



## 1.1

# Letter from Anna

Anna Meyers

1516 Aboriginal Road

Adelaide, South Australia, Australia

Dear Students,

Good day! My name is Anna Meyers. I am writing in the hope that you can help me with two items. The first has to do with a box I recently received in the mail. The second regards something my doctor told me about diabetes.

The box I got in the mail was filled with treasures that belonged to my grandmother Velma. A tribal member in your area found my address and mailed these treasures to me. The person unfortunately did not send a name or address, so I'm hoping you can help me.

I met my grandmother only once, when I was a child. My family moved to Australia, and I lost touch with all my relatives in the United States. All I know is that Grandmother belonged to a tribe in your area, was born around 1870, and lived until 1940. I am very sad to know so little about her part of my family.

I have included photographs of some of the things in Grandmother's box. Can you tell me about these things? And more important, can you tell me anything about my grandmother? I so wish I knew what Grandmother's life was like! How did she spend her days? What was it like where she lived? Mountains? Desert? Forests? Outback? I know nothing about your area. Has it changed much since my grandmother's days?

The other reason I am writing is because of what my doctor recently told me. She said I have a high risk of developing type 2 diabetes. My doctor says type 2 diabetes is more common in Native Americans than in other ethnic groups. Do you know what the doctor is talking about? Do all the tribal people in your area get diabetes?

Thank you, and I hope to hear from you soon.

Sincerely,

Anna Meyers





## 1.2

# Lifestyle Grid

Name \_\_\_\_\_

Lifestyle in \_\_\_\_\_

Lifestyle Category	Description
Food	
Home life and family structure	
Water	
Clothing	
Physical activity	
Communication	
Health resources (people, medicine)	
Technology used (machines or tools used)	
Transportation	
Entertainment	
Education and learning	





### 1.3

## Student Lifestyle—Possible Answers

Lifestyle Category	Description
Food	<i>Cereal, milk, toast, bagel with cream cheese, orange juice, eggs, cafeteria food, soda, chips, tacos, fast food, hamburger meat; food comes from grocery store</i>
Home life and family structure	<i>Live with grandmother and parent, two sisters; Mom works; Grandma cleans and cooks, watches kids; kids clean rooms</i>
Water	<i>Turn on faucet, hot and cold water, as much as needed</i>
Clothing	<i>Jeans, T-shirts, jacket, pajamas, tennis shoes, skirts, sandals; store-bought</i>
Physical activity	<i>Gym class at school, basketball at home, bike to friend's house once a week</i>
Communication	<i>Telephone, post office, e-mail, cell phone; face to face, mostly in English</i>
Health resources (people, medicine)	<i>School nurse, Indian Health Service clinic nearby with doctors, X-ray technicians, lab, physical therapists, pharmacy with medicine; aspirin, cough syrup in grocery store; get a checkup once every two years or so</i>
Technology used (machines or tools used)	<i>Television, microwave, gas stove, computer, CD or video player, tractor, electric appliances (freezer, refrigerator, electric blanket, MP3 player, cell phone)</i>
Transportation	<i>Car to store, airplane once, school bus, ATV at uncle's, bike, walk sometimes</i>
Entertainment	<i>Play video games on weekends, sports three times a week, dance, hang out with friends, watch TV every day</i>
Education and learning	<i>School six hours per weekday, dance lessons, tribal language lessons two times per week (parent attending college to be nurse)</i>





## 1.4

# Grandmother's Lifestyle in 1920—Possible Answers

The following information comes from Malinda Pekarck's mother, Gregorita Chavarria, who was born in 1905 and lived in Santa Clara Pueblo, New Mexico.

Lifestyle Category	Description
Food	Field corn, flour, chicken, eggs, pork, beef, venison, milk, squash, carrots, beans, tomatoes (sweetened with milk and raisins), pumpkin, rice, chili, watermelon, muskmelon, apples, peaches, cherries, pears; drank water and lemonade on special occasions Food cooked in earthen pots, mostly boiled, no metal utensils, very little frying, no skillets, no refrigerator; food dried
Home life and family structure	Several generations live in same house; many family responsibilities and chores (caring for siblings)
Water	Well water kept in jugs and buckets.
Clothing	Not plentiful; handmade shirts/dresses from calico, gingham and flour sacks; no underwear for children; moccasins from deer hide, children mostly barefooted
Physical activity	Walked most everywhere, rode horses for longer trips; work in fields, tending to livestock, grinding corn, cooking, washing, cleaning, dancing, playing games, chopping wood
Communication	Person to person, town crier-governor announced from housetop (e.g., ditch work, important information)
Health resources (people, medicine)	Herbs; Indian Health Service much later
Technology used (machines or tools used)	Plow, rakes, pitchforks made by hand from wood, wheat threshed by horses
Transportation	Walked, rode horses or wagon; train along river took kids to school for the year, to town one or two times a month, took all day
Entertainment	Marbles, games—shinny, dances, storytelling
Education and learning	Storytelling with morals; learning by example; watching and listening to elders





