

What to Tell a Growing Girl

As regards little girls, certainly no mother should allow her daughter to reach the age of menstruation without informing her on that subject, if for no other reason than to prevent needless fright and worry. There is a great variety of opinion as to the emphasis which should be put upon it. A mist of superstition and a halo of invalidism that would seem to be unhealthy and unnecessary surround this function. It is usually enough to tell the child that, once established, menstruation will recur with more or less regularity once a month, and that at the time of the period it is probably better as a rule to avoid any unusual exertion. Too much discussion of the subject will tend to fix the mind upon it in a morbid way, but gradually the mother should explain that the beginning of menstruation means a transition period between childhood and womanhood and that there is a definite connection between menstruation and the ability to have children.

The Boy at Puberty

By the time a boy reaches puberty, he should know that "seminal emissions" or "wet dreams" are not harmful but are the body's normal method of disposing of surplus secretions and spermatozoa. He should know that masturbation is an undesirable practice. He should have some knowledge of the anatomical and physiological differences between men and

women, and of the nature of bi-sexual reproduction. He should have sufficient ideas of hygiene to protect him against infection with a venereal disease, and in view of the number of boys who are seduced by older girls or women, he should know enough about this possibility to be on his guard.

All these are subjects on which a boy ordinarily acquires inexact information from his associates; and it is, therefore, important that he receive exact information from his parents, if his conduct is to be rightly guided. Information alone is not sufficient, however; he must also be given ideals.

A mother's ideals for her son have always counted with him to some extent, but there has also been a tendency among young men to feel that their mothers do not understand their problems. The modern mother who does know is, therefore, in a much better position to help her son than the old-fashioned mother who vaguely and earnestly hoped that her son would be "good." She and his father can tell him that continence and chastity do not injure the health of young people, and this statement can be backed with the testimony of the most enlightened members of the medical profession. It can be pointed out, when he is old enough to care, that he hopes some day to marry the girl whom he will choose of all others to be his life mate and the mother of his children, and so it is up to him to be as fine as she, if

he is to give her a square deal. He should be told also that aside from the mental degradation of associating with loose women, he will be running a great risk of getting syphilis or gonorrhea—that these venereal diseases may not only ruin his own health, but, if he should take the infection with him into marriage, it is likely to ruin the health of his wife, who has trusted him, and the lives of their future children.

Any boy, unless he is very abnormal, knows that he wants some time a happy home, a healthy wife and children, and if it is put clearly to him how far his own conduct may affect that ideal, it will bring to his aid his sense of fairness and chivalry, and will present to him a concrete motive for self-control.

A Serious Question

There is another serious question just alluded to in the instruction of older boys that a good many parents have to face for their younger girls and boys as well—the problem of masturbation. There is a wide range of opinion concerning it, from parents who regard it with positive horror to those who say all children do so and ignore it entirely.

The habit of masturbation can be acquired by the child spontaneously or through vicious instruction. And the child of the streets is practically sure to be informed of it. While

the habit should not be regarded with undue distress, it is undesirable, especially in young children, and it should receive intelligent and sympathetic attention on the part of parents.

In caring for a baby, it is important to see that the hands are kept away from the sex organs, and that the clothing worn is not so tight as to cause friction or irritation. It is also important to make certain through medical examination that there is no constriction or irritation of the genital organs. An older child who has acquired the habit of masturbation should be carefully supervised. He should not be left alone at play. When he takes a nap in the day time, or goes to bed at night, some one should stay with him until he is sleeping, and when he wakes he should get up. No parent should show annoyance over this habit, or try to frighten a child by telling him he may go insane, because in spite of the well-known tradition, there is no evidence that masturbation, of itself, ever causes insanity. The mental distress produced in a sensitive child by the impression that he is abnormal and a social outcast may be very great.

In children up to eleven and twelve years of age, the practice of masturbation results either from accidental stimulation or initiation by other persons, and the child must be safeguarded against such causes. In adolescence the practice is often acquired because of a

physiological urge arising naturally out of the sex mechanism enhanced by a sexually stimulating environment. Since this urge in many cases becomes powerful and even overwhelming, boys and girls in these years need particularly the understanding and sympathetic aid of responsible adults. Every aid of healthful living and of compelling ideals should be brought to bear, but failure of complete abstinence should not be magnified to undue proportions. Except in cases of great excess, the practice in these years is of no particular harm physically. The inexpediency lies chiefly in the direction of hurt to self-respect and in diverting an instinct requiring social expression to self-centered indulgence. However, this, too, must not be exaggerated. There is probably no more prolific source of the "inferiority complex" than the problem of masturbation unwisely dealt with.

The Venereal Disease Problem

There is another consideration that parents should bear in mind and that is the problem of the venereal diseases, syphilis and gonorrhea. Of course, it would be absurd to instruct young children concerning them. Older children should have some knowledge of the venereal diseases, but probably this instruction will be more definite and scientific if given by doctors or trained teachers in connection with work in health education. Therefore, it would seem to be an important part of the duty of parents,

besides giving their children sex instruction at home, to see that schools and colleges carry on that information in various suitable courses.

But fundamentally the first duty of sex instruction belongs in the home and to the parents, and thousands of parents, realizing this, have already given their children splendid education of this sort. They have been pioneers, deserving of the highest praise for their courage and common sense, and by their work they have greatly helped to take away the taboo from the subject of sex education, and have made it infinitely easier for the present-day parent to deal with, because it is now generally expected that they will do so. Of course there are still parents who feel it difficult and who doubt their own ability, but they should remember that a child whose honest questions are honestly answered by his parents is much better off than one who gains doubtful information through dubious channels.

The chief difficulties in sex education do not lie in the child but mainly in the inhibitions and perverted attitudes of adults responsible for it. The first and fundamental requirement is that we rid ourselves of such self-consciousness and embarrassment and acquire a clean, wholesome view such as will enable us to deal with sex as naturally as with any other facts of life.

B6

*Vitamins
from
farm
to
you*

FOOD FOR



FREEDOM



U. S. DEPARTMENT OF AGRICULTURE

AWI-2

VITAMIN *A* IN WAR AND PEACE

Vitamin A has a war nickname—the black-out vitamin.

This vitamin is needed for normal eyesight in dim light . . . it is important to air pilots . . . to fighting men . . . to people in darkened places.

When a person has too little A, his eyes cannot adjust quickly from bright light to darkness. This eye trouble is night blindness. The night-blind person may run into objects at night which a normal person would see.

Even in daylight a person with serious night blindness can't see well toward the right or left. This, too, may cause accidents. You need side-sight as well as front-sight when you walk, ride, or just stand still.

Vitamin A—in fact, all vitamins—help to protect against infections. A is one of the vitamins needed for growth, and for healthy teeth, bones, and nerves. Vitamin A is important for good skin and good linings to nose, mouth, and organs throughout the body.

Follow the Colors

Cows and chickens manufacture vitamin A in their bodies. So do fishes. And so do you.

You get vitamin A by eating ripe yellow and green vegetables and some red-colored ones . . . tomatoes, for example; also from liver, butter, and eggs. Bright colors in food are often—though not always—like flags, signaling with yellow, green, orange, or red, "This way for vitamin A."

Store for the Future

You can store some vitamin A in your body for future use. A wise plan is to get a generous supply in your food each day, so you will have some to draw on, if you should get less in food at any time.



B VITAMINS FOR MORALE

For a while one vitamin was called B. Then scientists learned that B was a large family of vitamins.

Now, one member is B₁. Better still, call it thiamine (rhyme "thi" with "my").

Thiamine, nicknamed the morale vitamin, helps steady nerves . . . helps you to keep cheerful—with a stiff upper lip. People who get too little thiamine in food often have poor appetites, constipation, slow heart rate, a tired feeling.

Another of the B family is niacin, or nicotinic acid (not the same as nicotine). You need this vitamin to help nerves and digestion and for healthy skin.

Health Watchman

Niacin is probably the health watchman that does most to ward off pellagra, a disease that weakens thousands of people in our own country. Victims of pellagra have skin trouble, poor digestion, feel weak and tired, gloomy . . . a few even go insane. Pellagra can be prevented by eating enough foods containing B vitamins, particularly niacin.

A third B vitamin is riboflavin ("ri" rhymes with "why," and "fla" with "way"). Riboflavin is needed for health and normal growth. If the body gets too little, ugly sores may form around nose and mouth—eyes see dimly and are bloodshot, and the light hurts.

Stay Above the Border

For one person in America who becomes out-and-out ill for lack of B vitamins, thousands are borderline cases.

Almost everyone can improve his health by eating more of the foods that have B vitamins. You get these vitamins in many foods.

VITAMIN C AGAINST SCURVY

Vitamin C is widely known by a longer name, ascorbic acid. This vitamin was one of the first discovered.

When you get enough vitamin C your body tissues are healthier . . . especially the bones, teeth, and gums.

Lesson From Sailors

For lack of this vitamin, sailors used to fall ill when they sailed on long voyages and ate no fresh food, just limited ship's rations day after day. Their strong muscles grew weak. Joints swelled and hurt. Gums bled.

In time seamen learned that if they took lemon, lime, or orange juice, they quickly recovered from this misery called scurvy. Raw green food such as cabbage also cured it. So the way to drive scurvy away was found long before scientists discovered vitamin C, the scurvy-fighter itself.

To keep babies safe from this condition and to help them to grow normally, mothers today give them vitamin C in some form . . . orange juice or canned tomato juice, usually.

Many people, young and old, get less vitamin C in their food than they should have for the best of health. They may escape actual illness, but they would be sturdier and feel more fit if they ate sufficient fruits and vegetables that carry this vitamin.

Eat As You Go

The body cannot store large amounts of vitamin C. You must get your supply day by day.

Canned tomatoes and citrus fruits contain practically as much vitamin C as fresh ones. So, some vitamin C may be kept on the shelf in canned foods ready for use.

VITAMIN D

Vitamin D
get it from food

For the Baby

Vitamin D
strong and sturdy
young children
vitamin regular

You may have
baby with bow
known now that
but too little v
bowlegs is give
bones will grow
be as firm and
start.

Some people
vitamin. When
vitamin D is fo

Sunshine is g
sunburn!

Children can
sunshine when
for cold weather
fog, smoke, or
the sun.

From Sea and

Fortunately,
this vitamin in
A. Oils from
commonly used

For years the
cod-liver oil. N
other fish, such
have even richer

Whole milk ha
stands in sunny
vitamin D to mi

THIS WAY FOR YOUR VITAMINS



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VITAMIN D FOR FRAMEWORK

Vitamin D is a two-way vitamin. You can get it from foods and from sunshine.

For the Baby's Bones

Vitamin D helps bones and teeth to grow strong and straight. This is why babies and young children need a special supply of this vitamin regularly.

You may have heard someone say that a baby with bowlegs "walked too soon." It is known now that the real trouble isn't walking but too little vitamin D. When a child with bowlegs is given the vitamin D he needs, the bones will grow sturdier, though they may never be as firm and straight as if he'd had the right start.

Some people call vitamin D the sunshine vitamin. When sunlight meets the skin direct, vitamin D is formed in the skin.

Sunshine is good for babies . . . but avoid sunburn!

Children cannot get much vitamin D from sunshine when they need to bundle up warm for cold weather or when they live where clouds, fog, smoke, or dust form curtains against the sun.

From Sea and Land

Fortunately, many fish in the sea store up this vitamin in their livers along with vitamin A. Oils from fish livers are the foods most commonly used as a source of vitamin D.

For years the richest source of D known was cod-liver oil. Now it is known that livers of other fish, such as halibut, perch, and shark, have even richer supplies of vitamin D.

Whole milk has some vitamin D when Bossy stands in sunny pastures. Some dairies add vitamin D to milk.

FOR YOUR VITAMINS





*How can
vita*

Eat the foods needed for all
need. Follow the Food for
When Americans fail to eat
foods that carry vitamins.
valuable vitamins A, B, C, and

★ ★ ★
**FOOD FOR
FREEDOM**

It is important to eat the right food . . .
important to you because you want to be well
and feel well . . . important to the Nation
because the United States depends on you to
keep up health and strength to do your share.
If you raise your own food, you can have the
right kinds without spending a great deal. If
you can afford to buy what you like, you can
afford to have what you need. If you must
spend carefully to stretch a small income, it is
all the more urgent for you to buy food wisely,
get the most for your money.

Check shows vitamins in foods listed						Check shows in foods	
	A	Thiamine	Riboflavin	Niacin	C		D
DAIRY PRODUCTS, EGGS							VEGETABLES
Butter	✓					✓	Asparagus, green
Cheese	✓		✓				Beans, lima . . .
Cream	✓					✓	Beans, navy . . .
Eggs, whole	✓	✓	✓	✓		✓	Beans, snap . . .
Egg yolk	✓	✓		✓		✓	Beet greens . . .
Milk, whole	✓	✓	✓	✓		✓	Broccoli
MEAT, POULTRY, FISH							Brussels sprouts

How can I get the vitamins I need each day

Eat the foods needed for all-round health, each day, and you will get the vitamins you need. Follow the Food for Freedom list at the left. Eat as much variety as you can. When Americans fail to eat a well-balanced diet, they are very apt to be short on foods that carry vitamins. The chart below will help you plan meals that include valuable vitamins A, B, C, and D.



★ ★ ★
**VITAMINS
THE KITCHEN**

You don't want vitamins vanishing from your kitchen. It can happen if you cook and the food won't show it. Some vitamins get out into cooking. This is true of B vitamins—thiamine, riboflavin, and niacin. Vitamin C does this, too. Heat destroys some vitamins, particularly thiamine and C. Foods lose some vitamins while just sitting on the counter to be used. Vitamin A is slowly lost, but vitamin C more rapidly. You notice that C is the vitamin that is the most easily destroyed.

Vitamin	Check shows vitamins in foods listed					
	A	Thiamine	Riboflavin	Niacin	C	D
EGGS	✓					✓
.....	✓		✓			✓
.....	✓					✓
.....	✓	✓	✓	✓		✓
.....	✓	✓	✓	✓		✓
.....	✓	✓	✓	✓		✓
FISH	✓	✓	✓	✓		✓
.....	✓	✓	✓	✓		✓

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★ ★ ★
VITAMINS IN THE KITCHEN

You don't want vitamins vanishing from foods right in your kitchen. It can happen, and the food won't show it. Some vitamins get out into cooking water. This is true of B vitamins—thiamine, riboflavin, niacin. Vitamin C does this, too. Heat destroys some vitamins, particularly thiamine and C. Foods lose some vitamins while just waiting to be used. Vitamin A is slowly lost this way . . . vitamin C more rapidly. You notice that C is the vitamin most

Riboflavin	Niacin	C	D	Check shows vitamins in foods listed	A	Thiamine	Riboflavin	Niacin	C	D
				VEGETABLES						
✓			✓	Asparagus, green	✓				✓	
				Beans, lima		✓	✓			
			✓	Beans, navy		✓	✓			
✓	✓		✓	Beans, snap	✓	✓	✓		✓	
	✓		✓	Beet greens	✓	✓	✓			
✓	✓		✓	Broccoli	✓	✓	✓		✓	
				Brussels sprouts	✓	✓			✓	
				Cabbage	✓	✓			✓	

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FREEDOM

It is important to eat the right food . . . important to you because you want to be well and feel well . . . important to the Nation because the United States depends on you to keep up health and strength to do your share.

If you raise your own food, you can have the right kinds without spending a great deal. If you can afford to buy what you like, you can afford to have what you need. If you must spend carefully to stretch a small income, it is all the more urgent for you to buy food wisely, get the most for your money.

For all-round health, keep in mind the following list of foods you need. The list is fitted to the yardstick of good nutrition adopted by the Nation's nutrition experts.

Try to have in your meals every day - -

MILK

- For a growing child, $\frac{1}{4}$ to 1 quart.
- For an expectant or nursing mother, 1 quart.
- For other family members, 1 pint or more.

TOMATOES, ORANGES, GRAPEFRUIT, RAW CABBAGE, OR SALAD GREENS

1 or more servings.

GREEN OR YELLOW VEGETABLES

1 or more servings.

OTHER VEGETABLES OR FRUITS

2 or more servings. (Among these include your potatoes and apples.)

LEAN MEAT, POULTRY, FISH, OR SOMETIMES DRIED BEANS OR PEAS

1 or more servings.

EGGS

1 a day or at least 3 or 4 a week cooked as you like or in made dishes.

CEREALS AND BREAD

2 or more servings of whole-grain or "enriched" products.

BUTTER AND OTHER FATS

When you eat a large variety of nourishing foods you get all the vitamins known. In addition—and this is important, too—you may be getting unknown vitamins in food . . . vitamins not yet discovered but working for you just the same.

