**Unit Five**

**Food and Health**

**Objectives**

Students will be able to:

1. Grasp the main idea (that the Organic food industry in China will be developed due to the emergency of the concept of healthy eating) and structure of the text (introduction of the topic by the information of organic food; development of the article by the organic consumption; conclusion of the article by a statement);
2. Appreciate how the author achieves coherence of the essay;
3. Acquire the key language points and grammatical structures in the text;
4. Participate in a series of reading, listening, speaking and writing activities related to the theme of the unit.

**Suggested Teaching Steps**

Lead-in

Text A

* Word Study
* Sentence Study
* Structure Study

After-reading

Additional Materials

**Lead-in**

**Directions: Watch a video and answer the questions.**

1) What does “organic” mean?

**Organic means that there aren’t any genetically modified ingredients, that no chemicals were used to kill bugs and weds and so on.**

2) Does organic food mean that the ingredients are nutritious?

**No, it doesn’t.**

**Text A: The Organic Food Market in China**

1. In China, most organic foods are cultivated by organized systems, not like other countries where organic foods are supplied by individuals. There are three mains organic food production models in China: the first one is that big company leases land from farmer and pays them. The second model is that under the permission of local governments, big companies sign an organic food production contract with farmers. The third one is the organic producer association. Farmers set up an association by themselves to conduct large-scale organic food production.

2. Due to vast cultivation areas and various climates, diverse organic food can be grown in China. The main organic products exported are processed vegetables, soybeans, honey, grains, green tea, herbal medicines and beans, which are mostly raw and semi-processed.

3. The concept of organic food was introduced in China after the reform and opening-up policy. By 2018, China's organic agriculture acreage ranked third in the world, accounting for 4.5% of the total acreage of global organic agriculture and 50% in Asia. From2002 to 2013, many laws were introduced to regulate the orderly market environment of organic agriculture. Thus after 2013, organic agriculture in China entered a stage of rapid development.

4. Looking at the evolution of the market, we can definitely say that organic food in China has huge potential in international and domestic markets. Just in2018, domestic sales of organic products in China were about ￥63.15 billion, up 4.01% from ￥60.67 billion in 2017. Besides, e-commerce largely stimulated sales of organic food in China. At present the market size of organic food in China is still very low, which is far from meeting the needs of domestic and foreign consumers.

5. Most Chinese consumers are price sensitive and look for value when buying organic food. Are organic products safer than other products? Are foreign imports really worth paying 2-3 times the cost of domestic items? These are some questions Chinese consumers ask themselves when they buy organic food. For most Chinese consumers, they don't think that organic food's high price matches its nutritional value. And many consumers also consider organic food as a marketing term without real higher nutritional value. From a sustainability point of view, the organic food industry is not as friendly towards the environment as people imagined. The production of organic food also exhausts a large amount of carbon dioxide and occupies much more lands than traditional agriculture. It is obvious that organic food has more natural nutrients and secure guarantees, however most Chinese consumers consider it as a luxury.

6. China is becoming one of the largest organic consumers in the world. With such potential, it's not surprising that China has become a goldmine for international organic food suppliers. However, selling its products to Chinese consumers requires some adjustments and a specific strategy for cross-border e-commerce in China.

7. China is by far the largest e-retail market in the world. Thus, online retail and 020 models are the most efficient sales channels for organic food in China. In 2018. the amount of orders of Chinese online retailer for agricultural products surpassed 65.3 billion RMB, with a 233% increase from 19.6 billion RMB in 2017.

8. Many of China's food-trading firms have seen international orders fall by 75% because of foreign barriers to trade. Meanwhile, the country's catering industry has been shut down. thus the demand for organic food has plummeted. Zhou, president of one of China's largest crop growers estimated that the outbreak could reduce the company's exports for 2020 by more than 20%. Nonetheless, after the outbreak physical health has become the core of Chinese consumers' priorities.As Chinese consumers' incomes continue to rise and more are concerned with a healthy diet, the market size of natural health food is expected to approach 200 billion RMB in 2022. In light of this wave in health consciousness, some green food companies seized the opportunity. “Grain Mill” harvested 918 million RMB as the turnover and 105 million RMB for net profit of the 2th quarter in 2019 which turned it into the industry leader.

