UNIT

3

Food and Nutrition

Chapter 7

How the Kiwi Got Its Name

An ugly little fruit journeyed around the world before it got its new name.

Content areas:
- Food and Nutrition
- Agriculture

Chapter 8

The Fifth Taste

A French chef and a Japanese food chemist discovered the fifth taste, but no one believed them.

Content areas:
- Food and Nutrition
- Culinary Arts

Chapter 9

Eat Less, Live Longer?

You may be suprised by what scientists say could be the secret to a longer and healthier life.

Content areas:
- Food and Nutrition
- Biology

CHAPTER

7

How the Kiwi Got Its Name

1 TOPIC PREVIEW

A Which fruits do you eat the most? Number the fruits from 1 (the most) to 5 (the least). Share your answers with your classmates.

_____ orange

_____ banana

_____ apple

_____ melon

_____ _____ (your idea)

B Read the title of this chapter, look at the picture, and discuss the following questions.

1 Which fruits in the picture do you eat? Do you know their names in English?

2 How do you eat fruit? Do you eat it as dessert? As a snack? In a salad? Do you cook with fruit? Explain.

3 What do you think the reading is going to be about?

2 VOCABULARY PREVIEW

A Read the word lists. Put a check (✓) next to the words that you know and can use in a sentence. Compare your answers with a partner. Then look up any unfamiliar words in a dictionary.

Food and Nutrition	Academic Word List	Agriculture
mineral nutritious vitamin	expand source symbol	crop grow harvest (*v.*) import tax plant (*v.*) seed

The chart shows selected words from the reading related to food and nutrition, agriculture, and the Academic Word List (AWL). For more information about the AWL, see page 121.

B Fill in the blanks with words from Part A.

1. Fruits and vegetables need water to _____ .
2. The _____ for the U.S. dollar is "$."
3. Be careful when you eat this orange! One of the pieces may still have a/an _____ in it.
4. It is important to eat _____ food.
5. Farmers usually _____ in the spring.
6. The new _____ of corn will be ready in a few days.
7. Some people think _____ C prevents colds.
8. In the fall, apple growers _____ their apples.
9. Sugar producers asked the government to put a/an _____ on sugar from other countries.
10. Bananas are a good _____ of potassium.
11. Iron is an important _____ that your body needs to stay healthy.
12. They bought more land so that they could _____ their farm.

3 READING

Preview the questions in Reading Check Part A on page 54. Then read the story.

How the Kiwi Got Its Name

1 It is one of the ugliest little fruits in the world. Many people don't know how to eat it and have never tried it. This fruit, however, is a multi-billion-dollar super food, a food that is very nutritious.

2 This fruit's skin is brown and looks like the fur of a monkey. This explains one of the fruit's original names, which means "monkey peach" in Chinese. The Chinese first grew it in the Chang Kiang Valley about 700 years ago. It became a favorite food of the rulers. They liked the bright green color on the inside of the fruit and its sweet taste.

3 When people from other parts of the world began traveling in China, they discovered this unusual-looking fruit. In 1904, a woman from New Zealand, Isabel Fraser, traveled to China. There, she ate a monkey peach. She liked its taste, so she took some seeds back with her to New Zealand. She gave the seeds to Thomas Allison. Thomas and his brother, Alexander, owned an orchard.[1] Alexander Allison planted Fraser's seeds and harvested the first fruit in 1910.