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Check shows vitamins in foods listed	A	Thiamine	Riboflavin	Niacin	C	D	Check show in foods
DAIRY PRODUCTS, EGGS							
Butter	✓					✓	Asparagus, green
Cheese	✓		✓				Beans, lima
Cream	✓						Beans, navy
Eggs, whole	✓	✓	✓	✓		✓	Beans, snap
Egg yolk	✓	✓		✓		✓	Beet greens
Milk, whole	✓	✓	✓	✓		✓	Broccoli
MEAT, POULTRY, FISH							
Beef, lean		✓	✓	✓			Brussels sprouts
Chicken		✓	✓	✓			Cabbage
Codfish		✓	✓	✓			Carrots
Fish-liver oils	✓						Cauliflower
Haddock				✓			Chard
Kidney	✓	✓	✓		✓		Collards
Liver	✓	✓	✓	✓	✓		Corn, sweet
Mutton, lean		✓	✓	✓		✓	Cowpeas
Pork, lean		✓	✓	✓			Dandelion green
Roe, fish	✓	✓	✓				Dock
Salmon	✓	✓		✓		✓	Eggplant
Sardines	✓	✓				✓	Endive
FRUIT							
Apples		✓	✓		✓		Kale
Apricots	✓	✓	✓		✓		Kohlrabi
Avocados	✓	✓	✓		✓		Leeks
Bananas	✓	✓	✓		✓		Lettuce, green
Blackberries	✓	✓	✓		✓		Mushrooms
Blueberries	✓	✓	✓		✓		Mustard greens
Cantaloup	✓	✓	✓		✓		Okra
Cherries					✓		Onions
Cranberries					✓		Parsnips
Currants, black	✓				✓		Peanuts
Dates	✓	✓			✓		Peas, dried
Figs		✓	✓		✓		Peas, green
Gooseberries					✓		Peppers, sweet
Grapefruit		✓	✓		✓		Potatoes
Lemons					✓		Radishes
Oranges	✓	✓	✓		✓		Rhubarb
Olives, green and ripe	✓				✓		Rutabagas
Peaches	✓				✓		Soybeans
Pears		✓	✓		✓		Spinach
Pineapples	✓	✓	✓		✓		Squash, yellow
Plums	✓	✓	✓		✓		Sweetpotatoes
Prunes	✓	✓	✓		✓		Tomatoes
Raspberries	✓	✓	✓		✓		Turnip greens
Strawberries	✓	✓	✓		✓		Water cress
Tangerines	✓	✓	✓		✓		
Watermelon	✓	✓	✓		✓		CEREALS
							Corn meal, yellow
							Whole grains



THIS WAY FOR YOUR V

Riboflavin	Niacin	C	D	Check shows vitamins in foods listed	A	Thiamine	Riboflavin	Niacin	C	D
				VEGETABLES						
✓			✓	Asparagus, green.....	✓					✓
✓			✓	Beans, lima.....		✓	✓			
✓			✓	Beans, navy.....		✓	✓			
✓	✓		✓	Beans, snap.....	✓	✓	✓			✓
✓	✓		✓	Beet greens.....	✓	✓	✓			
✓	✓		✓	Broccoli.....	✓	✓	✓		✓	
✓			✓	Brussels sprouts.....	✓	✓	✓		✓	✓
✓			✓	Cabbage.....	✓	✓	✓	✓	✓	✓
✓	✓		✓	Carrots.....	✓	✓	✓			
✓	✓		✓	Cauliflower.....	✓	✓	✓		✓	
✓			✓	Chard.....	✓	✓	✓			
✓	✓		✓	Collards.....	✓	✓	✓	✓	✓	✓
✓			✓	Corn, sweet.....	✓	✓	✓			
✓	✓		✓	Cowpeas.....	✓	✓	✓	✓		
✓	✓		✓	Dandelion greens.....	✓	✓	✓		✓	
✓	✓		✓	Dock.....	✓	✓	✓		✓	
✓			✓	Eggplant.....	✓	✓	✓			
✓	✓		✓	Endive.....	✓	✓	✓	✓	✓	✓
✓			✓	Kale.....	✓	✓	✓	✓	✓	✓
✓			✓	Kohlrabi.....	✓	✓	✓		✓	✓
✓			✓	Leeks.....	✓	✓	✓		✓	✓
✓		✓	✓	Lettuce, green.....	✓	✓	✓			
✓		✓	✓	Mushrooms.....	✓	✓	✓			
✓		✓	✓	Mustard greens.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Okra.....	✓	✓	✓			
✓		✓	✓	Onions.....	✓	✓	✓		✓	✓
✓		✓	✓	Parsnips.....	✓	✓	✓		✓	✓
✓		✓	✓	Peanuts.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Peas, dried.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Peas, green.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Peppers, sweet.....	✓	✓	✓		✓	✓
✓		✓	✓	Potatoes.....	✓	✓	✓		✓	✓
✓		✓	✓	Radishes.....	✓	✓	✓		✓	✓
✓		✓	✓	Rhubarb.....	✓	✓	✓		✓	✓
✓		✓	✓	Rutabagas.....	✓	✓	✓		✓	✓
✓		✓	✓	Soybeans.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Spinach.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Squash, yellow.....	✓	✓	✓		✓	✓
✓		✓	✓	Sweetpotatoes.....	✓	✓	✓		✓	✓
✓		✓	✓	Tomatoes.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Turnip greens.....	✓	✓	✓	✓	✓	✓
✓		✓	✓	Water cress.....	✓	✓	✓		✓	✓
				CEREALS						
✓		✓	✓	Corn meal, yellow.....	✓	✓	✓			
✓		✓	✓	Whole grains.....	✓	✓	✓			

THE KITCHEN

You don't want vitamins vanishing from foods right in your kitchen. It can happen, and the food won't show it.

Some vitamins get out into cooking water. This is true of B vitamins—thiamine, riboflavin, niacin. Vitamin C does this, too.

Heat destroys some vitamins, particularly thiamine and C.

Foods lose some vitamins while just waiting to be used. Vitamin A is slowly lost this way . . . vitamin C more rapidly.

You notice that C is the vitamin most damaged by heat and air. Take special care of fruits and vegetables rich in C so they can take care of you.

First Aid for Vitamins

Here are four first-aid rules for saving vitamins in food:

1. Don't crush or bruise.
2. Don't soak.
3. Keep cold until ready to cook or eat.
4. Use quickly when prepared.

Here are more detailed suggestions:

- Make raw salad or slaw as a last-minute job. Vitamin C gets away faster from foods peeled or cut.
- When you cook vegetables, use as little water as possible. Add salt to cooking water at the start, to help hold the vitamin C.
- Cook quickly whenever you can. Put vegetables into boiling water, and bring the water back to boiling point fast.
- Cook vegetables until just tender—but no longer.
- Stir vegetables only when you must. If you stir you mix air into the food and that destroys some of the vitamins.
- Do not add soda when you cook green vegetables. The soda destroys thiamine and vitamin C.
- Do not thaw frozen vegetables before you cook them.
- Serve raw frozen foods, such as fruits, at once, before thawing.
- Since cooking water takes up some of the vitamins and also minerals, it is good food. So, don't pour cooking water down the sink. Serve it with the vegetables . . . or in soups . . . sauces . . . gravies.



GET YOUR VITAMINS IN FOOD

You need vitamins. Everyone does—young and old. You need them for building a healthy body and for keeping fit and strong. Vitamins are especially important in a period of stress and strain.



THE VITAMIN ASSEMBLY LINE



The greatest vitamin factory on earth is a farm, for vitamins come to you from plants, animals, and sunshine.

When you eat a variety of good food grown on America's farms or in a home Victory garden, you get vitamins in their natural form.

The farm's vitamin assembly line runs from the ground up. Seeds are rich in certain vitamins. Green growing plants produce and hold vitamins or vitamin materials. Ripe fruits, vegetables, and grains bring the vitamins—along with other nourishment from the plants—to you.

Animals on the farm get vitamins from their feed and sunshine. Eggs, meat, and milk and other dairy products are all a part of the vitamin supply line that ends at your dining table.

SMALL BUT IMPORTANT

One thing is true of all the known vitamins: Tiny amounts handle big jobs. But tiny though these amounts are, they are essential for health.

Each of the vitamins has special work to do, helping the body to grow normally or to keep well and strong.

Because vitamins make up so small a part of food, for a long time no one dreamed they were there. You can't taste vitamins in food or smell them. For the most part you can't even see them in the food you eat, though one exception is this: The yellow color in many fruits and vegetables is carotene, the mother-substance of vitamin A.

Naming the Vitamins

When first discovered, vitamins did not seem to belong to well-known chemical families, as minerals in food do, for instance. So scientists called the orphans A, B, and so on a good way down the alphabet. Now vitamins are better known, and some have names that tell what they do or what they are like.

It is well to have a friendly acquaintance with vitamins A to D.

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Other bulletins on foods and nutrition available from the United States Department of Agriculture—

- Eat the right food to help keep you fit.
- Three market lists for low-cost meals.
- Market lists for moderate-cost and liberal meals.
- Food for growth. (For children.)
- Fight food waste in the home.
- Meat for thrifty meals.
- Dried fruits in low-cost meals.
- Dried beans and peas in low-cost meals.
- Green vegetables in low-cost meals.
- Root vegetables in low-cost meals.
- Soybeans for the table.
- Home canning of fruits, vegetables, and meats.

Issued by

BUREAU OF HOME ECONOMICS
United States Department of Agriculture
Washington, D. C.
1942



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HEALTHY, HAPPY WOMANHOOD

*A Pamphlet
For Adolescent Girls and
Young Women*



*(The material in this pamphlet was
prepared by the U. S. Public
Health Service)*



Virginia State Department of Health
Richmond, Virginia

(2)

HEALTHY, HAPPY WOMANHOOD

Throughout France and in many different countries of the world there stands the statue of a great heroic Frenchwoman, Joan of Arc. This humble peasant girl of Brittany, aroused by the misfortunes of her countrymen helped to free them from the hands of a foreign foe. But today she has come to represent far more than this. She has come to stand for the woman with a vision, the woman who is seeking to do her part for the betterment of the world. Wherever her figure appears, it is always looking forward, the light of a great purpose in her eyes, the will for large achievement in the lines of her face. As she raises her standard aloft there seem to gather behind it innumerable hosts of those who would follow her lead. A daughter of war-ridden fifteenth-century France, she nevertheless symbolizes the woman of the twentieth century, eager to take a part in the work of the world and in the great life-giving enterprises of peace.

HEALTH, THE FOUNDATION

You who aspire to take a part in the work of the world should assure yourself of good health. Without it all other preparation may be in vain.

3

Today, in addition to the more familiar duties of the home, occupations in factory and office are open to you. But only if you possess good health—a vigorous body and a clear brain—can you expect to undertake the new and trying work successfully. No matter how thoroughly you are trained, such training will be of little value unless it rests upon a foundation of good health.

Good health is even more important from the point of view of motherhood. Happy motherhood depends to a large extent upon healthy womanhood. It is impossible for women whose strength is depleted by overwork and under-nutrition to give birth to strong and healthy babies or to give proper nourishment even to the puny and underdeveloped children that they do bring into the world. Physical fitness during youth is the best foundation for healthy, happy womanhood. It is an asset of which you may rightly feel proud. With health, you can look forward to the time when you can participate actively in the work of the world; with health, happy motherhood becomes a well-grounded hope for the future.

BEAUTY AND POPULARITY

Besides fitting you more effectively for your life's work good health will incidentally increase your beauty and attractiveness. True beauty comes from within; it cannot be put on from without. Good health gives such beauty, a beauty that will wear. Its foundation is health of mind and body; its expression is a

4

sparkling eye, a clear complexion, a graceful body, an active brain.

Every girl wants to be popular with her companions. Today the popular girl is the girl who glows with life, who can swim and dance and play outdoor games, who has plenty of energy for fun when she has finished her daily tasks. Good health, since it produces high spirits, vitality, cheerfulness, and leadership, will help to make you popular. Every girl likes to enjoy herself. She likes to go to parties and picnics, to find the real joys of living. Physical fitness, by enlarging your opportunity for enjoyment and your power to enjoy, makes more such occasions possible.

HOW FITNESS IS ATTAINED

Plenty of physical exercise, fresh air, sufficient sleep, frequent bathing, three well-balanced meals a day, erect carriage, and comfortable clothing will help to make you strong and well.

Exercise.—To keep physically fit, exercise regularly every day of the year. Many forms of exercise are enjoyable as well as beneficial. Walking to and from school or office, "hiking", skating, canoeing, swimming, are excellent forms of outdoor exercise. Games, such as basket ball, volley ball, hockey, and tennis, stimulate both mind and body and are enjoyable sports. The blood tends to flow to the part of the body that is used and gradually strengthens the otherwise weak and flabby muscles. Girls who sit in offices, work in factories, or spend the day in the schoolroom are using only a

part of their bodies. They need to make special efforts to exercise the unused muscles during their leisure hours.

Fresh air and sleep.—You should always insist upon working in well-ventilated rooms. Spend sometime each day in the open air. By sleeping in a room with windows open, much fresh air is secured without special effort.

Sleep rests the brain and relaxes the muscles. A growing girl needs from 8½ to 9½ hours of sleep every night. Older girls may find that they can keep well with somewhat less.

Bathing.—Many impurities are cast off by the body through the skin. In order to keep the skin clean and functioning properly, frequent baths with soap and warm water are necessary. A cold bath is excellent for you, if after the rub-down it leaves your body warm and glowing and is followed by a feeling of general well-being.

What to eat.—A vigorous body demands wholesome food, eaten regularly. Three meals a day are sufficient. They should include fruits and vegetables, either fresh or canned; cereals, including bread; butter, eggs, meat, and milk; a moderate amount of simple dessert.

Proper food, at least eight glasses of water a day, plenty of exercise, and care in keeping the bowels emptied each day will prevent constipation. If waste material in the bowel is not removed, it may damage the entire system.

Erect posture.—Not only unattractiveness but also headaches and disturbances of the digestive and breathing organs may be due to slouching positions which crowd the lungs, stomach, and

intestines. The essentials of a good standing position are to "stand tall"—chest up, not out—the back touching an imaginary straight line. The feet should be parallel with toes pointing straight forward. Aside from all questions of health, the erect girl who carries herself with ease and grace, inspires, by her very appearance, the confidence of her employer or teacher and her friends.

Clothing.—Clothes should be loose fitting, warm and light and should hang from the shoulders, which have a bony frame and are well able to carry the weight. Avoid extremes of fashion, particularly in shoes. For street wear at least, those with low heels will prove attractive as well as practical. The body needs a level foundation upon which to stand.

GLANDS AND THEIR FUNCTIONS

Important in maintaining health and vigor and in carrying on the work of the body are several organs of different sizes called glands. Each of these glands produces a special kind of secretion. The largest gland in the body is the liver, which secretes bile or gall, a juice which aids digestion. Smaller glands in the cheeks and under the tongue secrete saliva, which has a similar function. Tear glands give off tears, which moisten and cleanse the eye ball. Other glands, instead of pouring their secretions out where they can be seen, send their product directly into the blood. For instance, the thyroid gland, located in the front of the neck, makes a secretion which is absorbed by the blood and

which plays an important part in development.

Other important glands are the ovaries in the woman and the testes in the man. These glands belong to the sex or reproductive organs of man and woman. The secretion from the ovaries is absorbed by the blood and carried to all parts of the body. It cause the girl's breasts to enlarge, her figure to develop. It adds a luster to her hair, a sparkle to her eye. It makes her brain clear and active. In short, it changes her from the awkward girl of 12 or 13 into a bright attractive young woman. The secretion from the boy's sex glands gives tone to his muscles, power to his brain, and vitality to his nerves. The sex glands are necessary for the development of manhood and womanhood.

THE REPRODUCTIVE SYSTEM

The function of the reproductive organs is to produce life—fuller and richer life for ones self and the new life of little ones who will grow up to assume our tasks. In these organs lie the woman's power to become a mother and the man's power to become a father. The girl's reproductive organs consist of the two ovaries, two fallopian tubes, the uterus or womb, and the vagina. The ovaries, in addition to making the secretion which helps to develop the girl into a woman, make the tiny egg cells or ova which contain the mother's portion of the life of the child. Connecting the ovaries with the uterus are the tubes through which the ova pass to the uterus. Here, if the egg cell

8

unites with the male element, the new cell remains and develops into a new human being. The lower end of the uterus opens into the vagina, a short tube connecting the uterus with the outside of the body. Through this passage the male cell is brought to the female egg cell and later, when the baby is fully developed and ready to leave the mother's body, the infant is born through this same passage.

After the girl's sex organs have partially matured, at 12 to 15 years of age, one of these egg cells develops once in about 28 days. It passes from the ovary and finds its way down the fallopian tube.

At about the time the egg cell leaves the ovary an additional supply of blood is sent to the blood vessels of the uterus. This blood oozes from the lining of the uterus and passes out of the body at the monthly or menstrual period. This is called menstruation. Menstruation is a normal experience and not an illness as many girls have been taught to believe. A girl who is well and strong should feel little or no discomfort during her menstrual period. To avoid unnecessary distress due to pressure upon the uterus, special care should be taken at this time to empty the bowel and bladder regularly. Vigorous forms of exercise such as swimming and horseback riding should be avoided, but some regular exercise should be taken. The external parts of the sex organs should always be kept clean and free from the irritation of tight clothing. Bathing with warm water and soap is especially necessary during menstrua-

tion, but care should be taken to avoid getting chilled. If a complete bath cannot be taken, the external parts of these organs should be washed night and morning.

THE BEGINNING OF LIFE

Before the egg cell furnished by the ovary can develop into a child, it must be fertilized by the sperm or male germ cell which is furnished by the sex organs of the man.

The union of male and female germ cells is necessary in most forms of plant and animal life to produce new life. The male cell in the pollen of the flower must unite with the female cell which lies at the base of the flower before a seed containing the life of a new plant will develop. This union of male and female cells is called fertilization. The egg of the hen must be fertilized within the hen's body by the sperm of the rooster if the egg which is laid is to contain the life of a baby chick.

Among animals such as the rabbit, the cat, the dog, and the horse, and man, the sperm or male germ cells are placed in the body of the female by the sex organ of the male, and union with the egg takes place within the reproductive organs of the female. The fertilized egg then develops in the uterus of the mother.

With the human mother, the child grows in the uterus of the mother for 9 months, fed by nourishment from her blood, warmed and protected within the body. The muscles of the uterus then contract, and the child comes down the vagina into the outer world. At that time

10

the child has developed to the point where he can breathe for himself and take the milk furnished by special glands in the breast of the mother. The uterus of the mother returns to normal size within a few days after the birth of the child. After this experience the mother should have even greater vigor and better health.

THE SEX INSTINCT

The feeling of hunger which animals and human beings have drives them to seek food. The sex instinct leads them to create life and continue the race. There exists between men and women a strong attraction. This attraction is often described by the word love. Love is due in a large measure to the sex instinct. All the fine emotions such as love of mother for child, of husband and wife, friendship, devotion to a great cause, and the joy which one finds in everyday work are closely related to it.

For the boy and for the girl the creative or sex impulse finds satisfaction in constructive activities. School work, reading interesting books of romance and adventure, clubs, games, outdoor sports with boys and girls, all furnish outlets for creative energy. Such outlets are also to be found in hobbies, the making of collections, or the cultivation of special talents in dramatics, music, and painting. These hobbies have the additional advantage of helping a girl to make herself a distinct individual. The unmarried woman finds an outlet for her creative energy in work, recreation, and service for others. But because this impulse is related to

the creation of new life its most complete expression is found in building up a home and family.

