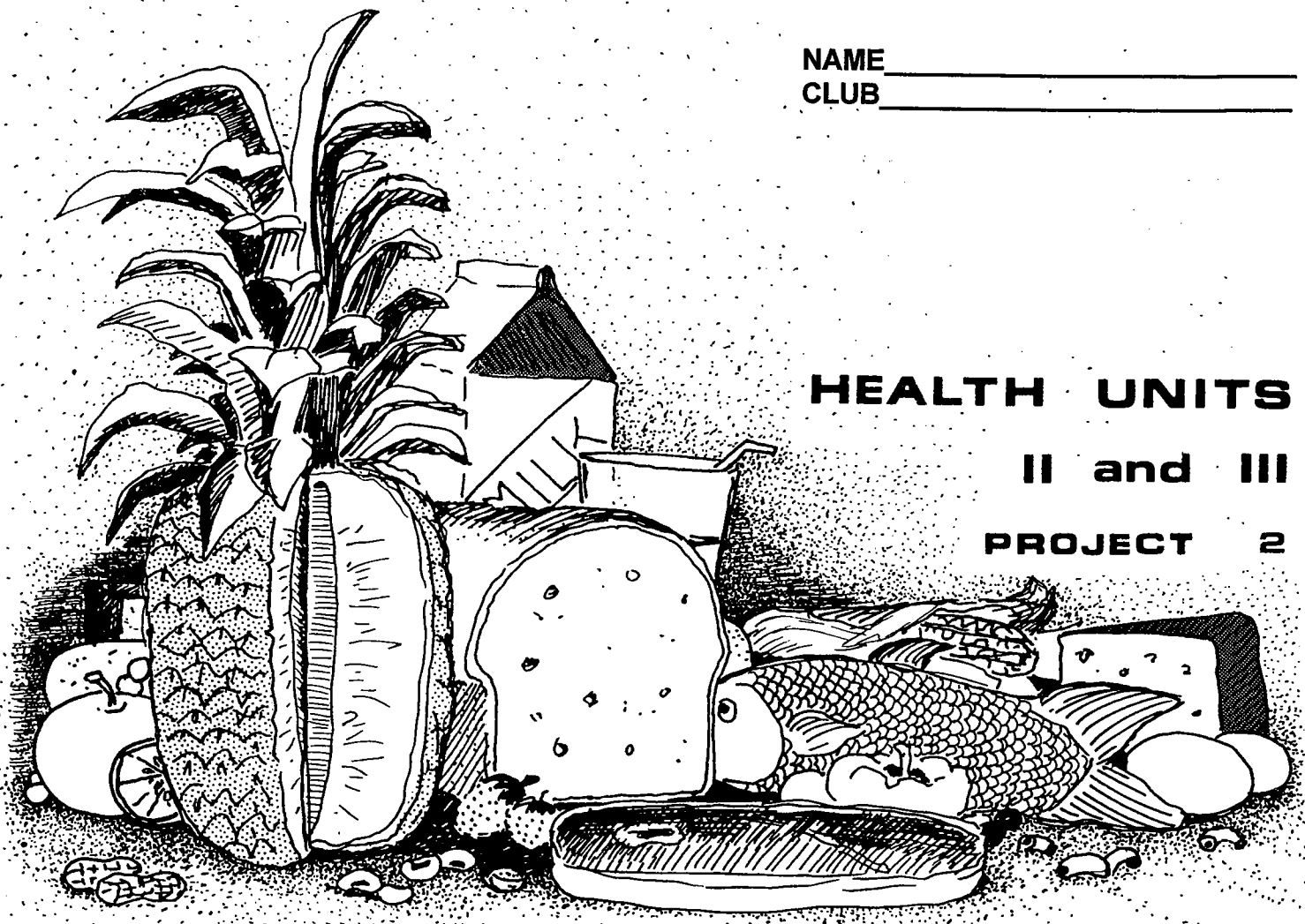


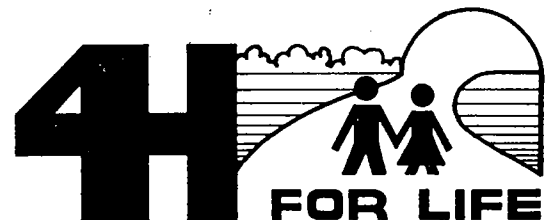
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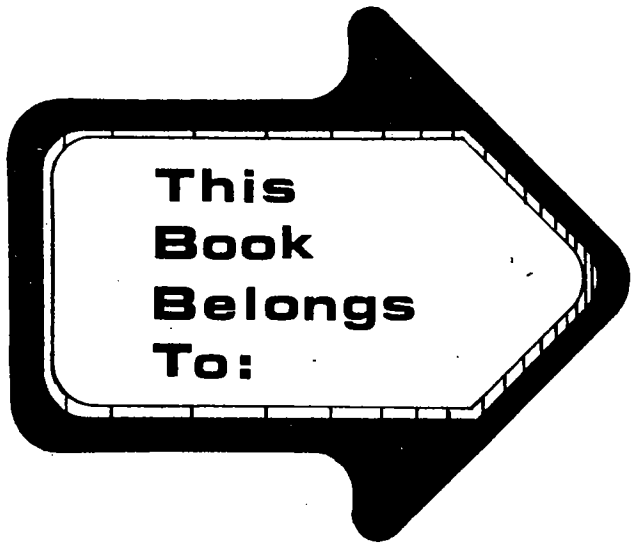


HEALTH UNITS
II and III
PROJECT 2

Looking Good — Food for Thought

Florida Cooperative Extension Service
Institute of Food and Agricultural Sciences
University of Florida, Gainesville
John T. Woeste, Dean for Extension





**This
Book
Belongs
To:**

NAME _____

ADDRESS _____

PARENT(S) NAME _____

AGE _____ **NUMBER OF YEARS IN 4-H** _____

COUNTY _____

NAME OF YOUR 4-H CLUB _____

NUMBER OF YEARS IN HEALTH PROJECT _____

GRADE IN SCHOOL _____

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LOOKING GOOD — FOOD FOR THOUGHT:

Health Unit II (Intermediate and Advanced Level 4-H Members)

and

Health Unit III (Advanced Level 4-H Members)

INTRODUCTION

It is often said, "you are what you eat." A working knowledge of food and nutrition is vital to everyone's well being and does not necessarily end with the "Basic Four". There are many aspects of nutrition that are constantly in the news and you should try to familiarize yourself with current information on additives, fads, and diets, and also learn how these factors may affect your health.

