Grade Level

3-12

Class Periods

2

Goals/Objectives/Student Outcomes:

Students will:

- Understand the changes in ideas about sanitation over time.
- Understand the changes in ideas about privacy over time.
- Learn about the ways to treat diseases and injuries.
- Learn about the attitudes towards medicine and drugs.
- Learn about the evolution of rooms and buildings devoted to maintaining good health.

Materials:

- 1. Telephone books, old and new
- 2. Local directories, old and new
- Photographs and illustrations of articles used for health and sanitation
- 4. Newspapers, old and new
- 5. Encyclopedias and other reference books
- 6. Home health care books
- 7. First aid manuals and charts
- 8. Diaries, reminiscences, novels, and stories about life in the past
- 9. Time to interview doctors, nurses, garbage truck workers, landfill workers, architects who design health facilities, and others

Background:

Our attitudes about what constitutes socially acceptable behavior change, often for no identifiable reason. A century ago entire families commonly lived in one or two rooms with little privacy. In more recent times it has been common for families to live in situations where there are separate bed-rooms for each person, as well as separate rooms for cooking, eating, studying, recreation and entertainment.

Just as ideas about privacy have changed, so have ideas about bathing, shampooing hair, and brushing teeth. Some of us believe that to maintain good health it is absolutely necessary to bath daily, change our clothes each day, brush our teeth twice a day, and shampoo our hair every day.

In late 20th century America personal hygiene has become very important. Earlier, when obtaining food and shelter occupied a large part of our daily routine, personal hygiene was quite secondary. Whereas until recently hygiene was of less concern, certain important changes have increased life expectancy, decreased infant mortality, and drastically reduced communicable diseases. Moving toilets from outside the house to inside with plumbing was one such change. Concern about community health and increased population that led to overcrowding may have brought about the shift to indoor plumbing.

Health care professions also have changed. There are now licensing standards for doctors and nurses, and controls on the purity of drugs and medicines.

Procedure:

This thematic lesson plan is intended to introduce this particular topic to students. The activities are intended to introduce students to the process of inquiry that can be applied to the study lowa history. In many cases the same activities can be used to explore the topic in a variety of lowa history time periods. This lesson plan can also be used in conjunction with other topical areas in this curriculum.

These thematic lesson plans underscore basic skills such as reading, writing, communicating orally, and collecting reference sources. Many of the activities will give students practice in using higher skills as in reading, writing, communicating orally, collecting reference sources and using a library; distinguishing between primary and secondary sources; using charts and timelines; and developing vocabulary. The teacher can introduce higher level skills through these activities such as collecting information from a variety of sources through observation and questioning; compiling, organizing, and evaluating information; comparing and contrasting; drawing conclusions or inferences from evidence; considering alternative conclusions; making generalizations; recognizing points of view; understanding how things happen and how things change; recognizing how values and traditions influence history and the present; grasping the complexities of cause and effect; developing a chronological sense; and understanding events in context.

Activities:

1. Draw a floor plan of your house and indicate which rooms or areas are designed for activities related to hygiene and sanitation.

- 2. List the natural dangers that face people today.
- 3. List the natural dangers that faced people a hundred years ago. Compare and contrast the two lists.
- 4. Write a story about the treatment of an accident victim a hundred years ago.
- 5. Collect photographs and other illustrations of fixtures, equipment, and utensils related to health and sanitation.
- Check the dictionary for definitions of health, hygiene, and sanitation.
- 7. Interview the local police and health officials about the laws that regulate matters of health and sanitation in your community.
- 8. List laws that are designed to protect people from danger.
- 9. For someone who has never heard of the activity, write a report that explains how and why you take a bath, brush your teeth, shampoo your hair, and clean and cut your finger nails.
- 10. Write a report about the different attitudes toward hygiene and sanitation in different parts of the world.
- 11. List the ways in which late 20th century attitudes about privacy differ from those of a hundred years ago.
- 12. Write a story about lore in an 1846 lowa log cabin where two families of 14 people live in one room for a year.
- 13. Write a report about the earliest development of sewers and indoor plumbing.
- 14. Interview local officials about the problems involved with trash and garbage disposal and what proportion of the municipal budget is used for these activities.
- 15. Draw pictures or make models of facilities, rooms, and buildings related to hygiene and sanitation.
- 16. Check the local telephone book for all the companies and stores that sell equipment related to hygiene and sanitation or that provide other services to help maintain good hygiene and sanitation.
- 17. Ask a nurse or doctor to explain and demonstrate first aid for injuries of various kinds.
- 18. Learn emergency techniques for dealing with accidents or injuries.
- 19. List all safety rules in your school and indicate why these rules exist.
- 20. Write a short biography of a person who lived through a time of change from outdoor toilets to indoor bathrooms.
- 21. Discuss the use of the term "bathroom" for a room in which many things take place not related to taking a bath. What are the other terms used to mean an indoor toilet?
- 22. Visit a local hospital and ask about the changes in facilities and procedures during the past hundred years.