The sex instinct is a tremendous power in life. Used rightly it will bring to the individual and to the race the greatest joy; used wrongly it will not only fail to produce this result, but also it will probably lead to serious suffering and unhappiness.

MISUSE OF SEX

After centuries of experience the marriage of one man with one woman has come to be considered the best method of carrying on the life of the race. Through such a relationship the sex instinct finds its most wholesome satisfaction. A man and a woman who bring children into the world whom they are unwilling to take care of endanger their own happiness as well as the welfare of the community. They miss the finer joys of human love and fail to appreciate what such love may mean in their lives.

More than this. Indulgence in sex relations among persons who are not married to each other exposes them to a serious physical danger. They are likely to become infected with a venereal disease. These diseases are called syphilis (pox) or gonorrhea (clap). They are germ diseases.

To the man a venereal disease may mean life-long suffering, unless by proper treatment the germs are destroyed. Syphilis often causes heart disease, paralysis, and some forms of in-

sanity. Gonorrhea may cause blindness, chronic rheumatism, incurable disorders of the sex organs, and inability on the man's part to become a father.

A man who has one of these diseases is likely to give it to his wife. While syphilis affects her much as it does a man, gonorrhea often affects her even more seriously. Many operations upon women's reproductive organs are made necessary by gonorrhea. Many women are lifelong invalids as the result of this disease. Some die. Many babies are blinded at birth by gonorrhea in the mother. Fortunately, simple medical treatment given the baby immediately after birth will prevent blindness of this kind. Syphilis causes many miscarriages (the birth of babies before they can live outside the mother's body). Many babies are defective in various ways because of it.

It is important to remember, however, that these results—blindness, sores, invalidism, and operations upon women—are often due to causes other than syphilis and gonorrhea.

These diseases are contagious or "catching." Usually they are passed from person to person through sexual intercourse. Occasionally, however, a person is infected through using a towel or public drinking cup or from being kissed by a diseased person. Accusations should never be made, therefore, against anyone who appears to be suffering from the effects of gonorrhea or syphilis. If one of these diseases has actually been contracted, the infection may have occurred in an entirely innocent way. But even

if the infection has been acquired as a result of the person's own misconduct, he or she should not be condemned; with sympathy and tact you can do much to persuade him to seek treatment and continue under the physician's care as long as is necessary.

Syphilis and gonorrhea can be cured if treated by a competent physician. There are many good clinics for those who cannot afford a private physician. If the treatment is not thorough and continued long enough, the disease may reappear years after the patient believes the cure to be complete. This is especially true when the infected person relies on patent medicines or "quack" doctors. Advertising doctors seldom cure and generally do more harm than good.

Because the sex instinct, which may bring the individual the greatest joy, is sometimes misused, a girl should exercise great care in the choice of the men with whom she associates. Chance acquaintances often invite girls on automobile rides, to movies, and cafes with the intention of leading them into sex relations. Such invitations should be refused. A girl does not wish to be considered an easy mark or to put herself in a position where a man can take advantage of her.

THE GIRL'S PART

Today physicians are teaching that sexual intercourse is no more necessary for men than for women. People are realizing that the greatest

health and happiness can be attained only through complete physical, mental, and spiritual development, that such development is possible only when the sex instinct is used for the up-building of the individual and the race. They understand that this rule applies as rigidly to men as to women.

Girls and women have a special work to do, therefore, in helping to build up a high standard of sex conduct. They must demand clean living from the men with whom they associate. Frank, wholesome companionship on the part of the girl will encourage the same sort of companionship from the man. Good manners are born of a respect for ones self and for others. If she really values a man's regard, she will not seek to win it through acts and words of familiarity. Physical attraction alone will never wholly satisfy; lasting love and friendship are of the mind as well as of the body. Their foundation is mutual respect and understanding, their highest expression a deeply spiritual emotion.

A girl's success and happiness will depend largely upon her choice of associates and finally upon her choice of a husband. Because she will choose her husband from among her men friends, it is important that her friendships be based upon qualities that will wear. Hasty marriages, following an acquaintance of a few days or weeks, often result in unhappiness because they are not founded on a love based upon a knowledge of each other. Fit partners for life are those who understand and respect each other's views, who recognize each other's faults as well as virtues, and are willing to work together for lasting companionship.

HOME MAKERS ALL

The future of the race depends upon the children. The men and women of today can determine in a large degree the kind of men and women who will make up the world of tomorrow. A girl can, by keeping herself well and by marrying a man who is physically fit, give her children a clean bill of health. Whether they will add fineness of character to a good physical inheritance depends largely upon the influence which is exerted upon them in their home.

It is the woman who is peculiarly the home maker. She can determine whether her home is to be a place where people sleep and eat only or where her family and friends find comfort, inspiration, and sympathetic companionship. A true home maker shares her husband's responsibilities, enters into the lives of her children and the community. By developing her own mind and spirit she is able to give the best in herself and draw out the best in others. Her husband and children love her and work for her gladly.

A CHALLENGE TO THE PRESENT

In the development of America, women have made a splendid record. Three hundred years ago, when the Pilgrims landed on the stern and rock-bound New England coast, it was the women—the Anns and the Priscillas—who kept hope and faith alive as the number of graves beneath the Plymouth cornfields grew and grew. During pioneer days in solitary log cabins women shared with their husbands the constant danger of attack from hostile Indians.

16

They were not spared when the redskins descended upon the settlements with tomahawk and torch, as the stories of Ann Hutchinson, Hannah Dustin, and many others indicate. At the time of the Revolution Molly Pitcher, taking her husband's place in the fighting when he was grievously wounded, was not the only woman who showed courage and endurance. Through the terrible winter at Valley Forge, when the cause of Washington and Jefferson seemed all but lost, women in homes from Massachusetts to Georgia helped to keep the light of Liberty burning. Women bore their share of the burden in the settlement of the lands across the Alleghenies, in the fertile valleys of the Ohio and the Mississippi. And in the tragic days of the Civil War, in homes North and South, in hospitals and on battlefields, women took their part earnestly and courageously. Never in any period of the country's history have they been found wanting.

Today the opportunities for women's development and her ability to contribute toward the creation of a better world are greater than ever before. At last all activities of life are open to her. She is now free to choose the part she will play in the world's work. Whatever part it may be, good health is essential. Only because the women of pioneer days possessed clear minds and vigorous bodies were they able to take such an active part in the settlement of this country. Only as you are similarly qualified can you in the home and in the larger world outside meet this challenge of a glorious past by your achievement.

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KEEPING FIT

A BULLETIN FOR BOYS

*(The material in this bulletin was prepared by
the United States Public Health Service)*

Virginia State Department of Health, Richmond, Virginia

KEEPING FIT

To be in prime physical condition and to keep fit is the ambition of every normal youth. By intensive athletic training a man may become a great sprinter or football player. The wiser aim for most young men is to be in condition all the time for any kind of sport, any kind of work, any task a man may be called upon to perform. The reward of keeping fit is vigorous manhood. At least six qualities should be sought if the full vigor of manhood is to be achieved. One of these is strength of muscle. One may have strength in his muscles without having very big muscles. Quality is more important than quantity. Both may be developed by exercise. Endurance is a second important quality. It is the ability to stay in the game when others become tired and discouraged. A third quality is energy; lack of it means laziness. Critical moments in athletics show the importance also of self-control and will power. And courage, though it may not be needed every day, of course, is essential.

Captain Robert F. Scott, who reached the South Pole in 1912, gave the world a wonderful record of endurance, energy, will power, and courage. When Livingstone faced the dangers of fever, sunstroke, wild animals, and savages, and traveled 1,000 miles into the heart of Africa, all the qualities of vigorous manhood were necessary. Lincoln, as a youth, could sink an ax deeper into a tree than any other man in the community. He could outlift, outwork, and outwrestle other men. He showed vigor of manhood.

HOW VIGOROUS MANHOOD IS ACHIEVED

Those who would achieve maximum vigor must observe at least five essentials. The first of these is sufficient exercise of the right kind. Reading the sporting page, yelling in the grandstand, and watching the baseball bulletin boards may be enjoyable, but will never make a man vigorous. He himself must take daily exercise. Hiking, baseball, rowing and canoeing, skating in the open air, swimming, if taken moderately, general gymnasium work, boxing and wrestling where the air is fresh, are among the most beneficial forms of exercise.

A young man's daily exercise should be vigorous enough to cause him to perspire freely. This helps his body to throw off certain waste products which would act as poisons if they were allowed to accumulate. After exercise a bath should be taken. A shower is better than a tub bath. A washbowl or any contrivance is better than nothing. Warm water should be used first, then cold. The bath should be followed by a vigorous rub-down with a course towel, the whole process taking no longer than four or five minutes. The bath and rub-down should produce a healthy glow of the body and a general feeling of well-being.

Second, young men should sleep in the fresh air, work and exercise in the fresh air as much as possible, and be sure to have the indoor air kept fresh. Fresh air is often more valuable than any quantity of medicine.

In the third place, most young men need at least eight hours sleep every night, and most boys between the ages of

TRAINING RULES

1. Exercise Wisely
2. Eat Wholesome Food
3. Get All the Fresh Air Possible
4. Take Sufficient Rest
5. Keep Clean

13 and 16 need from eight and one-half to nine and one-half hours. With less, one can get along, but he can not keep himself in the best possible physical condition. One should not lie in

bed after waking up, but should jump out and dress immediately.

Proper food is another requirement. One should eat chiefly fresh vegetables, cereals (wheat, oatmeal, and rice), bread and butter, eggs, and fruit, with fresh meat or fish not oftener than once a day. The system needs not only the kind of food that is rich in nutriment, but vegetables and other coarser food to give bulk and stimulate the action of the intestines. All food should be chewed to a pulp.

Not only is it necessary to eat wisely, it is also important to pass off the waste materials by regular movements of the bowels. When this is not done, one becomes constipated and is likely to have headaches and general ill health. Regular movements of the bowels are aided by an abundance of exercise, by eating plenty of fruit, and drinking plenty of pure water.

The Relation of the Reproductive Organs to Vigor

Finally, if one is to win vigorous manhood he should understand the relationship of the reproductive organs to vigor. This relationship needs to be carefully explained, because, while the facts are important, they are not generally understood. It would not be possible for a small, immature boy to achieve the full vigor of manhood were it not for the reproductive or sex organs.

Boys who live in the country know why a stallion is a more vigorous animal than a gelding. All male colts have two glands called testicles which hang from the body in a sack. Most male colts are "cut," "altered," or "castrated." This means that the testicles (or balls) are removed. When this is done the colt becomes a gelding. When the colt is not cut it becomes a stallion. The stallion has larger muscles, a finer, stronger body and more vigor. He becomes a finer horse because his testicles were not cut away. Remaining as a part of his body, they make a secretion which is taken into the blood and aids in the development of strength and vigor.

In some oriental countries, when slaves that can be easily managed are wanted for the king's palace little boys are sometimes cut or castrated and are allowed to grow up without testicles. Their beards fail to grow, their voices do not change, and they are likely to become cowardly, tricky, and indolent. They do not become men.

Every man and every boy has two glands, called testicles, which hang from the lower part of the body. These glands are somewhat similar to other glands in the body—such as the glands of the mouth, which secrete saliva. The sex glands, however, make *two* secretions. One secretion contains the male cells which enable the boy to have children when he marries (this subject will be discussed later). The other secretion, called the "internal" secretion is never seen, but it exerts a profound influence on the development of the body and the personality. The blood takes it to the muscle and the brain. It gives tone to the muscle, power to the brain, and strength to the nerves.

At about the age of 13, 14, or 15 years and sometimes earlier or later, boys undergo many physical changes. The shoulders broaden; the height increases; the voice changes; the hair begins to grow coarser and longer on the face, under the arms,

and around the sex organs. These organs themselves (the scrotum or bag, the two testicles, and the penis) increase in size at this time. All these changes are natural and are to be expected. If they occur as late as 15, 16, or 17 years of age, however, the boy should not worry. In some respects he has an advantage over the boy in whom they take place much earlier.

Athletics, abundant outdoor life, wholesome companions, lots of good fun, constant employment will help a boy break the habit called "self-abuse" (in case he has acquired the habit) and recover from any harm it may have done. Most boys who have abused themselves stop before any great harm is done. Self-abuse does not produce the terrible effects some persons say it does; it may, however, seriously hinder a boy's progress toward vigorous manhood. It is a selfish, childish, stupid habit. The strong boy will "cut it out."

The foreskin of the sex organ should be in such a condition that one can draw it back when bathing and wash it clean. This will prevent the accumulation of an irritating, cheesy substance under the foreskin. If the condition of the organ prevents it thus being kept clean, circumcision may be resorted to upon the advice of the family physician. The youth should not worry if the sex organ becomes hard and erect at times. If he will give his attention to some other interest, the condition will disappear.

Seminal Emissions

Inside the body, near the bladder, are two other glands, called the seminal vesicles. When a youth reaches the age of 15, 16, or 17, (though it may be earlier or later), these glands become filled with fluid which is occasionally discharged from the sex organ in the night. This discharge is called a seminal or nocturnal emission. It is frequently accompanied by a dream. It may come several times a month, or only once in two or three months. Seldom will boys feel any ill effects from emissions. Boys need not and should not worry about these experiences.

Knowing these facts, the young man will not permit himself to become the victim of quack doctors. In many cities unscrupulous men advertise to cure "lost manhood," "nervous debility," "pimples," and disorders which have nothing to do with sexual health. They try to frighten the ignorant into paying large sums of money for the "cure" of diseases which do not exist. Many boys are bothered by pimples on the body when they reach the age of about 15, 16, or 17. These are *not* an indication of any sexual disorder whatsoever, and they need cause no worry.

VENEREAL DISEASES

There are a number of important facts which should be thoroughly understood by boys and young men. They are sometimes called "sex diseases." The principal venereal diseases are syphilis and gonorrhea. These diseases are in some respects worse than smallpox. They are germ diseases which are communicable or "catching." Syphilis and gonorrhea are "caught" from other persons who have them, frequently from prostitutes (women who sell their bodies to gratify the lust of men.) All prostitutes, whether they are professionals who sell themselves for money, or girls who only occasionally have sex relations with men, are dangerous. In general, it may be said that some prostitutes are diseased all of the time and all of them some of the time. A large proportion of such women are feeble-minded. They are to be pitied and avoided.

Gonorrhea

This disease is sometimes called "clap" or "a dose." Gonorrhea in itself is a painful disease of the sex organs. It may lead to a serious kind of rheumatism; it may affect the testicles so as to cause sterility (inability of the man to become a father) or it may result in bladder disease, or disease of the kidneys or other organs.

Frequently gonorrhea appears to be cured, when in reality the germs remain in the deeper parts of the body. Years afterwards when a man is married to a lovely woman, whom he would not harm for anything in the world, the disease may break out in the man and be transmitted to his wife. Among women in-

ected with gonorrhea many become life-long invalids. Many are never able to have children; serious operations frequently are necessary. Often babies are born to them who become blind a few hours after birth.

Gonorrhea may be cured, but months of careful, steady treatment are often necessary to effect a permanent cure.

Syphilis

This disease is sometimes called "pox." The germs may get into the blood and reach any part of the body. An infected person may give the disease to another through a kiss or by transmitting the germs to a drinking glass and from the drinking glass to another person.

The most common method of acquiring it is by direct sexual contact.

The most serious results of syphilis may appear years after the first infection. It sometimes causes paralysis or softening of the brain.

A man who has had syphilis may transmit the disease to his wife without knowing it.

Syphilis has a murderous effect upon children. As a result of the disease, children are sometimes born dead. Others are born defective. Still others attain maturity seriously handicapped by general ill-health.

Syphilis may be cured, but a cure often takes one or more years.

The prevention of Venereal Diseases

In order to protect young women from venereal diseases a father should take measures to assure himself that the man whom his daughter marries is free from these diseases. He has a right to demand from him a certificate of health, showing freedom from both syphilis and gonorrhea.

Some ignorant men hold that sexual intercourse is necessary to physical health, but this is contrary to the best medical authority. A statement recently signed by 360 foremost medical men in the United States, declares there is no evidence that abstinence from sex activity is "inconsistent with the highest

physical, mental, and moral efficiency." Men who act upon the belief that sex activity is necessary often find out to their sorrow that sexual intercourse for them has resulted in disease and not health. When a prize fighter is training for a fight and needs all the vigor and endurance possible, his trainer insists upon abstinence from sexual activity.

Mind and Body

The condition of the mind has considerable to do with sex health. Various mental conditions often cause bodily changes. For instance, sorrow, a mental condition, may cause loss of appetite. The smell of a lemon makes the saliva flow more freely. Likewise, if a boy or man frequently permits himself to look at suggestive pictures, to listen to vulgar stories, and to indulge in lewd thoughts, he brings about a mental condition which may lead him some day later into a house of prostitution. Furthermore, such indulgence develops a low attitude toward sex, which (as we shall see) ought to be associated with the finest and most beautiful relationships in life. While it is not always possible to prevent lewd ideas coming to ones attention, it is possible, by using ones will power, to direct the attention away from them and center it on wholesome subjects. Some young men will need to learn the trick of switching the thoughts away from vulgar activities. The mind should not be made a cesspool, but a reservoir.

REPRODUCTION

The first function of the sex or reproductive organs is to develop the boy into a vigorous man. The other function is to enable him to reproduce himself when he becomes mature and the head of a family. By the process of reproduction, all forms of life—flowers, trees, birds, fish, wild and domestic animals, and human beings—are perpetuated on the earth. If the function of reproduction did not exist in life, the earth would soon become barren. Since reproduction is essential in human life, it is important to understand how life is passed on from one generation to another.