The stereotyped function of women as food buyer, food preparer, and food server is no longer true. In today's society, with an increased number of women working, husbands often take on meal planning and preparation responsibilities and find the challenges rewarding. Many world famous chefs are men and they find their job prestigious.

Boys as well as girls need to take an interest in nutrition because they never know when they will need to cook for themselves—example: right now if your parents work; during college; and, later in life.

Our society is geared toward slender girls and muscular boys with shiny hair and gleam-

ing teeth. This is a sign of popularity and status.

It's not by chance that some teens are thin, some fat, some have clear skin and shiny hair or some have dull lifeless hair and acne. The amount of food you eat and the type of lifestyle you lead affects your health and the way you look.

Project 2 will provide a basic knowledge of the following areas and if further information is desired you can obtain it from the resource list at the end of this booklet or from your 4-H leader:

- Examining your food style;
- Growth spurt;
- Over-the-counter weight loss products;
- Weight control;
- Food additives;
- Skin, hair and teeth;
- Vitamins and Minerals: Functions and myths;
- Anorexia nervosa and obesity.

DIRECTIONS

ALL INTERMEDIATE AND ADVANCED 4-H'ers:

Complete all activities in Unit II Project 2, and the summary for Unit II, Project 2.

ALL ADVANCED 4-H'ers:

Proceed at your own rate through Unit III, Project 2, and complete the summary for Unit III, Project 2.

OBJECTIVES

Objectives of Project 2 are as follow:

1. To learn about eating patterns of teens;
2. To understand the growth spurt during adolescence;
3. To assess teens' satisfaction with their body image;
4. To learn facts and myths about skin, hair, and teeth, and their care;
5. To learn facts and myths about vitamins and minerals;
6. To discuss food additives and how they are used;
7. To learn the effectiveness of over-the-counter weight loss products;
8. To learn the three key elements to weight control;
9. To understand the dangers of liquid protein diets;
10. To learn about two nutritional problems and how they relate to adolescents.

HEALTH UNIT II, PROJECT 2 (INTERMEDIATE AND ADVANCED LEVEL 4-H MEMBERS)

Examine Your Food Style

Parents and health professionals have always been concerned about the eating patterns of teenagers in general.

Over the years studies have indicated that teenagers' diets are lowest or deficient in calcium, iron, Vitamin C, and Vitamin A.

Many authorities claim that teenage girls have the poorest diets usually because of self-imposed calorie restricted diets.

Teens are notorious for skipping meals: breakfast and lunch are the most frequently missed. Even though they skip meals, teens usually snack two to six times a day. Snacking often makes up for total nutrient intake, unless it's all "empty-calories".

Teens' eating patterns change because they become more involved with after school activities, evening activities, and because peer influences cause them to conform and thus overlook eating habits of their family.

Irregular eating habits seem to be associated with ethnic and socio-economic factors. Research on this topic in various areas of the country have shown that race, parents' education, family income, and mother's employment all have an effect on eating habits.



Activity 1.



For one week, check all the balanced meals that you eat with your family (Refer to the 'Fabulous Four Guide' listed at the end of this book).

	BREAKFAST	LUNCH	DINNER
SUNDAY	_____	_____	_____
MONDAY	_____	_____	_____
TUESDAY	_____	_____	_____
WEDNESDAY	_____	_____	_____
THURSDAY	_____	_____	_____
FRIDAY	_____	_____	_____
SATURDAY	_____	_____	_____

- Are your eating habits regular?
[Yes] [No]
- How many balanced meals did you eat in one week? _____
- If you ate less than 10 balanced meals in one week, explain why you think your eating pattern doesn't include the essential nutrients your body needs regularly.

- List on your health contract the problems you identified above. You will learn more in Project 2 about how to establish a healthy eating pattern.



Activity 2.

Personal Contract For A Healthier Lifestyle



**MY PROBLEM AREA(S)
AS IDENTIFIED FROM MY
HEALTH PROFILE**

**MY PRESCRIPTION FOR
A HEALTHIER LIFESTYLE**

Moving Up (The Growth Spurt)

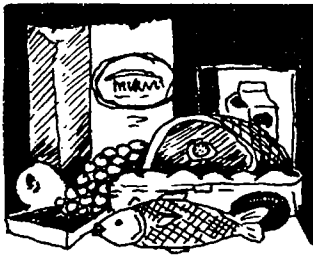
You often hear the saying, "growth spurt". During adolescence the rapid rate of physical growth is *second* only to that during infancy. This causes an increased demand for calories and all nutrients (protein, carbohydrates, fat, vitamins, and minerals). That's why you need to be concerned about regularly including essential nutrients in your diet.

This growth spurt begins earlier in girls than boys and often causes the girls to be self-

conscious. But keep in mind that boys not only will catch up in a year or two, but will surpass girls and keep on growing. Remember the growth chart that you used in Project 1 and recall that it was stressed that each teen passes through puberty at his own rate. If you think you are far behind or ahead of your peers, you may want to check with your doctor. If you want to find out more about growth during puberty, refer to *Health Projects 3 and 5*.

Body Image Survey

Activity 3



Take about five minutes to complete the *Body Image Survey* and decide how satisfied you are with yourself.

The *Body Image Survey* is designed

to measure how satisfied you are with the way your body looks. First, read all the questions and decide which body areas you are satisfied or dissatisfied with. Next, in the right hand column, list one or more things you can do to increase your satisfaction with or acceptance of your appearance. In some areas there may be nothing you can do but learn to like and appreciate yourself for your unique characteristics.