Assessment of Outcomes:

- 1. List all local agencies and companies that deal with matters of health, sanitation, and disposal of waste materials.
- 2. Compare and contrast the changes over the last hundred years in both attitudes and practices about hygiene and sanitation.
- 3. Write a report about the advances in medical knowledge and treatment during the past hundred years.

- 4. Make a list of human diseases and treatments for them.
- 5. Draw a map of your community showing all of the facilities that help people improve their health and sanitation.

Extensions and Adaptations:

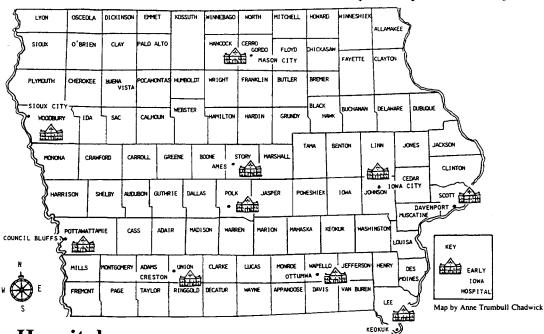
Most of the activities listed under procedures can be easily adapted to meet the learning needs of most students at various ages. Many of the listed activities can be used as art, music, writing, math, or science projects. Be sure to draw on teachers within your school and resource people in your community. The folklife section of this curriculum provides a list of community resource ideas.

Resources:

Contact the Iowa History Resource Center at the State Historical Society of Iowa for a list of books, videos, organizations and ideas for studying Iowa history. Write to: Education Coordinator, State Historical Society of Iowa, 600 East Locust, Des Moines, Iowa 50319.

Wild Rosie's Map Page

Meet Wild Rosie, Your Official "Goldfinch Tour Guide" for a trip into Iowa's past.



Early Hospitals

Ames—Mary Greeley Hospital, 1916

Council Bluffs—Mercy Hospital, 1887
Creston—Cottage Hospital, 1894
Davenport—Mercy Hospital, 1869
Des Moines—Mercy Hospital, 1894
Iowa City—University Hospitals, 1873
Keokuk—College of Physicians & Surgeons, Medical
Department of the Iowa State University in
Keokuk, 1849-1850
Mason City—Mason City Hospital, 1909
Ottumwa—Ottumwa Hospital, 1894
Sioux City—St. Joseph's Mercy Hospital, 1891

Have you ever been to a hospital? Hospitals have not always been around. In the nineteenth- and early-twentieth centuries, most doctors went to patients' homes to take care of them. The switch from home care to hospital care is only one of the many changes in medicine.

The map above shows a few of Iowa's early hospitals. Often more than one hospital was located in larger towns.

Look at another Iowa map. Write the name of the town by the hospital on the map. Then answer the following questions.

- 1. In what year was Iowa's first hospital opened?
- 2. When was the Ottumwa Hospital opened?
- 3. What name most frequently appears in these hospitals?
- 4. What is the definition of the word? How does it relate to hospitals?
- 5. What is the closest hospital to your house today? (It may not appear on the map.)

Kur Zado

Horse & Buggy Doctors

He climbed into the black buggy. It was beginning to rain and the doctor feared that the roads might turn into pools of mud. He didn't know if the horse would make it. He had about 50 miles to travel to see the sick Petersen baby. It would probably take most of the day to get there.

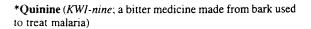
Dr. Nathaniel L. Bunce was Marshalltown's new doctor in 1857. The 28-year-old doctor rode his horse when the roads were too muddy to see sick patients in their homes.