1.5

## Environment Grid

Name \_\_\_\_\_

Environment in \_\_\_\_\_

Environment Element	Description (What Kind, Where From, How Much)
<b>Food resources</b> Where do your meat, eggs, and milk come from?  Where do your fruits and vegetables come from?	
<b>Water resources</b> Where does your water come from?	
<b>Climate and terrain</b> Is it warm all year? Are there mountains, fields, a seashore, a desert, trees?	
<b>City or country</b> Do you live in a big city? A small city? In the country?	
<b>Tribe, community, family</b> Who do you live with, near? Who is your nearest neighbor? Do you know your neighbors?	
<b>Health resources</b> How do you stay healthy? Who helps you if you are sick?	
<b>Technology resources</b> Do you have electricity, gas, a refrigerator, a telephone, computers, cars, a television?	
<b>Other</b> Where is the nearest store, places for entertainment, etc.?	





## 1.6

# Student Environment Grid—Possible Answers

Environment Element	Description (What Kind, Where From, How Much)
<b>Food resources</b> Where do your meat, eggs and milk come from?  Where do your fruits and vegetables come from?	<i>The store, sometimes hunting</i>  <i>The store; grow some corn, chili, apples</i>
<b>Water resources</b> Where does your water come from?	<i>Faucet, rain, irrigation ditch from river</i>
<b>Climate and terrain</b> Is it warm all year? Are there mountains, fields, a seashore, a desert, trees?	<i>Hot in summer, a little snow in winter, not much rain, not many trees in village, sandy, near a river, mountains nearby</i>
<b>City or country</b> Do you live in a big city? A small city? In the country?	<i>Country; cottonwood trees, a few dogs and birds, some prairie dogs</i>
<b>Tribe, community, family</b> Who do you live with, near? Who is your nearest neighbor? Do you know your neighbors?	<i>Live with my grandmother; know kids in my class, know some of my neighbors; all neighbors are tribal members</i>
<b>Health resources</b> How do you stay healthy? Who helps you if you are sick?	<i>Hospital, clinic, dentist; medicine from grocery store</i>
<b>Technology resources</b> Do you have electricity, gas, a refrigerator, a telephone, computers, cars, a television?	<i>School bus, telephone, computer, electricity, gas, cars, Internet, TV</i>
<b>Other</b> Where is the nearest store, places for entertainment, etc.?	<i>A lot of stores, a lot of houses and places to go</i>