- A. Extremely satisfied
- B. Quite satisfied
- C. Somewhat satisfied
- D. Somewhat dissatisfied
- E. Quite dissatisfied
- F. Extremely dissatisfied

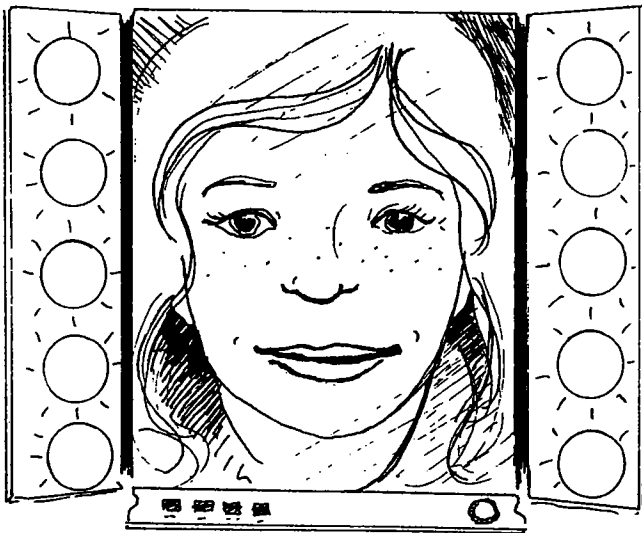
MY RECOMMENDATIONS

- 1. Height
- 2. Weight
- 3. Hair
- 4. Eyes
- 5. Ears
- 6. Nose
- 7. Mouth
- 8. Teeth

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

9. Voice	_____	_____
10. Chin	_____	_____
11. Complexion	_____	_____
12. Overall Facial Attractiveness	_____	_____
13. Shoulders	_____	_____
14. Chest (Males), Breasts (Females)	_____	_____
15. Arms	_____	_____
16. Hands	_____	_____
17. Size of Abdomen	_____	_____
18. Buttocks	_____	_____
19. Size of Sex Organs	_____	_____
20. Appearance of Sex Organs	_____	_____
21. Hips (Upper Thighs)	_____	_____
22. Legs and Ankles	_____	_____
23. Feet	_____	_____
24. General Muscle Tone or Development	_____	_____
25. Overall Body Appearance	_____	_____

Skin—Your Best Cover-Up



If you're like most teens, you are very conscious of your appearance, especially your skin, hair, and teeth. There is no one solution or one specific food to eat to give you healthy, shiny hair and clear soft skin. There are several solutions and they are no secret either:

- a well balanced diet
- adequate sleep
- regular exercise
- personal cleanliness
- stress management

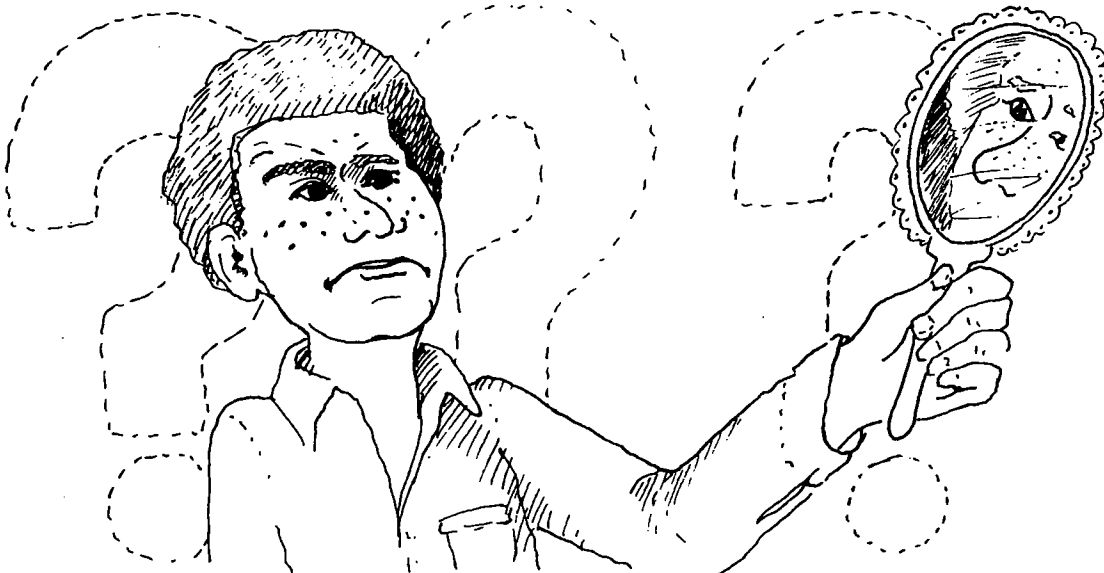
Activity 4.



Take the *Acne Quiz* and discover truths and myths about food, hygiene, and other factors that affect your skin. Circle true or false for each question.

Acne Quiz*

-
- | | |
|---|--|
| 1. Chocolate is a common cause of acne.
True/False | 8. Dandruff and acne are commonly found together.
True/False |
| 2. Bacteria cause acne.
True/False | 9. Squeezing pimples is dangerous.
True/False |
| 3. Antibiotics are an effective treatment for the majority of people with acne.
True/False | 10. A sauna or steam bath will help clear up acne by opening pores better than washing will.
True/False |
| 4. Eating greasy foods increases oil in the skin and thus increases acne.
True/False | 11. The birth control pill has been effective in treating some cases of acne.
True/False |
| 5. Acne increases in young people who are sexually active.
True/False | 12. Sunburns and sunlamps are good treatment for acne.
True/False |
| 6. Stress can make acne worse.
True/False | 13. Taking Vitamin A can reduce acne.
True/False |
| 7. Hair on the forehead makes acne worse.
True/False | |
-



*Used with permission from *Current Health*, Highwood, IL, Curriculum Innovators, Inc., 2, 1977, 28-29

Now, check your answers against the correct answers below. Score 1 point for each question you answered correctly.

Your Total Score _____.

1. **FALSE.** Chocolate is not a common cause of acne. Dermatologists agree that there is no one good food for skin. They used to say no chocolates, colas, or nuts for acne—but no longer. Some people may be allergic to these foods and experience trouble with the stomach but rarely do these foods cause skin problems.

Dr. Albert Kligman of the University of Pennsylvania Medical School says there is no scientific evidence that colas, peanuts, or chocolate cause or worsen acne. He recently fed two pounds of chocolate each day to volunteers with and without acne. The chocolate did not worsen acne of the first group nor cause acne in the second group. He and all dermatologists agree that a balanced diet is very important.