9. Due to many restrictions by the impact of the outbreak people have had to stay at home and cook by themselves. Thus, frozen and convenient foods became their first choice. According to research released by Nelson about how Asian consumers will eat post outbreak 86% of Chinese said they would eat at home more often than before the outbreak. In addition,80% will pay more attention to a healthy diet and 89% claimed that they prefer to buy fresh food online now. On the other hand health products such as vitamins, health teas and probiotics are also popular among Chinese consumers. As a result, the outbreak has changed many Chinese people's consumption behaviors; and health-related products will be favored during and after the special period.

10. Although Chinese consumers have huge demand for organic milk, China's milk industry will inevitably be impacted on production, transportation and sales. Focusing on China's biggest dairy company, it encountered a 10.7% contraction on its 1st quarter's turnover compared with 2019. However, despite the liquid milk revenue plummeting by 19%, its market share rose by 1.1%, arriving at 39.3%. Organic milk contains various nutrients and can help improve people's immune systems, which will help in producing a purchasing upsurge. Therefore, the sales of organic milk and milk powders by one domestic brand rocketed by more than 50% during the outbreak. Meanwhile, It is interesting to know that the sales of milk powder by foreign brands make up 60%-65% of total national sales in China. And as for most dairy companies, they are very optimistic about the organic milk market in China in the future.

11. China’s organic food market is developing rapidly,and the potential demand for organic food among Chinese consumers is enormous. As for the choice of organic food, imported organic food has quality advantage. Although the outbreak has depressed China's organic food industry, the emergence of a healthy diet concept and increasing demand for organic food will lead to a rapid recovery.

**Word Study**

**cultivate *v.*** to prepare land and grow crops on it, or to grow a particular crop 耕作；栽培；种植

e.g. Most of the land there is too poor to cultivate.

The villagers cultivate mostly maize and beans.

**supply *v.*** to provide something that is wanted or needed, often in large quantities and over a long period of time 供应，提供，供给

e.g. Electrical power is supplied by underground cables.

Three people have been arrested for supplying arms to the terrorists.

**regulate *v.*** to control something, especially by making it work in a particular way (尤指使按照某种方式运作而)控制，管理，调节，调整

e.g. You can regulate the temperature in the house by adjusting the thermostat

Her mother strictly regulates how much TV she can watch.

**evolution *n.***

1. the way in which living things change and develop over millions of years演化；进化

e.g. Darwin's theory of evolution has been questioned by many people

2) a gradual process of change and development 发展；演变

e.g.The new telescope has helped us to understand more about the evolution of the universe.

This product was an extremely significant step in the evolution of computer games

**potential *n.*** possible when the necessary conditions exist 潜在的，可能

e.g. A number of potential buyers have expressed interest in the company.

Many potential customers are waiting for a fall in prices before buying.

**exhaust  *v.***

1. to use something completely 用完；花光；耗尽

e.g. How long will it be before the world's fuel supplies are exhausted?

I'm afraid he's exhausted my patience.

1. to make someone extremely tired 使精疲力竭；使疲惫不堪

e.g. The long journey exhausted the children.

I've exhausted myself with all that cleaning.

**more...than** 与其……不如

e.g. He is more brave than wise.

He was more frightened than hurt.

**sustainability *n.***the quality of causing little or no damage to the environment and therefore able to continue for a long time (可)持续性，永续性

e.g. The company’s commitment to environmental sustainability.

It also addresses the negative implications of the sharp decline in birth rates for fiscal sustainability.

**as.….as**与……一样

e.g. He is as strong as a horse.

