

Eating
your way to
Hhealth

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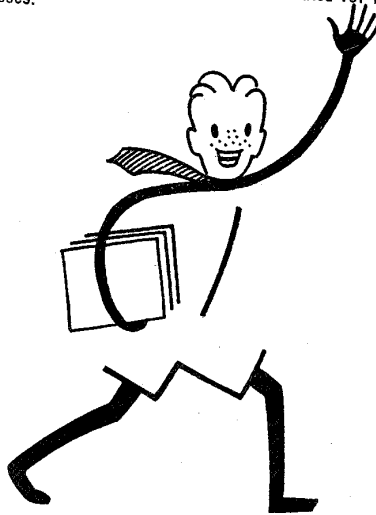
Definition of words possibly unfamiliar outside of Hawaii:

- Page 6. **Poi**, alkaline starch paste made from taro root, staff of life in old Hawaii. (On Mainland U. S. similar food values found in potatoes.)
- Page 6. **Guava, papaia, mangoes** are also common Hawaiian fruits, but generally speaking any fruit has the vital elements indicated.
- Page 8. **Taro**, tuber with food values much like potato.
- Page 19. **Opihi**, Hawaiian shellfish high in vitamin A.
- Page 21. **Takuan**, Japanese vegetable product.
- Page 24. **Menehunes**. Unseen hard workers who accomplished great tasks at night—the Hawaiian elves.
- Page 29. **Tofu**, Japanese bean custard.

PRICE-POTTENGER NUTRITION FOUNDATION
5622 TARTFORD WAY
SAN DIEGO, CALIFORNIA 92120

Eating Your Way to Health

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WANTED FOR STEALING



"SUGAR BOWL" PETE

DESCRIPTION

Hat:white bread Mustache:pie
 Eyebrows:chewing gum Cigar:candy stick
 Eyes:gum drops Scarf ring:doughnut
 Nose:cake Guns:soda pop guns
 Ears:cookies

Who is "Sugar Bowl" Pete? Why is he your enemy? Look carefully . . . the things you see in his picture rob you of beautiful, healthy teeth. They are thieves. They kill your smile . . . destroy your teeth . . . steal your health. Don't let "Sugar Bowl" Pete do that to YOU!



**Join the SHERIFF'S POSSE and help capture "Sugar Bowl" by remembering —
 "Sweets" harm your teeth!**

Created in the Interest of Dental Health Education,
 by the Council on Dental Health of the Southern California State Dental Association.

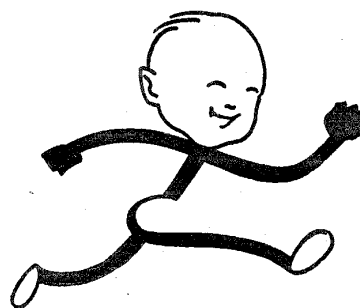
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INTRODUCTION

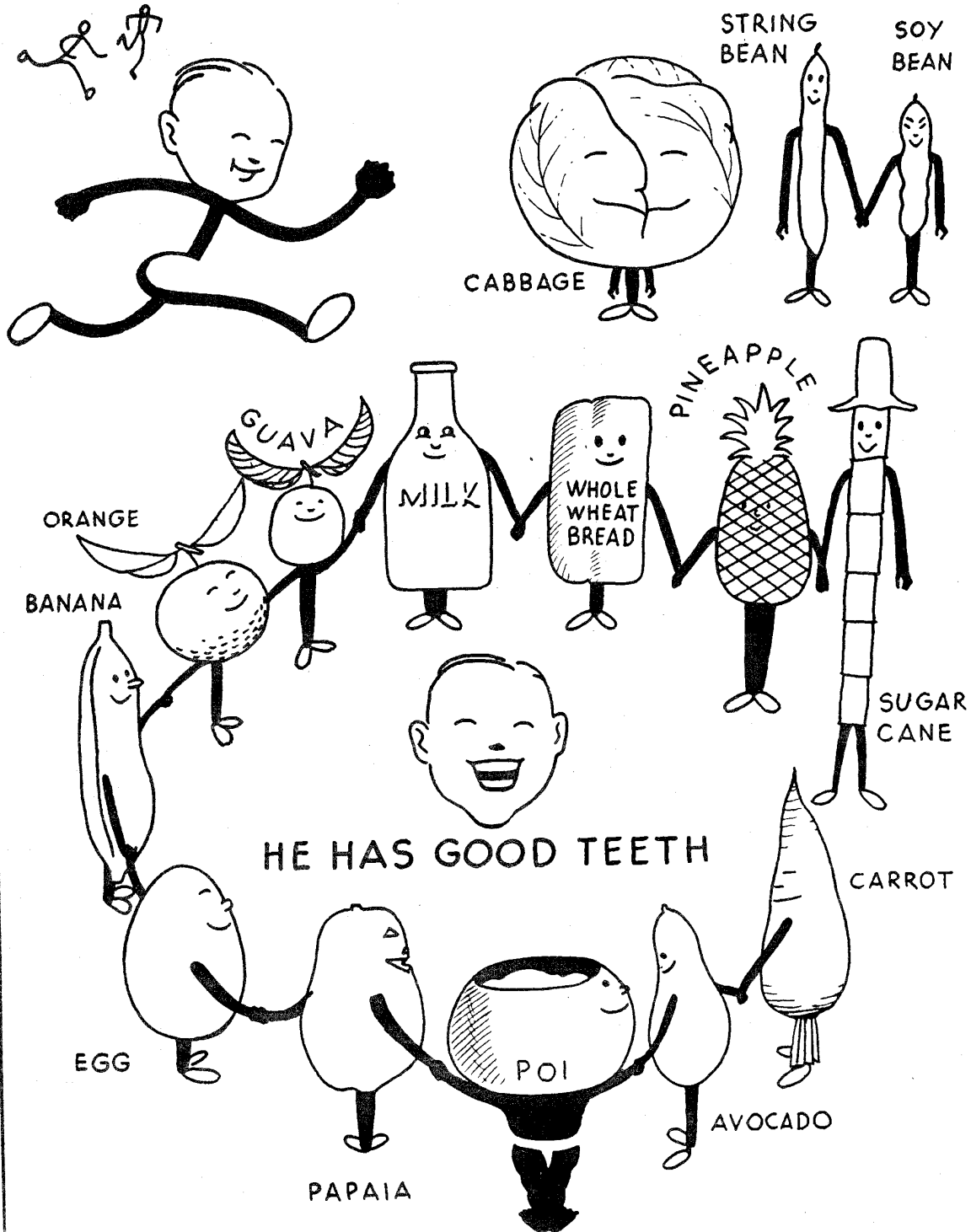
J. B. Orr, in the foreword to his monograph on Food, Health and Income, stated "From the point of view of the State, the adoption of a standard of diet lower than the optimum is uneconomic. It leads to a great financial burden on the State, and on the public-spirited citizens who support hospitals and other charitable organizations. It is probable that an inquiry would show that the cost of bringing a diet adequate for health within the purchasing power of the poorest would be less than the cost of treating the disease and ill health which would thereby be prevented. A few years hence, when the connection between the poor feeding of mothers and children and subsequent poor physique and ill health is as clearly recognized as the connection between a contaminated water supply and cholera, the suggestion that a diet fully adequate for health should be available for anyone will be regarded as reasonable and in accordance with common sense, as is the preservation of our domestic water supply from pollution."

Anyone who has studied the relationship of diet to health probably agrees with this statement. The present booklet is an attempt by the Central Nutrition Committee of Hawaii to help overcome the first obstacle to the attainment of better health through food by presenting the best authoritative facts about food in a form that everyone can understand.

We urge teachers, storekeepers, doctors, nurses and others interested to lend a hand in this program to increase the efficiency, ability, health and happiness of the people of Hawaii. We believe it can only be attained if the truth about diet becomes a commonplace accepted fact in each home. To attain this all must cooperate.

