food for prehistoric man

The evidence used to determine which foods were eaten by prehistoric man is scarce and can be very difficult to interpret. The majority of clues about food usage come from the study of collections of animal bones, sea-food shell mounds, plant food remnants, and *faecal*（排泄物的）remains, at or close to sites of human habitation. Studies of these food leftovers provide some hints as to what foods were available to and used by prehistoric man.

Until 10,000 ~ 12,000 years before the present (BP), humans relied on hunting and gathering for their food. They hunted wild animals such as *gazelle*（瞪羚）, antelope, and deer, as well as fish, crabs, and migratory waterfowl, and gathered foods including shell-fish, root vegetables, grains, pulses, nuts, and fruit. The period between roughly 11,000 and 6,000 years BP, which has been termed the *Neolithic*（新石器时代的）, was a time of crucial and widespread agricultural revolution. Wild crops such as wheat and barley began to be cultivated, and wild animals such as sheep and goats were tamed and then domesticated.

This shift from hunting and gathering to domestication and cultivation was very gradual and by no means universal (indeed some small isolated populations continue today to practise hunting and gathering as a mode of subsistence). However, the nature of the diet was altered considerably by the advent of farming. Pre-Neolithic man may well have consumed a large proportion of his diet in the form of animal products, with a lesser contribution coming from plant items. In contrast, the advent of plant cultivation led to certain crops, such as grains and root vegetables, becoming the main or staple part of human diets. As a consequence, the diet of Neolithic man was likely to have been dominated by these staple crops, with animal products making a considerably reduced contribution.

Food acquisition by hunting and gathering was time consuming and unpredictable. With the advent of farming, Neolithic man was, for the first time in human history, able to provide himself with a reliable and sufficient source of food. A major consequence of this was that as humans were no longer merely struggling from day to day to find sufficient food to survive, they could devote time to other matters. Most importantly, the availability of sufficient food led to a massive and unprecedented growth in the human population.

Food for modern man

Over the past 2,000 years there have been substantial increases not only in the quantity but also in the quality of the food available to man. Early inventions such as new forms of plough enabled the cultivation of virgin lands, and practices such as crop rotation, which allowed soil to become reinvigorated between plantings, significantly increased food production. The mechanization of seed planting, harvesting, and *threshing*（打谷）during the Industrial Revolution made agricultural production even more efficient.

However, this enhanced production led to a new set of problems, as it demanded innovative storage techniques and improved transport capabilities to avoid the spoiling of produce before it was consumed. Salting and smoking had long been known as methods for preserving foods over extended

periods of time. Canning was perfected in the early 1800s and quickly became popular as a convenient, cheap, and safe method of conserving pre-cooked food. Chilling or freezing was originally only available as a method of food preservation to those with a ready supply of ice; however, with the invention of ice-making machines in the 1830s, ice became widely available, and fresh fruit, meat, and fish could be conserved. Finally, the advent of fast and refrigerated transportation enabled fresh foods to be delivered in their original form to consumers around the world.

In order to ensure that the food supplied to the public is of adequate quality, many countries have set up agencies to monitor food safety. These agencies are designed to protect the consumer and improve the health of the public in relation to food by providing advice and information on food consumption. Furthermore, such agencies develop policies related to food safety, and, by carrying out their own research, monitor relevant developments in science, technology, and other fields of knowledge related to food.

As a result of the slow but continual development of production, preservation, and safety technology, contemporary humans in developed countries have access to an astonishing quantity and diversity of foods. In the past, only locally-produced, in-season foods were available to consumers, but modern technology has now made it possible to supply consumers with foods produced in countries from around the world throughout the year.

Food for thought

The question of whether there is sufficient food to feed the world's ever-increasing population has exercised the minds of philosophers, economists, *agronomists*（农学家）, and *demographers*（人口统计学家）for many centuries. In 1798, Thomas Malthus, an English political economist, wrote a paper entitled *An essay on the principle of population*, which still provokes heated debate. Malthus suggested that the world's population, growing at a geometric rate, was increasing at a much faster rate than the world's food production, which only increased arithmetically. Malthus argued that if a balance between population and food was not maintained, and the world's population grew to a size that was not sustainable by contemporary food production practices, then the consequence would be widespread famine.

The opposing viewpoint to that of Malthus suggests that increased population size is both a sign and a cause of prosperity, and that flexible and efficient markets can overcome any problems associated with an imbalance between population size and food production. This argument assumes that improving technology via scientific and agricultural innovation will ensure a steady and continual increase in food production. To support this assumption, anti-Malthusians suggest that increased population size will lead to a larger number of farmers tending ever-larger amounts of land, and that this will in turn precipitate innovation in land use and agricultural techniques.