[1] *orchard:* land where farmers plant fruit trees

The climate of New Zealand was perfect for the monkey peach, and soon the fruit became popular there. However, New Zealanders had trouble pronouncing the name in Chinese. They decided to call it a "Chinese gooseberry"[2] because the fruit is green, like a gooseberry. 4

By the 1950s, New Zealand had more Chinese gooseberries than they could eat. Fruit growers wanted to expand their markets to other countries. However, they had a problem. Some countries had an import tax on berries. To avoid the tax, the growers decided to change the name. The fruit looked like a tiny melon, so they decided to call it *melonette*.[3] This name seemed like a good idea until they learned that there was also a high tax on melons. What could they call it? 5

The fruit growers got together to discuss a new name. Someone suggested the name *kiwi*. The furry kiwi bird is a symbol of New Zealand, and New Zealanders are sometimes called Kiwis. The growers all agreed, and this small green Chinese fruit took the name of a symbol of New Zealand. 6

When the kiwi fruit first appeared in other countries, most people thought it was strange. They didn't know how to eat it, and they didn't like the rough skin. Eventually, people learned to remove the furry skin and eat the sweet inside part. They started to enjoy it. 7

Recently, food scientists have discovered some surprising information about the kiwi. One small kiwi fruit has more vitamin C than any other fruit. It is also a great source of fiber and provides the body with important minerals, such as calcium and potassium. 8

Today the kiwi is more popular than ever. It is a major crop in many countries, including Chile and Italy. In New Zealand, it is the number one export. Farmers there even export this healthy and delicious food to China, where it all began. 9

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[2] *gooseberry:* a type of berry; other examples of berries are strawberries, blueberries, and raspberries

[3] *melonette:* the French word for "little melon"

4 READING CHECK

A The kiwi fruit had different names over time. Write *1*, *2*, and *3* next to the first, second, and third names it had.

a ____ melonette

b ____ monkey peach

c ____ Chinese gooseberry

B Are these statements true or false? Write *T* (true) or *F* (false). Then correct any false statements.

1 ____ The kiwi fruit was from New Zealand originally.

2 ____ The skin of the kiwi is not like the skin of other fruit.

3 ____ Isabel Fraser planted the first kiwi seeds in New Zealand.

4 ____ On the inside, the kiwi is the same color as a gooseberry.

5 ____ Growers changed the name of the fruit to "Chinese gooseberry" because of import taxes in other countries.

6 ____ A "kiwi" may be a person, a bird, or a fruit.

7 ____ The kiwi fruit was immediately successful in other countries.

8 ____ The kiwi is nutritious because it has vitamins, minerals, and fiber.

5 VOCABULARY CHECK

A Retell the story. Fill in the blanks with the correct words from the box.

crop	expand	grew	harvested
import taxes	minerals	nutritious	plant
seeds	source	symbol	vitamins

In 1904, a woman from New Zealand, Isabel Fraser, traveled to China. There, she tasted a little brown fruit. The Chinese called it the "monkey peach." Fraser liked its taste, so she brought the first monkey peach _____[1] from China to New Zealand. She gave them to Thomas and Alexander Allison to _____[2] in their orchard. In 1910, the Allison brothers _____[3] their first _____[4] of fruit. The fruit _____[5] well in New Zealand, where it was called the "Chinese gooseberry."

By the 1950s New Zealand had more Chinese gooseberries than they could eat. Growers wanted to _____[6] their markets to other countries. However, many countries had _____[7] on berries, so the search for a new name began. The growers thought about "melonette," but there was a high tax in some countries on melons. They finally decided on *kiwi*, the name of the furry bird that is a/an _____[8] of New Zealand. Today many countries grow the kiwi fruit. It is a popular fruit all over the world.

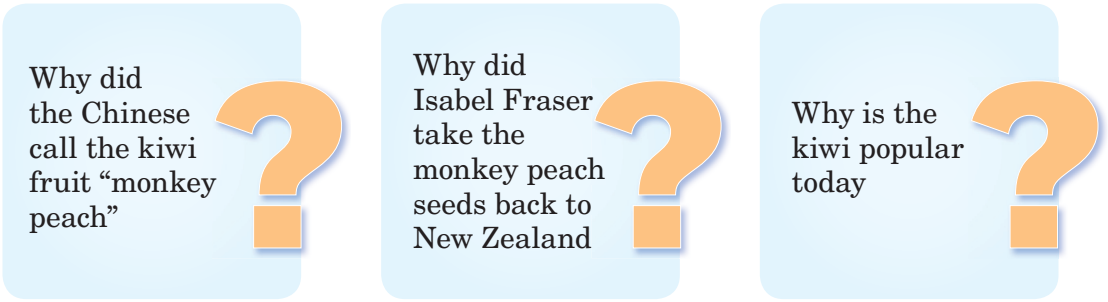
B Use words from the box in Part A to complete this advertisement.