1.7

## Postcard to Grandmother at School

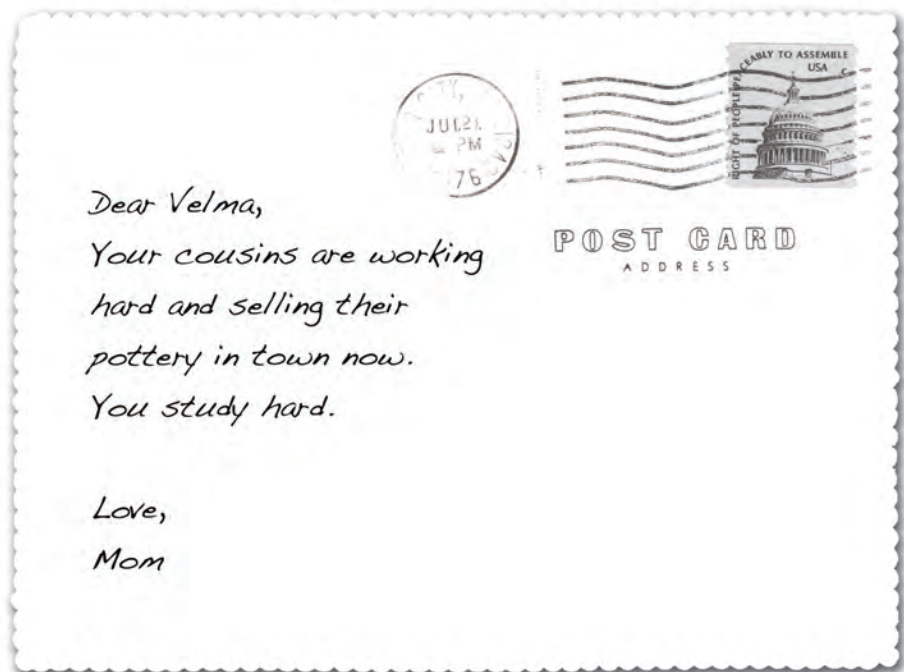


Photo by T. Harmon Parkhurst.  
Courtesy of Palace of the Governors (MNM/DCA), 004171.





1.8

## The Family Group



*Photo by T. Harmon Parkhurst.  
Courtesy of Palace of the Governors (MNM/DCA), 004137.*







1.9

## Velma, 1910



*Photo by T. Harmon Parkhurst.  
Courtesy of Palace of the Governors (MNM/DCA), 043746.*





1.10

## Pueblo Life



*Courtesy of Palace of the Governors (MNM/DCA), 004554.*





1.11

## Baking Bread



*Photo by T. Harmon Parkhurst.  
Courtesy of Palace of the Governors (MNM/DCA), 004147.*







1.12

## View of Pueblo from the Rooftop



*Photo by Carlos Vierra.  
Courtesy of Palace of the Governors (MNM/DCA), 042784.*





1.13

## Grinding Corn



*Photo by T. Harmon Parkhurst.  
Courtesy of Palace of the Governors (MNM/DCA), 003971.*







1.14

## Pueblo Women



*Courtesy of Palace of the Governors (MNM/DCA), 004151.*





1.15

## Tesuque Water Jar



*Photograph by Addison Doty.  
School for Advanced Research on the Human Experience,  
Catalog Number IAF.2080.*





1.16

## Postcard of Pueblo Women



*Gilcrease Museum, Tulsa, OK.*



Community, Prevention, Lifestyle, Education  
Diabetes Education in Tribal Schools  
Health Is Life in Balance

**Copymaster 1.16**  
Grades 5–6, Social Studies, Lesson 1  
Postcard of Pueblo Women





1.17

## Pueblo Mural



*Source: Santo Domingo Middle School Art Students, 2005.*





1.18

## Lesson 1 Quiz

Name \_\_\_\_\_

Date \_\_\_\_\_

*Directions: Please mark the response you believe is correct for each of the following items.*

1. Grandmother's treasures gave us clues about which of the following?

- \_\_\_\_\_ a. the answers to Anna's questions
- \_\_\_\_\_ b. the lifestyle of Grandmother's people
- \_\_\_\_\_ c. the environment in which Grandmother lived
- \_\_\_\_\_ d. all of the above

2. Our environment

- \_\_\_\_\_ a. includes things in our surroundings.
- \_\_\_\_\_ b. does not include the climate (weather).
- \_\_\_\_\_ c. does not include the water, plant, and food resources available to us.
- \_\_\_\_\_ d. only includes our family life.

3. Anna's doctor said that she was at a higher risk of getting

- \_\_\_\_\_ a. the flu.
- \_\_\_\_\_ b. type 2 diabetes.
- \_\_\_\_\_ c. cholera.
- \_\_\_\_\_ d. the measles.

4. It is possible to learn something about past lifestyles by looking at photos from the past.

- \_\_\_\_\_ true      \_\_\_\_\_ false

5. Our lifestyle includes the food and the activity choices we make.

- \_\_\_\_\_ true      \_\_\_\_\_ false







1.19

## Lesson 1 Quiz—Answer Key

1. Grandmother's treasures gave us clues about which of the following?

- ☐ a. the answers to Anna's questions
- ☐ b. the lifestyle of Grandmother's people
- ☐ c. the environment in which Grandmother lived
- ☒ d. all of the above

2. Our environment

- ☒ a. includes things in our surroundings.
- ☐ b. does not include the climate (weather).
- ☐ c. does not include the water, plant, and food resources available to us.
- ☐ d. only includes our family life.

3. Anna's doctor said that she was at a higher risk of getting

- ☐ a. the flu.
- ☒ b. type 2 diabetes.
- ☐ c. cholera.
- ☐ d. the measles.