Reproduction in Plant Life

In many forms of plant life the flower contains the reproductive organs. In its center is a single central organ called the pistil. Around it are several stems, called stamens, on the top of which is the yellow dust, or pollen. At the base of the pistil is a receptacle, called the ovary, in which are very small particles, called germ cells or ova. Cells of a different kind develop from the pollen. The ova may be called the female cells, and the cells which develop from the pollen the male cells. When the flower is in full bloom it is ready to do its part in reproducing the plant. As bees fly about from one plant to another they carry pollen from flower to flower. Part of this pollen is brushed off on the tops of the pistils. Germ cells from the pollen go down through the pistil into the ovary, where they fertilize the ova; that is, they make the ova capable of growing. After the ova are fertilized, they slowly develop into seeds. The upper part of the flower dies and drops away. The ovary becomes a seed pod, in which several fully matured seeds can be found. These may be kept through the winter. When planted in the spring they produce other plants like the one from which they came.

Reproduction in Animal Life

The salmon of the Pacific Ocean furnish interesting examples of reproduction in animal life. In the spring they swim into the rivers and find shallow, sheltered places for nests. There the female lays a large quantity of eggs. She then swims away and the male comes to the nest and deposits from his body a quantity of fertilizing fluid, containing cells called sperms. Thus they work back and forth until the female has laid several thousands of eggs. Many are fertilized by the sperms and develop into young fish. The parent fish, however, are exhausted by the process of reproduction. They drift down the stream in a helpless condition and very few ever reach the ocean alive. They give up their lives in producing their young.

Reproduction in Human Life

Human reproduction is similar in many ways to reproduction in the flower. Inside the human mother's body are minute

germ cells, called ova. In the male sex glands a whitish thick fluid is made containing other minute germ cells, called sperms. When a sperm cell comes in contact with an ovum inside of the mother's body, it fertilizes it, thus making it capable of growing. It slowly develops, being constantly protected by the mother's body and continually nourished by the blood from her heart. It slowly takes the form of a human being, until, after nine months of growth, it has sufficient strength to live without the direct protection of the mother's body, and then is born a new human life into the world. Both before and after birth the mother sacrifices much for the new life.

The Superiority of Man

Reproduction in plant life is largely dependent upon the action of bees, the wind, and other natural forces. In animal life reproduction is almost automatic. The salmon simply obeys the reproductive instinct when the springtime comes. Man has the reproductive instinct, but he has acquired the power to control it to a far greater extent than have the animals.

The sex instinct may be a source of destruction or a great blessing. If it be abused, disease and suffering may result for the man and his wife and children. If it be understood and controlled, it becomes a source of added strength and a richer and fuller life. The nature of the sex instinct may be understood by comparing it with other forces in life. Fire is a blessing to mankind. By means of it machinery is made to perform gigantic tasks. It warms our houses and cooks our food. The warmth and glow of a camp fire is a source of great pleasure to campers. When fire is controlled it is a valuable aid to man, but when it gets beyond control it may cause ruin.

The water above a dam becomes a source of power when directed into the turbines which run dynamos. If it be only held back by the dam it may accumulate and cause a break, resulting in a flood. To be useful it must not only be held back; it must also be directed into the turbines. So sex energy must be controlled and directed. The youth entering into manhood needs the full power of his will to keep his sex desires from leading him into practices that weaken and damage himself

and others. But the truer way of wisdom is in the occupation of the mind with healthful interests and the turning of the growing powers of youth into athletics, work, study, art, music—any constructive social activity. Thus life may be made much richer because of the sex instinct in us. Activities which give opportunities for wholesome relations with girls and women are helpful to the youth and should be encouraged.

While it is important for a youth to understand the facts herein stated, it is not necessary for him to concern himself further with the facts about glands, germs, and other details referred to. In fact, he will be wise to dismiss such matters from his mind. The important thing for him to do is to lead an active, vigorous life; and nature, as a rule, will take excellent care of him.

THE YOUNG MAN'S RELATIONSHIP TO GIRLS

The young man should think of all girls as the future mothers of the race and understand that one of their most important functions in life is to become the mothers of healthy children who will make useful citizens. A nation may be well judged by its attitude toward women. The youth who is fair will treat every girl as he expects other boys and men to treat his own sister, his girl friend, or his sweetheart.

The craving for the companionship of girls and women should be satisfied. The man who keeps away from all girls usually has a harder fight against sex temptation than the man who seeks friends among girls of the kind he wants later to marry and whom he treats in a courteous and manly way. A young man's plan for marriage will often help keep him straight when nothing else would.

In an accident at sea, when everyone is anxious to reach the lifeboats, the rule for all men is "women and children first." If a man rushes in ahead of them he is looked upon as a coward. It is more important for men to protect girls and women from other dangers, especially from those dangers which threaten to ruin their lives. Every man who has any principle believes in fair play. He despises cheating. The young man who is fair will adopt for his own life the same standard he demands of the woman he expects to marry someday.

Each youth who grows up and marries becomes a link in a great chain of human beings. This chain reaches back into the past for thousands of years, and it may reach forward into the future for an even longer time. One false step may infect the racial stock and blight the lives of generations to come. If the young man keeps his body in good condition and lives a clean life, his descendants will in all probability be vigorous and useful citizens. The spark of life is to be accepted as a sacred trust to be transmitted undimmed to future generations.

NOTE:

For further information regarding venereal diseases, write for the State Department of Health Bulletin entitled "Facts About Syphilis, Gonorrhea and Other Venereal Diseases."

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SEX EDUCATION

for the
Ten Year Old

By **M. MARJORIE BOLLES**

TWO DIFFERENT things are meant when the terms sex information and sex education are used. Sex information refers to the body of facts of physiology and anatomy that relate to sexual function. These facts, to a child, are in a different category from the facts of geography or other natural sciences. Through the process of sex education these facts are placed in a setting of social attitudes, emotions and moral values. The parent who gives only sex information and fails to recognize that an important part of the task is to aid in the development of healthy attitudes, ideals and practices is failing in a vital phase of the education of the child. Essentially, then, the parent must first realize that the responsibility is not merely to inform but to educate in the broad sense of the word.

To be really successful in handling sex education for the 10 year old, parents should realize that they must formulate their answers on the child's level of understanding and interests. The 10 year old is more interested and attached to members of his own sex than to members of

the opposite sex. This phase has been called the latency period. Whereas 6 year old boys and girls mix freely in their play, on the basis of equality, there is a sharp separation of the sexes in group activities between the ages of 8 and 11 years. A boy of this age will not join in games in which he is the only boy, and will avoid even sitting next to girls. Toward the end of this phase—11 years—the child will begin to show self consciousness and shyness in the presence of members of the opposite sex. At the age of 13 or 14, the social-sex development of the boy has reached the stage at which he adopts a teasing attitude toward his friends who have girls. The girl of this age has started to be "boy conscious," although she is not interested in any one specific boy.

In answering sex questions, the parent should find out first how much information and misinformation the child has already collected. In order to do this, the parent may take advantage of the well-known device of turning the question back on the questioner by such a remark as "What do you think?" or "What is your theory of the way it happens?" By using such an approach, parents may find out the child's own theories or fantasies about sex relations and reproduction before confronting him with new information which might be both conflicting and confusing.

Sex education for the 10 year old child must fit in with the type and accuracy of information he has already acquired. Some parents have answered the earlier questions of their child in a wise, matter-of-fact way. For these parents, the furthering of the sex knowledge of their 10 year old child is relatively simple. It will amount to an elaboration and some repeti-

tion of what has gone before. Information complete in biologic detail is probably best deferred until the period of adolescence, since then he will be able to read and better understand available pamphlets and books. The parent of the 10 year old child can lay the groundwork in information and attitudes toward sex, so that later the child will be capable of reading about sex without regarding it as either disgusting or spicy.

If the child has been "precocious" in sex interest, or if the parents have had an extensive biologic training, then the child will probably have had a complete biologic explanation before the age of 10. Other parents who have adopted an ultra "modern" attitude through having been exposed to some of the theories on the importance of sex and sex attitudes in personality will have felt that the younger child must "know all" in order to develop normally. A frequent result of this too early presentation of all facts is confusion and misunderstanding on the part of the child. As Freud has pointed out, the difficulty in giving sex information to the young child is that the child is unable to understand it physiologically. From this point of view, the too early presentation of all the "facts of life" may be even more difficult to understand than reference to the famous stork.

Few parents adapt their answers of their child's questions to the growth in mental age of the child. Neither do they make much of an attempt to find out how much sex information the child has picked up outside the home. As a result, this haphazard collection of information frequently fails to make sense to the child. For example, the parent may encourage

the child to raise pets so that he becomes interested and enthusiastic about the arrival of new litters. In spite of this interest it has been found that most children fail to see any similarity between animal reproduction as they have seen it and the facts of human reproduction.

The parent who thrusts a book or pamphlet in the hands of a child and literally, or at least psychologically, "runs away" is providing a partial explanation of little value. A book can give information, but it rarely affords a basis for an attitude of healthy interest and understanding.

Some parents, because of their own childhood experiences and attitudes toward sex, evade the questions of the younger child. "My child is too young." "I don't believe a child's mind should be burdened with such things." "Information stimulates curiosity." A parent who feels this way is apt to tell a child to "wait till you're older," or may offer some fantasy explanation which is supposed to quiet the child's curiosity temporarily. Even today some parents resort to the stork story or the story of purchasing babies in department stores in order to sidetrack the child's interest and to gain at least a "breather" from his questions. One of the girls who took part in a study made of sexual development reported the following:

She was the oldest of five children. Her parents did not believe that children should be given any sex information until they were "old enough to understand it"—presumably this understanding process did not occur until they were about 16 years old. In order to explain new additions to the family, the older

children were told that the babies were left in boxes by the fairies. In order to make their story convincing, the father placed one newborn in a box outside the door and then called the children to help "discover" it. Another baby was placed outside in the garden—fortunately it was in the summer. When this girl was asked what she thought about these practices, she laughed and said, "Oh, I think it would have been much less bother for them if they had just told us the truth."

The method of evasion of questions cannot be successful for several reasons. In the first place, fantasy explanations give rise to so many more questions that the parent is still harassed by continued cross examination, or the child decides that his mother or father will not answer such questions. The normal child gathers information from playmates which, though it may be inaccurate, is better than falsehoods. Evasion and prudery on the part of the parent are apt to lead to the development of unfortunate sex attitudes as the child becomes an adult.

Parents who have evaded any and all of their child's questions concerning sex are faced with a serious problem when that child is 10. The parent should try to solve the problem with a minimum of stress and strain and to assume as objective an attitude as possible. If the parent is emotionally incapable of such objectivity because of personal sexual maladjustment or any other cause, then the best solution will be to ask the family physician to talk over with the child such questions as the child asks.

There are certain specific problems regarding sex education which may arise. In the



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first place, there is the parent who reports, "My child doesn't ask questions." We know from the studies that have been made, that this does not mean that the child had no curiosity. It may mean that the child does not dare go to the parent for information and instead depends on other sources. Information should not be forced on the child by the parent but rather the parent must consider what factors are probably preventing this normal questioning. It may be the child's lack of confidence in the parents' sympathetic understanding. In such a case, the wise parent would make some effort to develop a feeling of closer understanding with the child and would not approach the problem directly but rather attempt to join in the child's interests and activities to a larger extent so that this particular branch of interest will gradually fit into the things discussed between parent and child. In the second place, the fact that the child does not bring questions to the parent may be the result of the fact that attitudes have been built up through dirty stories told by playmates and acquaintances which he believes unfit to repeat to his parents. This is only one item of many which should make the parent realize that the sex information that they give the child is only a part of that to which the child is exposed. In other words, the parent should not labor under the delusion that by omitting or suppressing any talk of sex topics the child's mind is therefore not concerned with them. It merely means that the child is going to other sources. These other sources may or may not be desirable. If early childish curiosity had been adequately handled by the parent, the child would probably have brought home to

the parent the back-alley stories when he first heard them and would have asked for an explanation instead of placing them in the category of unmentionable subjects.

Another special problem that comes up is the child with "precocious" interest. In most cases, such children have been exposed to a wide variety of dirty stories from children their own age or older and have not been able to understand the stories and incidents that they were told. This early curiosity, which might have been allayed by simple and honest statements from the parents, has increased to the point where it is a source of worry and concern to the child. In certain cases, where the interest is so extreme that the child is preoccupied with sexual matters, the problem may be one for the child psychiatrist, especially if the parent is emotionally incapable of discussing sex objectively.

A further problem that may rise in the parent's mind is whether the child should be given certain types of information as a protection against exposure to incidents such as sex play with children of the same age, and sex aggressions by adults. Sex play between young children has been found to be fairly frequent but it is mainly an expression of the natural curiosity of the child to know how members of the opposite sex are constructed. Such incidents were found to be sources of emotional disturbance only when the parents made a great issue of them and made the child feel that he or she had done something extremely disgusting. For this particular problem the parents' task is not so serious because the best plan seems to be to avoid undue concern and emphasis, while taking steps to prevent a recurrence.

The question of how to protect a child from sexual aggression is a complicated one. There are advantages and disadvantages in any advice that can be offered. Certainly, if sexual aggressions have already occurred the parent is only traumatizing the child by making a great fuss over the matter. However, parents necessarily feel that it is part of their duty to protect against such occurrences. Warning or explanation beforehand may give the child unnecessary fears and apprehensions so that he or she is unnecessarily timid and shy. If the girl is told in vague terms that strange men may "do something" to her, her whole attitude toward strangers may become distorted and she may view them all as potential dangers or threats. Instructions that she should not talk to strangers, go for a ride in a strange car, or accept candy from some one she does not know, can be given in the same way in which social amenities or manners are taught. There are certain parts of the child's instruction which must be accepted on faith by the child. While in most things the logical consequence of the act is the preferred way of explaining, in regard to the social conventions it is often beyond the ability of any one to justify certain of these forms. In the case of the threat of sexual aggressions, the logical reasons behind the instructions may be as great a source of anxiety and fear as exposure to the actual incident would be.

In general, the parent approaching the problem of sex education should realize that his or her own attitudes toward sexual matters will color any type of information that is given. The way in which this information is given will be affected by prudish attitudes or per-

sonal sexual maladjustment. The amount of information given may be influenced by particular theories of child education that the parents have picked up through friends, magazines or books.

But the most important factor in the sex education of a child rests in a happy parent-child relationship. The best method seems to be to answer the question when it is asked, but to make sure that you know why the question was asked and how it is understood after it is answered. Mutual confidence and understanding must be encouraged.

SUGGESTED READINGS

"Sex Education of Children" by M. W. Dennett. Cloth. Price, \$1.75. Pp. 202. New York: Vanguard Press, 1931.

"Sex in Development" by C. Landis and co-authors. Cloth. Price, \$3.75. Pp. 329. New York: Harper and Bros., 1940.

"Parents and Sex Education for Parents of Young Children" by B. C. Gruenberg. Cloth. Price, \$1.00. Pp. 112. New York: Viking, 1932.

"New Patterns in Sex Teaching": The normal sex interests of children and their guidance from infancy to adolescence by F. B. Strain. Cloth. Price, \$2.00. Pp. 242. New York: D. Appleton Century Co., 1934.

"Sex Education: Facts and Attitudes" (Symposium). Pamphlet. Price, \$0.25. Pp. 60. New York: Child Study Assn. Amer., 1934.

Other titles in this series include:

Sex Education for the Preschool Child, by Harold E. Jones, Ph.D. and Katherine Read.

Sex Education for the Adolescent, by George W. Corner, M.D. and Carney Landis, Ph.D.

Sex Education for the Married Couple, by Mrs. Emily Hartshorne Mudd.

Sex Education for the Woman at Menopause, by Carl G. Hartman, Ph.D.

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Healthy Girlhood

THROUGHOUT France and in many countries of the world there stand statues of the great, heroic young woman, Joan of Arc. This humble peasant girl of Brittany, aroused by the misfortunes of her countrymen, helped to free them from the hands of a foreign foe. But today she has come to represent far more than a militant leader. She has come to stand for the woman with a vision, the woman who is seeking to do her part in the betterment of the world. Wherever her figure appears, it is always looking forward, the light of a great purpose in her eyes. A daughter of war-ridden fifteenth century France, Joan of Arc symbolizes the young woman of the twentieth century, eager to take a part in the work of the world and in the great enterprises of peace.

Health, the Foundation

You girls of today who aspire to take part in the world's work, which includes all activities of the home and the community and the nation, should make sure of your good health. Without it all other preparation for your career in the home or outside may be in vain. Today, many occupations are open to you. In many fields you now compete with men. But only if you possess good health—a vigorous body and a clear brain—can you expect to undertake such work successfully. No matter how thoroughly you are prepared, such training will be of little use unless it rests upon a foundation of good health.

Good health is even more important from the point of view of marriage and home-making and motherhood. In underprivileged areas where proper medical supervision is not available a large number of babies die during the first year of life. Thousands of others begin their lives under tremendous handicaps. Why? One leading answer is that unhealthy mothers cannot give their babies a fair start in life.

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time when they can participate actively in the work of the world. With health, happy marriage and motherhood becomes a well-founded hope for the future.

Beauty and Popularity

Besides fitting a girl more effectively for life's work, good health will also increase her beauty and attractiveness. True beauty comes from within, it cannot be put on from without. Good health gives a beauty that will last. Its foundation is health of mind and body; its expression is a sparkling eye, a clear complexion, a graceful body, an active brain.

Every girl wants to be popular with her companions. Today the popular girl is the girl who glows with life, who can swim and dance and play outdoor games, who has plenty of energy for fun when she has finished her daily work. Good health, which produces high spirits, vitality, cheerfulness, and leadership, will help to make any girl more popular. Most girls like social activities. Physical fitness makes more such enjoyment possible.

How Fitness is Attained

Physical exercise, fresh air, sufficient sleep, frequent bathing, good posture, good nutrition and comfortable clothing will help to make a girl strong and well.

Exercise: Daily exercise of some sort should be taken regularly. Many forms of exercise are enjoyable as well as beneficial. Walking to and from school or work, "hiking," skating, swimming are some excellent forms of outdoor exercise. Games, such as all ball games, hockey, and tennis stimulate both mind and body and are enjoyable companionable sports. Girls who work at home-making, or in offices or factories, or spend the day in the schoolroom are using only a part of their bodies. They need to make special efforts to exercise unused muscles during their leisure hours.