2. **FALSE.** Bacteria do not cause acne. According to the National Institute of Health, bacteria may cause acne to become worse by starting a secondary infection, but they do not *cause* acne.

3. **TRUE AND FALSE.** Antibiotics are an effective treatment for the majority of people with acne. Not all cases of acne require antibiotic therapy. It is effective in cases where a secondary infection was caused by bacteria. Some dermatologists prescribe long-term antibiotic therapy to help keep severe cases of acne under control.

4. **FALSE.** Eating greasy foods does not increase oil in the skin and thus increase acne. The grease one eats is *NOT* transported to the skin. Therefore, you can be reassured those potato chips weren't the cause of that last flare up.

Skin produces its own oil in a response to hormonal changes rather than in response to the diet. An increase in hormones causes an increase in oil (sebum). The hormone androgen (male sex hormone) is high in males, which explains why more boys than girls suffer from acne and why girls have a flare up prior to and during their menstrual cycle when their estrogen level is low and androgen level is high.

5. **FALSE.** Acne does not increase in young people who are sexually active. Sexual behavior has no effect on acne. Birth control pills may affect the skin either way: they can increase or decrease the number of pimples.

6. **TRUE.** Stress can make acne worse. Acne will commonly flare up in times of stress. This may be due to the reaction of the endocrine system, specifically, the adrenal glands, during stress.

7. **FALSE.** Hair on the forehead does not make acne worse. Dr. Kligman states there is no evidence that washing away oil will help cure acne even though the scalp has been labeled as a "fountain" of oil that drains onto the face.

A person will look and feel better if his hair is clean.

8. **FALSE.** Dandruff and acne are not commonly found together. Dandruff is no more common in persons with acne than in those without acne. Relief of dandruff has no effect on acne.

9. **TRUE.** Squeezing pimples is dangerous. A doctor or specially trained assistant may mechanically extract material from a pimple under sterile conditions. The danger may be infection. You may press bacteria and oil further into the skin causing infection and this may result in scarring. Once you have a scar, you may have it for the rest of your life.

10. **FALSE.** A sauna or steam bath will not help clear up acne by opening pores better than washing will. Most dermatologists recommend washing with regular soap, not massaging the soap into the skin. Rinse with plenty of lukewarm water making sure to remove all traces of soap from folds and creases. "Steaming" the face may result in greater oil production.

11. **TRUE.** The birth control pill has been effective in treating some cases of acne. The birth control pill contains hormones such as estrogen which may be effective in the proper dosage for some people.

However, the effects of the pill are still unknown so this treatment is not recommended for everyone.

12. **TRUE AND FALSE.** Sunburns and sunlamps are good treatment for acne. Sunburn may camouflage acne, but studies have indicated there is no decrease in the number of pimples. If there is a decrease of acne after a sun exposure it was most likely due to a hormonal change or a decrease of stress.

13. **TRUE AND FALSE.** Taking Vitamin A can reduce acne. A new treatment of applying Vitamin A acid to the skin has been found to be an effective treatment, but not a conclusive cure for acne.

This is different from taking large doses of Vitamin A internally. That could be lethal because the body stores excess Vitamin A in the liver.



Other Skin Tips

- Girls should use **OIL-FREE** or **WATER-BASED** cosmetics to prevent excess oil in the skin.
- Everyone should bathe daily and use a deodorant.
- Sunbathe wisely:
 - a. The sun is a known culprit in aging the skin. Have you ever seen a middle-aged man or woman with a deep tan? Does his/her skin appear leathery? Wrinkled?
 - b. The sun can cause a leathery appearance and excessive wrinkles over a period of years if sunbathers bake themselves consistently without any protection.
 - c. Recent research shows that the sun is a major cause of 90% of all skin cancer. This may seem unrealistic to you now, since most teens find it hard to imagine themselves twenty years from now when a skin cancer might become recognized.
 - d. How should you sun bathe?
 - 1) First, don't rush it! Start with short exposures.
 - 2) Get out of the sun before you are noticeably red. You're not safe in the water; ultraviolet rays can penetrate up to three feet of water.



- 3) If you're the fair skin type, sunbathe before 10 a.m. and after 3 p.m. when ultraviolet rays are the weakest.
- 4) You can burn on cloudy days too. Seventy to eighty per cent of ultraviolet rays penetrate clouds on overcast days.
- 5) Apply and reapply sunscreens often. Use a sunscreen with PABA (Para-aminobenzoic acid) to block harmful ultraviolet rays.

Some Hair-Raising Facts

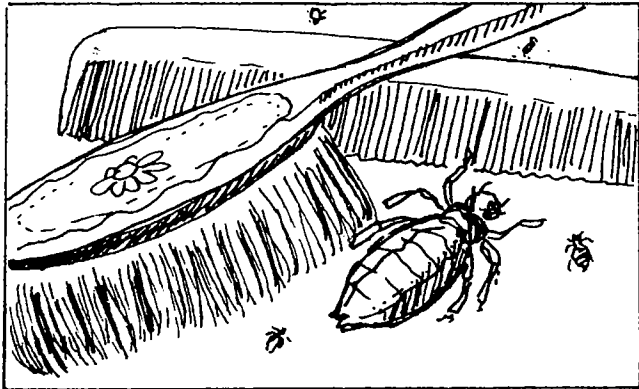
Dr. Joseph B. Jerome, of the American Medical Association, claims that vigorous brushing, shampooing, and massaging of hair will make it break. Even though the hair will grow back, if the root is alive, the broken hair will make the thinning problem more visible.



Below are some tips for healthy, shiny hair:

- Wash your hair at least once a week. Oily hair needs to be washed more often. Follow these tips for each shampoo:
 - a. Wash and rinse hair twice.
 - b. Be sure to rinse out all soap.
 - c. Use a creme rinse or a lemon juice rinse (2 Tablespoons lemon juice to a glass of water).
 - d. Rinse well.
 - e. Wash your comb and brush once a week.

- Brush your hair thoroughly. Do not brush wet hair as it may cause breakage. Brushing keeps your hair healthy and shiny.
- Do not lend your brush and comb to anyone.



Lice. Head lice are epidemic in some schools. These pin-head-sized insects can spread by contact with clothing, hats, scarves, brushes, combs, furniture, and carpets. Even a clean person can become infested.