4. It is possible to learn something about past lifestyles by looking at photos from the past.

- ☒ true      ☐ false

5. Our lifestyle includes the food and the activity choices we make.

- ☒ true      ☐ false





## 2.1

# Our Lifestyles Group Report

Name \_\_\_\_\_

Date \_\_\_\_\_

*Directions: Work as a group to answer these questions. Record your answers after you discuss each question. Use Copymaster 2.2, Timeline, 1870–Present, for Questions 1 and 2.*

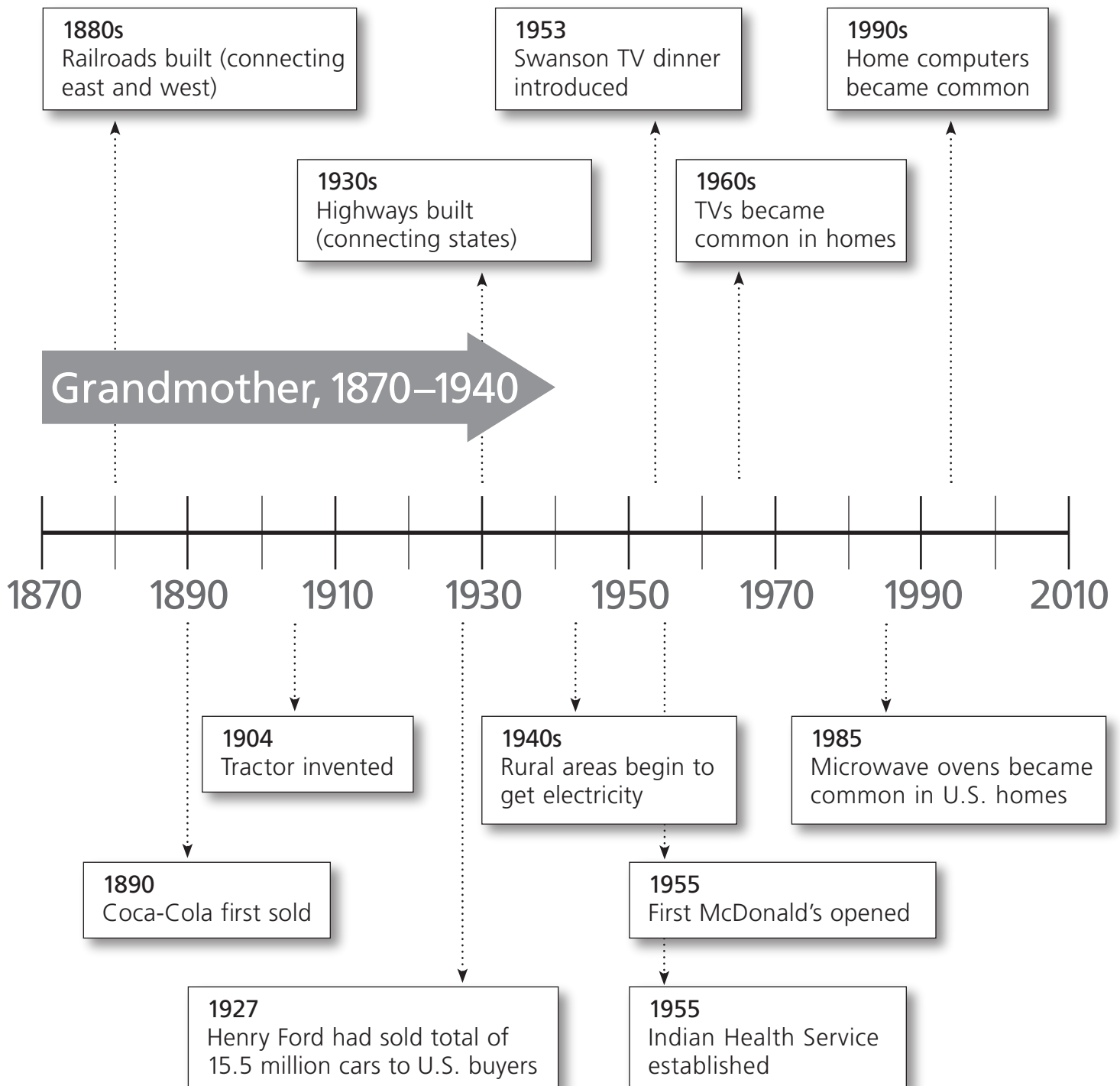
1. Choose one event from the timeline. How might that event have affected lifestyle? Explain or draw what people do differently because of that event.
  