He doesn't study as hard as his brother.

**demand  *v.*** to ask for something forcefully,in a way that shows that you do not expect to be refused要求

e.g. I demanded an explanation.

The union is demanding a seven percent pay rise this year.

**impact *v.*** to have an influence on something影响

e.g. Falling export rates have impacted (on) the country's economy quite considerably.

**decorate *n.*** to make sth. look more attractive by putting things on it 装饰；装潢

e.g. They decorated the room with flowers and balloons.

The sitting room is decorated with coloured lights.

**depress *v.***

1. to cause someone to feel unhappy and without hope 使沮丧

e.g. This weather depresses me.

It depresses me to think that I'll probably still be doing exactly the same job in ten years' time.

1. to reduce the value of something, especially money 抑制，减少

e.g. A surplus of corn has helped depress the grain market/grain prices

The rise in the value of the dollar has depressed the company's earnings/profits this year.

**lead to:** If an action or event leads to something, it causes that thing to happen or exist 致使

e.g. Reducing speed limits should lead to fewer deaths on the roads.

Higher demand for goods and services leads to higher imports from abroad.

**Sentence Study**

1. (Para. 1) In China, most organic foods are cultivated by organized systems, not like other countries where organic foods are supplied by individuals.

【译文】在中国，大多数有机食品都是由有组织的系统种植的，不像其他国家那样，有机食品是由个人提供的。

1. (Para. 3) From 2002 to 2013, many laws were introduced to regulate the orderly market environment of organic agriculture.

【译文】从2002年到2013年，出台了许多法律来规范有机农业的有序市场环境。

1. (Para. 4) Looking at the evolution of the market, we can definitely say that organic food in China has huge potential in international and domestic markets.

【译文】纵观市场的演变，我们可以肯定地说，中国的有机食品在国际和国内市场具有巨大的潜力。

4)(Para.5) From a sustainability point of view, the organic food industry is not as friendly towards the environment as people imagined.

【译文】从可持续发展的角度来看，有机食品行业对环境并不像人们想象的那样友好。

5)(Para.5) The production of organic food also exhausts a large amount of carbon dioxide and occupies much more lands than traditional agriculture.

【译文】有机食品的生产还消耗了大量的二氧化碳，占用的土地比传统农业多得多。

6) (Para.6) However, selling its products to Chinese consumers requires some adjustments and a specific strategy for cross-border e-commerce in China.

【译文】然而，将其产品销售给中国消费者需要进行一些调整，并为中国的跨境电子商务制定具体的战略。

**adjustment *n.***

1. a small change 调整；调节；小改动

e.g. She made a few minor adjustments to the focus of her camera.

The invitations are almost ready, I just need to make a couple of adjustments.

1. the ability to become more familiar with a new situation(对新情况的)适应；适应力

e.g. He has so far failed to make the adjustment from school to work.

1. (Para. 8) As Chinese consumers incomes continue to rise and more are concerned with a healthy diet, the market size of natural health food is expected to approach 200 billion RMB in 2022.

【译文】随着中国消费者收入的持续增长和更多人关注健康饮食，预计2022年天然保健食品的市场规模将接近2000亿元。

**be concerned with**

1. worried 担心的；忧虑的；挂念的

e.g. I'm a bit concerned with your health

(2) involved in something or affected by it 有关的；牵涉到的

e.g. Her job is something concerned with computers.

**approach *v.*** to come near or nearer to something or someone in space, time, quality, or amount 靠近；接近；临近

e.g. We could just see the train approaching in the distance.

If you look out of the window on the left, you'll see that we're now approaching the Eiffel Tower.

1. (Para.8) In light of this wave in health consciousness, some green food companies seized the opportunity.

【译文】鉴于这一波健康意识，一些绿色食品企业抓住了这个机会。

**in light of:** because of 因为，鉴于

e.g. In the light of recent incidents,we are asking our customers to take particular care of their personal belongings.