The life cycle of a louse is 30 to 40 days. It feeds off a person's scalp by stabbing an opening and sucking out blood. Then it injects its saliva, which acts as a blood thinner to prevent clotting. The saliva causes head itching and scratching can cause a secondary bacterial infection. The female deposits three to four eggs per day during her lifetime—a total of about 90. She attaches them to the hair with a cementlike substance close to the scalp. The eggs will hatch in eight days and become adults in eight more days.

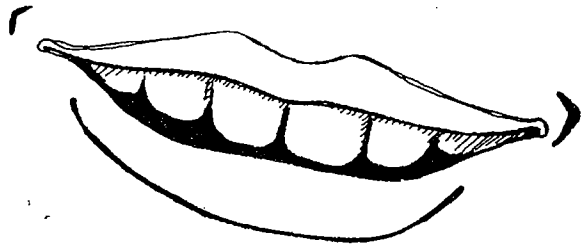
Prevention would include not lending combs, brushes, hats, jackets, or other clothing. Keep a periodic check on you scalp, especially if you have itching.

If you have lice there are shampoo preparations available at the drugstore or your local health department can recommend appropriate treatment. Also, all combs or brushes must be soaked in water and disinfectant or placed in hot water at 150 degrees for 10 minutes. Any clothing, towels, sheets or anything that may have come in contact must be washed in the washer and cleaned with a disinfectant.

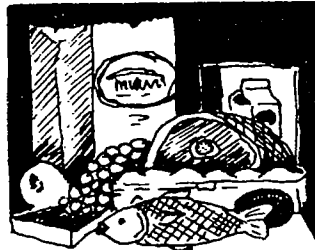


Your Teeth—Just A Smile Away

Your mouth works for you 24 hours a day, everyday. Do you know how to keep bright teeth, healthy gums, and fresh breath? Take the quiz below and find out what you can do for your mouth.



Activity 5.



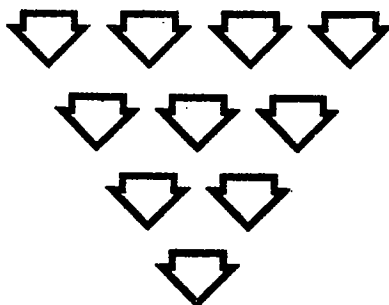
Complete the quiz below and discover your knowledge of dental hygiene. Circle true or false for each question.

1. You should brush your teeth after every meal. True/False
2. If brushing isn't possible, rinsing with water is a waste of time. True/False
3. Plaque is a bacterial deposit on teeth that can cause tooth decay. True/False
4. A stiff, hard toothbrush gets in the crevices better. True/False
5. The proper way to brush your teeth is side-to-side. True/False
6. A disclosure tablet shows you where cavities are, after you chew it. True/False
7. Fluoride in toothpaste or city water helps reduce tooth decay. True/False
8. You need to floss only your front teeth. True/False
9. Mouthwash is a good substitute for brushing your teeth. True/False
10. A visit to your dentist every year or two is sufficient. True/False

Now, compare your answers with the correct answer below. Score 1 point for each correct question.

Your Score _____

- 9-10 Smile and keep up the good work.
- 6-8 Brush and floss before it's too late.
- 4-5 Start brushing more often.
- 1-3 Make an appointment with the dentist!



1. **True.** You should brush immediately after each meal and snacks, if possible.
2. **False.** If you are unable to brush your teeth after eating, you should rinse your mouth out vigorously with some water. This will remove some unwanted food particles and bacteria that cause plaque.
3. **True.** Plaque is a sticky, not readily apparent substance that accumulates on everyone's teeth. Bacteria growing on the surface of a tooth form part of the plaque. If plaque is not removed by brushing, it may harden to form calculus or tartar which can be removed only by the dentist or a dental hygienist.
4. **False.** A stiff or worn toothbrush is ineffective. It can harbor bacteria and should be replaced at the first sign of wear. Consult your dentist about the stiffness of the bristles. Usually a soft brush will get into the crevices better to help remove food particles and massage the gums.
5. **True and False.** The latest viewpoint on the correct method of brushing, a combination of up-and-down and side to side, is appropriate as long as it systematically covers where the tooth meets the gum, the front, back, and chewing surfaces. Also, the top of the tongue should be brushed.
6. **False.** A disclosure kit, available in a drugstore, is educational in showing you how effective your brushing has been. After you chew the tablet, you will see a vivid red stain on your teeth where any residual areas of plaque remain. To remove the stain, brush away the plaque.
7. **True.** Fluoride in drinking water or toothpaste has resulted in decreased tooth decay of up to 65 per cent. Fluoride is either found naturally in some drinking water or is carefully added by some cities. Fluoride toothpaste is helpful even if you have fluoridated drinking water.
8. **False.** You need to floss between all teeth daily. This helps remove difficult food particles such as meat, candy, or nuts, and prevents buildup of plaque.
9. **False.** With regular toothbrushing using toothpaste, there is no essential need for mouthwash.
10. **False.** Most people need to visit a dentist every 6-12 months for a cleaning and a check up.

Are You Puzzled About Nutrition?*

Activity 6.



