PHYSICAL CULTURE FOOD DIRECTORY

Physical Culture
Food Directory

A Rating of Foods for Vitality, Growth, Reduction and Energy and for the Prevention of Constipation

BY

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ten years ago the "food reformer" was a voice crying in the wilderness; he was considered a fanatic, a hobby rider, a crank, a "nut."

"Food will be the medicine of the future," wrote Dr. Wiley twenty years ago. Interested as I was in the subject at the time, I thought that to be a pretty far-fetched statement. But today that prophecy is rapidly being fulfilled. Where there was then one case of disease cured by diet, there are a dozen cases cured today.

Physical Culture has always kept in the van in this movement to proclaim the use of food science as a means of building health and preventing or curing disease. Bernarr Macfadden has had the satisfaction of seeing his conception of the fundamental importance of diet in relation to health recognized not only by a growing army of physical culturists but by an ever increasing portion of the general public, and also by the scientists of our colleges and universities. Twenty years ago these scientific authorities had a conception of the food problem very different from the teaching of *Physical Culture*. Today, though terms used and theoretical explanations may differ, the practical application of the *Physical Culture* teachings and the best recognized scientific authorities are very much alike. True, *Physical Culture* now gives more attention to scientific theory, but in the meanwhile scientists have changed their theories to explain the practical facts of the health-giving qualities of the *Physical Culture* ideals of diet which Mr. Macfadden had been preach-

ing and practicing for twenty-five years. The mountain has moved to Mahomet!

Even the medical doctors, who once labeled as quackery all healing by the control of diet and by fasting, are now making rapid strides in applying food knowledge to the maintenance of health and the curing of disease.

Looking over the past field of published literature on food science, my own included, I am impressed with the fact that nine-tenths of this information, classifications and food value tables have been useless outside of the scientific laboratory.

It did no good to tell a man how many calories there are in a pound of potatoes, or how much protein in a pound of peanuts when he did not have any real comprehension of calories or protein nor know why or how much he should eat of either.

Then we scientists shifted our angle of interest and "went in" for minerals—chemical elements existing in food and in the body and absolutely essential to life and health—and which we had previously neglected because of their comparatively small quantities. So we had a great food reform movement tied to the food mineral idea, which was largely popularized by the forceful pen of Alfred McCann.

But there are about a dozen of these physiologically important minerals, and they exist in numerous chemically compound forms, not all of which are equally available to the body. For an absolute knowledge of this science of food minerals we would have to know

just how much the body under all conditions needed of each and every mineral in its various forms. That knowledge was available only in fragments and even what we knew was too complex for popular application.

McCann here scored a great point in practical food journalism by inventing the term "denatured" to apply to processed foods, many of which are deficient in minerals. Since the average man has a love for the natural and a suspicion of the artificial, especially in foods, the "denatured" idea caught on. But it by no means told the whole story of foods for health. A food may be natural and still be a poor food for a given purpose. To say that a food is natural or denatured doesn't tell whether it will make a man fat or lean.

It doesn't even tell him whether it is constipative or not. Cheese and eggs are natural and rich in available minerals, but they are constipating. Bran is the most widely accredited food to remedy this sore defect with a civilized diet, but if the term were consistently used bran is certainly "denatured," for we remove the white flour part of the wheat grain to make bran, just as we remove the bran portion to make white flour.

When the vitamins were discovered much valuable knowledge was added to food science. So we scientists began to rate foods on their vitamin content. Vitamins caught on, perhaps because the word sounds like "vitality." The public got so excited over vitamins that some of the more level-headed food scientists began to criticize the over-doing of the vitamin ideas

and the laymen, finding the scientists quarreling among themselves concluded that "vitamins were a fake."

Vitamins are not a fake. Thousands of human lives have been saved because of their discovery, and millions have been benefited because of this really important addition to the world's knowledge of foods, yet vitamins are not all there is to food science any more than calories or minerals were all.