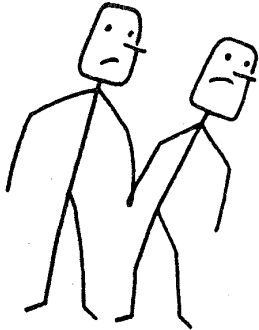


THE CHILD IS WHAT HE EATS



TOO MUCH OF THESE -

LOLLYPOPS



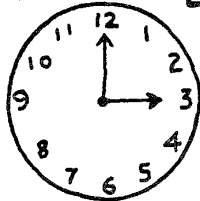
SODA



DOUGHNUT

and-

BETWEEN MEALS

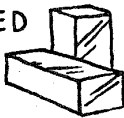


SHAVED ICE



CANDY BAR

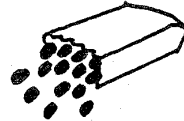
FLAVORED ICE CUBES



POP

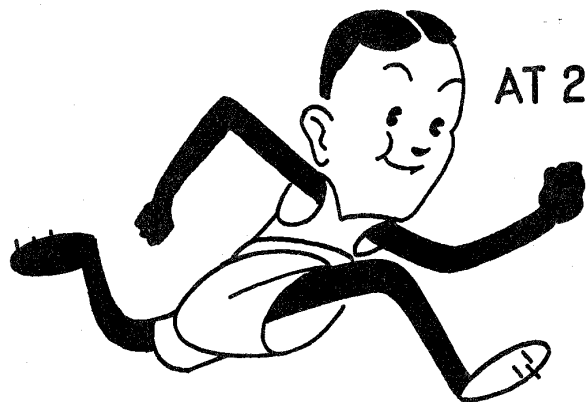


CRACKED SEEDS

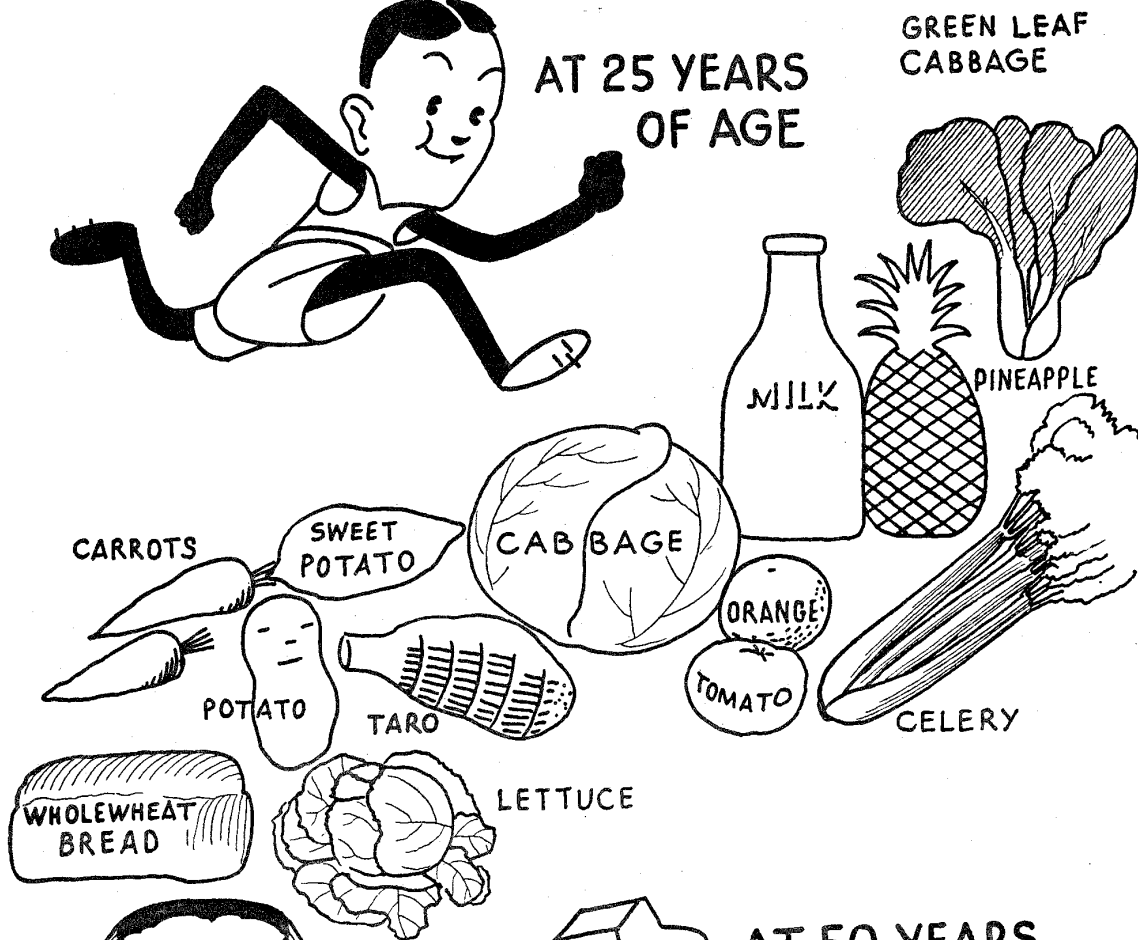


HE HAS POOR TEETH

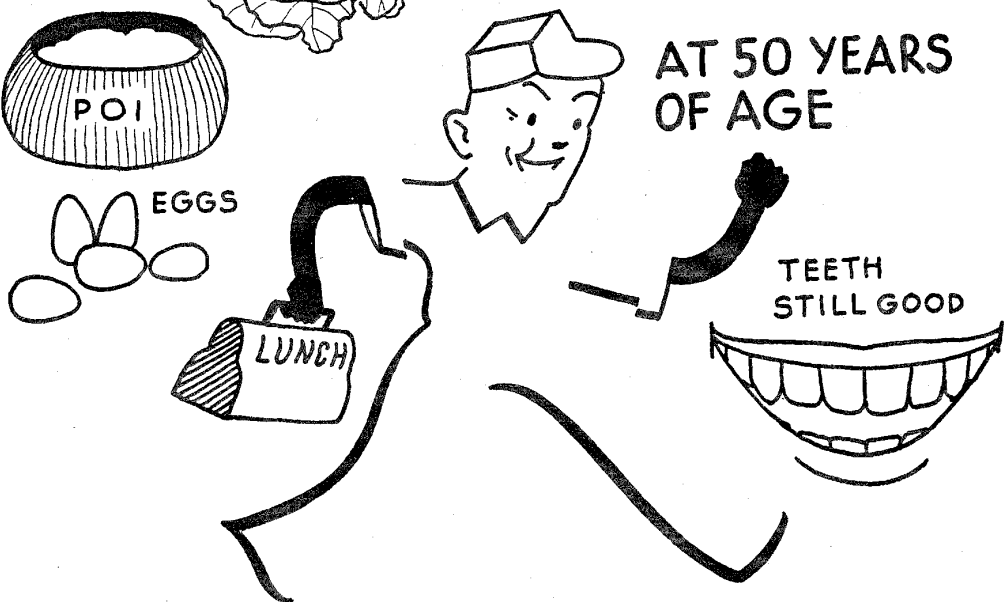
FOOD MAKES THE MAN



AT 25 YEARS
OF AGE

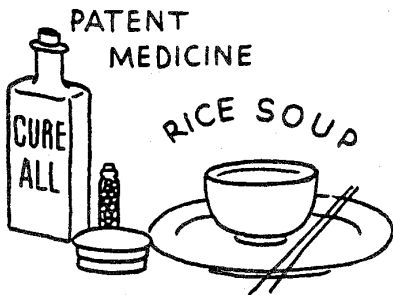
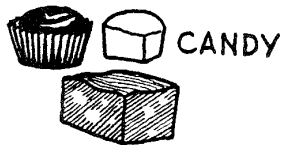
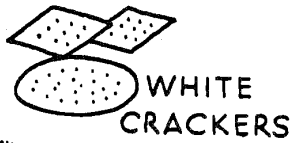


AT 50 YEARS
OF AGE



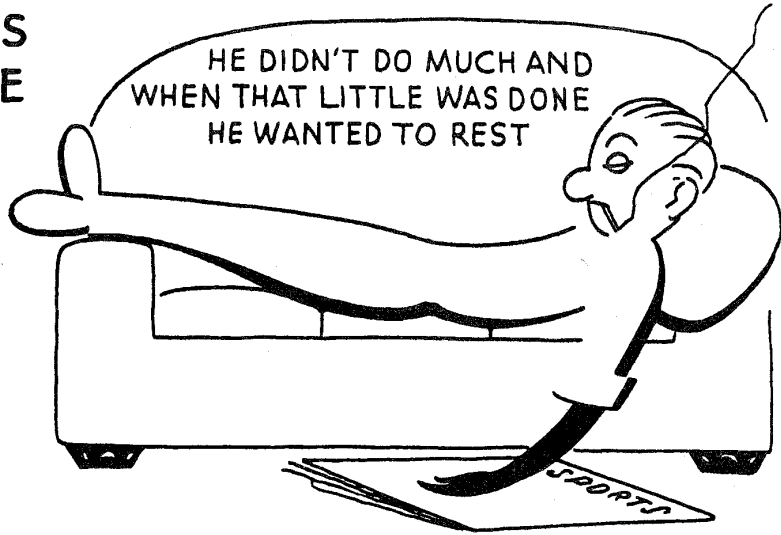
AT 25 YEARS OF AGE

TOO MUCH



HE TRIED PATENT MEDICINE AND ATE WHITE RICE SOUP BECAUSE HE LOST HIS TEETH AND COULDN'T CHEW

HE DIDN'T DO MUCH AND WHEN THAT LITTLE WAS DONE HE WANTED TO REST



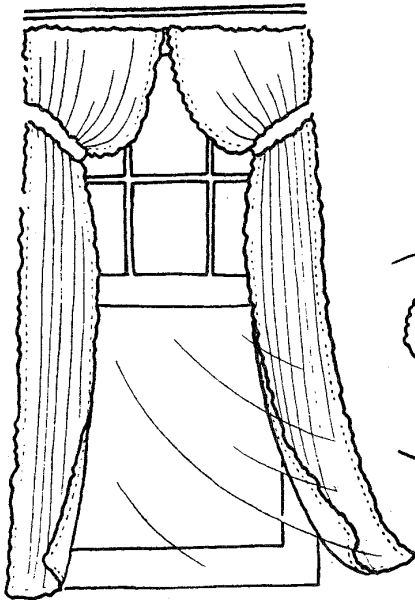
-AND AT 50 YEARS OF AGE



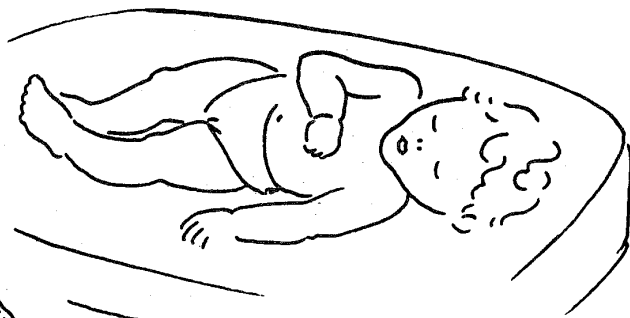
"THE WHITER THE BREAD, THE QUICKER YOU'RE DEAD."

THE HEALTHY BABY GETS

FRESH AIR



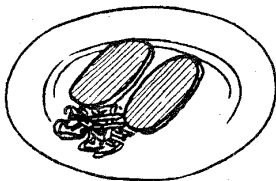
SLEEP



EGG YOLK



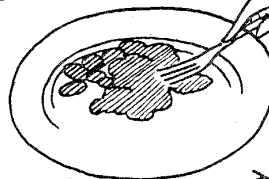
LIVER



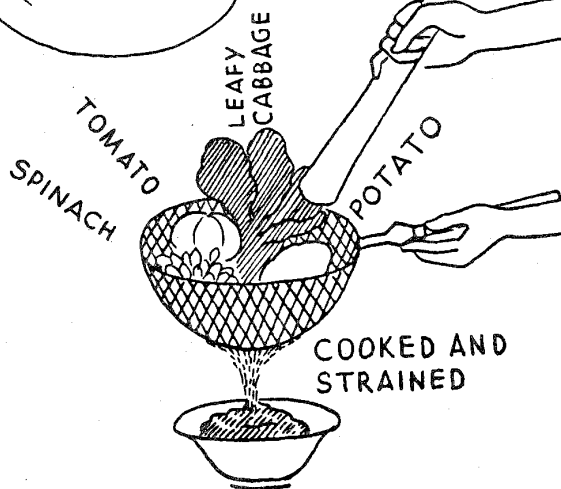
BROWN BREAD
AND BUTTER



VEGETABLES



COOKED AND
MASHED

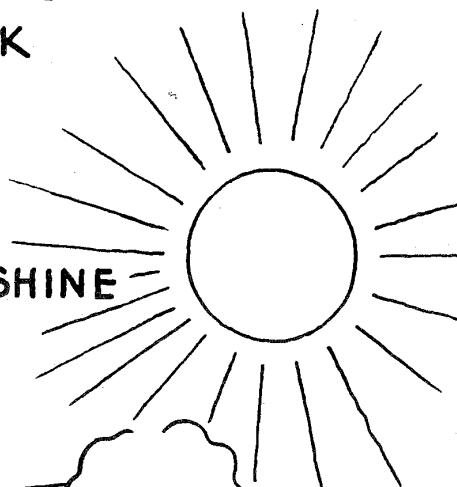


COOKED AND
STRAINED

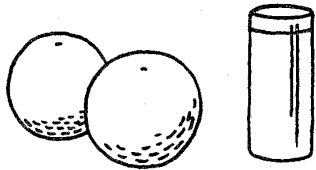


MILK

SUNSHINE



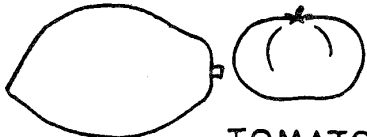
FRUIT JUICE



ORANGE.