There is good evidence that food production and crop yields have indeed increased sufficiently to cope with the increase in population size, but there are worrying signs that the rate of increase of crop yields is declining. This slowdown is no doubt due to a combination of causes: farmers may well be approaching the absolute maximum possible crop yields, and the cumulative effects of environmental

degradation, partly caused by agriculture itself, may also be responsible. Considerable evidence suggests that, at least in some of the world's poorest countries, years of intensive agriculture, often coupled with long periods of drought, have led to the nutrient-exhaustion and *desiccation* (干涸) of farming land. Such land is significantly less fertile and quickly becomes unable to support an ever-increasing population. Areas where this has occurred have been labelled "demographically entrapped", as their projected population exceeds that which can be fed by local food production capabilities. In the absence of international food aid programs, these countries, which typically lack trade and migratory safety valves, are thought to be facing uncertain futures of starvation, disease, and internal conflict.

Since Neolithic times, humans have carefully selected and bred plant and animal organisms that have demonstrated favorable traits. These selectively-enhanced descendants, with characteristics such as greater yield or improved flavor, often show little resemblance to the wild varieties. This ancient technology was further exploited between 1960 and 1980, during which laboratory-bred, high-yield cereal grains fed much of the world's expanding human population: the so-called "Green Revolution". However, these increases in yield may have led to environmental degradation through the exhaustion of ecological capital such as topsoil and groundwater. In response to the need for more productive and more environmentally friendly crops, modern advances in biotechnology have produced genetically-modified (GM) crops. GM crops typically contain gene alterations which confer agronomic benefits such as resistance to pests or to herbicides. These traits can reduce costs to the farmer and can also be beneficial to the environment, as they theoretically decrease the amount of insecticides and herbicides required. However, while such advances may be extremely useful in balancing world food production with the population, there has been considerable public concern about this new technology and much more long-term research is still required.

Ironically, while the health of people in developed countries suffers from an excess of food leading to obesity, many developing countries face a stark future. Recent estimates have suggested that almost one-tenth of the world's population is malnourished in ways that impair health, and that the absolute number of malnourished persons, especially children, continues to grow. It is clear that food will continue to play a crucial role in human history for the foreseeable future.

(1,578 words)

Exercises

I. **Directions:** *Decide whether the following statements are true or false according to the passage. Write "T" for true and "F" for false in the space provided.*

_____ 1. The rise of civilizations and human population expansion might be closely related to the onset of the production of a reliable and sufficient supply of food.

_____ 2. The plants containing toxic compounds cannot be eaten even after thorough processing.

_____ 3. Plenty of evidence has been available to determine which foods were eaten by prehistoric man.

_____ 4. The shift from hunting and gathering to domestication and cultivation was very gradual and by no means universal.

_____ 5. The agricultural production became even more efficient due to the mechanization of seed planting, harvesting, and threshing during the Industrial Revolution.

_____ 6. The agencies to monitor food safety develop policies, and, by producing their own food, monitor relevant developments in science, technology, and other fields of knowledge related to food.

_____ 7. Philosophers, economists, agronomists, and demographers have thought about the question of whether there is sufficient food to feed the world's ever-increasing population for many centuries.

_____ 8. It has been proved that food production and crop yields have indeed increased sufficiently to cope with the increase in population size.

_____ 9. The slowdown of the increasing rate of crop yields is no doubt caused by agriculture itself.

_____ 10. Humans selected and bred plant and animal organisms which have demonstrated favourable traits only in recent centuries.

Ⅱ. Directions: *Answer the following questions based on the reading material.*

1. What is the definition of food viewed from a biological perspective?

_____

2. What did humans rely on for their food 10,000 ~ 12,000 years before the present?

_____

3. When was canning perfected and became a convenient, cheap, and safe method of conserving pre-cooked food?

_____

4. What is the conclusion of Malthus concerning food supply and population increase?

_____

5. What are the advantages of GM crops?

_____

Part Ⅱ Reading Comprehension (Reading in Depth)

Passage 1

A New Diet Equation

No diet has ever been able to defy the laws of thermodynamics. Whether you go low carb, low

fat, low this or low that, the only way to lose weight is to burn more calories than you consume. Even the new "**it**" diet, **volumetrics** — which uses fancy terms such as energy density and **satiety** to describe why filling up on certain low-calorie, water-based foods like celery makes you less hungry — can't miraculously melt away fat. But new research indicates that where on your body you pack on extra kilograms may provide a clue to determining which diet will work best for you.

It is already widely accepted that even the most rigorously adhered-to diet will not produce the same results from person to person. Some of us are simply genetically predisposed to burn more calories more efficiently than others. Restricting those calories, as you do on a diet, will similarly lead to differing results. But the biggest wild card in the diet game may be how you crank out **insulin**.