Fresh Air and Sleep: Every girl should have good ventilation in all indoor life. She should spend some time each day in the open air, and should sleep in a room with cool and fresh air without drafts.

Sleep rests the brain and relaxes the muscles. A growing girl

in the years thirteen to nineteen needs from eight to ten hours of sleep every night. Older girls may find that they feel well with somewhat less sleep.

Bathing: This is important for two reasons: aesthetic and sanitary. All "nice" people bathe in order to keep clean as civilized folks should. Some of them also bathe, especially with soap, because it removes germs and dirt which might irritate the skin or get into the mouth. Moreover, bathing with cold water and a rub-down with a coarse towel set up increased circulation of blood in the skin. This not only leads to a feeling of well-being but also is excellent practice in skin-temperature adjustments which reduce the tendency to "catching cold."

Good nutrition: A vigorous body demands wholesome food, eaten regularly. As a rule three meals a day are sufficient, and they should provide the well-balanced diet of sugars, starches, fats, proteins and vitamins which are recommended in many books and pamphlets on foods.

Proper food, six or eight glasses of water each day, some vigorous exercise, and regularity of bowel movements will help prevent constipation. Chronic or prolonged constipation may generate poisons which will affect general health. If constipation occurs frequently, consult your physician.

Correct posture: The essentials of a good standing position are to "stand tall"—chest up, not out, abdomen drawn in—the back touching a wall or an imaginary straight line. The feet should be parallel, with toes pointing straight forward. Aside from all questions of health, the erect girl who carries herself with ease and grace, is attractive and inspires, by her very appearance, the confidence of her teacher or employer and her friends.

Clothing: Clothes should be becoming, practical and comfortable. Many styles of shoes with low heels are attractive and practical.

Glands and Their Functions.

Important in maintaining health and vigor and in carrying on the work of the body are several organs called glands. Each of these

glands produces a special kind of secretion. The largest gland in the body is the liver which secretes bile, a juice which aids digestion of foods. Smaller glands in the cheeks and under the tongue secrete saliva, which has a similar function. Tear glands give off fluid which moistens and cleanses the eyeball. The secretions of some other glands are absorbed directly into the blood. Such glands are called endocrine and their secretions contain active substances called hormones. For instance, the thyroid gland located in the front of the neck makes a secretion which is distributed by the blood and which plays an important part in growth and health.

Other important glands are the ovaries in the girl and woman and the testes in the boy and man. These glands belong to the sex or reproductive organs described below. A secretion from the ovaries is absorbed by the blood and carried to all parts of the body. It causes the girl's breasts to enlarge and her figure to develop. In short, it changes the immature girl of twelve or thirteen into a bright, attractive young woman. The secretion from the boy's sex glands (testes) likewise cause the many body changes from boy to man. Thus the sex glands are necessary for the development of manhood and womanhood. Other glands, especially the thyroid and the pituitary above the brain, cooperate with the sex glands in this change from youth into adulthood.

In addition to their work as glands, the ovaries of the female produce egg cells or ova and the testes of the male produce sperm cells.

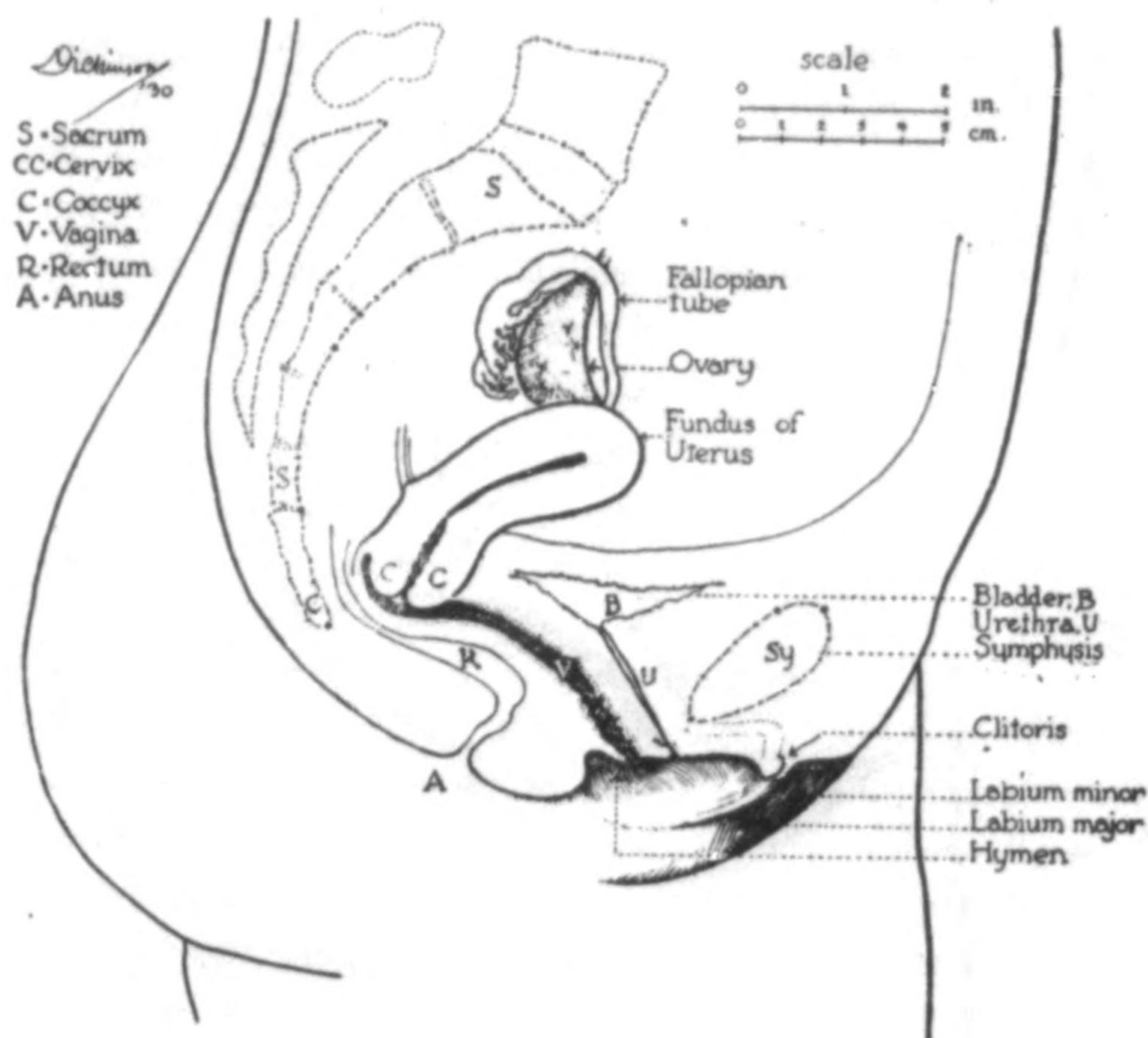
The Reproductive Organs.

Two kinds of humans inhabit this world of ours and live together in family units. Of course, the "two kinds" are men and women or boys and girls, and the male and female sexes. It is an important idea of modern education that boys and girls should learn the main facts about the structure and functions and life of the other sex which we must live with and understand in family life. Most such information is now obtained from parents, teachers and printed pages of books and pamphlets. Hence this pamphlet for girls and its companion for boys (*From Boy to Man*) have short

descriptions of both sexes, and more may be read in the books recommended on the last page of this pamphlet.

The primary function of the reproductive organs is to produce offspring or the new individuals of the next generation. In these organs lie the woman's power to become a mother and the man's power to become a father.

The female reproduction organs (see diagram) consist of the uterus or womb, two Fallopian tubes, two ovaries, the vagina, and the external parts which collectively are called the vulva. The uterus



FEMALE REPRODUCTIVE ORGANS

The diagram represents the organs as if the body were transparent and looked into from the right side. The left ovary and its Fallopian tube are shown. The external parts which are abelled clitoris, labia minor (smaller lips) and labia major (larger liips) belong to the vulva mentioned in the text. The cervix (cc) is the lower part of the uterus. The haymen is a thin membrane which partially closes the vagina in most young girls. The haymen is a thin membrane which partially closes the vagina in most young girls. The dotted lines represent bones of the backbone and pelvis.

is a hollow organ of pear shape with thick muscular walls. The lower end of the interior of the uterus opens into the vagina which is a short tube three or four inches long connecting with the outside between the labia or lips of the vulva. The Fallopian tubes are attached at the upper end of the uterus. Near the end of each tube is an ovary.

Ovulation: The primary function of the two ovaries is production of ova or egg-cells. Beginning at the period called *puberty* when the girl's reproductive organs have partially matured, at twelve to fifteen years of age, one egg-cell is discharged from either one of the ovaries about every twenty-eight days, as a rule. The egg enters a Fallopian tube. If the egg in the tube meets a sperm cell (as described later under *Fertilization*) it is fertilized and begins to develop into an embryo. In a few days this arrives in the uterus, becomes attached to the lining of that organ, grows rapidly and soon becomes an unborn human baby.

Menstruation: But if the egg is not fertilized in the Fallopian tube, it dies and disintegrates. Then part of the lining of the uterus flakes off and releases more or less blood and secretions, which for several days flow through the vagina to the outside. This flow is called menstruation or menstrual period from a Latin word which means monthly. It is a normal experience of healthy girls, and not an illness as many girls have been led to believe. A girl who is well and strong feels little or no discomfort during her menstrual periods. Certain health rules are helpful. Special care should be taken at this time to relieve the bowel and bladder regularly. Strenuous physical activities should be avoided, but some regular exercise should be taken. The external parts (vulva) should, of course, be kept clean. Bathing with warm water and soap is recommended by doctors, but care should be taken to avoid getting chilled. Modern sanitary pads for absorbing discharged menstrual fluids are recommended by reliable doctors and sold in all drug stores, ten-cent stores and mail-order houses.

Male Reproductive Organs: In preceding pages it is stated that ovaries produce egg cells or eggs and testes sperm cells or sperms,

and that union of the two cells (fertilization) occurs in a Fallopian tube. To understand these facts we need a brief description of the male reproductive organs.

Probably most girls of the 'teen age have noticed that their younger brothers or other small boys have external sex organs quite unlike the female organs—all of which, except the vulva, are internal. The male organs are the scrotum, a rounded bag made of wrinkled skin, and the penis which hangs in front of the scrotum. Inside the scrotum are the two oval-shaped bodies, the testes (commonly called testicles) in which millions of sperm cells are produced after puberty. A tube (called urethra) extends from the bladder to the end of the penis. The urethra is joined near the bladder by two small tubes, called spermatic ducts, which connect with the testes. Sperm cells pass through these ducts into the urethra. There are three glands (the prostate and two seminal vesicles), located near the bladder, which secrete a fluid (called semen) in which sperm cells are carried.

Fertilization: Union of a male and female germ cell (egg cell and sperm cell) is necessary in most forms of plant and animal life to produce a new individual. This union of the male and female cells is called fertilization. The egg of a higher animal (bird or mammal including humans) must be fertilized within the female's body by a sperm cell of the male in order to start the egg developing into a new individual. The sperm cells are placed in the vagina of the female by the sex organ (penis) of the male during the mating act or sexual intercourse. Many sperms swim into and up through the uterus and thence up the Fallopian tubes where an egg may be met and fertilized by one sperm cell.

The Sex Instinct or Impulse.

There exists between men and women a natural attraction which leads them to mate and continue the race. This attraction which is often called "sex instinct" or "sex impulse" is associated with love, which is a human characteristic. Used rightly the sex instinct will bring to the individual, to the family and to the race the greatest

joy; used wrongly it will not only fail to produce this result, but also it may lead to serious suffering and unhappiness.

The marriage of one man with one woman is a natural tendency, even among the most primitive peoples. Through such relationship and companionship the sex relations find their most wholesome satisfactions. Society has approved this by establishing marriage customs and laws. A man and a woman who live together without such approval of society and who, perhaps, bring into the world illegitimate children, are guilty of conduct which is out of harmony with the highest standards of life in all civilized countries. Such an illegal relationship creates problems which are never those of two individuals only—for the responsibility for such an unwanted baby may bring unhappiness which involves families and friends as well.

Moreover, in addition to social disapproval by the vast majority of the best types of citizens, there is a grave health danger in sex relations outside of marriage, often called "promiscuous" relations. Physicians now know that the germs of the dangerous venereal diseases, chief of which are syphilis and gonorrhea, are most commonly transmitted by extra-marital or promiscuous sexual intercourse. The nature, effect and treatment of these diseases is explained for youth of both sexes in pamphlets on communicable diseases. (See reference list on the last page.)

Because the sex instinct, which may bring to a pair of individuals the greatest joy in love and marriage and parenthood is sometimes misused, every girl should exercise great care in the choice of the men with whom she associates. It is never wise to accept from men who are chance acquaintances invitations to automobile rides, to beer parlors or dance halls, or questionable amusement places. Such invitations should be refused because boys and men of a certain type are unprincipled and sometimes dangerous. One reads tragic stories that might never have occurred if the girls involved had been careful in their choice of associates.

The Girl's Standards

The great majority of men still demand that the women they marry shall not have had sex experience with other men. But too

little attention is paid as to whether men live up to the same standards for themselves. Today physicians are teaching that self-control in these matters is just as possible for men as for women. People are realizing that the greatest permanent health and happiness can seldom be attained except through physical, mental and spiritual life, controlled and lived in harmony with the accepted customs of marriage and family relations.

Girls and women have a special work to do, therefore, in helping to build up high standards of sex conduct. They should demand clean living from the men with whom they associate. Frank, wholesome companionship on the part of girls will encourage the same from the men. Good conduct is born of a respect for one's self and for others. A handshake or a smile extends a friendly greeting. A kiss or any caress should be reserved as an expression of genuine affection and respect. A girl who does not value these expressions highly and uses them sparingly makes herself cheap and weakens her power of self-protection. If she really values a man's regard, she will not seek to win it through acts and words of unwarranted familiarity. Physical attraction alone never wholly satisfies; lasting love and friendship are mental and emotional as well as physical. Their foundation is mutual respect and understanding; and their highest expression a deep emotion of affection.

The sex instinct is a powerful force which needs guidance and control in order to avoid its potential dangers and to reap its greatest values. The danger in petting is that it stimulates strong desires which may be hard to control, harder for one person than for another, and may mean yielding to sexual urge which can bring serious and unhappy consequences.

Choosing a Husband.

Marriage: A girl's success and happiness depends largely upon her choice of associates and finally upon her choice of a husband. Because she will choose him from among her men friends, it is important that her friendships be based upon qualities that will wear. Hasty marriages following an acquaintance of a few days or weeks,

often result in unhappiness because they are not founded on love based upon a long-developing knowledge and appreciation of each other. Fit partners for life are those who understand and respect each other's views, who recognize each other's faults as well as virtues, and who are willing to work and plan together for lasting companionship.

The above considers choosing a husband as a desirable social partner for a lifetime. A girl should also choose her husband as the probable father of her future children. This involves questions of fitness for parenthood as indicated by the heredity and the health (physical and mental), as well as the social qualities, of both the man and the woman.

Today the opportunities for woman's development and her ability to contribute toward the creation of a better world are greater than ever before. At last almost all activities of life are open to women. They are now free to choose the part they will play in the world's work. Whatever part it may be, good health is essential for them in the home and in the larger world outside.