The human mind is so constituted that it is more impressed by a single idea with a lot of enthusiasm back of it than with a group of complicated ideas that encompass the whole known truth. That is why the exponents of single ideas make the most impression on the public. Sylvester Graham with his whole wheat flour idea, Dr. Wiley with his pure food idea, Horace Fletcher with his thorough mastication idea, Alfred McCann with his denatured food idea, Prof. Chittenden with his low protein idea have all in their time made deep impressions and secured wide followings.

But to take all of the ideas in food science and to try to present the theory of all and teach the applications of all, results in a complication and a confusion of the subject that the average reader cannot fathom nor follow.

After twenty years working in this field it finally dawned upon me that all of us food scientists and writers had got the cart before the horse. We had told you about calories or minerals or vitamins first and afterwards attempted to tell you what these

for each purpose we have decided upon the following:

If no mark is given it means that the food is practically devoid of value for that purpose. Thus sugar is rated blank under Vitality because it contains no vitamins or mineral salts. White flour also draws a blank under this same head although it does have a small amount of minerals; but the quantity is less than the human needs and less than the average diet, hence the use of white flour increases the mineral deficiency of the diet and of the body and therefore it is practically devoid of Vitality value.

The mark of a single "A" means a moderate or average value. It means that your diet is not made worse than the average diet for the purpose being considered, nor is it particularly improved.

The "AA" rating means a good quality—a positively beneficial diet ingredient for the purpose stated.

The "AAA" rating means a super-quality, an enriching of the diet for the purpose to the point that the food becomes distinctly remedial or curative for those conditions indicated by the particular food purpose classification. This "AAA" rating may also mean that the food is so rich in the effect that it need be used only in comparatively small amounts, rather than as a food staple. Here common sense must be your guide. Oranges take a "AAA" rating for Vitality and yet there is little danger of their over-use. Bran takes a "AAA" rating for constipation but one can over-do the eating of bran. Cod liver oil takes a "AAA" rating for Vitality but is obviously not a

regular diet article but a "food medicine" to be taken in medicine-like quantities.

Now to fix the relative values of these four rating designations in your mind I will give an example familiar to all, being four leading cereal substances as rated for Constipation:

Polished Rice	—
Oatmeal	A
Whole Wheat	AA
Bran	AAA

We have done our best to simplify this system of ratings, but the necessity of some intelligent effort to comprehend the system cannot be wholly eliminated. Because you see spinach, cod liver oil, oranges and bran all bearing high ratings does not mean that a diet of these four foods only would be either practical or ideal. We can set up sign posts on the food highway but you can still run into a ditch if you lack common sense as a driver.

You will find that the ratings of many foods will be the same for more than one purpose. Even when the ratings of a food for two or more purposes are alike it does not mean that the purposes are identical. Thus bran rates high as a Vitality food and for Constipation, but the reasons for these ratings are not the same. Bran rates high in Vitality because of its mineral salts and vitamins, but it rates high for Constipation because of its large content of cellulose or fibre.

No food can rate equally high for all five purposes.

or call them "cranks." And remember, those of you who in the zest of your exuberant health that *Physical Culture* has won for you, rather enjoy being called "health cranks"—we haven't said one word to stop your living on raw fruits and vegetables if you want to live that way.

But we believe it is unfair to more conservative minded people to infer that health cannot be found with an intelligent selection of more conventional foods. It is as much our job to show a man who has got to live by eating at Boston restaurants how to select the best foods available for his needs, as it is to publish the story of a man living directly from the trees of a California fruit orchard.

CHAPTER II

Purity Is Not Enough

THE chief efforts made heretofore to rate foods for the protection of the public have been based wholly upon the idea of food purity. While I have no desire to criticize our food laws, which are very necessary, I do wish to point out the folly of centering attention wholly upon the idea of food purity to the neglect of the actual health-giving qualities of food.

The word "pure" is a word to conjure with. You can hopelessly damn a food by suggesting to the average man or woman that it is impure. Purity in a food is not necessarily a point in favor of that food. In many cases it simply indicates a lack of essential elements which should be present but which have been removed in the effort to secure an ultra-refined appearance.