Nutri-Delicious is an amazing new food. Add it to anything you eat for a wonderfully _____[1] health aid. Nutri-Delicious is full of _____[2] from A to Z and _____[3] like iron and calcium. It's also an excellent _____[4] of fiber. Don't wait. Buy Nutri-Delicious today!

6 APPLYING READING SKILLS

Asking and answering "Why?" questions *about information in a reading can help you develop critical thinking and reading skills.*

A Look back at the reading to find the answers to these "Why?" questions.



B Practice using "Why?" questions. Write two or more "Why?" questions about the reading. Then ask and answer the questions with a partner.

1 Why _____

_____?

2 Why _____

_____?

7 DISCUSSION

Discuss the following questions in pairs or groups.

1 Are there foods that you like now that you didn't like when you were younger? Are there foods that you don't like now that you liked when you were younger? Explain.

2 What are some foods that grow in your area? What are some foods that are imported? Where do the imported foods come from?

3 What foods have recently become popular where you live? Have you tried them?

CHAPTER

8

The Fifth Taste

1 TOPIC PREVIEW

A What foods are your favorites? Make a list of the five foods that you enjoy most. Share your answers with your classmates.

1 _____

2 _____

3 _____

4 _____

5 _____

B Read the title of this chapter, look at the picture, and discuss the following questions.

1 Describe the taste of each of your favorite foods. Is it sweet, sour, bitter, or salty?
2 Describe the taste of each food in the photograph.
3 What do you think the reading is going to be about?

2 VOCABULARY PREVIEW

A Read the word lists. Put a check (✓) next to the words that you know and can use in a sentence. Compare your answers with a partner. Then look up any unfamiliar words in a dictionary.

Food and Nutrition	Academic Word List	Culinary Arts
additive	**isolate**	**chef**
food chemist	**occur**	**flavor** (*v.*)
seaweed	**physical**	**fry**
	respond (to)	**ingredient**
		sauce

The chart shows selected words from the reading related to food and nutrition, culinary arts, and the Academic Word List (AWL). For more information about the AWL, see page 121.

B Fill in the blanks with words from Part A.

1 She cooks in a large restaurant. She is an excellent _____ .

2 You need an egg to make this cake. The egg is an important _____ .

3 He studies and does experiments with food. He is a/an _____ .

4 Scientists had to _____ the virus so that they could make a vaccine.

5 She felt better as soon as her body began to _____ to the medicine.

6 She poured the thick _____ on top of the meat.

7 Herbs, salt, and pepper give food more taste. They _____ food.

8 He had a bad _____ reaction to the food.

9 "How are you going to cook the chicken?" "I'm going to _____ it."

10 Sometimes answers to problems _____ to us when we aren't trying to think about them.

11 The food contained a/an _____ to help it stay fresh.

12 The ocean contains a lot of _____ . As a food, this is a great source of minerals for the human body.

3 READING

Preview the question in Reading Check Part A on page 61. Then read the story.

The Fifth Taste

Since ancient times, people have recognized four basic tastes. 1
One is sour, like a lemon. Another is salty, like potato chips. The third is sweet, like sugar. The fourth taste is bitter, like coffee or unsweetened chocolate.

It wasn't until the late 1800s in Paris that a famous chef, Auguste 2
Escoffier, made a new discovery about taste. First, he fried beef in a pan at a very high heat until it was brown. Then he added a liquid and scraped the browned meat from the bottom of the pan. The taste of the browned meat stock[1] wasn't sweet, salty, bitter, or sour. Escoffier was a chef, not a scientist, but he was sure he had found a fifth taste. He used his discovery to create some of his famous sauces.