GUAVA



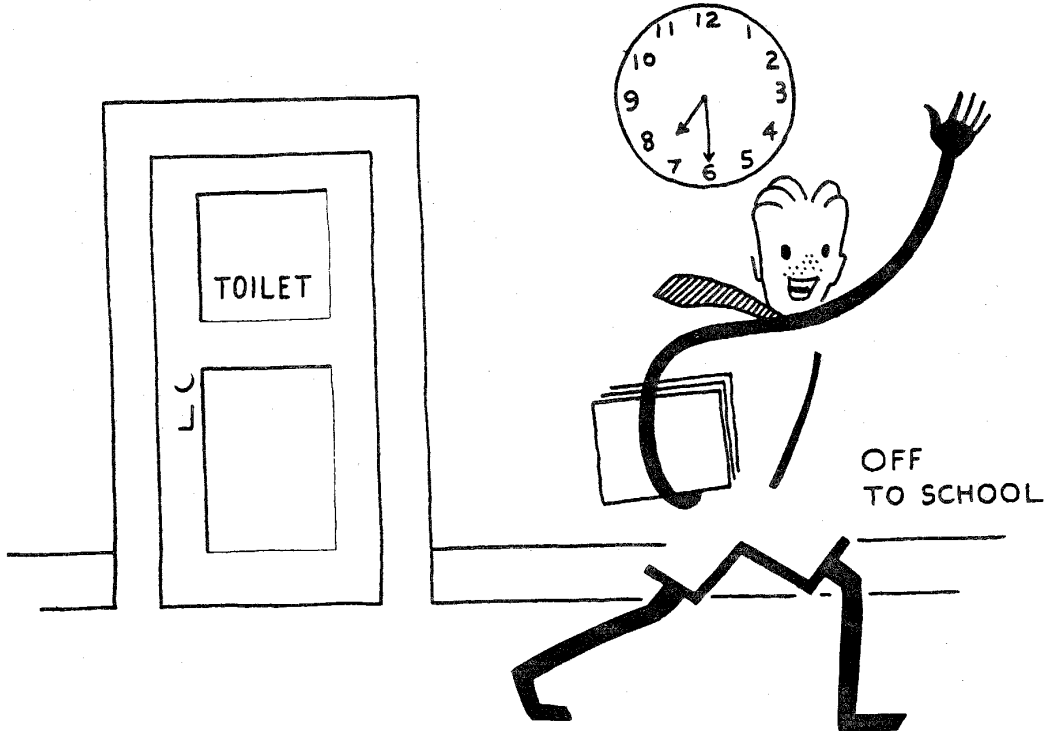
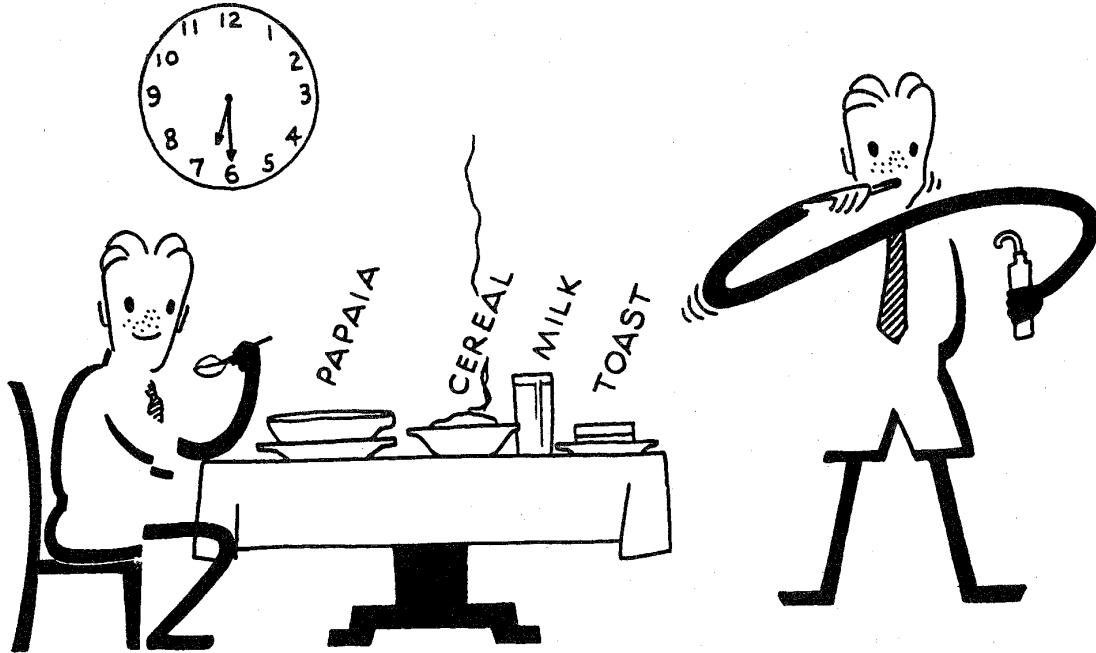
PAPAIA

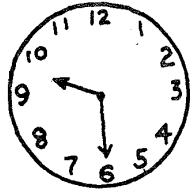
TOMATO

PINEAPPLE JUICE



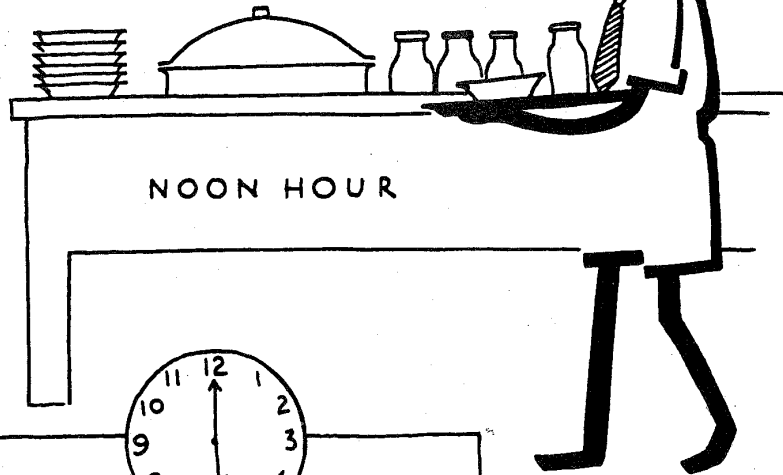
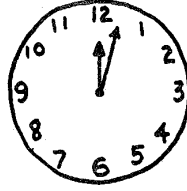
THE HEALTHY CHILD'S DAY



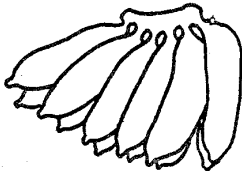
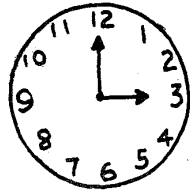


MID-MORNING LUNCH

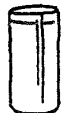
MENU
STEW WITH
BROWN RICE
MILK
PINEAPPLE



NOON HOUR

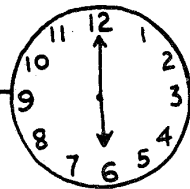


BANANA



MILK

MID-AFTERNOON MEAL



SUPPER



MILK



BROWN RICE



MANGO



ORANGE



FIG



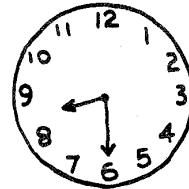
LOTS OF VEGETABLES



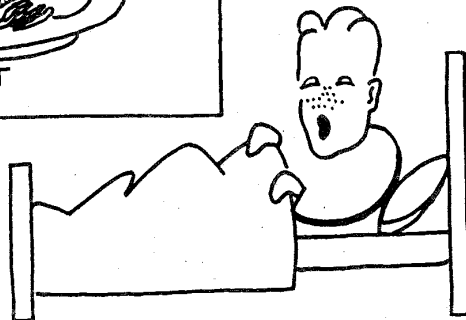
BROWN BREAD AND BUTTER



MEAT



BEDTIME



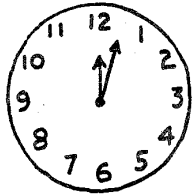
THE UNHEALTHY CHILD'S DAY



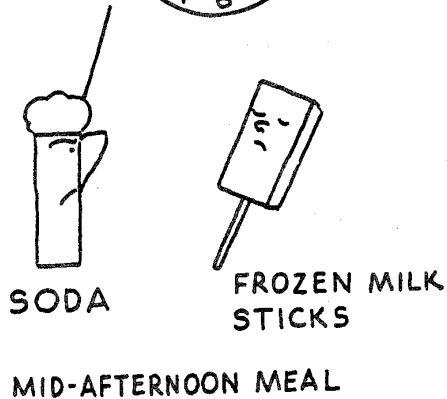
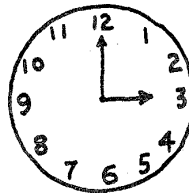
BREAKFAST ON THE WAY TO SCHOOL