Purity in itself is not a guarantee of wholesomeness. If all the essential elements are present, then purity in the sense of cleanliness is desirable, of course, but it is perfectly obvious that a *pure* food may also be a *poor* food. Pure arsenic is a worse poison than impure arsenic. Cane sugar is about the purest food we have and about the worst. Bologna sausage may be pure dog meat or it may be adulterated with beef.

Into this atmosphere of holding cleanliness next to godliness, purity synonymous with virtue and honesty,

came Dr. Wiley, as head of the Bureau of Chemistry, at Washington. Dr. Wiley was pretty familiar with the various adulterates, dyes and preservatives with which the unscrupulous manufacturer doped up his food. Wiley's cause was popular with the public.

The fear of being poisoned by chemicals in food, once the idea was suggested, was not an easy thing for the public to forget, and the publicity aroused public opinion to such an extent that a pure food law was passed, further advancing the belief that purity is the one and only important thing to consider about the food we eat.

The pure food law not only carried the idea of ruling out harmful ingredients but it demanded truthfulness of labels. No one can quarrel with this principle either, yet in some cases it actually works to injury of health rather than otherwise, for the reason that the public doesn't always know what is good for it. As an example of this sort we might cite the case of cane sugar versus glucose. Cane sugar is made from the juice of the cane plant or the sugar beet, whereas glucose is made from the starch of the corn plant.

Both cane sugar and glucose are pure foods, in fact they are both pure sugars, but they are chemically different kinds of sugar. As a matter of fact the glucose is physiologically the more "natural" sugar as it is in the form in which sugar is used in the human body. Recent biological investigations seem to show that the glucose is actually the better form of sugar food.

Had glucose been the first form of sugar used extensively by man and had it been popularized under the common name of corn sugar, and if then sugar made from the cane plant had been introduced and sold under its technical name of sucrose, we would have had a reversal of popular opinion and the corn sugar would have been considered the pure article and the cane sugar the adulterant.

The pure food law cannot be directly blamed for the public's ignorance and prejudice in such a matter as distinguishing between the value of these two kinds of sugars, and yet the general effect of the over-emphasis of the pure food idea was to condemn the use of glucose because it had been used as an adulterant of cane sugar products. In such matters the pure food law did not attempt to educate the public but rather played up to existing prejudices. Grandmother sweetened her preserves with cane sugar and the manufacturer sweetened his with glucose—therefore the thing to do was to lambast glucose.

In justice to Dr. Wiley I should say that he did not set out to uphold the cause of artificially refined or purified foods, but rather to condemn the artificially added ingredients or adulterations. But the public conception of purity never distinguished between the wash-tub system of taking the natural dirt out of things and the mud-slinging scheme of throwing artificial dirt into things. Upton Sinclair with his "Jungle"—a book written against the exploitation of packing house labor, and telling quite incidentally of dirty methods and filthy

slaughter houses—was the John the Baptist that prepared the way for Wiley. Sinclair said, "I aimed at the heart of mankind and hit him in the stomach."

This stomach that revolted at the smells of the Jungle also tabooed the skins of potatoes because they once were in contact with the soil.

Another big factor in building up the mental attitude that made the demand for foods with the salt of life purified out of them has been the popular teaching of bacteriology or the science of germs. The truths and half truths of the relation of bacterial life to disease and nutrition is too big a subject to discuss here, but the exploitation of these sea-serpents in a drop of water led to the craze for sterilizing and boiling, disinfecting and scrubbing, pasteurizing and sealing, the fear of the touch of the human hand that picked the fruit from the tree, and the footprints of the ant that climbed the cabbage stalk to look at the weather—and it has all entered into this civilized dirt-phobia, this craze for the starched and laundried diet of our pure food age.