  
  
  
  
  
  
  
  
  
2. Choose a second event from the timeline. How might it have affected lifestyles? Explain or draw what people do differently because of that event.
  
  
  
  
  
  
  
  
  
  
3. Does everyone in our community have the same lifestyle? Give three examples of lifestyle choices that are different from person to person in our community.
  
  
  
  
  
  
  
  
  
  
4. Why are lifestyles different even within our community?





## 2.2

# Timeline, 1870–Present





## 2.3

# Lesson 2 Quiz

Name \_\_\_\_\_

Date \_\_\_\_\_

*Directions: Please mark the response you believe is correct for each of the following items.*

### 1. Lifestyles

- \_\_\_\_\_ a. are completely the same for people who live in the same community.
- \_\_\_\_\_ b. involve choices that we make as individuals.
- \_\_\_\_\_ c. have not changed over time.
- \_\_\_\_\_ d. are not affected when the environment changes.

### 2. Which of the following has affected lifestyles?

- \_\_\_\_\_ a. opening of fast-food restaurants
- \_\_\_\_\_ b. invention of electricity
- \_\_\_\_\_ c. invention of the home computer
- \_\_\_\_\_ d. all of the above have affected lifestyles

### 3. Our lifestyle choices are affected by what's in our environment.

\_\_\_\_\_ true      \_\_\_\_\_ false

### 4. The community can make changes in the environment to affect lifestyle.

\_\_\_\_\_ true      \_\_\_\_\_ false

### 5. In general, the lifestyle choices that we make today about "entertainment" have changed since Anna's grandmother's time.

\_\_\_\_\_ true      \_\_\_\_\_ false





## 2.4

# Lesson 2 Quiz—Answer Key

### 1. Lifestyles

- \_\_\_\_\_ a. are completely the same for people who live in the same community.  
\_\_\_ **X** \_\_\_ b. involve choices that we make as individuals.  
\_\_\_\_\_ c. have not changed over time.  
\_\_\_\_\_ d. are not affected when the environment changes.

### 2. Which of the following has affected lifestyles?

- \_\_\_\_\_ a. opening of fast-food restaurants  
\_\_\_\_\_ b. invention of electricity  
\_\_\_\_\_ c. invention of the home computer  
\_\_\_ **X** \_\_\_ d. all of the above have affected lifestyles

### 3. Our lifestyle choices are affected by what's in our environment.

- \_\_\_ **X** \_\_\_ true      \_\_\_\_\_ false

### 4. The community can make changes in the environment to affect lifestyle.

- \_\_\_ **X** \_\_\_ true      \_\_\_\_\_ false

### 5. In general, the lifestyle choices that we make today about “entertainment” have changed since Anna’s grandmother’s time.

- \_\_\_ **X** \_\_\_ true      \_\_\_\_\_ false







## 3.1

# Diabetes Fact Sheet

Having type 2 diabetes means that your blood sugar, or blood glucose, is too high. Your body gets glucose from the foods you eat. Glucose is also made by your muscles and liver.

## What Is Type 2 Diabetes?

Type 2 diabetes is one form of diabetes. It used to be called adult-onset diabetes, but this disease is rapidly becoming more common in children. It is believed that changes in our nutrition (foods we eat and how much we eat) and a decrease in our activity level (lack of exercise) have caused diabetes to affect the younger population.

## Why Is Type 2 Diabetes an Important Issue?

Diabetes and other complications that arise for people with diabetes are major public health problems in the United States. In the United States, the rates of type 2 diabetes are often two to five times higher among American Indians than among the general population.

Until recently, type 2 diabetes was rarely diagnosed in children and teens. It has now been reported in American Indian children as young as

four years old. It is becoming increasingly common among children 10 and older. A recent Indian Health Service study showed that between 1991 and 1997, diabetes increased by 32 percent in American Indian children aged 15 to 19. Having diabetes can contribute to a person's risk of heart disease, pneumonia, and other leading causes of death in American Indians. In some American Indian communities, one in two adults has diabetes.