**seize *v.***to take something quickly and keep or hold it抓住；夺过

e.g. I seized his arm and made him turn to look at me.

He seized the chance/opportunity of a free flight with both hands.

1. (Para.10) Although Chinese consumers have huge demand for organic milk, China's milk industry will inevitably be impacted on production, transportation and sales.

【译文】尽管中国消费者对有机牛奶的需求巨大，但中国牛奶行业将在生产、运输和销售等方面不可避免地受到影响。

1. (Para.10) Meanwhile, it is interesting to know that the sales of milk powder by foreign brands make up 60%-65% of total national sales in China.

【译文】同时，有趣的是，外国品牌的奶粉销售额占中国全国总销售额的60%—65%。

**powder *n.*** a loose, dry substance that consists of extremely small pieces, usually made by breaking something up and crushing it 粉末

e.g. A packet of white powder was found and police scientists are analyzing it.

You'll get more flavour from the spices if you grind them into a powder.

***v.*** to put powder on someone's skin 打粉

e.g. Powder the baby's bottom to stop it chafing.

**make up**

1. The make-up of something or someone is the combination of things that form 构成，组成

e.g. They argue that the membership of the Council does not reflect the racial make-up of the city.

Organizational ability is not one of the most obvious parts of his make-up.

1. to invent something, such as an excuse or a story, often in order to deceive制造，编造

e.g. I made up an excuse about having to look after the kids.

My dad was always really good at making up stories.

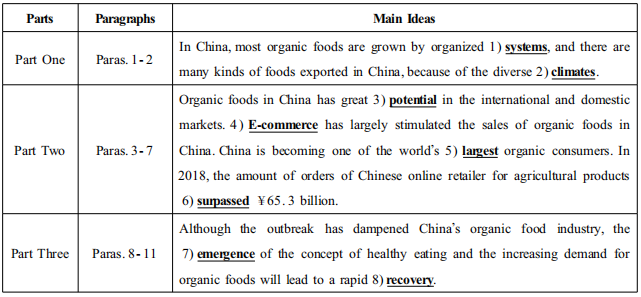
1. (Para. 11) Although the outbreak has depressed China's organic food industry, the emergence of a healthy diet concept and increasing demand for organic food will lead to a rapid recovery.

【译文】尽管大流行病爆发抑制了中国的有机食品行业，但健康饮食概念的出现和对有机食品需求的增加将导致其快速复苏。

**Structure Study**

**Summary of Text**

**Directions: The text can be divided into 3 parts. Fill in the blanks using appropriate words from the text to complete the main idea of each part.**

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**Directions: Choose the answer that best completes each sentence.**

1. Which of the following is NOT the main model of organic food production in China?

A) Big companies lease land from farmers.

B) Under the permission of local governments.

**C) The foods are supplied by individuals.**

D) Farmers set up an association by themselves.

2) When did China have the third largest organic agriculture planting area in the world?

A) In 2012. B) In 2013

C) In 2015.  **D) In 2018.**

3) Which of the following statements is FALSE?

A) The market scale of organic foods in China is still very low, far from meeting the needs of domestic and foreign consumers.

**B) Most Chinese consumers are not price sensitive.**

C) Most Chinese consumers see organic foods as a luxury.

D) China is becoming one of the world's largest organic consumers.

4) Which of the following is NOT the impact of the pandemic on China's organic industry?

A) Huge barriers to foreign trade.

B) The number of international orders fell.

C) The demand for organic foods has plummeted.

**D) Chinese consumers no longer care about their health.**

5) What is the author's attitude toward the future of China's organic market?

**A) Optimistic.** B) Pessimistic.

C) Indifferent. D) Hesitant.