About 20 years later in Japan, Kikunae Ikeda was eating a bowl 3
of soup. As he ate, he tried to decide what made the soup so delicious. His wife told him how she made it. The basic ingredient was *dashi*, a stock made with kelp, or dried seaweed. Suddenly, it occurred to him, too: there weren't four tastes. There was a fifth taste, and this was it – the deep, full taste in the stock!

Ikeda was a food chemist. He decided to use his knowledge and 4
skills as a chemist. He wanted to know exactly what this fifth taste was. He went to work in his laboratory and found the answer –

[1] *stock:* a liquid used to add flavor to food that is made by boiling meat or fish bones or vegetables in water

glutamate. Glutamate is an amino acid[2] that is produced when living things begin to die. For example, the production of glutamate happens when cheese ages or meat cooks. Its taste is very different from the other four tastes. Ikeda decided to call the taste *umami*. This comes from a Japanese word that means "delicious."

Kikunae Ikeda

5 Ikeda continued to work with glutamate. He wanted to use this natural amino acid to make food more delicious. He was looking for a way to make umami similar to salt or sugar – an additive to flavor food. Finally, he isolated the glutamate and found that he could add salt (sodium) to it. Monosodium glutamate, or MSG, was the food additive he was looking for. It produced the fifth taste.

6 Ikeda and another man started a company, Ajinomoto, to make MSG. Soon Ajinomoto was selling MSG all over the world. Today 1.5 million tons of MSG are used every year, and Ajinomoto sells one-third of it.

7 Ikeda's MSG was a huge commercial success, but some scientists did not believe umami was really a fifth taste. They continued to believe that there were only four tastes. Then, in 2000, almost 100 years after Ikeda's discovery, scientists found physical proof. The human tongue contains tiny receptors, or taste buds,[3] which allow us to tell the difference between tastes. Scientists found that these receptors responded to glutamate in a special way. In fact, they found that the receptors responded in that way only to glutamate, and not to any of the other four tastes.

8 It turns out that the great French chef Escoffier was right. There are five tastes, not just four. Today, chefs in many parts of the world are using their knowledge of this fifth taste to create a new type of cuisine. The chefs are trying to use less salt and less butter. They are using foods with a lot of natural glutamate. The result is healthy food that is also very tasty. It's delicious. It's umami!

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[2] *amino acid:* a chemical substance found in plants and animals

[3] *taste buds:* groups of cells on the tongue that allow people to recognize tastes

4 READING CHECK

A Circle the number of the sentence that best expresses the main idea of the reading.

1 A chef and a chemist identified the fifth taste.
2 Amino acids are in the foods we eat.
3 People all over the world use MSG to flavor food.

B Circle the letter of the best answer.

1 Escoffier was famous for his _____ .
a sauces **b** fifth taste **c** umami

2 Ikeda was eating _____ when he discovered the fifth taste.
a seaweed **b** soup **c** sauce

3 Which of these is *not* true?
a Glutamate is the fifth taste.
b Glutamate is an amino acid.
c Glutamate is only in cooked food.

4 Escoffier's sauces had the fifth taste because _____ .
a they were very famous
b he made a sauce with seaweed stock
c he cooked the meat at a high temperature

5 In his laboratory, Ikeda added _____ to glutamate.
a sugar
b a stock
c sodium

6 People add MSG to food because it makes food _____ .
a healthier
b taste better
c cook more quickly

7 For many years, scientists did not believe Ikeda because _____ .
a they did not like the taste of MSG
b the amino acid glutamate did not exist
c there was no physical proof of a fifth taste

8 Special receptors on the _____ respond to glutamate.
a heart
b tongue
c nose

5 VOCABULARY CHECK

A Retell the story. Fill in the blanks with the correct words from the box.

additive	chef	flavor	food chemist
fried	ingredients	isolate	occurred
physical	respond	sauces	seaweed

Escoffier, a famous French _____ (1) , discovered a fifth taste when he _____ (2) meat at a very high heat until it was brown. This was the way he made stock to use in his famous _____ (3) .