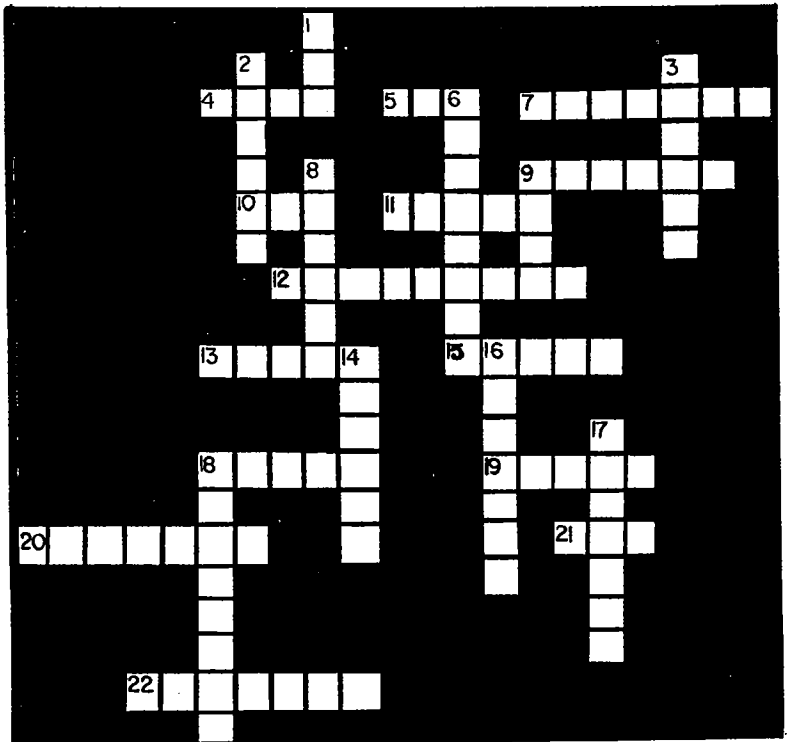
Complete the following puzzle to test your knowledge about nutrition. Check your answers in the back.

Across

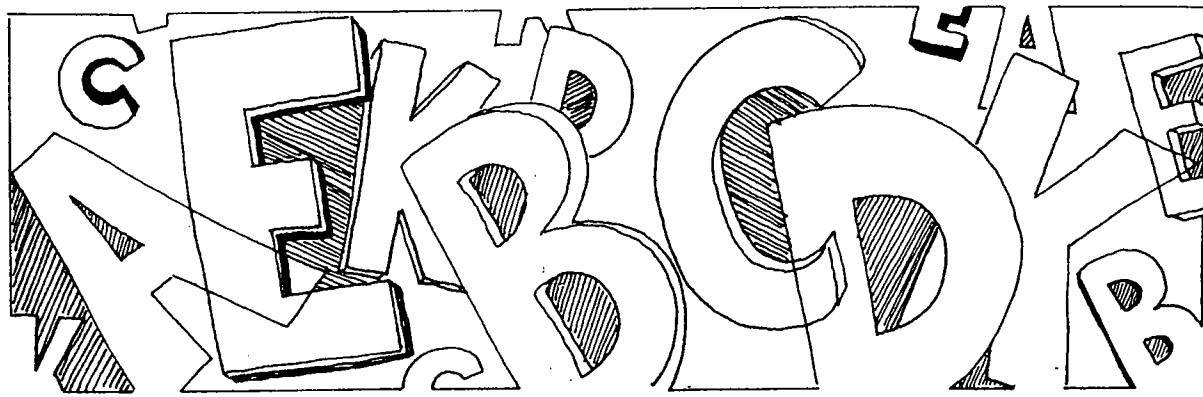
4. What you eat is your _____.
5. Beware of this type of diet.
7. Fat tissue.
9. A mineral found in iodized salt.
10. One suffering from anorexia nervosa may become very _____.
11. Fruits and vegetables are a good source of this.
12. Part of this may be removed surgically to lose weight.
13. Considerably overweight.
15. Seldom lies about your weight.
18. A source of immediate energy.
19. This tells you what you should weigh.
20. Each one counts.
21. Some wire this closed to lose weight.
22. Instrument to measure skin thickness.

Down

1. Not chubby but _____.
2. The vitamin found in whole grain cereal.
3. Many would like these to melt away.
6. This disease is four times more common among the overweight.
8. Many overweight people blame their _____.
9. A mineral frequently missing in teens' diets.
14. Inadequate intake of nutrients may result in lack of this.
16. This mineral is a bone builder.
17. Natural fertilizers are used on these foods.
18. Name of test that measures skin thickness.



*Used with permission from *Current Health*, Highwood IL, Curriculum Innovations, Inc., 4, 1977.



Vitamins

Vitamins are classified according to their solubility, for lack of a better classification system. There are a total of 13 (A, B-complex, C, D, E and K) discovered so far, but authorities say there are probably many more, yet undiscovered. Two broad groupings are:

FAT-soluble vitamins: A, D, E, K

WATER-soluble vitamins: C, B—complex

We'll review each vitamin briefly and discuss functions, food sources, and myths. You can refer to a Recommended Daily Allowance (RDA) chart in a nutritional text if you have further questions.

Numerous studies have been performed on the nutritional status of teenagers. Most of them reveal that teens aren't as undernourished as most people presume, but are shown to be deficient in vitamins C, A and D. These studies have varied among teenage populations and the results have not profiled every American teen. As discussed earlier, the increase in body demands for nutrients plus the change in eating patterns are the usual causes of diet deficiencies.

There are many misconceptions about vitamins as a whole. Probably, the worst misconception held by more people is that vitamins supply them with ENERGY.

THIS IS NOT TRUE!!!!!!

Also, people misuse vitamins thinking that if a little is good more must be better.

To assess whether you may have been spend-

ing money foolishly, answer the questions below:

- Do you take a vitamin every day? _____

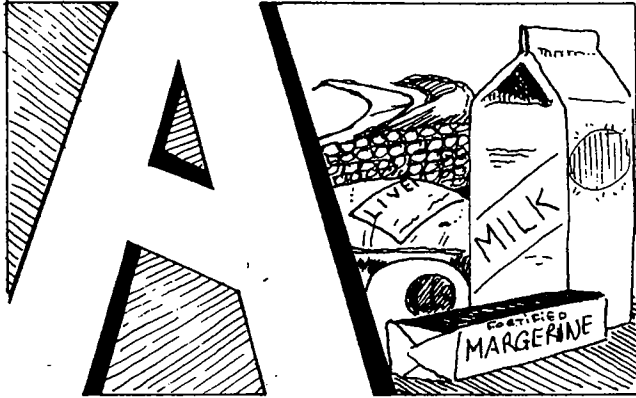
- Does your mother suggest it? _____
- Do you think it makes up for eating poorly? _____
- Do you think the more you take the better you'll feel? _____

- Do you think it gives you energy? _____

The Federal Drug Administration (FDA) fears that Americans are uninformed about vitamins. A study showed these results:

- Sixty million people thought they needed supplemental vitamins to be healthy.
- Twenty million thought that without vitamins, they would get sick.
- Some thought that without a daily vitamin pill they would get cancer.
- Most thought they needed to take vitamins to make up for poor eating habits.