As digestion breaks down much of what we eat into sugary, energy-rich fuel that helps keep us on the go, insulin triggers the body to store excess sugar floating around the bloodstream as fat. Insulin was particularly important in our caveman days, when we needed the energy from one meal to last as long as possible, until we had hunted down the next. "Insulin is the hormone of feast," says Gary D. Foster, director of the center for obesity research and education at the Temple University School of Medicine in Philadelphia.

But nowadays, with food so plentiful that groups like Weight Watchers are making a fortune promoting portion control, our insulin is often forced to work overtime, sweeping up the excess carbohydrates we pour into our system from candy bars or fruit juice or starchy foods like pasta. Sometimes insulin can do such a good job of responding to a spike in blood sugar that it causes those levels to quickly drop. This in turn can lead to feelings of hunger shortly after a big meal. For this reason, many scientists think insulin's ride on the blood-sugar **roller coaster** may be a stimulus for overeating and, as a result, weight gain. It would be nice if there were an easy way to determine how aggressive your particular insulin response is, and now it appears there is.

In a study of 73 obese adults published last month in the *Journal of the American Medical Association* (J. A. M. A.), Dr. David Ludwig, director of the obesity program at the Children's Hospital Boston, and his colleagues looked at high- and low-insulin secretors. People who rapidly secrete a lot of insulin after eating a little bit of sugar tend to carry their excess weight around their waist — the so-called apple shape. People who secrete less insulin carry their excess fat around their hips — the pear shape. Those differences are more than **aesthetic**. The study found that high-insulin, apple-shaped people will not lose as much weight on a diet that restricts fat calories as they will on a low-glycemic-load diet — one that restricts simple carbohydrates from sugary and starchy foods like cookies and potatoes. Low-secreting, pear-shaped people will do equally well on either type of diet. But the results went deeper than simply how much weight was lost.

Over the course of six months, high-secreting, apple-shaped people lost an average of 6 kg on a low-glycemic diet and just 2.3 kg on a low-fat diet. Low-secreting, pear-shaped people lost around 4.5 kg on both diets. At the end of 18 months, however, the pear-shaped people had gained back half of the weight they had lost on either diet. Apple-shaped people gained back almost 1.4 of the

2.3 kg they lost on the low-fat diet but kept off all the weight they had lost on the low-glycemic diet. While the study is revealing, almost nothing about it is simple. It's not clear just what the mechanism is that links body shape and insulin levels — a crucial detail if scientists are going to understand the full implications of their findings. More importantly, nothing suggests that apple-shaped people should simply dash out to sign up for an **Atkins**-type low-carbohydrate diet.

True, a large report published in J. A. M. A. earlier this year showed that regardless of body shape, Atkins produces the greatest short-term weight loss. ("If you want to look good in your wedding gown, I would go for Atkins," says Dr. Anastassios Pittas, assistant professor of medicine at the School of Medicine of Tufts University.) But adherents tend to fall off the low-**carb** wagon and quickly gain back unwanted kilos. What's more, the Atkins diet allows only a small fraction of calories to come from carbs, compared with 40% on the new study's low-glycemic regimen. The more balanced diet allows — indeed, encourages — people to eat whole-grain cereals and other complex carbs that take longer to digest and thus don't cause the rapid fat production that accompanies spikes in blood sugar. Atkins' more restrictive regimen may reduce fat even faster, but people lose weight on both diets. "Atkins just does it with a **bludgeon** instead of a **chisel**," says Ludwig.

What's clearer from the study is that apple-shaped people should probably not choose low-fat diets, because the white rice or other types of simple carbs they are still allowed to eat may have a yo-yo effect on blood-sugar levels, making them hungrier sooner. The study didn't evaluate whether these people would do better on an Ornish-style vegetarian diet that restricts fat intake and has dieters make up the difference by eating lots of complex carbs, such as brown rice and oats — which are high in fiber and tend to make people feel fuller longer — as well as low-sugar fruits like blueberries.

For apple-shaped people hunting for the right diet, a blood test to determine insulin levels may help confirm which regimen will work best for them. But for pears, it remains a toss-up. So until scientists find out more about their body shape, they'll have to lose in the old-fashioned way: eating less.

(1,014 words)

New Words & Expressions

it /ɪt/ *adj.* 时髦入流,备受青睐的
satiety /səˈtaɪətɪ/ *n.* 饱足感
roller coaster 过山车
carb /kɑːb/ *abbr.* carbohydrate, 碳水化合物
Atkins /ˈætkɪnz/ *n.* 阿金饮食法:一种少吃淀粉多吃肉的减肥法
chisel /ˈtʃɪzəl/ *n.* 凿子
volumetrics /ˌvɒljʊˈmetrɪks/ *n.* 一种减肥方法
insulin /ˈɪnsjʊlɪn/ *n.* 胰岛素
aesthetic /iːsˈθetɪk/ *adj.* 有美感的
bludgeon /ˈblʌdʒən/ *n.* 棍棒