Suggestions for Further Reading

Books

- The Way Life Begins*—74 p. 50 cents
V. M. and Bertha C. Cady
- Attaining Womanhood*—95 p. \$1.25
G. W. Corner
- For Daughters and Mothers*—138 p. \$1.50
Valeria H. Parker
- Health For You*—\$2.50
Katherine B. Crisp
- Growing into Maturity*—38 p. 40 cents
Katherine B. Crisp
- The Questions Girls Ask*—128 p. \$1.50
Helen Welshimer
- A Girl Grows Up*—235 p. \$1.75
Ruth Fedder
- The Family and Its Relationships*—470 p. \$2.00
E. R. Groves, Edna Skinner and Sadie Swenson

Pamphlets

- Petting, Wise or Otherwise*, E. L. Clarke, 25 cents
- Health for Women and Girls*, W. F. Snow, 10 cents
- Choosing a Home Partner*, N. Edson, 10 cents
- How Life Goes On and On*, T. R. Rice, 25 cents

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A Discussion of
SOCIAL HYGIENE
for Older Boys
and Girls

Understanding Ourselves

By MARION L. FAEGRE

Understanding Ourselves

BY

MARION L. FAEGRE

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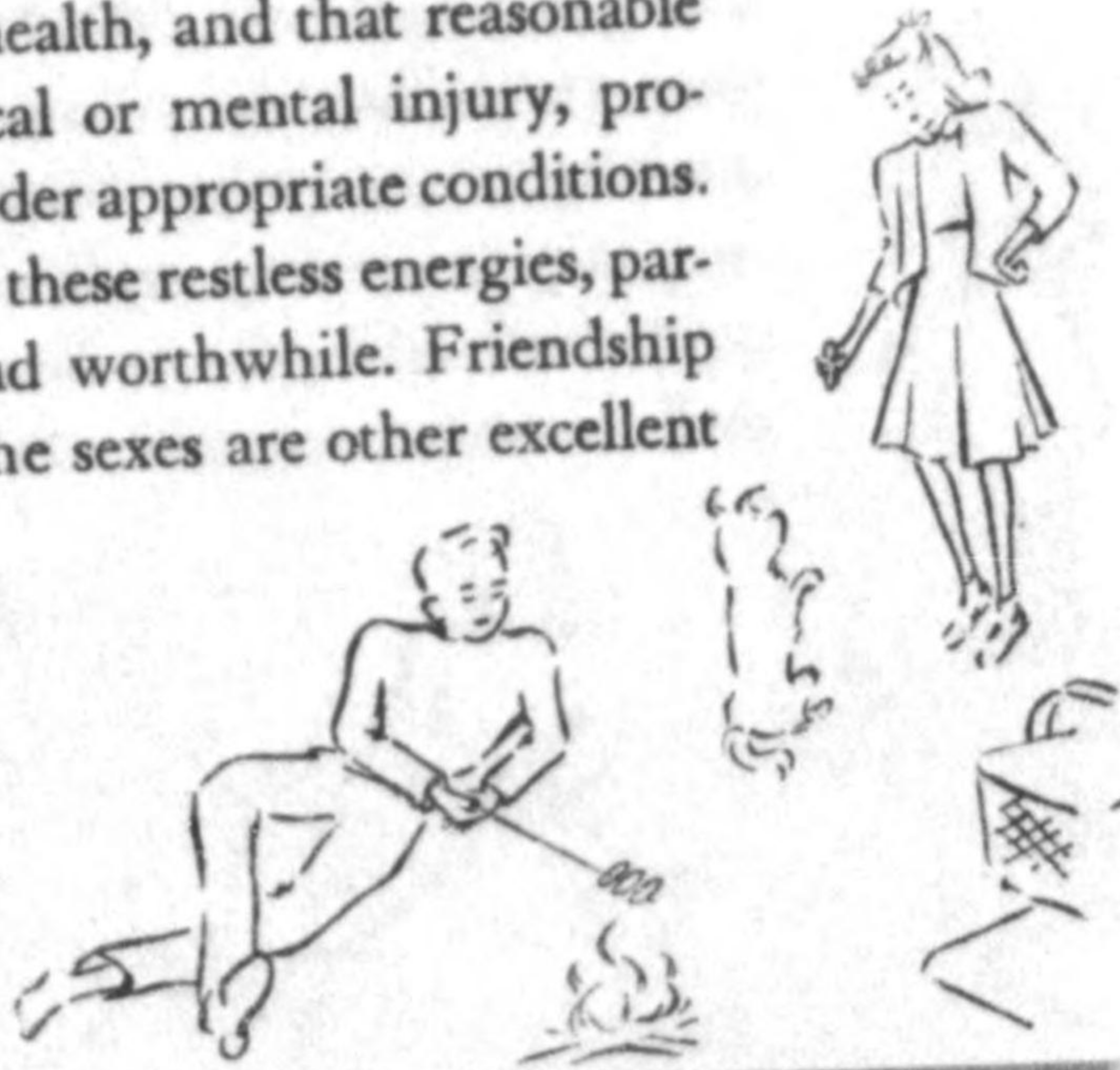
First printing, 1943, 10,000 copies
Second printing, 1944, 20,000 copies

P R E W O R D

This pamphlet is different from other social hygiene pamphlets in that it has been written for both boys and girls. In the past, social hygiene literature for young persons always appeared in two forms: one pamphlet for the girls and the other for boys. It is true that boys and girls have slightly different problems and interests, but certainly young persons nearing college age should have a complete understanding of the opposite sex.

During the period of adolescence, both boys and girls become more conscious of their physical and emotional changes. Physical maturity is advancing and new sex energies press the individual to seek satisfaction. This pamphlet recognizes that the need at this time is for more knowledge and for more possibilities of sublimating or diverting these new sex energies into socially-approved channels, thus obtaining the genuine satisfactions and pleasures which sublimation brings.

I should like to re-emphasize the point brought out in the pamphlet that young people can and should be persuaded that, unlike hunger, immediate satisfaction of the desire for mating is not essential to life or health, and that reasonable postponement involves no physical or mental injury, provided substitutes are resorted to under appropriate conditions. Work is one of the best outlets for these restless energies, particularly work that is creative and worthwhile. Friendship and companionship between the sexes are other excellent

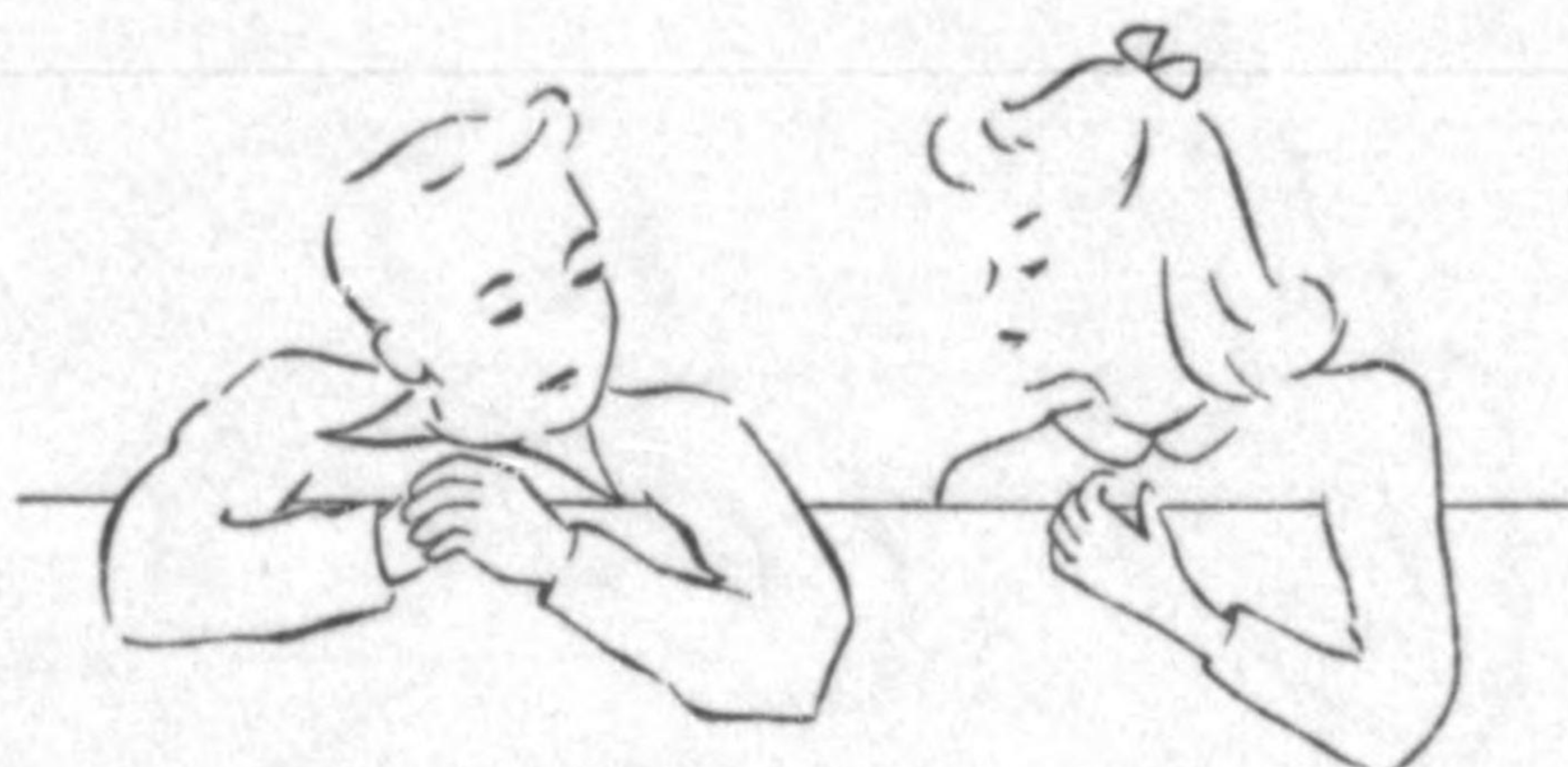


forms of substitution, while dancing, theatrical productions, sports, walks, picnics, debates, and social service afford abundant opportunity for association and comradeship between young people. These things should be encouraged and provided both for the sake of the profit and pleasure they yield and for the purpose of building up a natural, normal relationship between the sexes, enabling them to cooperate in work and in play without false modesty and exaggerated shyness or self-consciousness.

Above all, in addition to interesting occupations the young person needs introduction to standards and ideas based not only on tradition or religious doctrines, but on science, common sense, and verifiable facts. He must be convinced that the reason for the self-denial, the self-discipline and the sublimation urged upon him, is to be found in his own enduring happiness as well as in the welfare and progress of the society of which he is to be a member and which he will want to serve with honor and distinction.

Knowledge is not enough in the control of conduct; ideals, high aspirations, the will to live up to the best in us, are as essential as knowledge. A better society implies higher ideals of society and individual desire and determination to translate ideals into daily behavior.

RACHELLE S. YARROS, M.D., Formerly Professor
of Social Hygiene, University of Illinois



UNDERSTANDING
OURSELVES



OLD ER BOYS

You, Bill or Dick or Peter or Ted—whoever you are—owe a lot to a man you've probably never heard of. Oh, he wasn't famous as Socrates and Charlemagne are, but he deserves to have you put him on a pedestal, just the same. For Stanley Hall made things a whole lot different, and pleasanter for boys like yourselves. No, he didn't invent bicycles, or ice-cream, but he did something just as important to you: he set people thinking about the problems of young people.

Until Stanley Hall came along, most people paid little attention to the fact that somewhere between the ages of twelve and twenty boys turned into men. "Why, surely, there's nothing to that," many of them would have said, had someone spoken to them about it. "Everybody grows up. What's the need of talking about it? What is there to do about it?"

Now Hall had not only been a boy himself, but he hadn't, as many grown-ups do, forgotten about what it's like. He was a very lively boy, too. He was a boy who loved to climb trees, and make boats, and watch the blacksmith, and eat apple pie, and catch mink and fish in the stream on the farm where he lived. He knew just how boys feel about making the most of their time. (He felt that way until he was 80 years old, too, always making the most of his time, always finding something so new and interesting to do that his life seemed all too short.)

He remembered that there are many puzzling things that

happen to a boy, and especially that there is a time, known in textbooks as "adolescence," which is a sort of in-between stage. A person isn't a child, but he isn't a man. First people say, "You're old enough to know better than that!" and then the next minute they turn around and laugh at you for wanting to do something, and say, "But you're not *old* enough!"

This teen age bridge of years between childhood and adulthood interested Stanley Hall, and he made up his mind he would find out something about what goes on during this period, so that young people needn't stumble along with their eyes shut to what was happening to them.

He realized that while a boy is becoming a man things happen both inside and outside him; that is, there are changes occurring in his body and mind, and there are changes in the way the world thinks about him, and the rules it sets up for him to follow. Because we live in a society that has gone on for a long, long time, established ways of doing things have grown up until one's own natural desires come up against a fence every time one turns around. Stanley Hall knew that one may be hungry, and still have to obey the rule of waiting to eat until all are served at table. He knew how it feels to want to answer back, when the rules of polite society say one must hold one's tongue. He went through feelings of half-embarrassed pleasure when he discovered that he needed to shave if he were to look attractive to the girl who was so pretty he couldn't take his eyes off her; and he knew that he would not only be laughed at but frowned at very hard if he disobeyed the "rules" of society that made it necessary for him



to wait a long while, years, in fact, before he could say to that young lady that he wanted to make a home for himself and her.

STANLEY HALL'S CONTRIBUTION

Because he felt that children's lives could be made happier if people understood more about the processes of growth and behavior, Stanley Hall bent his energies for many years to the study of growing children and the results were finally published in two great volumes called *Adolescence*. From the reading of these books, hundreds of thousands of teachers and fathers and mothers gained more of an understanding of what happens to their children along the way from childhood to adulthood. Since that time, which was in the 1880's, many other scientists have made the unrolling of the story their main object, so that nowadays, there are not quite so many puzzling things about behavior. We know about how children's bodies grow, and how their minds unfold, and something of what the feelings and desires they have are.

Of course it is easier to study growth that you can measure in inches than it is to understand changing thoughts and feelings. But by very careful watching it's sometimes possible to put two and two together and find a connection between the different kinds of growth. For instance, when a baby gets to be a little over a year old, he usually puts a great deal of energy into climbing. He wants to try to go up and down stairs, to climb onto chairs, to use his arms to pull himself up. People who don't know any better sometimes try their best to keep the baby from climbing because they're afraid he'll fall.

But if one stops to think, it's clear that one reason the baby wants so much to climb at this age is because such exercise strengthens his back and helps him to get ready to walk. Almost everything people do is connected with some need, some desire, and they should have that desire fulfilled—although maybe not always in the exact way they are trying to do it.

WHAT ARE THE OLDER BOY'S NEEDS?

A boy in his early teens, for example, usually feels a great urge to have more freedom and independence than he's had as a small boy. Sometimes he shows this desire through eagerness to go on overnight hikes, or camping trips, without any adult along. Sometimes, if he feels his parents don't understand, and are keeping him from doing some of the things he's perfectly able to do, he shows his longing for independence by being rude and impatient with his father and mother. That, often, is misunderstood by them, and because they feel hurt, and also because they're afraid they haven't been training their child right, or he wouldn't show such ugliness, they may watch him more closely than ever, and put more restraints around him. Which, again, makes him feel still more resentful.

Why is it that the life a boy would *like* to lead doesn't always fall in line with what his parents think he should do? Of course there's no one simple answer, but there is one thing that stands out importantly. Our "civilized" life doesn't allow for many of the natural urges and desires to be satisfied in a

natural way. When a great many people live together, as in our society, the rules and regulations governing their behavior multiply and grow rigid. It wouldn't seem to be necessary to have any rules against singing, would it? But if a person decides he wants to sing at the top of his lungs in the middle of the night, he usually disturbs a lot of other people by yielding to his desire, so that his singing is frowned on. It's the same way with a lot of other things. A boy in his teens wants to show that he is growing up by earning money (which is the usual way in our group life of proving that we are accomplishing something), or by driving a car. But there may be no jobs of the sort that he can do, or no car to drive, so his impulse to act grown up is thwarted. In a simpler kind of society a boy begins to make his own way in life much earlier than he can do in our way of living; it doesn't take years of education for a boy in the South Sea Islands to learn how to do what he'll make his living by for the rest of his life. He has been learning to make canoes, and to fish, ever since he can remember. There aren't hundreds of different things he may become, as in our world.

So you can see that there are bound to be problems in the life of a boy who is growing up in a kind of society that is very complicated. Not that there aren't problems in all lives, but just that ours are different. Problems are what make living so interesting. For if we weren't continually being challenged our lives would be very dull. If we knew just how to solve everything that came along we'd feel that existence was very stupid indeed. If we woke up every day and knew just what

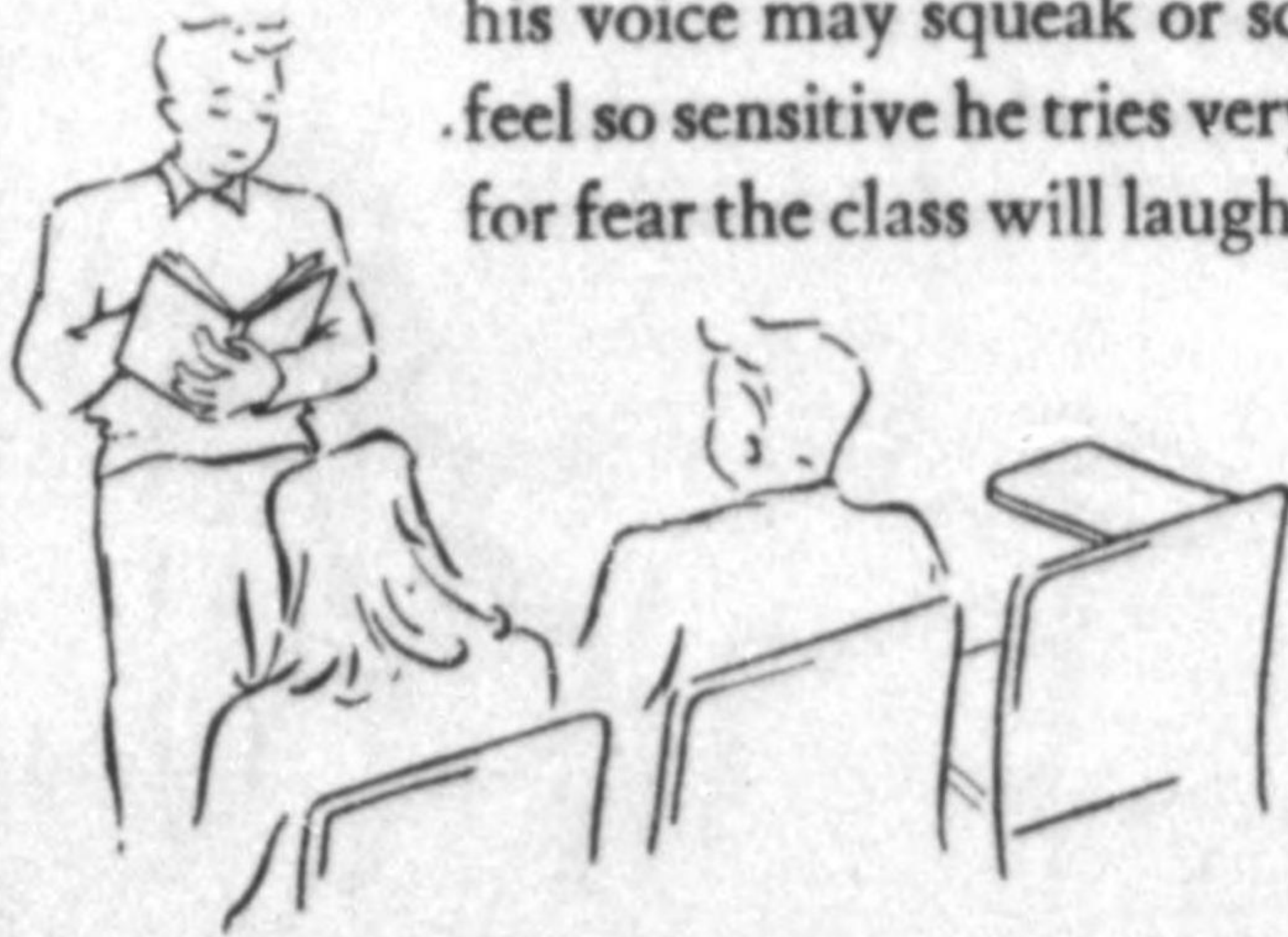


was going to happen throughout that day we'd soon be so bored it wouldn't seem worthwhile to wake up!