Most authorities say that daily vitamin supplements are unnecessary if you eat a well-balanced diet daily. Even a lunch at McDonald's (two burgers, one order fries, and a milkshake) provides 1,000 calories and is well balanced except for slightly low Vitamin A. Vitamins and their functions are listed below.



VITAMIN A

- Functions:**
- Protects against night blindness
 - Promotes strong bones and teeth
 - Aids digestion.
 - Maintains smooth and soft skin
 - Maintains mucous membranes resistant to infection

Food Sources: liver

cream, butter, whole milk
 egg yolk
 green and yellow vegetables
 fortified margarine
 yellow fruits
 cheddar cheese

CAUTION: TOO MUCH VITAMIN A causes Hypervitaminosis A. Vitamin A is stored in the liver and large doses can be toxic.

Myths: Vitamin A has been promoted by some megavitamin therapists in high doses for acne and other skin disorders; however, high doses can cause headache, nausea, hair loss, liver damage, and has been known to mimic signs of brain tumor. These high doses have not been researched nor reported successful in preventing any type of skin problem.

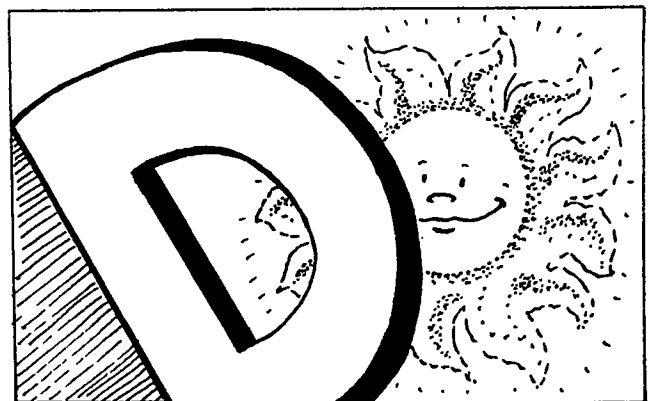
VITAMIN D—"The Sunshine Vitamin"

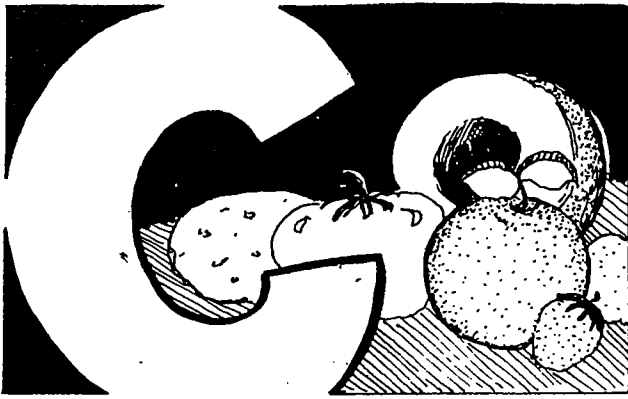
Functions: Promotes strong bones and teeth; associated with the absorption of calcium and phosphorus and their deposit in bones.

Food Sources: Vitamin D milk

butter
 fish liver oil
 main source is sunshine

CAUTION: EXCESS VITAMIN D causes Hypervitaminosis D. The excess is potentially harmful and can cause damage to bones, kidneys, or the lungs.





VITAMIN C—Ascorbic Acid

- Functions:**
- Provides cementing substance necessary to build supportive tissue
 - Helps resist infection
 - Aids in body stress situations (injury, shock)
 - Makes iron available for hemoglobin
 - Influences conversion of folic acid to tetrahydrofolic acid (folic acid)

Food Sources:

citrus fruit	green and yellow vegetables
tomatoes	broccoli
strawberries	green peppers
cantaloupe	asparagus
cabbage	chard
white potatoes	kale
sweet potatoes	turnip greens

Myths: Volumes of research have been performed on the hypothesis that Vitamin C:

- prevents colds
- increases the body resistance to disease
- lessens the severity of colds
- plays a role in activating enzymes that aid the body in expelling cancer-causing substances such as DDT
- combats cancer

The validity of these studies ranges from well-designed to suspect. The conclusion of most authorities is that vitamin C beyond the level of tissue saturation is excreted in the urine. In other words, it's wasted.

Also, there are studies being performed to prove that megadoses of water-soluble vitamins may be hazardous over a long period of time.

Research has indicated that high doses may actually destroy vitamin B₁₂ (needed to prevent pernicious anemia) and may also be implicated in gout, bleeding ulcers, formation of kidney stones, severe diarrhea, liver and genetic abnormalities, and termination of pregnancy.

VITAMIN E

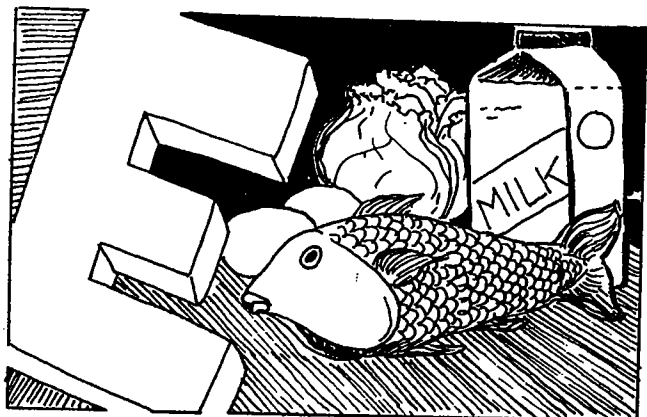
- Functions:**
- Aids reproduction (in animals only).
 - Acts as antioxidant (is used with vitamin A to prevent it from oxidizing before it's absorbed).