I laugh yet when I think of a human I once knew—registered as a male, I believe on his birth certificate—who abandoned the use of raw milk upon his discovery that it contained 'steen million wiggling germs per cubic centimeter. In a spirit of delicious bedevilment, I reminded him that pasteurizing only murdered the microbes and that the millions of invisible corpses were still floating about in the beverage—whereupon he abandoned the use of milk altogether.

There are other examples that could be mentioned.

But I am tired of this dominance of this pure food idea to the exclusion of more important nutritional knowledge. I frequently get samples of food sent to me with an awfully shocked reader's letter, wanting me to tear my hair in the magazine because some criminal manufacturer has put benzoate in the catsup or hydrogenated fat in the shortening or glucose in the honey. I usually eat the samples and forget it.

There are but three fundamental ways to kill a man. One to mutilate his anatomy by smashing him, cutting him, burning or freezing him, or shooting him full of holes. A second way is to poison him and a third way is to starve him.

All deaths except "violent" ones, are due either to poisoning or starving. All diseases are due to poisoning or starving.

There can be many kinds of poisoning, according to the particular interfering chemical substance that is in the body that should not be there. When the poisonous substance is definitely known we call it poisoning—when it is unknown we name it some disease.

There are also many kinds of starvation according to the chemical substance that is lacking in the body but which should be there.

There are a few kinds of starvation that are generally known and appreciated. First, oxygen starvation as in smothering or drowning. Next water starvation as in dying of thirst. Third starvation for fuel foods, *i.e.*, for sufficient calories of combustible

substance. This last is the kind of starvation that is meant by the ordinary use of the word.

Beyond these more obvious forms of starvation the non-scientific mind has no conception of starvation, but, as in the case of obscure poisoning, attributes the result to "disease" of the nature of which there are as many confusing conceptions as there are kinds of religion.

Much more is known about poisoning. Anyone can name a dozen poisons and some can name hundreds. Poisons have always furnished easy ways for cowards to kill themselves or their friends. They are sold in the drug store. Near poisons and under-dosing of poisons has been the bulk of the medical game for centuries.

To the popular mind all chemicals are suspected of being poisons, and putting anything into food that has a chemical name sounds like a jealous wife dropping bichlorid of mercury into an unfaithful husband's coffee. With this psychological background it is very easy to wave the red rag of "chemical doped food" before the bull of public opinion. And yet all foods, natural and unnatural are nothing but "chemical substances." A grocery store is as much a chemist's shop as a drug store. Your daily bread contains carbon, hydrogen and nitrogen and so does hydrocyanic acid—which will kill a cat by radio.

When we think of poisons we think of the very poisonous substances which taken in small amounts will kill a man. But when we think of starvation we think only of the starvation for things we require in

large amounts, as air, water and fuel food. The chemical substances that are needed to support life but are needed only in small amounts and the starvations for these various small-portion food elements, are the things the layman knows nothing about, and of which science until recently was comparatively ignorant.

The reason for this attention to poisons and lack of attention to rare food essentials is easily explained. People usually die quicker of poison than of starvation for lack of a food element. Moreover the poison is an added thing and hence more visible. It is easier to notice a strange new cow in a herd than it is to miss one that belongs there. The fact that a loaf of bread containing arsenic will kill us by poisoning is easier found out and a more striking fact, than the fact that a loaf of bread lacking calcium will kill us slowly by *starving* us for calcium—which it certainly will if we don't get the calcium elsewhere.

It is this greater knowledge of the poisons than of the starvations that is back of this popular response to the pure food idea, and the popular indifference to the food deficiencies. We are afraid of being poisoned by eating some elements in food that ought not to be there, while content to remain blissfully ignorant that we are more likely to be killed by the lack of something that isn't there.

The body can cast off most foreign substances much easier than it can create needed chemical elements that are not there. In fact it can't do the latter at all.

Thus, we found in our laboratory that a certain

mineral salt was absolutely essential to life, but that only a small fraction of one per cent was needed. Then we thought we would see what an excess would do and we fed increasing quantities up to thirty per cent of this mineral without killing our rats or even stopping their growth.