Bunce was one of Iowa's early frontier physicians. According to the 1850 United States Census, there was one physician to every 355 people in Iowa. The territory was so large that doctors had to travel great distances to reach their patients.

Most nineteenth-century doctors knew little about what caused diseases. The nineteenthcentury doctor could usually do the following to help patients:

- Give valuable assistance at childbirth
- Set broken bones
- · Perform amputations and minor surgery
- Extract teeth
- Administer quinine to malaria patients*
- Vaccinate against smallpox**
- Give general, common sense advice about diet, exercise, and environment.

"Beyond this," writes historian Peter T. Harstad, "there was little else of value that physicians could do for patients other than to be kind and understanding." Doctors like Bunce worked by themselves and made house calls in patients' homes.





These doctors perform an operation at St. Joseph Mercy Hospital in 1910.

Over time the role of the doctor changed. Preventing disease and **rehabilitating** (*RE-ha-bil-eh-tate-ing*; bringing back to a healthy condition) the sick were added to the healing role of the doctor.

Iowa's first doctors were mostly males. A few women were gradually admitted into medical schools and became doctors in the latter part of the nineteenth century (see "Doctors Wanted").

How did the world of medicine change for doctors in Iowa?

"Scorpion Sting" Attack

Pioneers often relied on home remedies to cure disease before they contacted a physician. The most serious disease in frontier Iowa was called the "scorpion sting." Fever and **ague** (a gyoo; malaria) struck many homes. People could come down with chills and fever one afternoon, and die the next day. The symptoms included chills,

^{**}Vaccinate (VAK-se-nate; to introduce weakened germs of a disease into the body to make it resistant to attacks of that disease). Smallpox (a contagious disease marked by fever and sores)

fever, and lack of energy.

"We could only eat when the chill was on us, being too sick when the fever was on," wrote Granville Stuart. "I well remember how the cup would rattle against my teeth when I tried to drink. . . . Almost everybody in [the] thinly settled part of Iowa would have the ague part of the time. . . . I can still see how thin and pale and woe-be-gone everyone looked." Doctors were helpless to find a cure.

A less serious, but annoying ailment was called **prairie itch**. "It was very amusing at times to see a whole family out around a log house, leaning against the butt ends of the logs," recalled Elisha W. Keyes, "scratching first one shoulder and then the other." Often the home remedy was lotion made "from the roots of the skunk-cabbage."

Medical Training

Before the Civil War (1861-65), some people practicing medicine were not graduates of medical schools. But many young people studying to be medical doctors (M.D.'s) read books, attended medical lectures, served as assistants to older physicians, and observed operations like amputations.

At the time, most medical students were trained in Europe or in the East. Many doctors came to Iowa with medical degrees from schools in Kentucky or Ohio.

Later more schools opened in the West. The State University of Iowa's medical department opened in its current home in Iowa City in 1870. (The medical department existed before the opening of the hospital three years later.) It first

was called the College of Physicians and Surgeons of the Upper Mississippi in Keokuk in 1849-1850.

The Iowa State Medical Society was formed that year. The society was created to bring respect and professionalism to medicine.

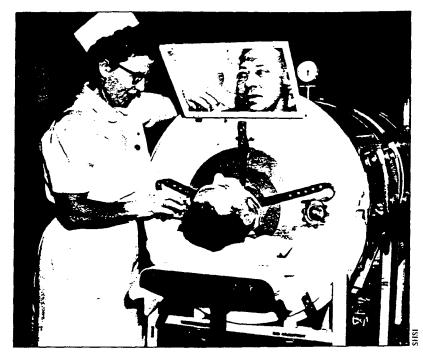
Bleeding

Physicians used simple drugs and instruments compared with the drugs and technological advances used by doctors today. In the medicine chests of most nineteenth-century doctors were a stock of basic drugs: castor oil, bark, calomel, Dover's powder, and quinine. They also carried unusual instruments. "In case of fever, a patient was generally bled," noted one historian. "Every physician carried lancets (small knives) for this purpose." It was believed that bleeding would relieve the body of disease. One doctor from Sibley wrote that he always carried "a pocket case of instruments, a few tooth forceps, an amputating case, and a pair of saddlebags."