**After-reading**

**Key to Exercises — Vocabulary**

**1.** 1) adjust 2) regulations 3) occupied 4) model 5) exceeding

6) customers 7) domestic 8) sensitive 9) concerns 10) revenue

**2.** 1) exceed 2) cultivated 3) regulating 4) estimated

5) suppress 6) consumer 7) except 8) organic

**Key to Exercises — Structure**

**1.**

1) led to fewer deaths on the motorways

2) led to the fire

3) led the police to a house near the harbor

4) make up almost a quarter of the hospital’s patients

5) made up of a number of different articles

**2.**

1) He often comes to school late, which makes his teacher angry.

2) It rained hard yesterday, which prevented me from going to the park.

3) This book, which you can get at any bookshop, will give you all the information you need.

4) His house, which he bought for $100,000 ten years ago, is now worth $350,000.

5) He went out of the room without a word, which clearly showed his disapproval.

**Key to Exercises — Cloze**

1) N 2) D 3) M 4) B 5) I 6) L 7) O 8) G 9) F 10) E

**Key to Exercises—Translation**

With the rapid development of society, the standard of living has gradually improved, and consumers’ awareness of health care has gradually increased. The demand for food quality is also increasing, and some of the characteristics of organic food can meet people’s needs. At present, many food companies regard organic food as an important development direction in the future. The health food market in China planted its roots in the 1980s. The National Food Safety Standard defines “health foods” as foods that claim to have specific health functions or vitamins supplements and mineral intakes that aim to enhance health along with a balanced diet. Such foods are suitable for a wide range of age groups and regulates body functions but do not cure disease. Since the opening of China’s economy, it has become the world’s biggest market in almost every product category. China’s cutting edge retail technology market in China has grown at such a staggering pace that it is now looked upon as the predictors of change in developing markets and countries.

**After-reading Activity**

**Activity One: Group Work**

**Directions: Form a group of 4. Each student in the group talks about what traits they have inherited from their parents.**

Has anyone ever said to you,"You have your mother's smile" or "your father's nose"? You have many traits that are very similar to your parents' traits because you inherited your genes from them. Half of your genes came from your mother, and half came from your father. Those genes all came together in the cell that eventually developed into you.



The above photos show human traits are controlled by a single pair of genes. The top ones show the traits that result if a person inherits one or two of the dominant alleles (等位基因) for that trait (see the tips below).Which form of each of these traits do you and your parents have?

Write E as the dominant (显性的) alleles and e as the recessive (隐性的) alleles in the table.

Then, talk with your group members about what traits you have inherited from your parents.

**·Tips for you:**

E+E=E; E+e=E; e+e=e.

(E: dominant allele; e: recessive allele)

|  |  |  |  |
| --- | --- | --- | --- |
| Genetic Traits | Your Father | Your Mother | You |
| 1. tongue-rolling |  |  |  |
| 1. long eyelashes |  |  |  |
| 1. Widow’s peak(额头的V型发尖) |  |  |  |
| 1. Hitchhiker’s thumb |  |  |  |

**Activity Two: Discussion**

**Directions: Discuss the following question with your partners in the group.**

You got your brown eyes from your mother, and your freckles from your father.But where did you get your thrill-seeking personality and talent for singing? Did you learn these from your parents or were they predetermined by your genes? While it’s clear that physical characteristics are hereditary, how about an individual's behavior,intelligence, and personality? Ultimately, here comes the old argument of nature vs.nurture.

Question: DNA or life experience, which determines who you are?

**Activity Three: Read and Speak**

**Directions: Organic foods are unadulterated foods produced without artificial chemicals or pesticides. But are organic foods a risk or a benefit? Read the following passage and then share your ideas with your classmates.**

**Organic Foods: The Benefits and the Risks**

Scientists have revealed that organic foods and non-organic foods contain pretty much the same amounts and kinds of vitamins and other nutrients. This might be surprising news for those of us who choose to buy organic believing it to be healthier. Researchers from America’s Stanford University concluded that there might not be any extra health benefits to buying organic, thus people might be better off saving their money and buying non-organic products. Lead researcher Dr. Crystal Smith-Spangle said there was no difference in the vitamin content in fruit, vegetables, meat and dairy products in organically- and conventionally-produced food. She said the only difference was slightly more phosphorus in the organic products.