MID-MORNING LUNCH



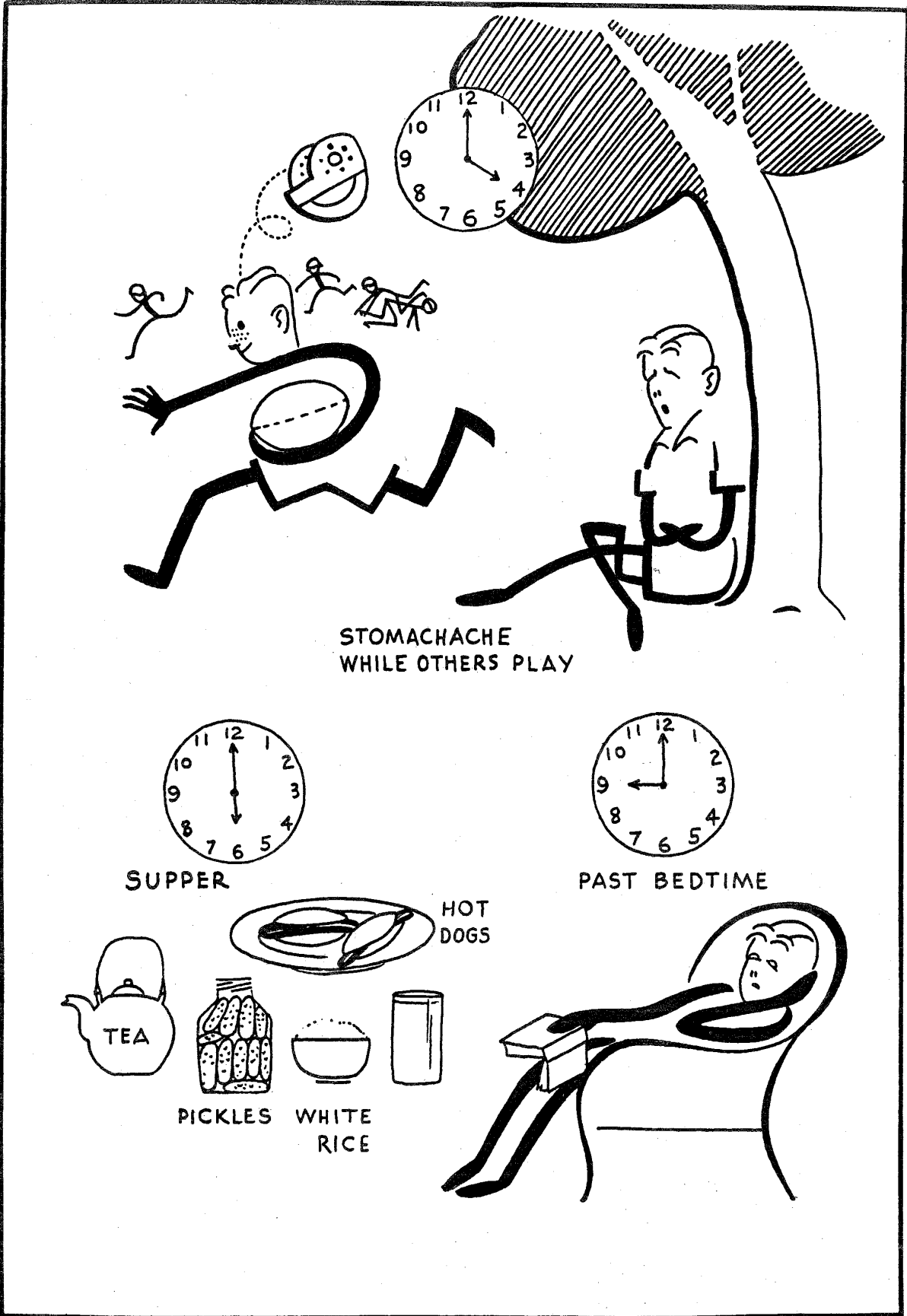
NOON HOUR



SODA

FROZEN MILK STICKS

MID-AFTERNOON MEAL



STOMACHACHE
WHILE OTHERS PLAY

SUPPER

PAST BEDTIME

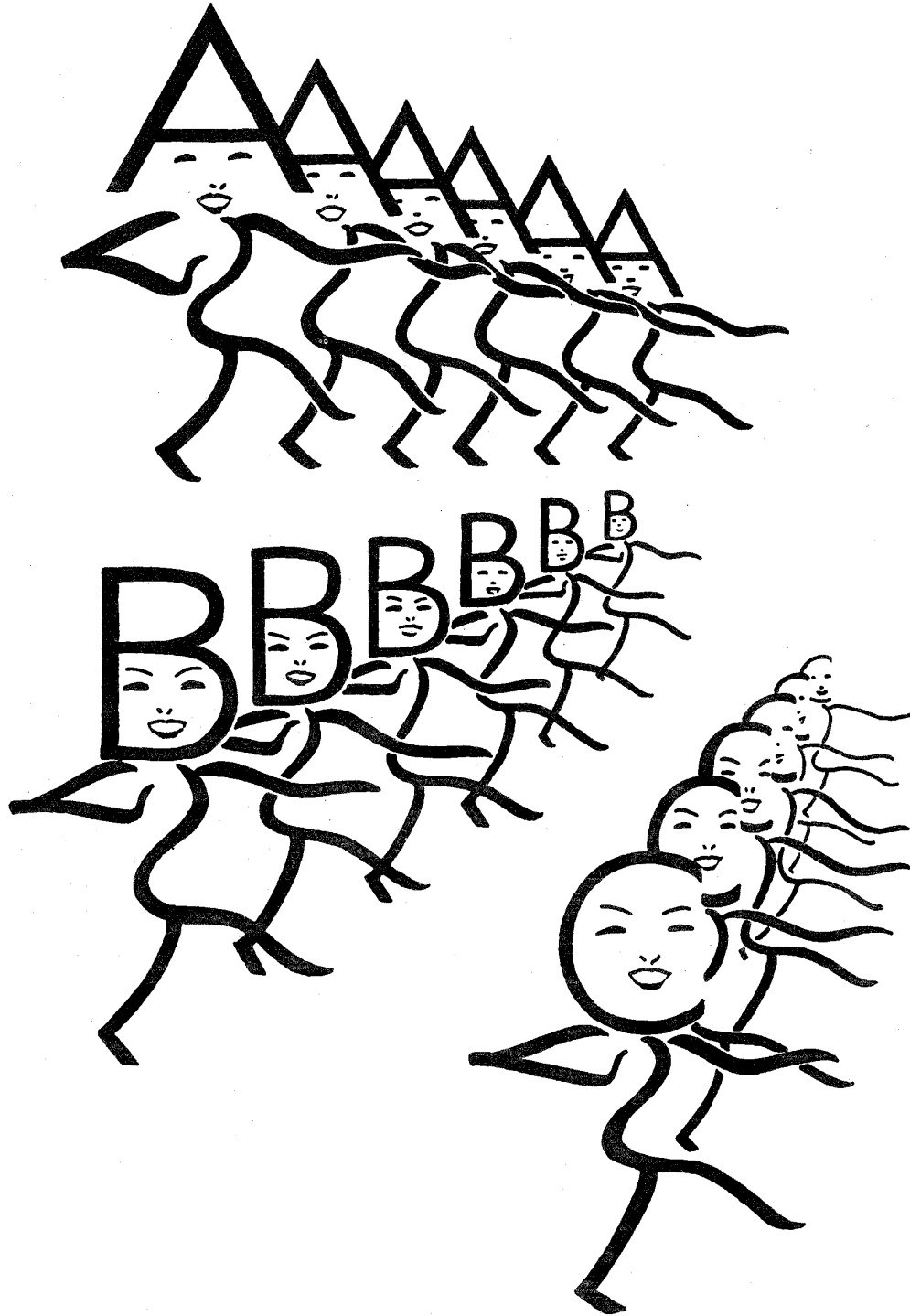
HOT
DOGS

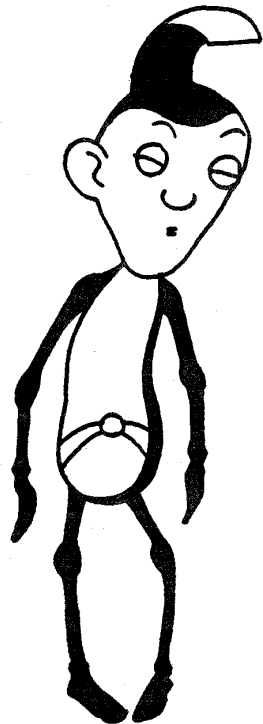
TEA

PICKLES

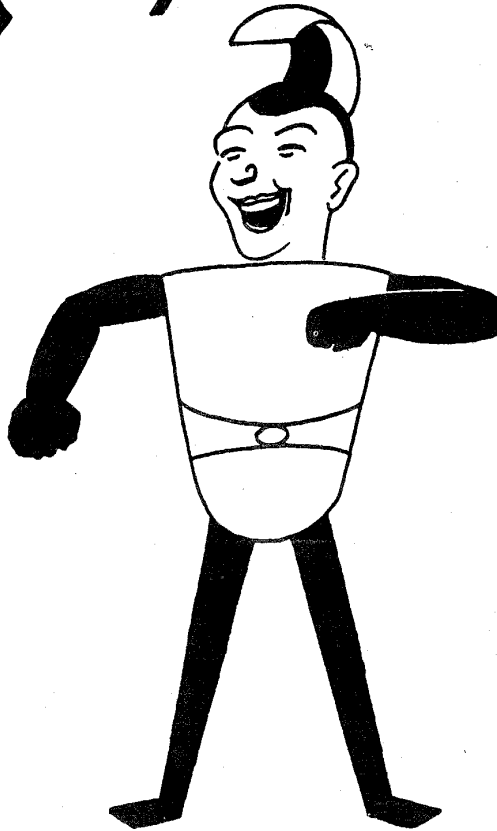
WHITE
RICE