If a manufacturer were to put thirty per cent of any foreign mineral substance into bread the crowd would be for burning him at the stake. Yet he can leave out of a staple food the small percentages of minerals needed for health and those of us who make a fuss about it are considered a "bunch of nuts."

In a Russian prison fourteen hundred men were put on a diet of tea, coarse bread and cabbage soup. The soup was so unclean that twenty of the men refused to eat it. Within a few months these twenty men developed scurvy, while no case occurred among the one-thousand, three hundred and eighty men who ate the unclean cabbage soup. These twenty men were more interested in the purity of their food than they were in its actual nutritional value, and some of them paid for their finickiness with their lives.

There are about fourteen hundred million people of the more highly civilized races that are also more concerned in seeing that their food is clean and pure than they are in seeing that it contains the proper quality and quantity of the elements necessary to life and health. As a result a good many more than twenty million develop various diseases from which they die

before their time. These millions are killed by "pure" food!

You can argue the point by saying it isn't the purity of the food that kills them, as pure foods can also be healthful. That depends on the definition of purity. If by purity we mean chemical purity of what until recently was recognized as food substances the statement that pure foods will destroy health and life is literally true.

It was an attempted application of the pure food principle to animals that led to the discoveries of vitamins and of greater knowledge of food minerals.

Scientists tried feeding caged animals absolutely pure food elements such as pure starch, pure sugar, pure fats and pure proteins, and no matter in what proportions this purified food was fed the animals invariably sickened and died. The absolute purification of the foods had killed the animals by starvation for food essentials that had been removed with the "dirt." Even when all the minerals of milk were added the animals still failed to live, and that is how vitamins were discovered.

It is the fear of dirty or impure or dirty looking food that is responsible for the pure and nice looking but deficient and disease breeding foods that characterize the diet of our cultured civilization.

Some of my fellow food writers, with an eye to easy popularity, like to make out that the reason we have devitalized, "denatured" and impoverished foods is because food manufacturers delight in wholesale murder for the amusement of the thing, or if they

don't do it in sport, do it for the equally reprehensible reason of making money.

That idea of abusing business men, and especially large corporations because they are in business to make money, is silly. Business men, in the food line or any other line, are there to give the public what it wants—and if they don't do it, they don't stay in business.

If the public wants foods that are pure but unwholesome it will get them; and if it wants pure foods that are wholesome, it will also get them. In the past, the public has insisted on the purity and been indifferent to the real nutritive values and hence has got foods like white flour and granulated sugar.

White flour was not developed because any one believed or advocated that the darker bran and germ of the wheat decreased the food value, for it has been known for two thousand years that the whole grain flour was the better food. Bolted white flour was first used in ancient Rome, and the most famed Roman physician of his day warned his fellow citizens against this "denatured" product. During the Dark Ages the people forgot how to make this fine flour and went back to the earlier system of just grinding their grain and eating it all. But in England two or three hundred years ago they had revived the making of bolted flour and again wise observers decried its use. American pioneers with their simpler mills again went back to whole wheat flour, but with prosperity they also returned to the bolted, whiter product. About 1840 Sylvester Graham raised such a hue and cry over the

inferiority of white flour that the whole wheat flour which he advocated was renamed "Graham flour." (Take notice that whole wheat flour and Graham flour are the same thing.)

Nothing could be further from the truth than the idea that the millers were responsible for use of white flour. They were merely trying to give the public what it wanted. The miller who had the whitest flour sold it at the best price, and so the milling engineers worked out grinding and bolting and bleaching processes to make it as white as it could be made. Millers rate flour according to its whiteness, and what they call "cheap" flour and "low grade" flours are the less finely bolted flours. Many food writers who have accepted the idea of the superiority of whole wheat flours also condemn low grade mixed flours, low grade bleached flours, etc., accepting the millers' own terminology of "low grade" as applying to flours containing the darker portions of the wheat. To condemn such flours as inferior to whole wheat is correct, as they are intermediate between whole wheat and high patent white flour. But the lower the grade (according to millers' terminology), the better the flour according to health effects.