A Japanese _____ (4) named Kikunae Ikeda was eating a delicious soup that his wife had made. One of the main _____ (5) of the stock was dried _____ (6) . As he ate, it _____ (7) to him that the soup had a fifth taste. Ikeda did experiments in his laboratory. He found that the taste came from glutamate. He was able to _____ (8) glutamate and add sodium to it. He created a/an _____ (9) called MSG that people use to _____ (10) food.

Almost 100 years later, scientists found _____ (11) proof that both Escoffier and Ikeda were right. The tongue has receptors that _____ (12) only to this fifth taste.

B Which preposition follows the words in bold? Circle the answer.

1 She didn't **respond** (in / from / to) the question.

2 The answer **occurred** (in / from / to) her later.

3 MSG is an **additive** (in / from / to) many foods.

4 Sugar is an **ingredient** (in / from / to) most sodas.

5 The doctor **isolated** the sick patients (out / from / to) the healthy ones.

6 APPLYING READING SKILLS

Sometimes you are not sure about the meaning of a word or phrase in a reading. ***Finding examples and definitions*** *of the word or phrase can help make its meaning clearer.*

A Draw a line from the words on the left to an example or a definition from the reading on the right.

WORDS	EXAMPLES AND DEFINITIONS
salty	things found on the tongue that can tell different tastes
umami	like the taste of sugar
taste buds	like the taste of potato chips
kelp	an abbreviation for "monosodium glutamate"
sweet	related to the Japanese word for "delicious"
MSG	another word for "dried seaweed"

B Practice finding examples and definitions. Look back at the reading. Find examples or definitions of the following words.

WORDS	EXAMPLES AND DEFINITIONS
sodium	_____
bitter	_____
fried	_____
sour	_____
an additive	_____

7 DISCUSSION

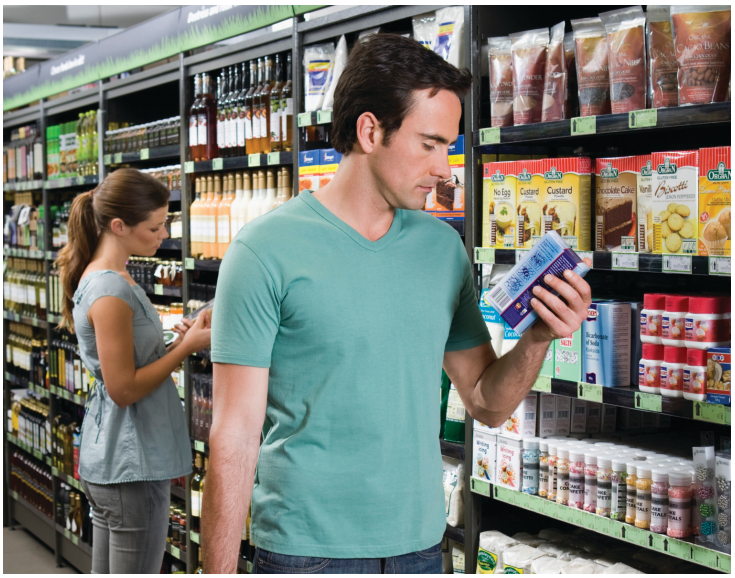
Discuss the following questions in pairs or groups.

1. Which of the following describe you? Which do not describe you? "I like spicy food." "I have a sweet tooth." "I enjoy salty food." "I try not to eat food with MSG." Explain.
2. In your family, who is the best cook? Why is his or her cooking so good?
3. What foods do you think people will be eating a hundred years from now?

CHAPTER

9

Eat Less, Live Longer?