THE VITAMIN FAMILY





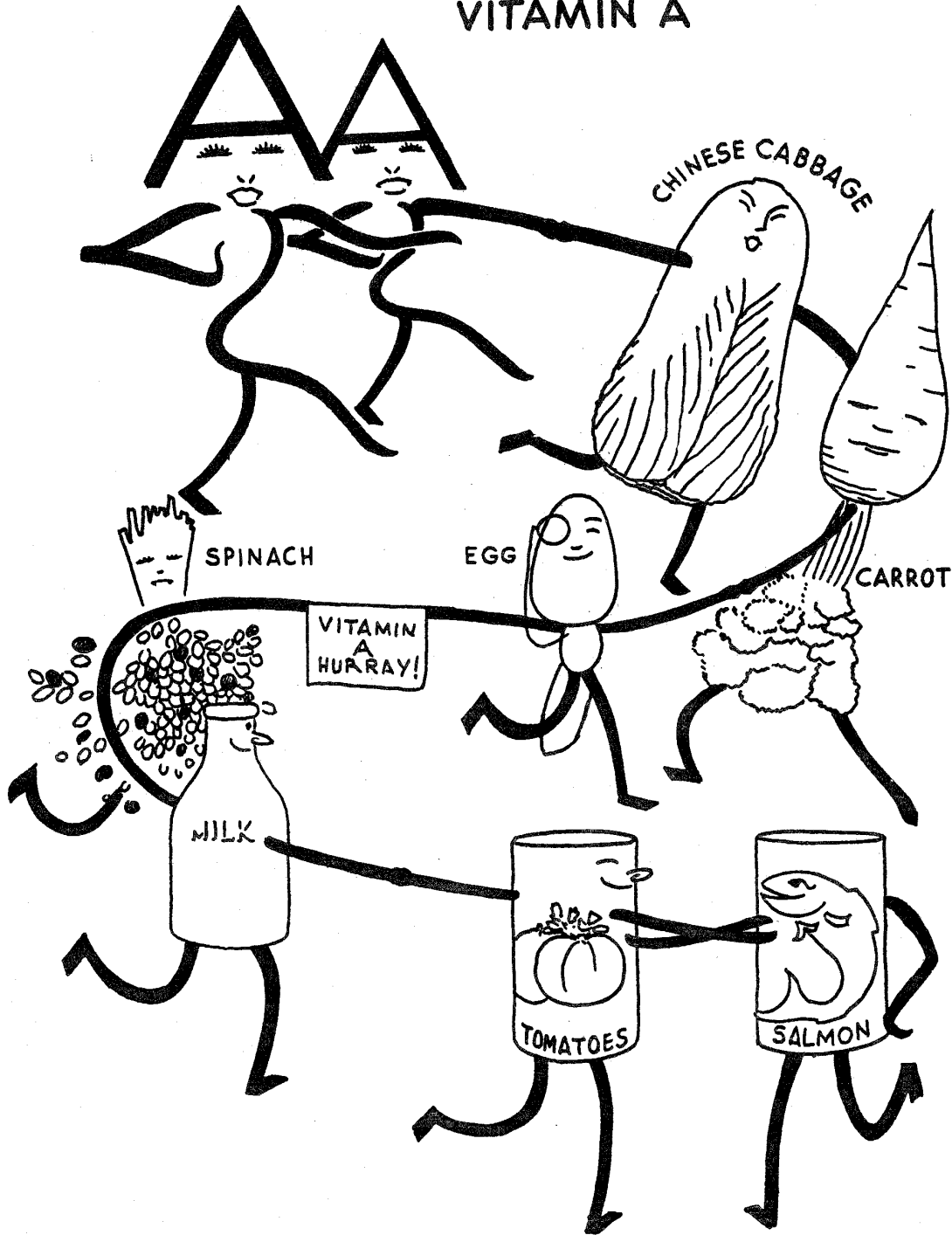
HOW WE FEEL
WITHOUT VITAMINS

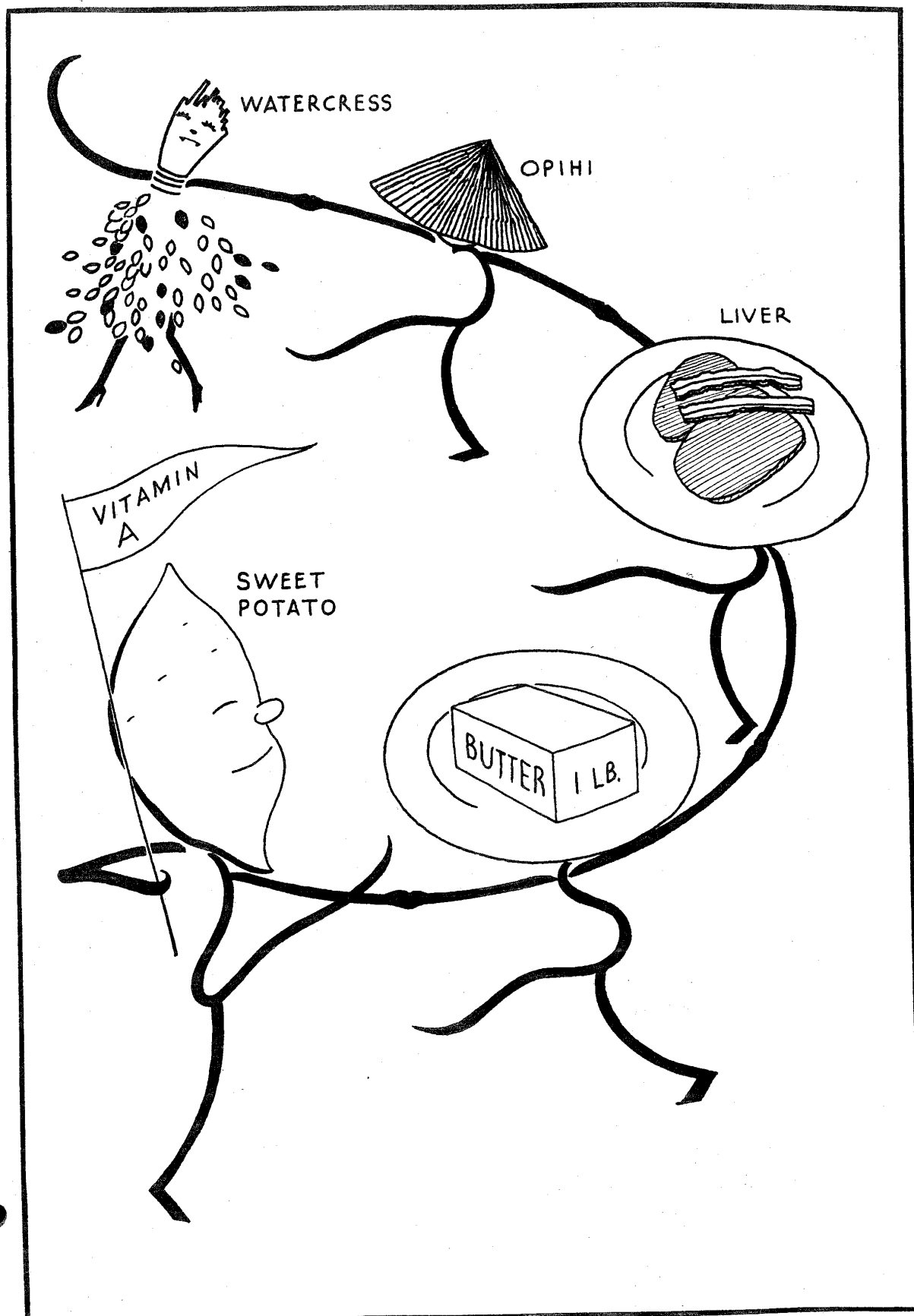


HOW WE FEEL
WITH VITAMINS

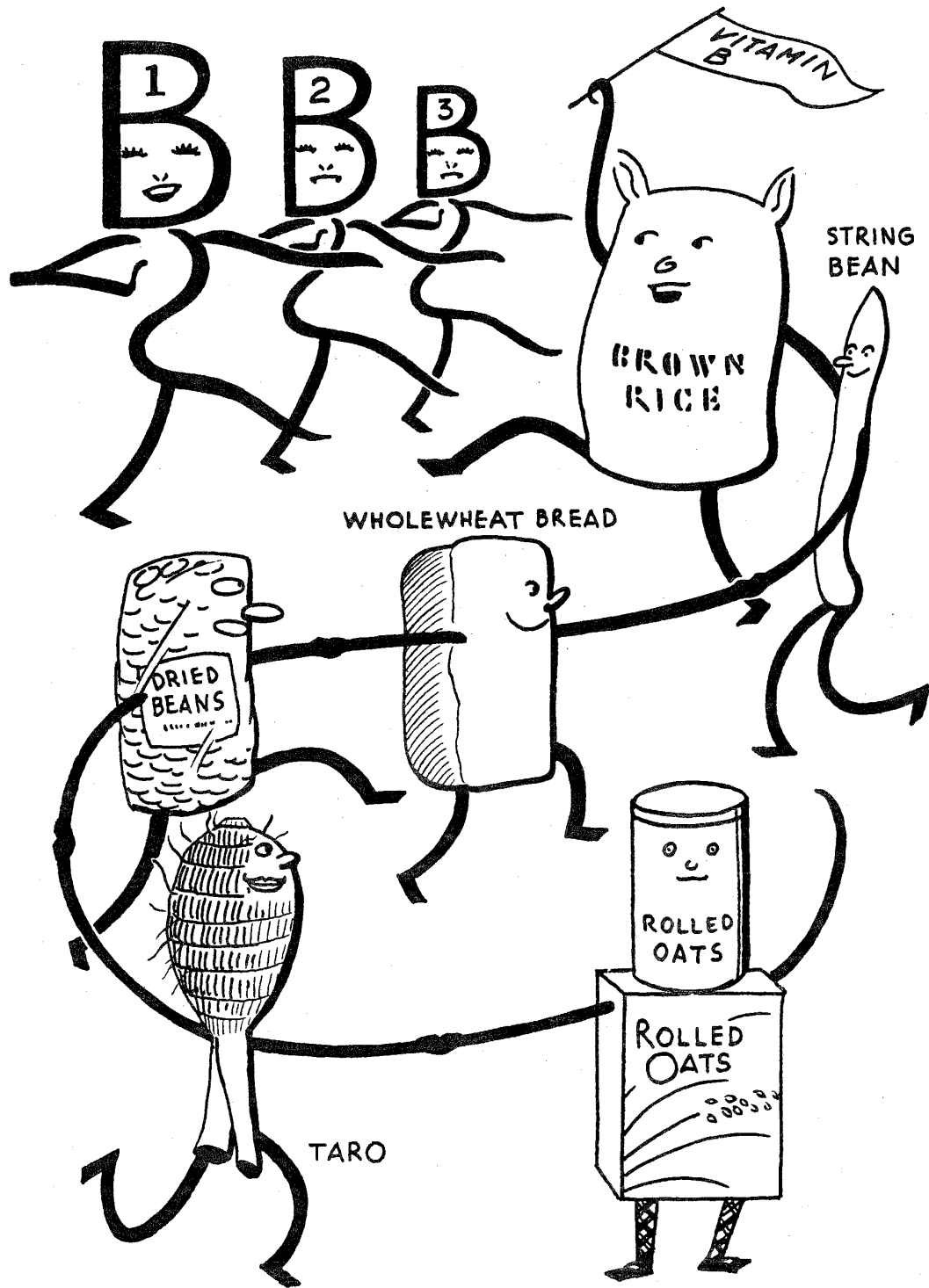
WHERE WE FIND THE VITAMINS

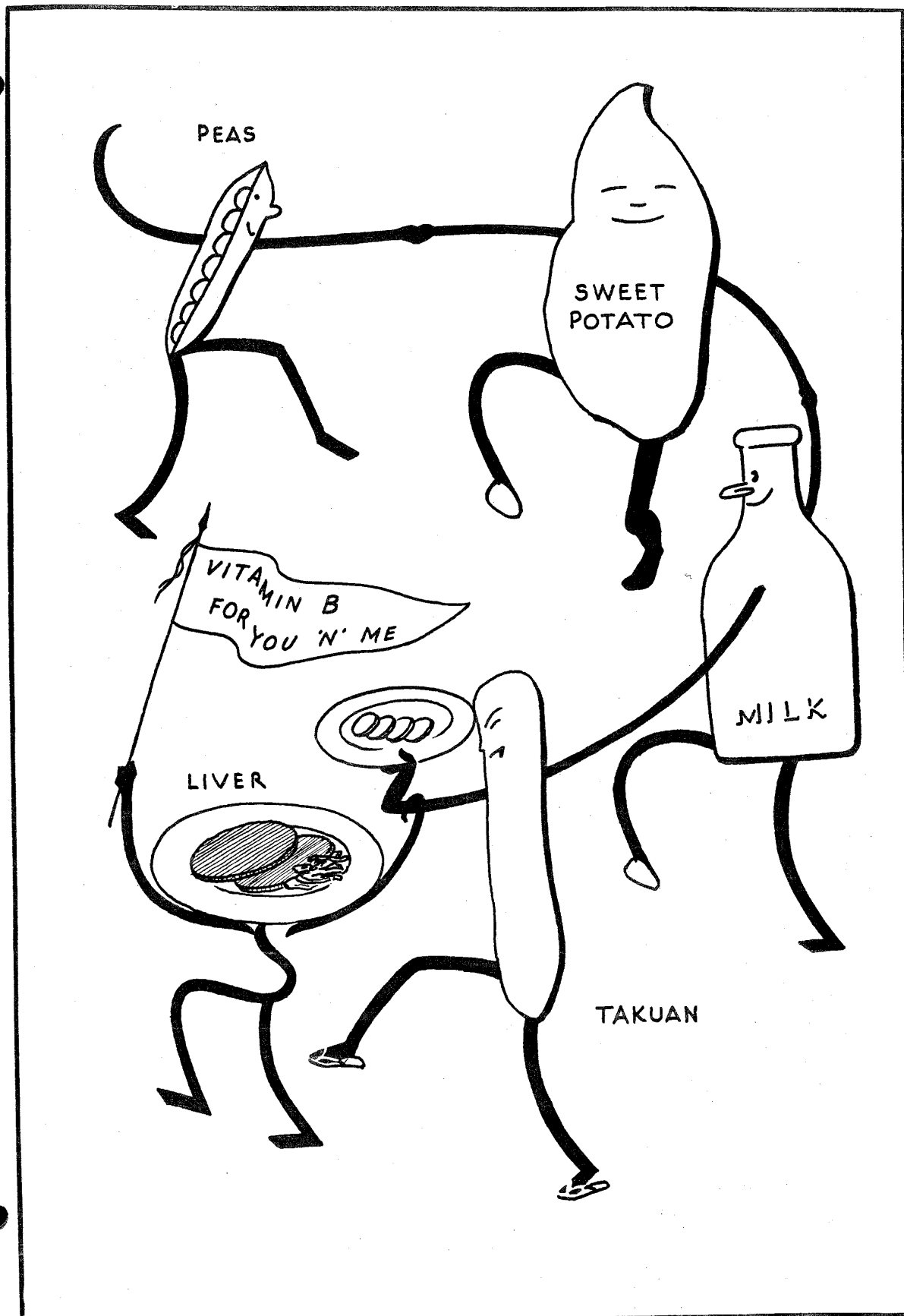
VITAMIN A





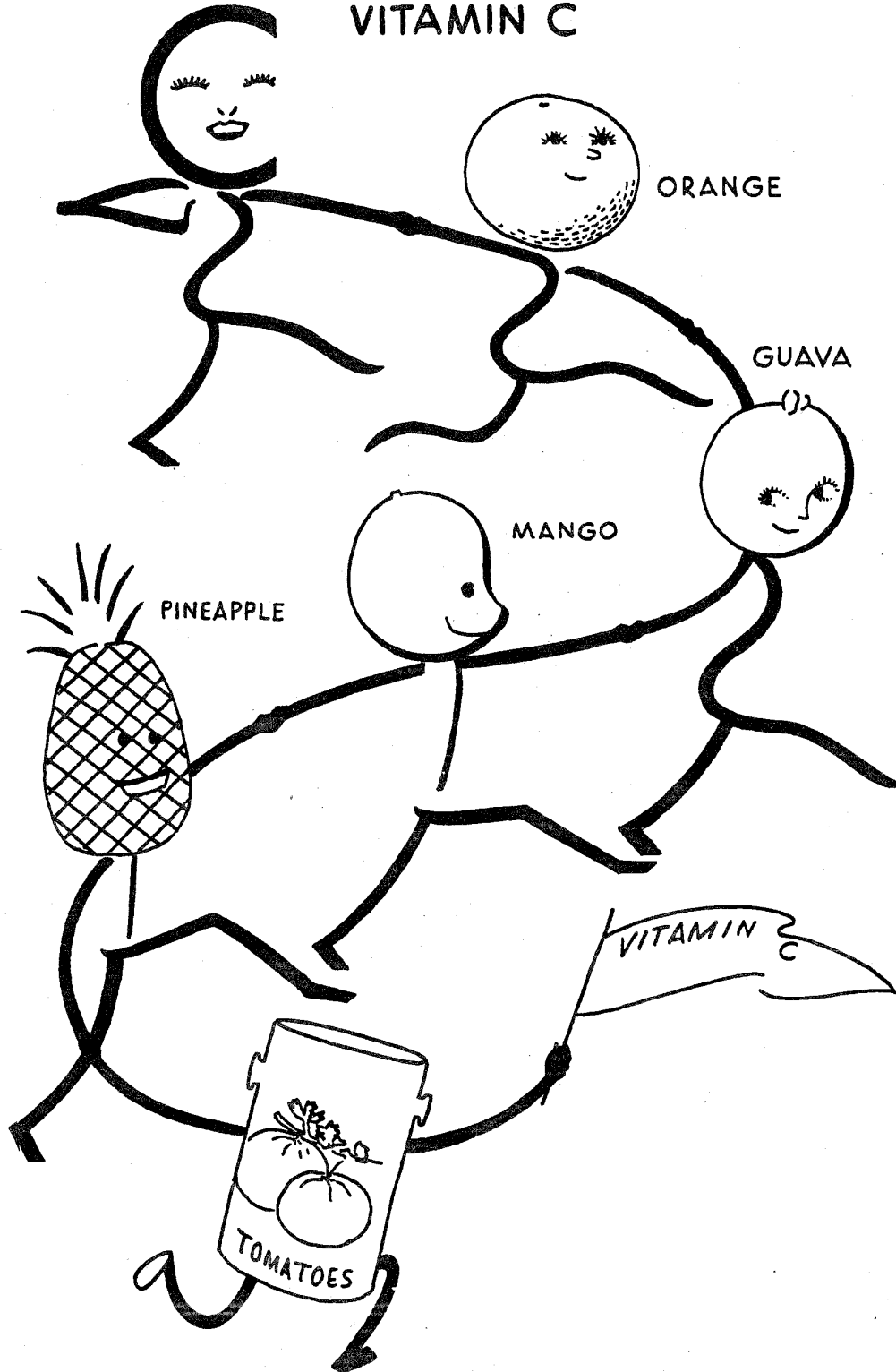