What did these doctors do with their medicine chests? Practicing physicians often advertised their services in newspapers. One doctor's rates in Bloomington (now Muscatine) were:

First visit in town in the daytime	\$1.00
Every succeeding visit	.50
Visit in the night time	1.50
Bleeding	1.00
Tooth Extracting	1.00
Attention on a patient all day or night	
by request	5.00

Not all physicians were strict about collecting their fees. Many doctors received food as payment instead of money. Dr. Campbell



In the 1950s polio was an epidemic that struck many homes. It was a virus that often caused paralysis. Some people, like this man, lived in artificial iron lungs. The artificial lungs helped a person to breathe when the lung muscles were too weak.

Gilmer, who lived three miles outside of Ft. Madison, rode and answered "all calls, day or night, no matter what the state of the weather, and never made inquiry as to whether the patient was able to pay a fee."

Today's Doctors

Today's doctors work as part of health care teams. With the help of registered nurses, dieticians, dentists, pharmacists, and others, most physicians work in group practice and hospitals.

Physicians diagnose illness by asking about a patient's medical history (past health and illness), performing physical examinations, and ordering

medical tests. Patients are now treated with drugs and surgery.

Like mid-nineteenth century doctors, today's doctors also give vaccinations (vak-se-na-shuns) and regular physicals, and conduct scientific research.

To become medical doctors, young men and women must meet strict educational requirements. They study in college and medical school for eight years. Additional years spent as interns and residents provide the needed experience to become doctors.

Men and women physicians have come a long way in working to prevent illness since the days when Dr. Nathaniel Bunce rode 50 miles in his buggy to see one sick baby.

Dandy Home Remedies

by Paul Stolt

Elmer Dandy trotted up the path to his house after school. He wanted to get his chores done early so he could read from the new book his teacher had given him. But as he got closer to home he saw his mother standing on the front porch.

"Elmer," she called, "could you get me some things from the woods and the garden before you come in? I need some slippery elm bark, some blackroot, an onion, some dill, and bring in a few logs for the stove, too!"

"Aw, Ma, do I haveta?" Elmer grumbled as he walked slowly toward the woods.

"Yes. Now hurry up! We haven't got all day," his mother said smiling.

'What is all this stuff for anyway?" he asked when he returned to the house.

"Well, your sister's got a bad cold and a nasty cough," she said throwing another log in the stove. 'So I'm going to make her a nice cup of slippery elm bark tea and an onion poultice (pole-tiss).

"What's a poultice?" asked Elmer.

"A poultice is something warm and moist, like these onions I'm frying," she said dropping a spoonful of lard (soft, white grease made from hog fat) in the frying pan. "When they're good and warm, I'll wrap them in this old towel and lay it on your sister's chest. It will help her breathe easier.'

'Does she haveta drink that stuff, too?"

"Yes, the slippery elm bark tea will help her cough and sore throat.

"What are you doing with those dill seeds?" asked

"I'm grinding them up to put in a glass of water. Your little brother Howard has the hiccups, and this will help him to get over them.'

"What's this stuff?" Elmer asked pointing to two

cups of steaming black liquid.
"That's blackroot tea," replied his mother. "Your brother Jonathan says his stomach aches, and it won't hurt for you to drink some also.'

"Aw, ma!" Elmer moaned.

Elmer's leg began to itch. As he scratched, a red rash was beginning to show. His mother caught him

"Elmer! What are you doing? Let me see that leg," she said pulling up his pants leg.

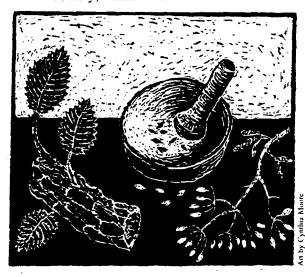
"My leg itches really bad, Ma. What's the matter with it?"

"It looks like you've gotten into some poison ivy when you were in the woods," said his mother. "You'll have to take a nice bath in baking soda water tonight!'

'Aw, ma!"

"Oh, you'll be all right. You can read your new book while you soak in the tub.'

'Well, okay,'' Elmer said with a smile.