1 TOPIC PREVIEW

A Which of these food groups should you eat the most of? Which should you eat the least of? Number the food groups from 1 (the most) to 6 (the least). Share your answers with your classmates.

_____ whole grains

_____ meat, fish, and poultry

_____ fruit

_____ dairy products, such as milk and yogurt

_____ sweets, such as cake and cookies

_____ vegetables

B Read the title of this chapter, look at the picture, and discuss the following questions.

1 Do you think there is a relationship between the foods you eat and your health?
2 Do you usually read food labels? Why or why not?
3 What do you think the reading is going to be about?

2 VOCABULARY PREVIEW

A Read the word lists. Put a check (✓) next to the words that you know and can use in a sentence. Compare your answers with a partner. Then look up any unfamiliar words in a dictionary.

Food and Nutrition	Academic Word List	Biology
calorie	**benefit** (*n.*)	**gene**
diet (*n.*)	**consume**	**lab animal**
fast (*v.*)	**data**	**life expectancy**
	process (*n.*)	
	restrict	
	significantly	

The chart shows selected words from the reading related to food and nutrition, biology, and the Academic Word List (AWL). For more information about the AWL, see page 121.

B Fill in the blanks with words from Part A.

1 The _____ of humans has increased because of modern medicine.

2 The mouse is the most common _____ .

3 He is trying to lose weight, so he is counting every _____ .

4 A healthy _____ includes a lot of fruit and vegetables.

5 Losing weight takes a long time. It is a slow _____ .

6 Scientists analyze the _____ from their experiments.

7 People with red hair have a _____ that makes their hair red.

8 Young people usually _____ more candy than older people.

9 In some religions, people do not eat anything on certain days. They _____ .

10 They did a lot of exercise and ate less. Their health improved a lot. It improved _____ .

11 There is a health _____ to eating lots of fruits and vegetables.

12 Many parents _____ the amount of sugar their children eat.

3 READING

Preview the questions in Reading Check Part A on page 68. Then read the story.

Eat Less, Live Longer?

1 Owen and Canto live near each other. They lead similar lives and are close in age, but they look very different. Canto is strong and healthy. Owen, on the other hand, is slow and heavy. He is losing his hair, and he moves like an old man.

2 The biggest difference between Owen and Canto, however, is their life expectancy. Scientists expect Canto to live 30 percent longer than Owen. Why? Every day for 17 years, Canto has eaten a diet with many fewer calories than Owen. Scientists think this is the reason Canto does not have heart disease or diabetes,[1] common health problems in old age. It seems that eating less has kept Canto's body younger.

3 Owen and Canto are not people – they are monkeys. They live in a scientific research laboratory at the University of Wisconsin in the United States. Scientists at the lab are studying the effects of low-calorie diets. Does eating a diet with many fewer calories in it have health benefits? Does eating less also increase life expectancy?

4 Scientists in other laboratories around the world are doing similar research. So far, the results suggest the same thing. If you restrict the number of calories that an animal eats, it will live longer than an animal that eats a lot. In one study, mice ate 30 percent fewer calories than normal. These mice lived 40 percent longer than the mice that had a normal diet. They also had fewer age-related problems and diseases.

[1] *diabetes:* a disease in which the body cannot control the level of sugar in the blood

Scientists are beginning to understand the reason for the benefits of eating less. When the body gets less food, the body produces a substance called *sirtuin*. This substance acts on the genes in the body that control aging. Sirtuin seems to slow down the aging process. 5

Humans, of course, are not lab animals. Will a very low-calorie diet give humans the same health benefits as lab animals? Scientists are beginning to study the effects of calorie restriction on humans, too. In one study, scientists studied two groups of people for three years. In the first group, people ate a normal diet. They consumed between 2,000 and 3,500 calories a day. In the second group, people ate a healthy, low-calorie diet. They consumed only 1,000 to 2,000 calories a day. After three years, the people in the second group were significantly healthier. They had lowered their risk of diabetes and heart disease. 6