WHERE WE FIND THE VITAMINS

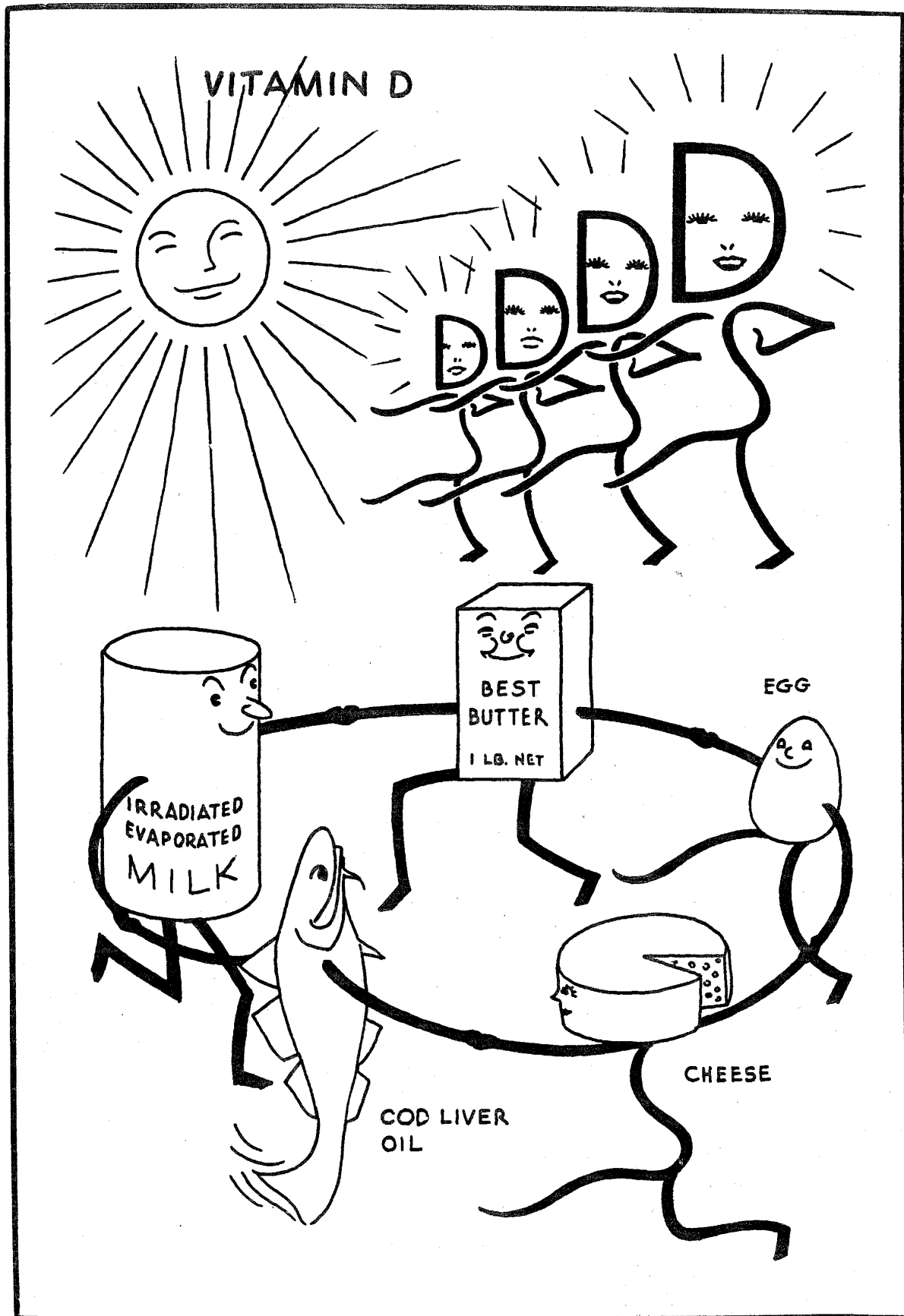




WHERE WE FIND THE VITAMINS

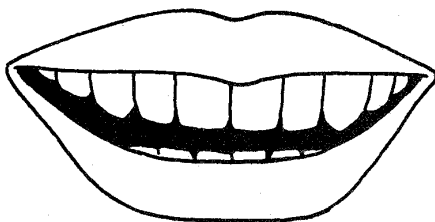
VITAMIN C





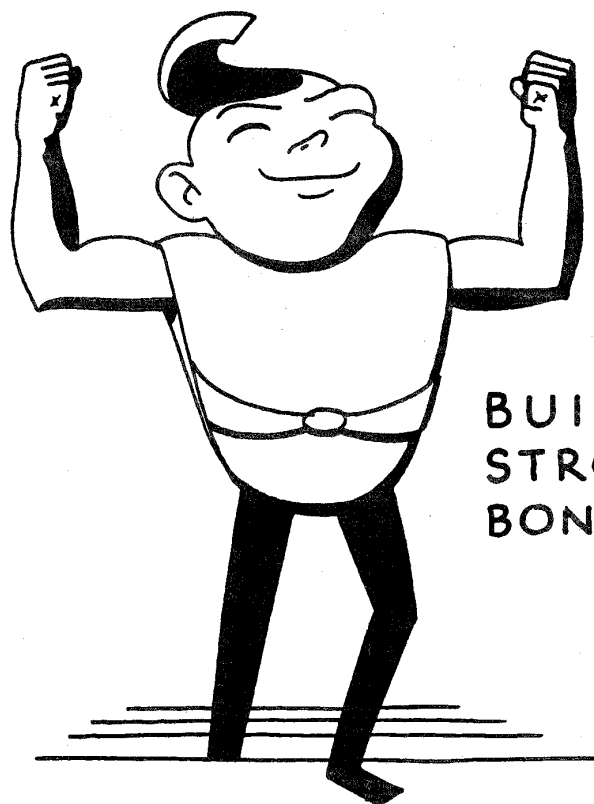
THE MINERAL MENEHUNES FOR STRENGTH

T H E Y

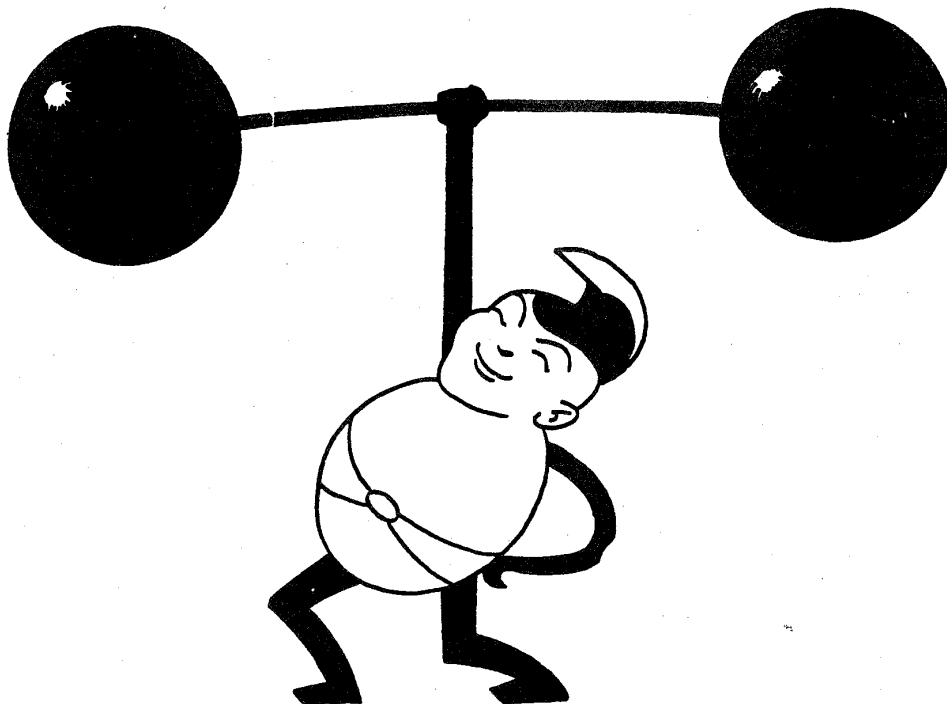


MAINTAIN
GOOD TEETH

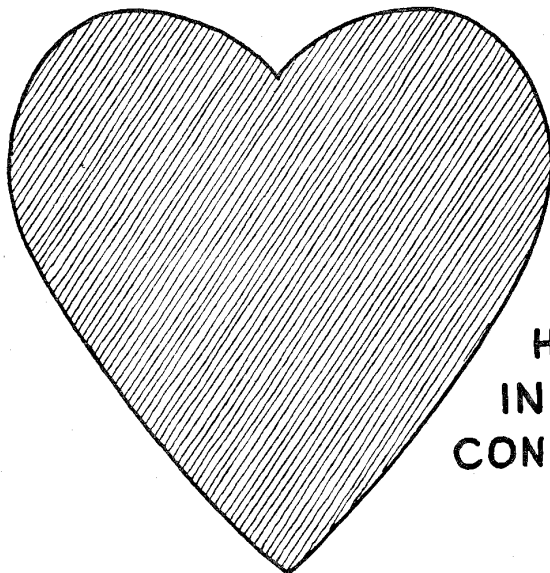