ACTIVITY

Can you match the home remedies (cures) with the symptoms (signs of sickness) that Elmer learned about in this story? Draw a line matching the remedy with the

(1) Slippery elm bark tea Stomach ache

(2) Blackroot tea

(3) Dill seeds

(4) Onions & lard

(5) Baking soda

Cold & congestion

Poison ivy

Hiccups

Cough & sore throat @

(5) baking soda—poison ivy. hiccups; (4) onions & lard—cold & congestion; (2) blackroot tea—stomache ache; (3) dill seeds— (1) slippery elm bark tea-cough & sore throat; SIOMSUY

Doctors Wanted — Women Need Not Apply

In nineteenth-century Iowa, some women worked as nurses. Few were doctors. What barriers prevented women from becoming doctors?

by Sharon E. Wood

When Delia Irish was a girl growing up in Wisconsin, she may have heard about Elizabeth Blackwell, the first woman in America to graduate from medical school. Elizabeth became a doctor in 1849, when Delia was seven years old. Delia might have decided then that she, too, wanted to be a doctor.

In those days, there were not many places where a woman could study medicine. Even the college Elizabeth Blackwell had attended refused to admit any other women. So when Delia finished high school, she began to study medicine with a local doctor. That was the old way, but Delia wanted a modern education.

A special medical college just for women had been founded in Philadelphia, so Delia decided she would go there. She had to teach school to earn the money, but in 1868, she finally became a doctor.

With her new medical degree in hand, Dr. Delia Irish moved to Davenport to work as a doctor. She was one of only eight women physicians in the whole state of Iowa.

Many people did not think women should be



Dr. Delia Irish was one of lowa's early women

doctors at all. A medical professor at Harvard University in Boston, Massachusetts, wrote a book claiming that education for women would ruin their health and make them unable to have children. In some places, the men in charge of licensing doctors refused to give women doctors licenses. Women were often barred from medical societies.

Opportunities in Iowa

Luckily, things were a little better in Iowa. Delia Irish was welcomed into the medical society in Davenport. And in 1875, she joined the state medical society.

When the medical school at the State

University of Iowa opened in 1870, both men and women were allowed to attend. Women came from all over the United States to study medicine in Iowa. Soon there was a woman on the board which licensed new physicians.

Gradually, more and more women became physicians. From the table below, you can see how male doctors continued to outnumber women doctors in the nineteenth century:

	1870	1880	1890	1900
Women	8	<i>7</i> 3	128	260
Men	1,857	2,962	2,923	3,749
Total	1,865	3,035	3,051	4,009

In some places, the men in charge of licensing doctors refused to give women doctors licenses.

Many women doctors became leaders of their communities. Dr. Jennie McCowen of Davenport supported many charities. She also wrote for newspapers in Davenport, Chicago, and Cleveland, Ohio, and helped edit the state medical journal. Dr. Sara Pagburn Kime of Ft. Dodge worked for better care for the mentally ill. She and her husband also ran a hospital for people with tuberculosis. Dr. Margaret Abigail Cleaves was a founder of the Des Moines Woman's Club. Later she moved to Pennsylvania

This illustration from 1870 shows a class of young women medical students at a lecture.



where she was a pioneer in providing better care for mentally ill women.

"In union there is strength"

Even though the number of women doctors continued to grow, there were still only a few compared to the number of men doctors. A woman doctor might rarely get to meet and talk to another woman doctor. In 1898, some women decided that they could help each other be better doctors by starting an organization. The Society of lowa Medical Women was the first state medical woman's society in the country.

"In union there is strength," proclaimed Dr. Azuba King of Des Moines, one of the first presidents of the organization.

"Each must give the best that is in her for the good of all," said Dr. Jennie McCowen, "standing shoulder to shoulder, and holding out hands of sympathy and helpfulness and good cheer to all newcomers."

The women met each year to discuss the pleasures and problems of their profession and to learn the latest breakthroughs in medicine. Sometimes they invited guests, like one of the first women surgeons, Dr. Bertha Van Hoosen, to give lectures at their meetings.

Struggles Ahead

It is not surprising that these women doctors felt the need to join together to support each other. In spite of the growing number of women in medicine and the acceptance many found in Iowa, some people still did not think women should be doctors.