## What Increases the Chance of Getting Type 2 Diabetes?

Following are some risk factors:

- Obesity or being overweight
- An inactive lifestyle
- A diet high in fats and sugars
- A family history of type 2 diabetes

## What Can Be Done to Prevent Type 2 Diabetes?

Lifestyle changes can prevent or delay diabetes. Research shows that the key lifestyle choices necessary to prevent diabetes are choosing nutritious foods to eat, eating smaller portions, and getting daily physical activity. Talking about and





### 3.1

expressing our feelings can help us cope with life. Having goals and visions about our future and our role in our family, community, and world can positively affect our health. Observing traditions and understanding our culture can make us stronger.

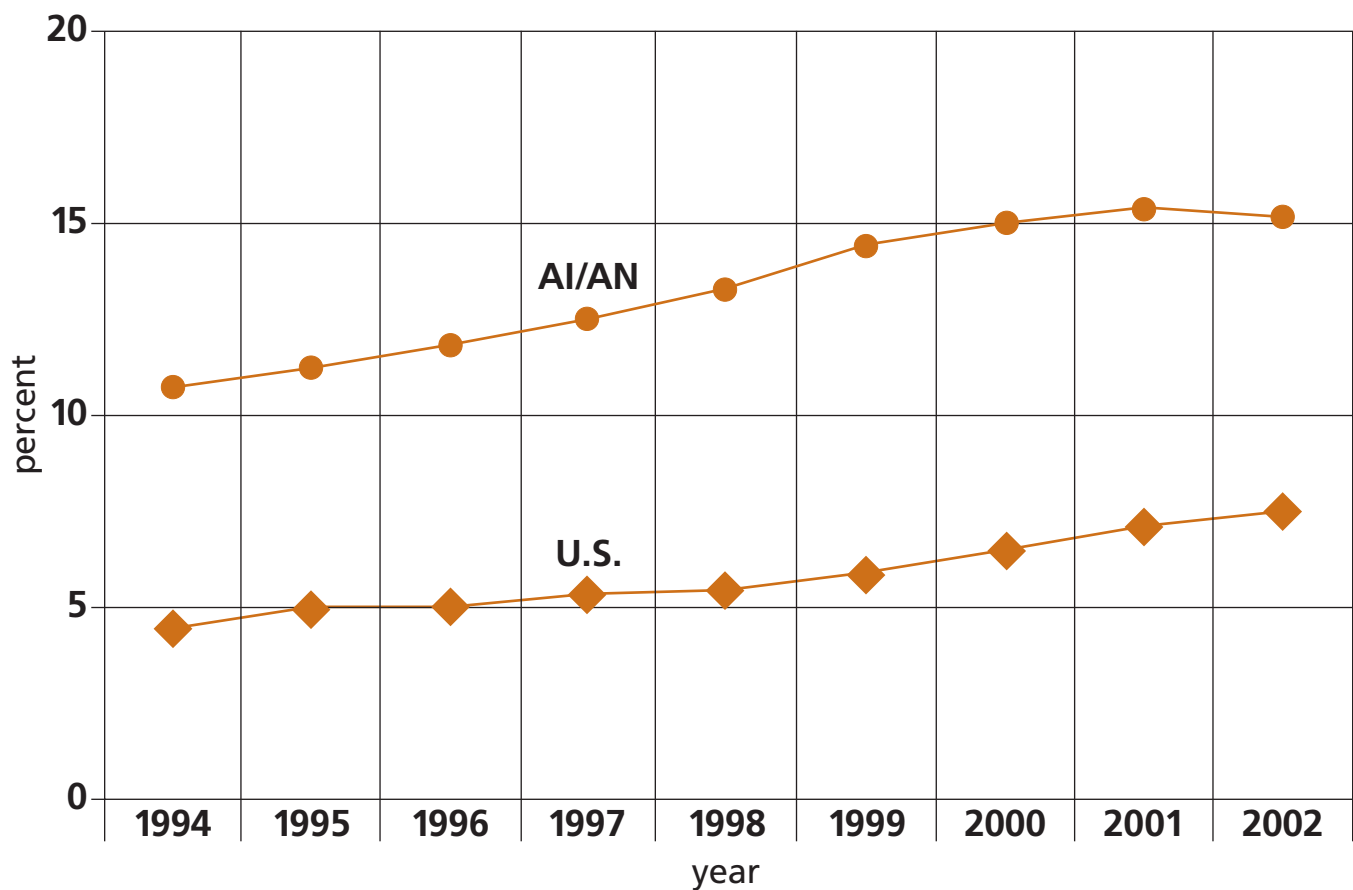
Challenging our minds with new ideas makes us healthier. All of this affects our wellness and can help prevent diabetes. The most effective prevention efforts have strong community support and acceptance.