KEEP
BLOOD
RED



BUILD
STRONG
BONES

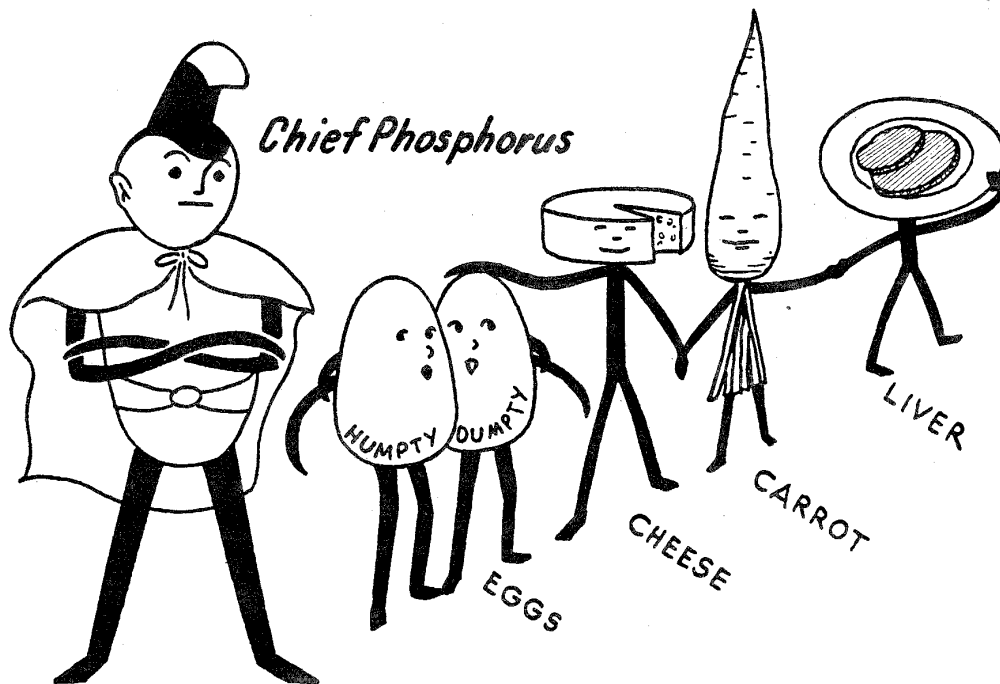
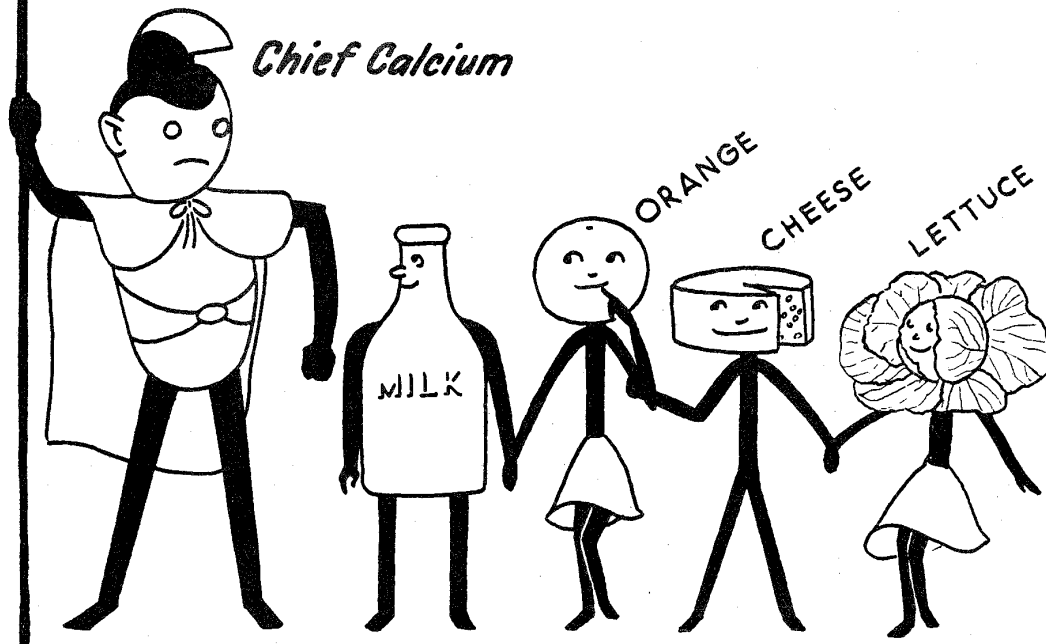


KEEP MUSCLES WORKING WELL



**KEEP
HEARTS
IN GOOD
CONDITION**

WHERE WE FIND THE MINERAL MENEHUNES





Frequent Questions About Diet *Asked and Answered*

1—Q. How does eating a good diet help to keep us healthy?