In 1897, some women in the medical school at

Drake University were harassed and insulted by male students. At first the medical school voted to end the problem by expelling all the women. But the directors of the university insisted that women had a right to study medicine, and the women were allowed to stay. Many of the women students did not feel welcome, so they left anyway to go to other schools.

From the days of pioneering women doctors like Elizabeth Blackwell and Delia Irish, women made great strides in the medical profession in the nineteenth century. But progress did not continue at the same pace in the twentieth century. Many medical schools continued to refuse to admit more than a few women. And women were not encouraged to become doctors.

In the 1970s, this began to change. More women are becoming doctors today, and medical schools gladly admit them as students. While there are still many more men than women in the medical profession, the future has never looked brighter for women who want to be doctors.

ACTIVITY

Look at the table on the previous page. Then answer the questions below.

- 1. How many women doctors were in Iowa in 1870?
- 2. How many men were doctors in Iowa in 1870?
- 3. How many more men than women doctors were there in 1900?
- 4. What was the first state medical woman's society?
- 5. Why did people think that women should not be doctors? Can you think of any other reasons?

Get Healthy Tips

by Chris Annicella

Did you know that many turn-of-the-century folks were into health fads? The big craze in exercise was bean-bag tossing and bicycling. Careful chewing and eating the new food—corn flakes—was supposed to ensure perfect digestion.

Bicycling was believed to cure asthma, diabetes, and other ailments. However, people feared that riding a bike might give you "bicycle face" or a set, strained look of tension caused by trying to maintain your balance. By the 1910s, the fitness craze dwindled.

Today we're in the midst of another health and fitness craze. However, experts say this is more permanent because of medicine's focus on the prevention of illness.

To help prevent disease and keep you healthy, we've collected a few basic health tips for kids:



Television and Fitness

What is the first thing you do after school? Do you practice for a team sport? Do you walk with your friends? Or do you take the bus home and flip on the television until dinner? Experts are discovering that how you spend your leisure time may indicate how healthy you are.



A Fitness Test: How Fit Are You?

Suppose you have a bus to catch and it is about three blocks away. What would you do?

(a) Know that you could catch the bus in time and run for it.

(b) Wonder if you could catch it, but run anyway. You might be pretty tired for awhile.

(c) Not even try, because you know that you could never run far enough to catch it.

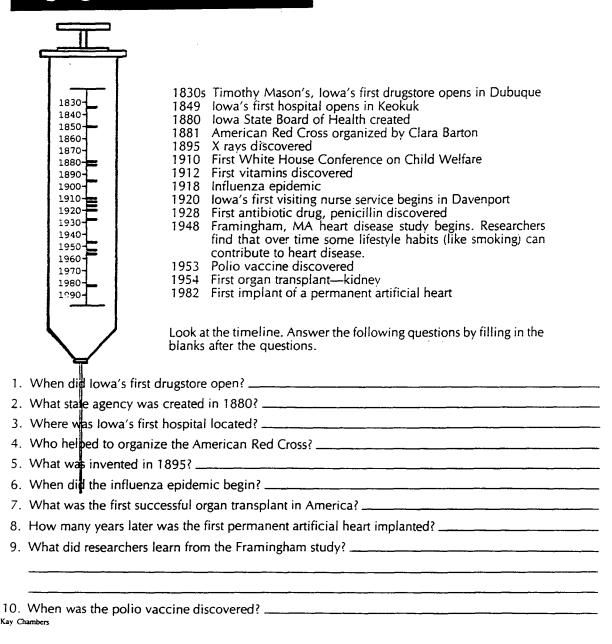
Your answer may give you a clue to how fit you are. As you can see, fitness is not just for athletes. Being fit means that you can participate in daily activities, like running without getting tired.

Nutrition: Feel Good and Eat Healthy

Have you ever heard the expression "you are what you eat?" It's true! Along with exercise, it is important to eat the right foods to stay healthy. Food provides fuel to your body so you can study, play, run, and even sleep.

*Before starting any new diet or exercise program, check with your doctor.

Highlights in Health Timeline





A Nutrition Foundation

It is important to eat a balanced diet choosing foods from each of the four food groups to get all of the nutrients your body needs.