Dr. Smith-Spangle’s review of over 200 different reports on organic food suggests people should perhaps revise their shopping choices, based on the levels of pesticides. Smith-Spangler said both organic and conventional foods rarely exceeded the allowable limits for pesticides in the USA. She said the evidence wasn’t too clear on whether the difference in pesticides would have an effect on health. She concluded by saying consumers should know there is overwhelming evidence that eating fruit and vegetables is good for your health, so people should eat more fresh products, whether they are organic or conventional. Organic foods accounted for $31 billion in sales in the USA last year, up from $3.6 billion in 1997.

**Additional Materials**

**Activity One**

**Directions: Describing the characteristics of organic food.**

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Organic food, fresh or processed food produced by organic farming methods. Organic food is grown without the use of synthetic chemicals, such as human-made pesticides and fertilizers, and does not contain genetically modified organisms (GMOs).

**Activity Two**

**Directions: Fill in the table below with the advantages and disadvantages of Organic Foods given underneath. If you can think of more, please add them to the table.**

|  |  |
| --- | --- |
| Advantages | Disadvantages |
| **Beneficial to the natural environment**  **Taste better**  **Healthier** | **High cost**  **Expensive**  **Low yield** |

Environmental protection, taste, health, cost, **price**, **amount**.

**Background Information**

1. **Gene Technology**

“Gene technology”, “genetic engineering”, “genetic modification” all mean the same thing. They’re all one type of modern biotechnology.

Until the 1950s, traditional biotechnology was a pretty imprecise and time-consuming affair. Then scientists discovered that the DNA wrapped up inside the cells of all living things (in coiled units called chromosomes) is like a blueprint that is passed from one generation to another. DNA is deoxyribonucleic acid, a chemical molecules- which contains in its long strands segments called genes, which are found in almost every cell of all living things. Each gene acts as a set of instructions coded with the genetic information which gives all living things their particular characteristics. They carry the information needed to create the proteins — the “doing” molecules — which perform highly specific tasks in the body (as enzymes, antibodies or hormones).

Modern biotechnology took off when scientists found that all living things use the same genetic message code. The aim of today's gene technologist is to introduce, enhance or delete particular characteristics of a living thing, depending on whether they are considered desirable or undesirable.

Gene technology is just one branch of modern biotechnology. It’s a range of techniques used in an attempt to control or modify genes,or most significantly, move them between two unrelated species (this is what’s called recombinant DNA technology).

Gene technology has other applications, too. In medicine, for example, “gene therapy” may give us treatments for those diseases attributed, in part,to a person’s genetic make-up. It’s also being used to produce new vaccines and new drugs,to map the human genome (the complete set of DNA in humans), to improve testing and diagnosis techniques and to create transgenic animals as potential organ and tissue donors.

1. **Frankenfood**

Opponents of genetically modified food often refer to it as “Frankenfood”, after Mary Shelley’s character Frankenstein and the monster he creates in her novel of the same name. The term was coined in 1992 by Paul Lewis, an English professor at Boston College who used the word in a letter he wrote to the New York Times in response to the decision of the US Food and Drug Administration to allow companies to market genetically modified food.

The authors of *The Frankenfood Myth* provide some support for genetically modified food: Henry I. Miller of Stanford’s Hoover Institution and Gregory Conko of the Competitive Enterprise Institute, a lobbying group funded in part by multinational corporations, make the case that foods modified by recombinant DNA splicing present no new or special dangers, but in fact may improve the lives of countless millions worldwide. However, these benefits have not been borne out in practice, due to farmers needing to repeatedly purchase expensive seed and use higher quantities of chemicals on the GM crops, which can harm neighboring farms.