Will eating fewer calories lead to a greater life expectancy for humans? It will take scientists much longer to find this out. Humans live much longer than laboratory animals, such as mice and monkeys. 7

There is a group of people, however, who already believe they will live longer by eating less. They are members of the Calorie Restriction Society. They have studied the data about animals. They believe that restricting their calories will increase their life expectancy and help them live healthier lives. On some days, they fast, and they rarely eat more than 2,000 calories a day. 8

Dean Pomerleau, member of the Calorie Restriction Society

Scientists don't expect many people to follow such an extreme diet. They also don't expect a huge increase in human life expectancy. Many scientists expect an increase of about 9 percent, but others expect only 2 percent. They believe the major benefit of a low-calorie diet is a healthier, more active life, as Canto the monkey has. A 90-year-old may feel like a 65-year-old. 9

We are still waiting for scientists to tell us if calorie restriction really works. So, the best advice is to eat well. Just don't eat too much! 10

4 READING CHECK

A Are these statements true or false? Write *T* (true) or *F* (false).

1 ____ Canto and Owen both eat what they want.

2 ____ A low-calorie diet causes age-related diseases.

3 ____ People who eat less may have longer lives.

B Circle the letter of the best answer.

1 Owen and Canto ____ the same age.
a are **b** look **c** are almost

2 Canto ____ common health problems of old age.
a has many **b** has some **c** does not have

3 Researchers think ____ will live 30 percent longer on the low-calorie diet.
a Owen **b** Canto **c** people

4 In a research study, mice on a restricted diet lived ____ longer than normal mice.
a 20 percent **b** 30 percent **c** 40 percent

5 When does the body produce sirtuin?
a all the time
b when genes slow the body down
c when the body does not have a lot of food

6 What was the difference between the two groups of people in the research study?
a One group consumed only 500 calories per day.
b One group was healthier at the end of the study.
c One group was three years older.

7 Members of the Calorie Restriction Society ____ .
a fast on some days
b believe they will live 200 years
c eat more than 2,000 calories per day

8 Scientists expect ____ if they consume fewer calories.
a people will live 30 percent longer
b people will live healthier lives
c people will feel 60 years younger

5 VOCABULARY CHECK

A Retell the story. Fill in the blanks with the correct words from the box.

calories	consumed	data	diet	fast
lab animals	life expectancy	process	restriction	significantly

Will you live longer if you eat less? Scientists are studying the relationship between a low-calorie _____ (1) and _____ (2) in animals. In one experiment, one group of mice _____ (3) fewer _____ (4) than a second group. The first group lived _____ (5) longer than the second and appeared much healthier.

Scientists now want to know if there are benefits to people as well as to _____ (6). They are looking at the _____ (7) from a research study involving humans. Members of the Calorie _____ (8) Society eat a limited amount of very nutritious food. Some days they _____ (9) instead of eating. Scientists think that a substance called *sirtuin* is more active when the body gets less food. Sirtuin may slow down the aging _____ (10). So does eating less help people live longer? Possibly. However, we still need to wait for scientists to do more research.

B Fill in the blanks with the correct form of the word.

Verb	Noun	Adjective
benefit	benefit	beneficial
restrict	restriction	restricted
–	gene	genetic

1 The color of your eyes is _____ .

2 A low-calorie diet may be _____ to people.

3 It is difficult to follow a _____ diet.

4 How does calorie restriction _____ people?

5 The doctor told the patient to _____ the amount of sugar he eats.

6 APPLYING READING SKILLS

Some readings contain mathematical information, especially percentages. ***Understanding mathematical information*** *can lead to a deeper understanding of a reading.*

A Work with a partner. Read the questions below. Then go back to the text to find the information that you will need to answer the questions. The information in the box below the questions will help you calculate percentage increase or decrease.