## 3.2

# Diabetes in the U.S. Population



Source: FY97-01 IHS APC and user population files; based on 2000 U.S. population.





### 3.3

## Lesson 3 Quiz

Name \_\_\_\_\_

Date \_\_\_\_\_

*Directions: Please mark the response you believe is correct for each of the following items.*

1. The increase in the number of people with diabetes is likely a result of  
\_\_\_\_\_ a. lifestyle changes in what we eat and how much activity we get.  
\_\_\_\_\_ b. something that is unknown.  
\_\_\_\_\_ c. only things that we cannot control.  
\_\_\_\_\_ d. just eating too much sugar.
2. Which of the following is a risk factor for developing type 2 diabetes?  
\_\_\_\_\_ a. diet—eating too much and not a balanced diet  
\_\_\_\_\_ b. having someone in your family who has type 2 diabetes  
\_\_\_\_\_ c. not getting enough exercise  
\_\_\_\_\_ d. all of the above
3. The rate of type 2 diabetes among Native Americans is lower than the rate for other groups.  
\_\_\_\_\_ true      \_\_\_\_\_ false
4. All Native Americans eventually get type 2 diabetes.  
\_\_\_\_\_ true      \_\_\_\_\_ false
5. Type 2 diabetes can be prevented or delayed by making healthful lifestyle choices about our diet and physical activity.  
\_\_\_\_\_ true      \_\_\_\_\_ false







### 3.4

## Lesson 3 Quiz—Answer Key

1. The increase in the number of people with diabetes is likely a result of  
☒ a. lifestyle changes in what we eat and how much activity we get.  
☐ b. something that is unknown.  
☐ c. only things that we cannot control.  
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☐ a. diet—eating too much and not a balanced diet  
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☒ d. all of the above
3. The rate of type 2 diabetes among Native Americans is lower than the rate for other groups.  
☐ true    ☒ false
4. All Native Americans eventually get type 2 diabetes.  
☐ true    ☒ false
5. Type 2 diabetes can be prevented or delayed by making healthful lifestyle choices about our diet and physical activity.  
☒ true    ☐ false





## 4.1

# Lesson 4 Quiz

Name \_\_\_\_\_

Date \_\_\_\_\_

*Directions: Please mark the response you believe is correct for each of the following items.*

1. Which of the following is a factor that can be controlled by individuals?

- \_\_\_\_\_ a. the family into which we are born
- \_\_\_\_\_ b. our family's history with diabetes
- \_\_\_\_\_ c. our diet and activity level
- \_\_\_\_\_ d. none of the above

2. Inventions like the riding lawn mower, television, and the car

- \_\_\_\_\_ a. were owned by most people when Anna's grandmother was young.
- \_\_\_\_\_ b. have caused a decrease in the activity level of people.
- \_\_\_\_\_ c. did not affect the activity level of people.
- \_\_\_\_\_ d. should never be used if we want to be healthy.

3. Our environment is made up of things in our surroundings such as climate, terrain (mountains, desert, fertile farmland), technology, food resources, and more.

- \_\_\_\_\_ true    \_\_\_\_\_ false

4. Diabetes is a serious disease, but only adults get it.

- \_\_\_\_\_ true    \_\_\_\_\_ false

5. Native Americans have a higher rate of diabetes than other groups, but I can make choices to prevent getting type 2 diabetes.

- \_\_\_\_\_ true    \_\_\_\_\_ false





## 4.2

# Lesson 4 Quiz—Answer Key

1. Which of the following is a factor that can be controlled by individuals?

- \_\_\_\_\_ a. the family into which we are born
- \_\_\_\_\_ b. our family's history with diabetes
- ☒ c. our diet and activity level
- \_\_\_\_\_ d. none of the above

2. Inventions like the riding lawn mower, television, and the car

- \_\_\_\_\_ a. were owned by most people when Anna's grandmother was young.
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3. Our environment is made up of things in our surroundings such as: climate, terrain (mountains, desert, fertile farmland), technology, food resources, and more.

- ☒ true    \_\_\_\_\_ false

4. Diabetes is a serious disease, but only adults get it.

- \_\_\_\_\_ true    ☒ false

5. Native Americans have a higher rate of diabetes than other groups, but I can make choices to prevent getting type 2 diabetes.

- ☒ true    \_\_\_\_\_ false