(1) Vegetable and fruit

4 servings per day

(2) Bread and cereal

4 servings per day

(3) Milk and cheese

3 servings per day

(4) Meat, poultry, fish, and 2 servings per day

beans

What about that yummy fifth food groupsweets? Are sweets such as candy, pop, and cookies forbidden? Experts say no. If you eat a balanced diet and exercise regularly, it is okay to occasionally eat sweets.

Fitness Tips

- Try many different activities. Choose a "lifelong sport"—one you can enjoy all your life. You may like to play team sports now, but as you get older it may be harder to find others to play with. Some lifelong sports include: cycling, swimming, running, walking, aerobics, tennis, and racquetball. Experiment!
- Remember to warm those muscles by stretching before exercising.
- Keep it fun! Get your family and friends involved.
- Think of exercise as your leisure time. It is not a punishment.
- If you prefer reading to running, try walking as your exercise.
- For more information, write for the publication "Get Fit." It offers kids exercises to help them to get ready for the Presidential Fitness Award Test. Write: PCPFS, 450 5th Street NW, Department 81, Washington, D.C. 20001.



Be Chewsy

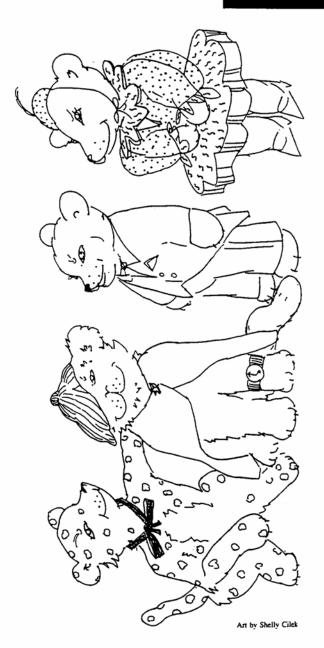
Snacking may bring to mind candy bars and potato chips, but these foods are high in sugar and calories, and have little nutritional value. They may give you an energy spurt, but it won't last long. If you like to munch between meals, nutritionists suggest eating fruit, yogurt, popcorn, vegetables, or nuts.

Other Health Tips

- Teeth are an important part of overall health. How often do you brush and floss your teeth? Experts say that most tooth decay can now be prevented by brushing twice a day and flossing once a day.
- How much sleep do you get each night? If you find that you are tired and cranky throughout the day, chances are that you are not getting enough sleep. Sleep will make you feel alert and ready to go.
- As summer nears, be careful of staying out too long in the sun. Too much sun is not healthy for your skin.
- Call TEEN LINE at 1-(800)-443-TEEN, the only health information line for kids in the United States! Call day or night if you have questions relating to health or fitness. (This is not a crisis line, but a health information line.)

A healthy lifestyle will make you feel better, look better, and will help you live a long, enjoyable life. Start now to get healthy!

Health Anagrams



Rearrange the letters of the strange phrases on the left to make words that have to do with health. Make the words on another piece of paper and then draw a line from the funny phrase on the left to its matching health word on the right.

vice can seem dire hail spot run sing rod cot pact is harm demi epic fun in zeal expect fancy lie rod cross all the hip cub me tent rat Lock fine dime eye nigh a seen at his us Gerry visa mint I or scale it dents nut in riot I cob era Tess fin seas die I pencil nill ripe on vent

vaccine surgery nutrition hygiene influenza fitness disease aerobic penicillin doctor remedies dentist hospital prevention calories nursing pharmacist epidemic **Red Cross** folk medicine anesthesia vitamins treatment public health

life expectancy

ripe on vent-prevention.

Answers
vice can—vaccine; seem dire—remedies; hail spot—hospital; run sing—nursing;
rod cot—doctor; pact is harm—pharmacist; demi epic—epidemic; fun in zeal—
influenza; expect fancy lie—life expectancy; Rod Cress—Red Cross; all the hip
cub—public health; me tent rat—treatment; lock fine dime—folk medicine; eye
nigh—hygiene; a seen at his—anesthesia; us gerry—surgery; visa mint—
vitamins; I or scale—calories; it dents—dentist; nut in riot—nutrition; I cob
era—aerobic; tess fin—fitness; seas die—disease; I pencil nill—penicillin;
era—aerobic; tess fin—fitness; seas die—disease; I pencil nill—penicillin;