In order to understand the feelings that accompany growing up, it's necessary to take a quick look at what's happening in the body of the teen age youth.

HOW BOYS BECOME MATURE

After a time of rather slow growth, which corresponds roughly to one's grade school years, there comes a time when growth speeds up, making ready, we might say, for the all-important change that will make one mature. About the first way one knows he is growing up is that he rather rapidly becomes taller. This is much earlier in the case of some boys than others; boys who have been tall for their age from as early as they can remember will probably have this spurt in growth sooner than boys who have always been short. But come it will, the time when one grows several inches in a year, when trousers and coat sleeves are so rapidly outgrown that one's new suit, bought in the spring, may seem embarrassingly too small when one puts it on in the fall, ready for school. And as if this bothersome situation weren't enough, other changes occur for which one isn't always prepared. A boy may have to stop singing in the choir, temporarily, because his voice is changing, and he can't reach the high notes that were easy before. Sometimes when he's reciting in class, his voice may squeak or squawk unexpectedly, making him feel so sensitive he tries very hard to get out of being called on, for fear the class will laugh. Some boys are very little troubled



in this way, others go through agonies before their voices settle down to the normal lower tones that we associate with men.

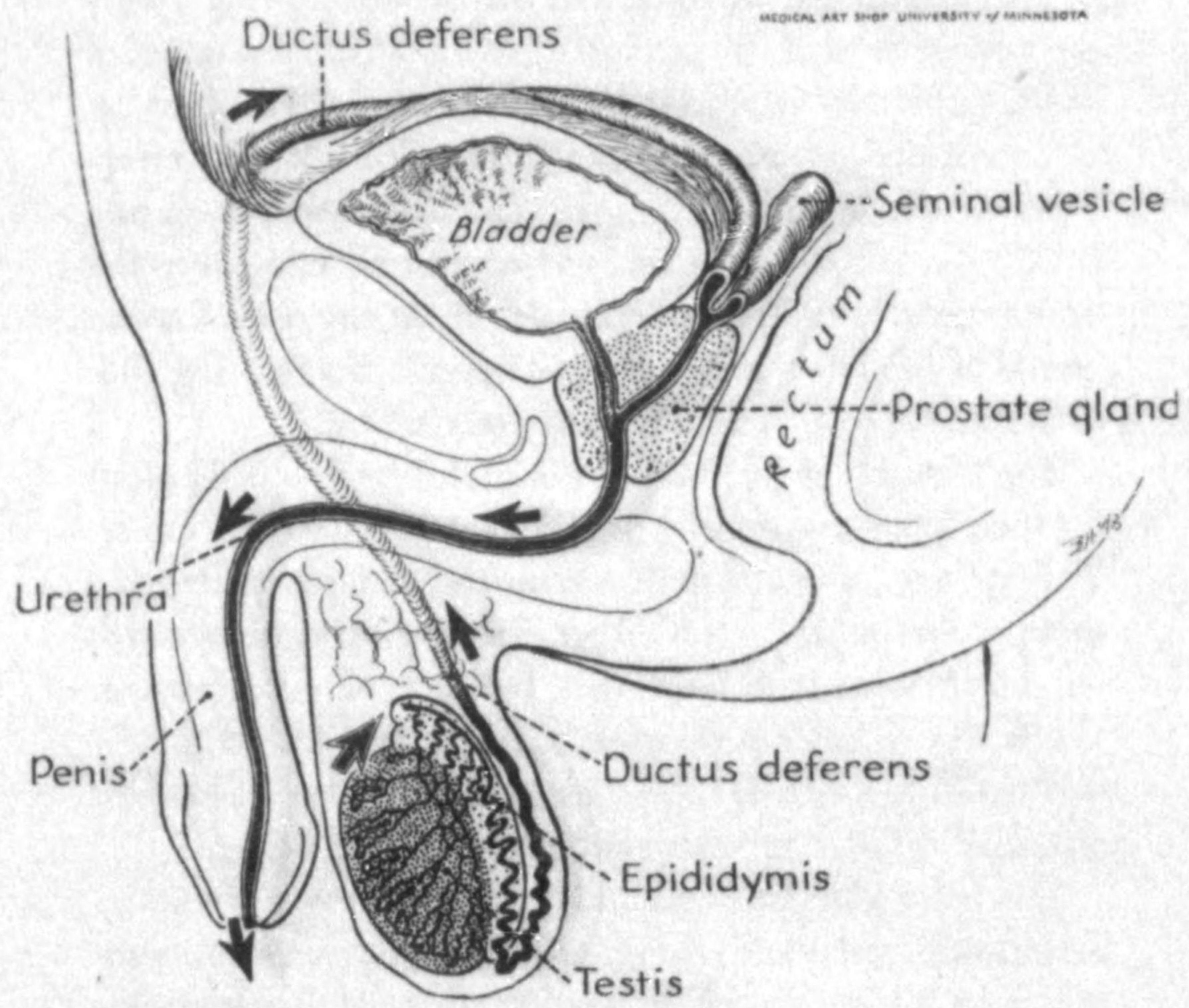
Every boy looks forward to the time when he will shave, because this is one of the best signs by means of which he can be sure he is becoming mature. Along with the growth in height, and change in voice, and the need of shaving, comes the enlargement of the genital organs, and the appearance of curly, kinky hair around these organs and in the armpits.

The genital or sex organs, that are concerned with reproduction, remain small and relatively inconspicuous during childhood, but take on rapid growth and changes when the time approaches for the individual to be getting ready for that period of life when it will be his responsibility to bring children into the world, and thus carry on the race.

The position of these organs is probably due to the need for their being as carefully protected as possible from injury. The sex organs of the male are on the whole simpler than those of the female, upon whom rests the very complicated, long-drawn-out and important business of child-bearing. While the man's reproductive apparatus is less intimately tied up with the body than that of the woman, it is still an elaborate mechanism that requires some explaining.

There are both external and internal genitalia, those on the outside of the body being known as the penis and scrotum, which contains the testes, while the parts that are inside the body are the vas deferens and its associated parts, the prostate gland, and the urethra.

MALE REPRODUCTIVE ORGANS



The penis is a cylinder-like structure, the base being covered, along with the region around it, with pubic hair. The delicate skin, or prepuce, which covers the penis extends forward in a fold over the head of the organ when it is relaxed. It is becoming more and more usual for boy-babies to have this fold of skin removed by the simple operation known as circumcision, on account of the greater ease of keeping the penis clean, and because the removal of this prepuce lessens the sensitivity of the gland.

In order that the penis, carrying the semen, or life-giving fluid, may be introduced into the body of the female, it is made up of three spongy bodies that are capable of being quickly permeated with blood, which accomplishes the hardening or stiffening of the organ. Erection, as this condition is called, comes about spontaneously, from infancy on, under many circumstances other than those connected with the sex act of introducing the penis into the body of the female. Boys and young men often have erections upon awakening in the morning, probably because the bladder is full of urine at this time. Excitement due to erotic thoughts, that is, thoughts connected with sex, and brought about by pictures, conversation, or dreams that tend to arouse a person sexually, often brings about the distention or filling of the penis with a rush of blood. This is a normal reaction, quite to be expected, as are the seminal emissions at night, when the accumulated seminal fluid passes out of the body during sleep, sometimes with, sometimes without, dreams of sex excitement.

The scrotum is the sac that holds the two testes, where the fluid containing sperm, or life cells is produced. Its location outside of the body is due to the very interesting fact that human sperm cells cannot live in the higher temperature within the body. In some mammals, like the elephant and the whale, the testes are inside the body.

The two testes are fastened to the epididymis, a curious word which seems almost as long as the long coil of tubes of which it is composed, which empties into the vas deferens, or the organ which carries the sperms to the urethra. This is the duct through which the sperms pass out. These tiny tubes, which may be anywhere from 12 to 48 inches in length, are lined with fine cilia, or hair-like structures, which sweep the sperm cells along, into the vas deferens, where they are nourished by a fluid that encourages their becoming active; so that by the time they have passed through the tube they are capable of swimming about, a movement induced by the lashing, tail-like part of the sperm cell.

The vas deferens is a strong, muscular tube, which by its forcible contractions, squeezes the sperm along to the seminal vesicles. It is helped by the prostate gland, which by its contraction as the sperms are passing along the tube, sends into the seminal fluid an additional element, having an alkaline nature which is favorable to the activity of the sperm cells.

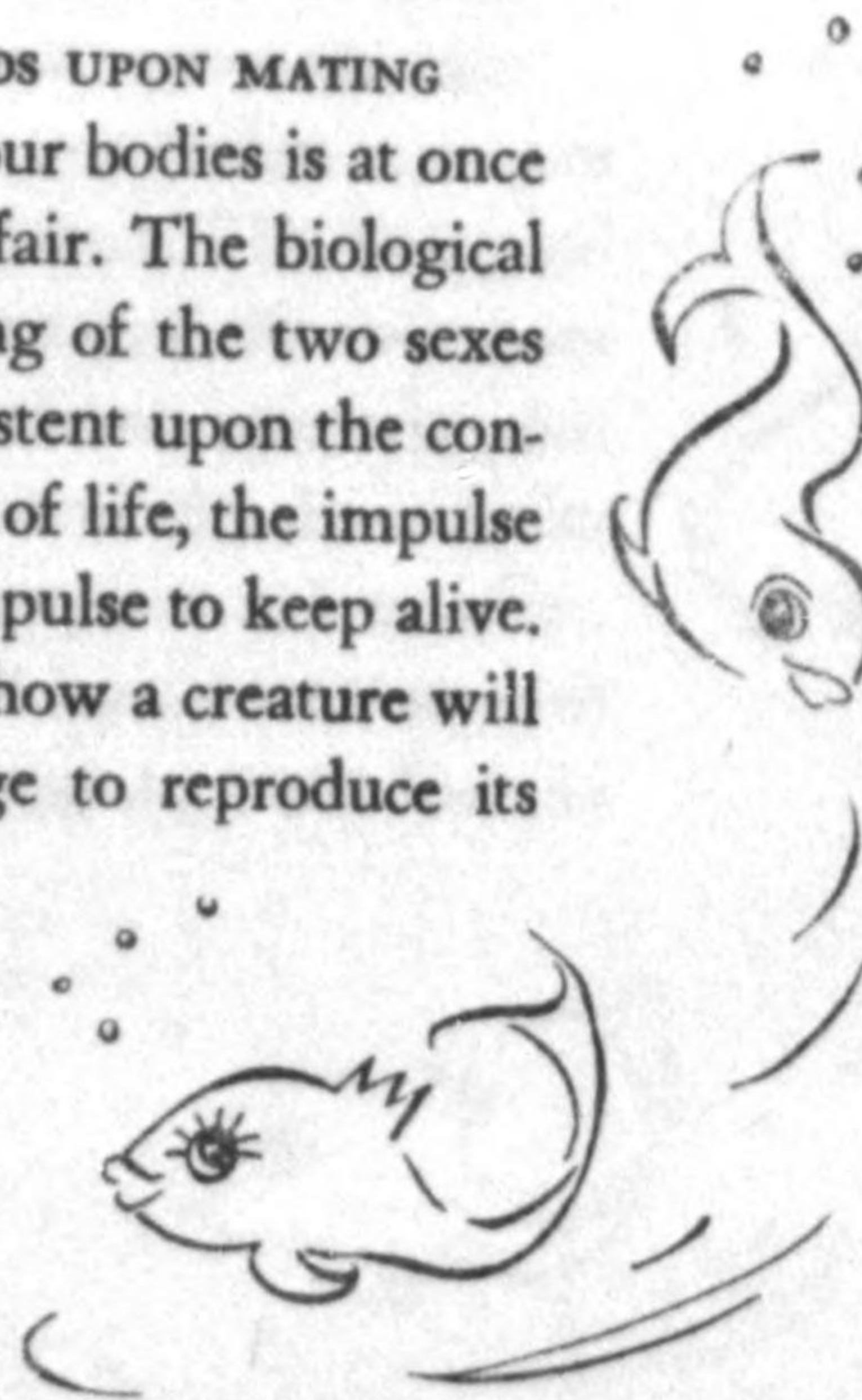
The extremely powerful muscles with which these various organs are equipped makes possible the ejaculation, or forceful expulsion, of the seminal fluid. First, the muscles and

congested blood must make the penis firm enough to penetrate into the opening in the body of the female, known as the vagina; and second, the expulsion of the precious seminal fluid must be strong enough to make sure that the sperm cells will reach their appointed place in the body of the female. The moment of ejaculation, or expulsion of semen, is known as the sex orgasm, when the powerful drive of the organism to accomplish its instinctively desired end reaches a climax.

In order to understand coitus, or the joining of the two sexes in the reproductive act, it is necessary to learn something about the structure of the female body, as well. The two sexes are rather different in their sex feelings, just as they are in their sex structures, and the union of a man and a woman is much more likely to be happy, and to meet the needs of both, if each understands what is going on in the feelings and body of the other. On page 27 you will find a description of the reproductive organs of the woman.

THE CONTINUANCE OF THE RACE DEPENDS UPON MATING

The story of the way sex functions in our bodies is at once a very simple and a very complicated affair. The biological reason, of course, that the urge of mating of the two sexes is so very strong, is because nature is insistent upon the continuance of the human race. In all forms of life, the impulse to mate is as deep and powerful as the impulse to keep alive. The salmon is a well-known instance of how a creature will even forfeit its life, in fulfilling the urge to reproduce its



kind. Swimming back to its original home, up streams, over rocks and against the flow of waterfalls that almost dash it to pieces as it blindly carries out the plan that nature devised for the spawning time, the salmon wears itself out so completely that all that is left for it is to die, after making this heroic struggle. It carries out without forethought, but only according to driving instinctive needs, its appointed duty. In like manner a wasp stings and paralyzes a beetle on which to lay its eggs, so that its young, emerging from the eggs long after the wasp has died, will have fresh food ready at hand.

In these cases, although the parent creatures do not purposefully plan and arrange things so that their young will be taken care of, there is still an inborn urge to follow a certain course, which results in the safety and security of the offspring. The salmon eggs hatch out safely in the quiet pools where they are deposited, the "grubs" from the wasp's eggs find their needs taken care of until they can fend for themselves. In all nature, some provision is made for the care of the young, whether it be the instinct implanted in the pigeon, which results in the male bird sitting on the eggs during the day, while the female watches over them at night, or a physical arrangement like the pouch of the kangaroo, which permits the mother to keep her babies safe until they are able to leap fast and far by themselves.

But among human beings, the care of the young has long since been lifted far above the automatic and unthinking solicitude that lower animals give their babies. Human



mothers and fathers have made out of the sex need that first brings them together such fine and lasting feelings that the sex act has come to mean a great deal more than just a matter of fulfilling one of nature's urges. Through the long centuries of time during which our ways of life have developed there have been growing feelings and sympathies and understandings that have made the sex experience one to which people look forward, not just because it gives them a deep pleasure to answer the needs their bodies feel, but because the union with someone of the opposite sex has taken on the rich meaning of love.

THE UPLIFTING NATURE OF LOVE

Love, in our way of thinking of it, means much more than simply the sex passion from which it originally arose. It has come to be one of the most all-important and meaningful words in our language, connected with the very finest and very highest things of life. Love of children, love of father and mother, love among brothers and sisters and friends, the care that love expends upon loved ones—all these different kinds and degrees of love had their beginnings, far back in the past, in the sex attachment that was the cause of the start of the home, the family, and all that those institutions have come to mean. Bit by bit man has raised himself from the level of the animals, who satisfy their sex needs just as thoughtlessly as they snatch food, until his sex life has developed into something much more abundant; that overlaps and includes most of the finer

things of life. Man's music, his art, his poetry, all praise the lifting of the reproductive function from mere gratification of body needs into things that satisfy the soul and imagination. Whether it be Shakespeare, telling how his love makes him feel "like to the lark, at break of day arising," or an earlier poet, saying "Love wing'd my hopes, and taught me how to fly far from base earth," poets testify to the uplifting quality of the love element in their lives.

No doubt you have known people to whom the subject of sex seemed to be a joke, and not only a joke, but a smutty one at that. You may be pretty sure that any person who treats such an important part of his life so lightly has not had an introduction to it that allowed him to see the whole question of sex in an adequate way. In a sense, he who thinks of sex as something dirty, or funny, is on the defensive; that is, he feels that he has to adopt a sort of know-it-all, superior attitude because he has not had light thrown on his questions as to the meaning of this part of his life.

There are many ways in which this can be explained. In some cases, a child has his early questions snubbed or turned off, and he at once surmises that this is something many people do not talk about naturally. If his first questions as to where babies come from or what the names of his genital organs are, are answered hesitatingly, or not at all, a boy is not likely to go back to his father or mother for explanation about other things that may arise to puzzle him. We must not, though, blame parents who do not know how to deal with their children's wonderings about sex; for it is only too

likely that they themselves never had a fair chance to learn wholesome attitudes, and so they may feel hesitant and unable to deal with the child's questions. They probably acquired their information from sources that were not really helpful, and had to stumble along as best they could. We must keep in mind that not so very long ago the whole subject was more or less a closed book, because people are apt to repress in their minds things that are mysterious and little understood.

Another reason why some people have poor attitudes about sex is because their first experiences have been unfortunate. Most little children, when they are just discovering their bodies, go through a period of playing with their genitals. This very natural interest a child has in his body may have been dealt with unwisely. The child may have been punished, and made to feel that what he was doing was very naughty, or even disgraceful. His shame over being reprimanded about something that was to him a natural act may make him feel that there must be something disgusting about those parts of his body. Then later on, when the normal feelings of awakening sex interest become too noticeable to be ignored, he tries by subterfuge methods to find out what is happening to him, and the information he gets may be very misleading and incorrect. If he seeks from his friends to know what it is all about, he may run up against the fact that their training has been even more inadequate than his own. Or, he may be purposely misled by some older person, who, because of his own unhappy experiences, thinks it is

amusing to pervert the feelings of the young person who wants help.