A. The body is like a machine, for example, an automobile. Good quality steel is necessary to make a good automobile, and good quality food is the building material of the body. In order to be good building material the food must contain all the necessary elements, it must be complete. If only one or two necessary things are left out, the body machinery is more or less defective, as has been shown by many experiments. The body is not as strong as it ought to be, therefore less able to resist disease. Then, after the body is built, it still needs complete foods to make it run properly, just as the automobile needs many things—good oil, the right kind of grease, proper fuel, the right mixture of gasoline and air in the carburetor, a good battery for electric current, and the electrical connections and spark plugs properly adjusted. Every one knows that these are necessary to keep the car running, but not every one knows that the body needs all the necessary elements in food during all its life to keep it running right and efficiently. This has also been proven in many experiments.

2—Q. What are the "protective foods" which we should eat?

A. Mainly milk, vegetables and fruits. These foods contain the most of those necessary elements of which we do not usually find much in other foods. These elements, which are vitamins and minerals, are most necessary to keep the body machine running well. The body machine may still run, even if not enough vitamins or minerals are given it. So will the car keep on running with only half enough air in the tires, but the tires will wear out much faster. Our bodies will also wear out faster if we eat too much white rice, white bread, or other highly refined cereals and not enough milk, fruits and vegetables. The vitamin and minerals in these foods are as necessary to the body as the oil is to a car. These

foods are called "protective foods" because they help to protect us from a number of diseases and tend to raise our resistance against all diseases.

3—Q. Is a good diet necessarily expensive?

A. No, because many of the best protective foods are cheap. BANANAS and SWEET POTATOES are among the best, and they are very cheap. GUAVAS and MANGOES are good protective foods which may be had for the picking. FRESH MILK is available to plantation employees at very reasonable prices on a number of plantations. Unsweetened CANNED MILK, which is as nourishing as fresh milk, is very cheap when it is considered that it is one of the most nearly complete foods and does so much for the body machine. Beans, fresh or dried, taro (including poi), CABBAGE, and others are excellent and also inexpensive.

4—Q. Why is brown rice a better food than white rice?

A. Brown rice contains a large amount of the necessary vitamins, minerals and proteins in the bran layer and the germ. This is lost when the bran and germ are rubbed off in the mill to make white rice. Living mostly on white rice, which has lost almost all of its vitamins, is like giving your car plenty of gasoline but almost no oil. After a while there will be trouble. For one to remain healthy, part of the white rice in the diet should be replaced by brown rice or by plenty of the other protective foods—fruits, vegetables and milk. At least half of the daily food supply should be in the form of these protective foods.

5—Q. What are vitamins?

A. Vitamins are substances found in foods which the body must have to keep well and alive. This name was given to these vital elements in 1912. It was agreed to name them with the letters of the alphabet, hence the names Vitamin A, B, etc. All foods contain small amounts of these vitamins, but some foods are

much richer in vitamins than others. A diet consisting mainly of low-vitamin foods will not furnish the body enough of these substances. As a car will run along a smooth road with one spark plug missing, without anything appearing to be wrong, so will the human body on a diet without enough of some of the vitamins. But when the going gets rough and hilly for the car, or when extra work or hardship or exposure to illness comes to the human body, either one may break down because the power in one case or the vitamin supply in the other is not enough.

Experiments with animals and observations on human beings have proved that vitamins are necessary for health and life. A complete lack causes death; a little vitamin but not enough causes serious illness; nearly enough may not actually cause disease, but will make the person become sick more easily and after becoming sick he will be less able to throw off the disease. He will also tire more easily, be less able to do hard work and when placed on piece work he will be unable to earn as much as another who has eaten plenty of the vitamins. He becomes a less efficient individual than he is capable of becoming.

6—Q. Why do you say "vitamin B-one" for the vitamin that prevents beri-beri?

A. Because what was once thought to be a single vitamin and was referred to as vitamin B has been found to be a whole family of vitamins so that we now have vitamin B₁, B₂, etc. The one which prevents beri-beri is called vitamin B₁.

7—Q. Isn't a diet that will cause beri-beri one that is deficient in other respects as well as vitamin B₁?

A. Yes, indeed. Such diets are generally deficient not only in vitamin B₁ but in other vitamins and minerals. But because the body can store so little vitamin B₁, the ill effect of such deficiency is usually first to show up.

8—Q. In ordinary terms what is the least of these protective foods that one should eat each day?

A. An Eastman "Food Guide" answered it thus: Foods an adult should eat each day are: (1) 1 pint milk. (2) 1 medium-sized potato. (3) 2 other vegetables (ordinary servings) . . . one a green

leafy kind. (4) 1 fresh raw fruit or its juice. (5) 1 level tablespoon butter. (6) 1 egg (or piece of meat) and enough other foods (or more of these) to keep your weight right. And—water is also needed to help regulate the work of your body. Drink six glassfuls each day. A famous nutritionist once said, "Eat what you like after you have eaten what you should."

9—Q. Many plantation families cannot afford milk. Can they obtain the protective properties from food other than milk?

A. The old Hawaiians—one of the finest races on earth physically, used no milk in their diet. For instance, one-half solo papaia which can furnish 3.3 per cent of the total calories needed, will furnish 3 times more vitamin A than the body requires, 10% of the needed vitamin B, more than the required vitamin C, and 10% of the vitamin G. This can be bought for 2 cents. Out of 5 cents worth of pasteurized milk you will get one-fifth the needed vitamin A, 9% of the needed B, 13% of the needed G.

Three cents worth of turnip greens (one-half cup) will furnish 2.3 times the needed A, 50% of the needed C and G, and 10% of the B. It has 5 times more iron than the 5 cents worth of milk, and a little more calcium.

On the other hand a comparable amount of brown rice contains only 10% of the needed B, the same amount of iron and very little calcium.

It is evident the vital elements necessary are not so expensive—what is needed is more knowledge. Proper food elements can be bought on even the poor man's budget.

10—Q. Do most people eat enough of the right foods?

A. Simmond's survey in 1938 showed that only a few patients who seek dental services are, regardless of economic status, on a good diet, judged by generally accepted dietary standards. Most people don't realize the necessity of enough of the necessary factors.

11—Q. How can the correction of health through food be made?

A. Only through "constant agitation" and constant education.

12-Q. Can calcium and Vitamin A be gotten just as well out of canned evaporated milk as out of fresh milk?

A. Yes. Studies on the evaporated milk indicate that the calcium and vitamin A content is excellent. When evaporated milk is diluted to the same strength as fresh milk you can get almost three times more for the same price than you can get in the form of fresh milk.

13-Q. Can the quality of milk of a nursing mother be affected by the food of the mother?

A. Yes. In Europe it has frequently been shown that a nursing child will develop rickets because the mother's diet is deficient in Vitamin D. Every pregnant and nursing mother should eat particularly large quantities of protective foods to have a well-formed, strong child.

14-Q. Why don't animals suffer from lack of vitamins?

A. They do. The booklet, "Food for Health's Sake," edited by the National Health Council, begins with this story:

"Don't it beat all," said the farmer, "how them hens is layin' since I began to give them that new food the Farm Bureau man told about! They don't get near so many diseases either. Whoever would have thought the kind of food would make that much difference! They sure enough were gettin' plenty to eat before!"

"And will you believe it!" added the neighbor, "my cows are giving more milk since he suggested another food, and the horses are working better, too! They aren't forever getting sick. Well, so long. I must hurry home. Son Billy isn't feeling very well today and my wife is anxious about him. He has these spells every once in a while, but his mother gives him a cathartic and then the boy seems all right for a time. Still, he is pale and thin and peaked-looking."

"The chicken farmer looked thoughtful for a second and then he said, 'Say! You don't suppose the food we give our children could influence them the same way as it does our hens and horses, do you?'"

It does.

15-Q. Can the vitamins in food be destroyed by the way the food is prepared?

A. Yes. Peeling a potato may remove 15% of the vitamins and minerals. Cooking vegetables in water and pouring away the water destroys much of the value, whereas cooking vegetables in their peels and cooking them in vacuum or in pressure cookers saves most of these vital elements. It is this knowledge, used by the canning industry, that has kept these vital elements in canned goods. They also know that cooking vegetables in soda destroys the vitamins. Therefore, soda should never be used in cooking vegetables.

16-Q. Do the food requirements at different ages vary greatly?

A. The amount of food needed varies with the size of the person and his speed of growth or activity. (This is measured in calories.) For instance, a one-year-old child uses 900 to 1200 calories a day; from two to five years, 1100 to 1500 calories are needed; from six to eleven, an average of 1450 to 2800 is required, and from eleven up, 1900 to 4000 calories are burned each day (one glass of milk can furnish 200 calories). But, if you would be strong and healthy, if you would feel energetic, if you would have spring in your step, strength in your teeth, buoyancy and enthusiasm in life, and ability to withstand certain diseases, you need the same fundamental foods whether you are man, woman, or child. The protective foods are essential and it should be remembered that a certain quantity of each is necessary every day. Besides the foods illustrated, there are many other foods that also contain vitamins and minerals. Any good food table will give you these. The ones in the illustration represent group types and at different ages different types of food are more acceptable. Hence the variation is indicated.

17-Q. If these food facts are so important why isn't more done about it?

A. Many are trying. In 1939 the Public Affairs Committee issued a study based on reports of the Health Committee of the League of Nations and from other studies. It was called "This Problem of Food." On the first page we read:

"The difficulties are too great for governmental efforts alone. The need of an intelligent public opinion to solve the difficulties and work out a solution from which all will benefit is very great. . . ."

"Food may not make the man, but it has a tremendous effect. For centuries the stomach has been said to determine the strength of armies and now we know that it governs the brains and bodies of citizens at peace. The civilized world has come to believe that regardless of race, color, creed, or job, all should have equal opportunity for health. Whatever our democratic ideal may be, its achievement is dependent upon the vigor of the population. Schools should teach pupils to buy and to eat the right foods in order to promote health and to lessen the strain on pocket-books. Provision of the right kind and the right amount of food is one of government's primary responsibilities."

This book is The Central Nutrition Committee's attempt to help Hawaii. We enlist your aid, also!