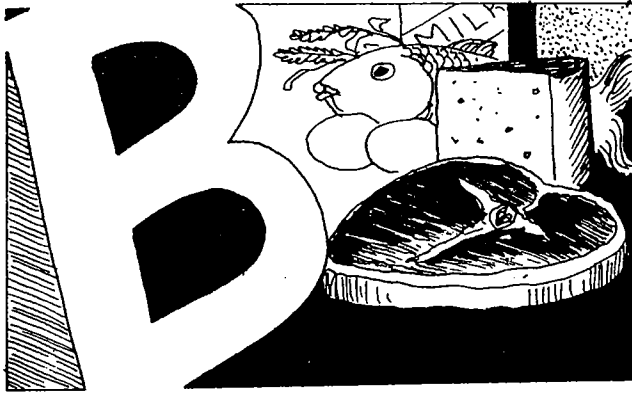
Food Sources: vegetable oils
milk
eggs
meat
fish
cereal
leafy vegetables

Myths: Vitamin E has been touted as a treatment for everything from sexual problems to heart disease. It's alleged to protect against aging, pollution, and to give "speed" to sluggish athletes. None of these functions are conclusive.

VITAMIN E does NOT

- increase stamina
- improve circulation or delivery of O₂ to muscles
- lower blood cholesterol
- prevent graying of hair
- enhance sexual potency or cure infertility





B VITAMINS

In the past, the "B-complex" vitamins were associated with preventing diseases. Now they are recognized as serving other purposes: a central role in energy metabolism, cell growth, and blood forming factors.

Thiamine (B₁)
Riboflavin (B₂)

Functions: Play a central role in energy metabolism.

Niacin:

Functions:

- Assists nervous system function
- Aids in normal digestion
- Maintains healthy skin

Food Sources: meat
 fish
 poultry
 eggs
 dried peas and beans
 milk
 cheese
 ice cream
 whole grain and enriched bread and cereal
 white potatoes

Pyridoxine (B₆)
Pantothenic acid
Lipoic acid
Biotin

Functions: Serve as essential coenzymes in metabolism.

Food Sources: meats
 potatoes
 dark green leafy vegetables
 whole grains
 dry beans

Folic acid
Para-aminobenzoic acid
Cobalamin (B₁₂)

Functions:

- Promotes cell growth
- Aids in the formation of red blood cells

Food Sources: milk
 cheese
 eggs
 meats
 green vegetables
 whole grains
 dry beans

That is a very brief overview of the B-complex vitamins. If you wish further in-depth information, you can consult a nutritional text.

Myths: All the B-complex vitamins have gone in and out of vogue in treatment of ills over the years.

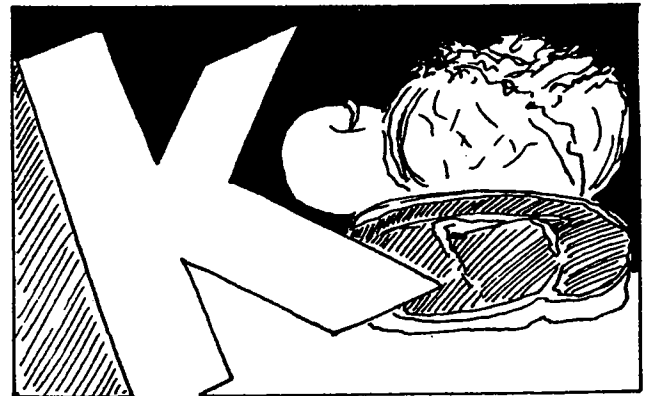
Niacin has been tested in large doses in therapy for schizophrenics; results were ineffective.

Thiamine has been touted as an anti-depressant that also increases the body's energy.

Pantothenic acid has been prescribed for treatment of gray hair, pyridoxine for beautiful skin and providing energy, and cyanocobalamin has often been prescribed for fatigue or hangovers.

None of these has been substantiated by scientific research.

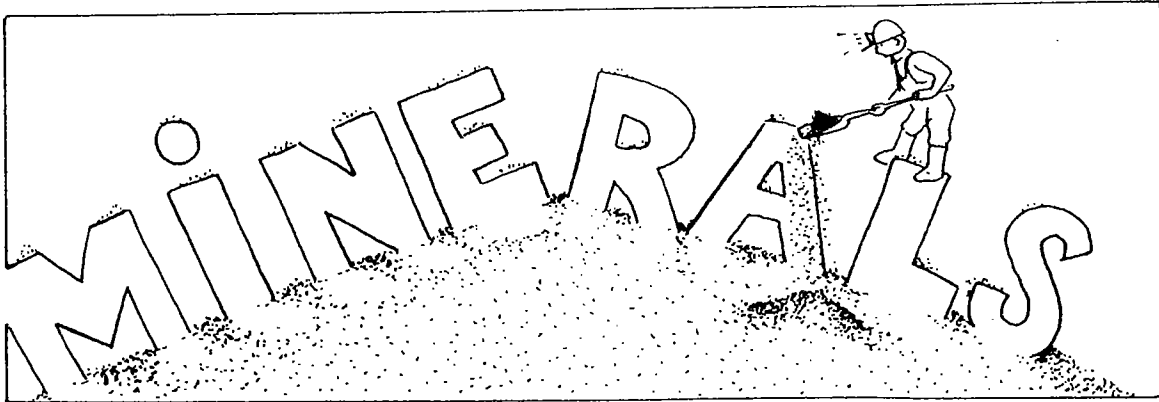
Riboflavin is now being tested for a possible linkage to cancer.



VITAMIN K

Functions: Required for blood clotting (synthesis of prothrombin in intestine)

Food Sources: liver
 cheese
 egg yolk
 green, leafy vegetables



Minerals

Minerals also are a part of a well balanced diet. Minerals may be classified according to the amount in which they are found in the body. Listed below are the major groups present in the body:

Group I: Major minerals (60-80%)

- Calcium (Ca)
- Magnesium (Mg)
- Sodium (Na)
- Potassium (K)
- Phosphorus (P)
- Sulfur (S)
- Chlorine (Cl)

Group II: Trace minerals

- Iron (Fe)
- Copper (Cu)
- Iodine (I)
- Manganese (Ma)
- Cobalt (Co)
- Zinc (Zn)
- Molybdenum (Mo)

Group III: Trace minerals (function unknown)

- Fluorine (Fl)
- Aluminum (Al)
- Boron (Br)
- Selenium (Se)
- Silicon (Si)
- Cadmium (Cd)
- Chromium (Cr)
- Vanadium (V)
- Tin (Sn)
- Nickel (Ni)

Minerals play an important role in maintaining good health. Listed below are the functions of minerals and sources for a well-balanced diet.