SOME PUZZLING PROBLEMS

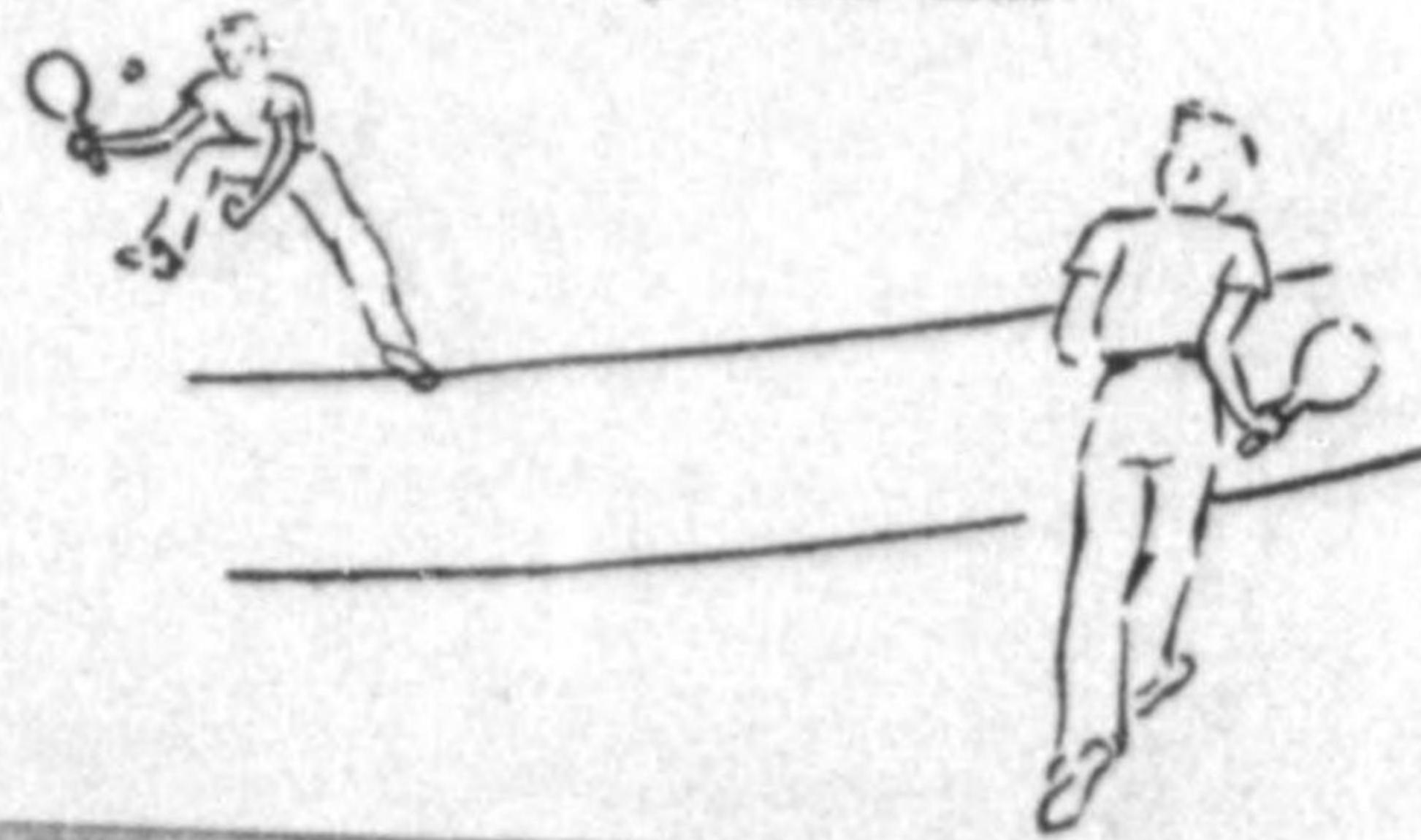
One of the things that may trouble a boy because he misunderstands it is the seminal emission, or occasional overflow of the fluid containing sperm-cells. It occurs unconsciously during sleep, in some boys quite often, in others, very infrequently. It seems to be set off by dreams, or by other stimulating circumstances, such as being too warmly covered, sleeping on the back, or wearing uncomfortable pajamas. A full bladder, or bowels that are constipated, probably help to bring about the tension that is released by the emission, so the need of healthful regularity of getting rid of body wastes is easily seen. In the past, many quack doctors used to prey on boys who were afraid these emissions indicated they had some disease, or who thought that in this way their strength and manliness were threatened, but nowadays it is becoming more commonly known that this natural pouring off of the fluid stored in the seminal vesicle and prostate gland does not in any way affect a boy's health, physical or mental.

Another thing that often bothers boys is the rather common self-stimulation known as masturbation. This excitation of the sex organs by manipulation with the hands, and the resulting erection of the penis and ejaculation of fluid is a natural enough thing in a boy, who feels the pressure of sex tension, and finds in this way its temporary release.

There are good reasons why this practice is unwise. First of all, it is a habit that encourages, and is encouraged by, solitariness. A boy who is lonely, who tends to think too much about himself, may come to fall back on this childish way of finding satisfaction. He knows that it is frowned upon, so he feels guilty, and may even imagine that other people know of his habit. This makes him even more unlikely to go out and seek companionship and healthy outlets for his energy. To carry on a childish habit like masturbation is much the same as if a grown boy were to indulge in temper tantrums. People excuse temper displays in a four-year-old, but look with disfavor on uncontrolled behavior in a boy in his teens. Gaining control over one's behavior is one of the things that should accompany growing up, and a boy who practices something that he knows he should have outgrown will not feel as manly as one who has put aside childish indulgences.

The old notion that the practice of masturbation resulted in insanity had no foundation whatever in fact. Masturbation, however, which must be carried on in secret, and which causes shame and fear of discovery in the person indulging in it, can bring about a feeling of being an outcast, a fear that no one would like him or want to associate with him if they knew of his habit. Thus the boy's *feelings* about his act, and not the act itself, can bring about disturbing effects on his personality.

There is little danger of this habit acquiring a hold on the boy who lives a wholesome, well-rounded life, who has



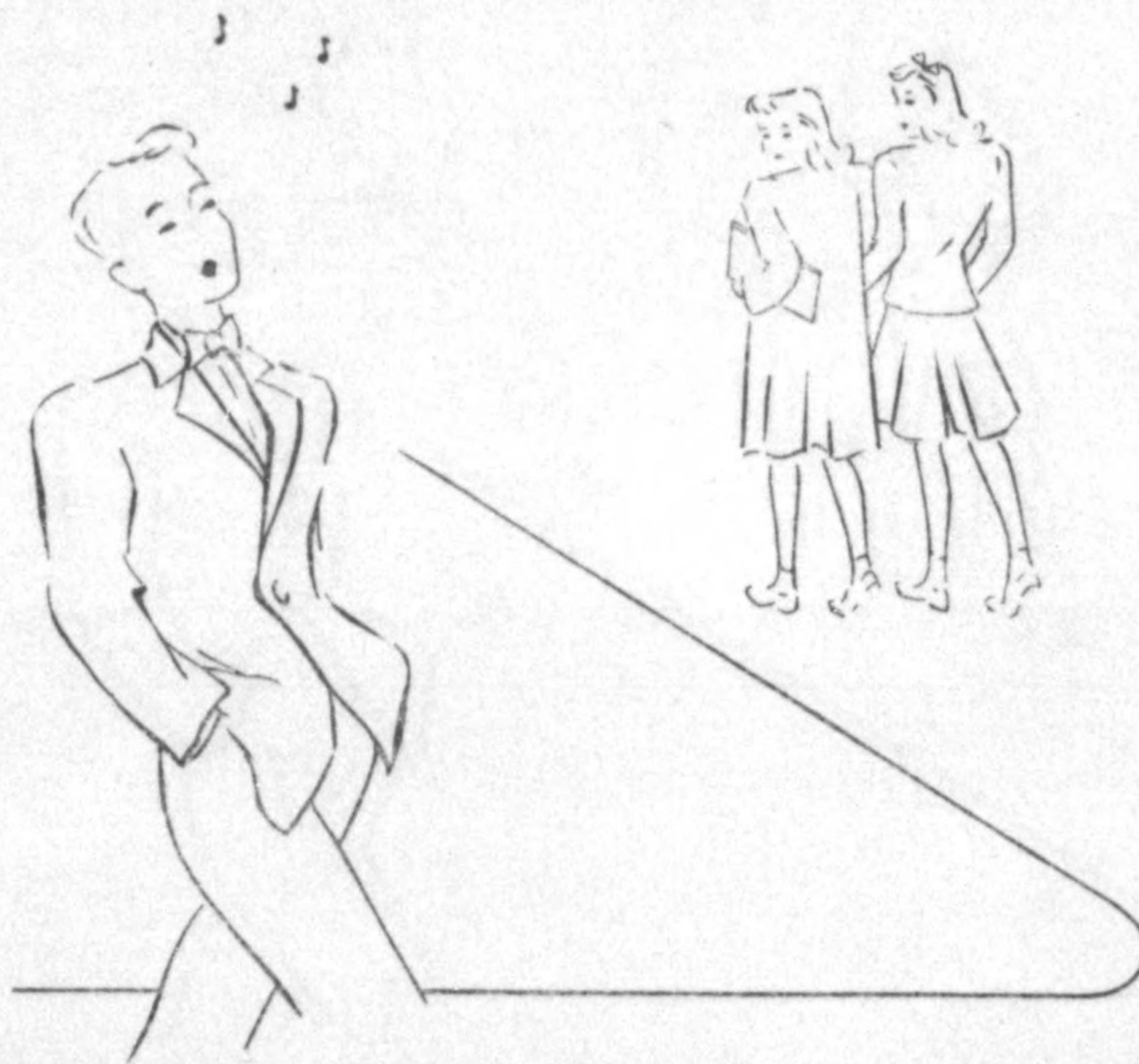
plenty of interests and activities to distract him from the natural sex urges that come upon him from time to time. Engaging in active sports, perfecting one's athletic abilities, having worthwhile and satisfying hobbies as well as necessary and regular work, and refusing to allow himself to be drawn toward those types of amusement by which sex feelings are aroused are some of the best means of counteracting any tendency to find enjoyment in self-stimulation.

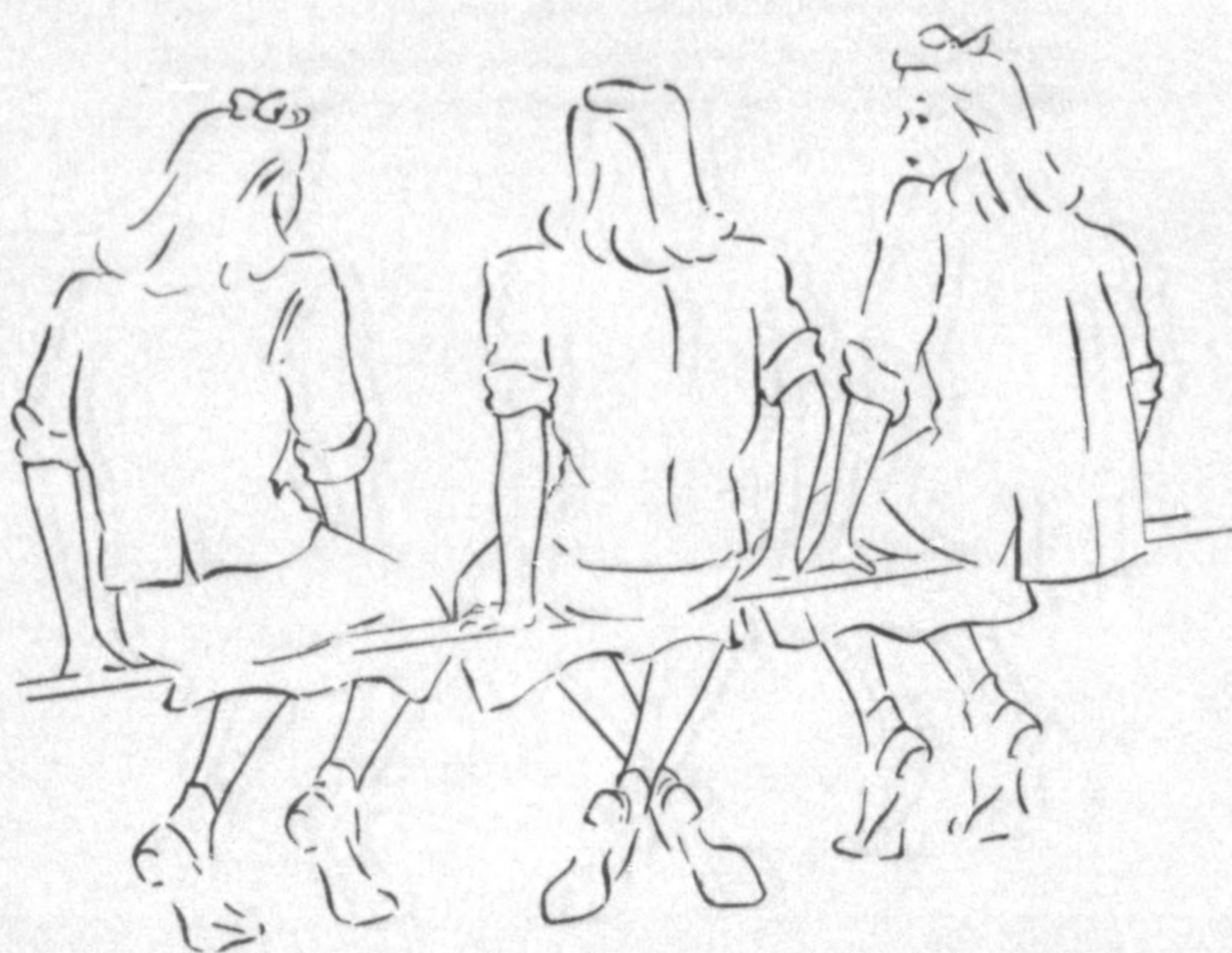
SELF RELIANCE OPENS THE DOOR TO FREEDOM

The awkwardness and discomforts associated with growing up are few and small compared with the advantages. With each year of growth, a boy grows in manliness as well as in size. He adds to his sense of responsibility, and shows, by his increasing good judgment, that he can be trusted. Parents and others who have to do with his life are usually willing to give him added freedom in so far as he shows himself able to conduct himself in a mature way. When boys complain that their parents want to supervise them too closely, and pry into their affairs, always wanting to know where they are going and what they are going to do, it is usually because the boys involved have not shown themselves capable of using good sense about managing their own lives.

Passing through the period of adolescence is like crossing a bridge from the carefree, unthinking time of childhood into the open, limitless country of adulthood. This bridge of years is an important time in one's life span, because learn-

ing how to use one's new powers takes place. Every boy in his teens is proud of his growing strength. He should also be able to be proud of his growing powers of self control over his newly-developing urges. If he can respect himself, other people are going to respect and admire him.





OLDER GIRLS

When you woke up this morning, and washed, and dressed, and brushed your hair, you probably hummed a tune, as you looked forward to the new day that was before you. While we never know just what is going to happen on any one day, we always look forward expectantly, knowing that there may be interesting or exciting things to enjoy. There may be almost as many disappointing and puzzling things as there are stimulating and happy ones, but we always look ahead, with a tingling delight in just being alive.

No two girls have exactly the same experiences, just as no two of us look exactly alike. But there are certain drives, or strong impulses, that we all share, and these desires and urges that we have in common make it possible for us to understand and enjoy the people around us. Each of us, of course, is sure that no one else feels or thinks in just the same way as we do—those differences are what make each of us a "personality," but the deep underlying needs that make us act the way we do are the same for all human beings.

When you make a cake, you have several ingredients that you mix together; you use eggs and sugar and flour as the principal ones. It's just like that in our lives; there are three main "ingredients" of behavior in all of us that are mixed together inseparably: the search for food to keep us alive; the avoidance of harm (whether it be heat or cold or germs,

or what not) and the search for a mate. It's easy to see that without these strongly compelling feelings, the human race wouldn't last very long. Without sustenance, without protection from various kinds of harm, without mates to insure the continuance of the race—it's impossible to picture a world in which the urges to obtain these things had faded out.

In the teen age, through which you are passing, you are beginning to take upon yourself the responsibility of managing your own life. Up to this time, your parents, or some other persons, have seen that you were fed and protected; your love has been for your parents, and brothers and sisters, and friends, because you were not yet ready for the mating-love that comes with maturity. But now you have begun to be interested in providing for yourself; you want to earn your own money, you are beginning to think about some kind of work that will make you feel necessary in the world, and you have begun to be interested in the opposite sex in a new way. No longer do you look with scorn on boys, dismissing them as rough and careless and noisy, but instead you steal a glance at each new boy you meet, measuring his appearance and behavior and stacking him up as either "attractive" or "impossible" or somewhere in between.

WHAT IT MEANS TO GROW UP

These new feelings of wanting to be on your own, to make your own decisions, to choose your own friends, and direct your own life, come about, of course, because you are

growing up, and becoming mature. This hasn't happened all of a sudden. By the time you were ten or so, the changes began that were to transform you from a little girl into a young woman. First of all, perhaps you shot up in height, so that you felt gawky and awkward, because you were taller than your best girl friend, and almost certainly taller than the boys of your age. (Or maybe you were the shortest in your crowd—*that* can be disconcerting, too!) Then you began to notice that your breasts were becoming fuller, that your body was taking on curves, where before you had been all angles. Your legs were no longer straight as sticks, but had slender ankles and gracefully curved calves. These outward body changes meant that the internal development was going on that would presently cause you to begin to menstruate, or have a monthly release of blood from the lining of the uterus, a definite sign that you were maturing sexually.

And along with these changes in your body, you began to have changed feelings. Perhaps you lost interest in playing with dolls, perhaps the childish games that you used to enjoy now began to seem silly and too young. And you definitely began to be interested in putting on make-up, having more grown-up clothes, like an evening dress, and high-heeled pumps, and in having dates.

Mysterious, isn't it, the way your body decides what your feelings and thoughts are going to be?

What are the changes that go on so invisibly and subtly inside your body, mysteriously affecting your feelings and