1 Monkeys usually live 27 years. To what age do scientists expect Canto to live?

2 Mice usually live for 12 months. How many months do scientists expect the mice that ate fewer calories to live?

Working with percentages

10% = .10

10% of 30 = (.10 x 30) = 3
A 10% increase of 30 = 30 + (.10 x 30) = 33
A 10% decrease of 30 = 30 – (.10 x 30) = 27

B Show your understanding of percentage data. Answer the questions below.

1 Average life expectancy in the United States is 77 years. How long do scientists expect average Americans on low-calorie diets to live if they expect them to increase their life expectancy by 2 percent?

2 How long do scientists expect average Americans on low-calorie diets to live if they expect them to increase their life expectancy by 9 percent?

3 If a woman who normally eats 2,000 calories a day restricts her calories a day by 35 percent, how many calories a day will she eat?

7 DISCUSSION

Discuss the following questions in pairs or groups.

1 Do you think scientists should use monkeys to do scientific experiments? Explain.

2 Does the research make you want to restrict the number of calories you eat? Why or why not?

3 In addition to having a healthy diet, what else can you do to increase your life expectancy?

UNIT
3
WRAP-UP

VOCABULARY REVIEW

Chapter 7	Chapter 8	Chapter 9
Food and Nutrition	**Food and Nutrition**	**Food and Nutrition**
mineral · **nutritious** · **vitamin**	**additive** · **food chemist** · **seaweed**	**calorie** · **diet** (*n.*) · **fast** (*v.*)
Academic Word List	**Academic Word List**	**Academic Word List**
expand · **source** · **symbol**	**isolate** · **occur** · **physical** · **respond** (to)	**benefit** (*n.*) · **consume** · **data** · **process** (*n.*) · **restrict** · **significantly**
Agriculture	**Culinary Arts**	**Biology**
crop · **grow** · **harvest** (*v.*) · **import tax** · **plant** (*v.*) · **seed**	**chef** · **flavor** (*v.*) · **fry** · **ingredient** · **sauce**	**gene** · **lab animal** · **life expectancy**

Find words in the chart that match the definitions. Answers to 1–4 are from Chapter 7. Answers to 5–8 are from Chapter 8. Answers to 9–12 are from Chapter 9.

1 To gather fruits or vegetables: _____

2 Something used to represent something else: _____

3 Describing food that makes your body healthy: _____

4 Where something comes from: _____

5 To cook food at a very high heat, usually in oil: _____

6 A plant that comes from the sea: _____

7 To separate something from other things: _____

8 To add spices or other taste to food: _____

9 A unit of energy in food: _____

10 The average time that a group of people or animals will live: _____

11 To use something, for example, fuel, energy, or time: _____

12 By a large amount: _____

VOCABULARY IN USE

Work with a partner or small group, and discuss the questions below.

1. Do you have a good daily **diet**? Which nutritious foods do you eat frequently?
2. When you cook, what do you usually **flavor** your food with?
3. Do you think it is a good idea to take **vitamins**? Why or why not?
4. How much water do you usually **consume** in a day? Do you think it is a good idea to drink a lot of water? Why or why not?
5. Do you or people you know ever **fast**? For what reasons?
6. Which **physical** activities do you do regularly?
7. Did your parents **restrict** any of your activities when you were a child? Explain.
8. Have you ever **planted** a **seed**? Describe the **process**.

ROLE PLAY

Work with a partner. Student A is a nutritionist, an expert in nutrition. Student B does not feel healthy and wants advice about how to feel better. Student A asks Student B questions and then gives suggestions. When you finish, change roles.

WRITING

Write a persuasive paragraph in which you give suggestions for improving the typical diet where you live. Consider the following questions.

- Why is it important for people to change the way they eat?
- What changes can people make to have healthier eating habits?
- What foods can people eat to be healthier?
- What are some ways to make healthy food delicious so that people want to eat it?

WEBQUEST

Find more information about the topics in this unit by going on the Internet. Go to www.cambridge.org/readthis and follow the instructions for doing a WebQuest. Search for facts. Have fun. Good luck!