Now the white flour millers have so monopolized the flour trade that they fight for white flour to protect their investments in white flour making machinery. But they made that investment originally to get the higher price which white flour would bring, and they did so knowing that they would make less flour out

of a bushel of wheat and have to sell from a fourth to a half of the wheat product for cattle feed at a lower price. If the public would only use it in larger quantities the millers would actually make whole wheat flour and sell it at the same price or even cheaper than the white flour because they could make more money by so doing.

But if the public is to blame for white flour, why did the public do it and why does it want such flour? Ask the matrons of ancient Rome—or your neighbor across the street. The answer in either case would be: "Because it makes whiter, lighter, purer bread. Dirt isn't white, and would show in white flour, so I know that white flour is pure and clean."

As further proof of my contentions, when granulated sugar was first put out, the argument used to sell it was not that it was more wholesome, but that it was pure. To drive this point home somebody discovered a sort of a louse-looking creature said to reside in brown sugar—and the trick was done. I grant that in this case the fellow who invented the brown sugar louse was reprehensible—but the public got what it wanted—pure sugar.

Phrase it as you like, this love for whiteness and cleanliness and purity was behind the origin of the demand for white flour.

It is the super-civilized fear of dirt that has given us the super-refined foods of civilization.

It costs money to refine and purify foods, but knowing the demand is there, the manufacturer spends his

money and then goes out to get it back by telling how dirty and impure the less refined foods are.

He takes the dirt out all right, but some of the things he takes out as dirt, or with the dirt, are the very elements that make life and health possible!

The discovery of the importance of the problem of food deficiencies has been the big advance in food science and health science of the last decade. The old theories of disease were conceived along the line of the poison idea, and the idea of cure was the administrations of other poisons, or at least substances foreign and abnormal to the regular life processes, but believed to be capable of driving out, destroying or counteracting the disease poisons.

Only recently we have discovered that disease can be caused by the lack of necessary substances quite as well as by the presence of foreign substances.

The pure food idea of judging foods laid all the stress on the idea of keeping poisons, either real or imaginary, out of foods. The present food science, while certainly not advocating the adding of foreign harmful or useless substances to foods, lays equal or greater stress on the idea of seeing that all the needed substances are present in the diet.

It is my honest conviction that the presence of all the dyes, adulterants, preservatives, misbrandings and impurities that our pure food laws have forbidden did less harm than the omission of any one of the several essentials that are cut out of the conventional modern refined but pure diet. I believe that the lack of

cellulose alone, by causing constipation results in more actual disease to civilized humans than all the chemicals that have been dumped into the American stomach through adulterated foods.

And right here is one of the queer contradictions of this business—the most dangerous poisons are the ones that a man generates in his own system through the failure of function that is caused by deficiencies of food essentials or by an excess of perfectly good food elements eaten out of balance and proportion to his needs.

But do not misunderstand me, I have written this argument to show you the insufficiency and incompleteness of the pure food ideas as a basis of selecting foods for health. I have done this at this time because we are giving you a Health Food Directory and I don't want you to call it a "Pure Food Directory," and confuse it with similar Pure Food Directories previously published.

But that doesn't mean that we are going to fight the pure food law or advocate any miscellaneous doping of foods for commercial reasons. We stand back of the existing Federal Pure Food Law believing it to be as wisely drawn as any completed law is likely to be—but we insist that it is not a Health Food law in the sense that you have only to eat pure foods to be healthy.

We don't believe any such law could or should be enacted or enforced and we are not trying to have one passed.

The most helpful thing we can do is to work out a

system of health food ratings that express health food values in terms that mean the most to the most people, and which they can follow without being lost in the mystic maze of technical terms and mathematical propositions. That is what we are trying to do in this Physical Culture Food Directory.

CHAPTER III

Vitality

THE vitality rating values foods for their general health-giving and disease-resisting qualities.

The first essential of a healthful diet is that it be not "denatured" or deficient. It must have all the elements required to support life in its fullest and most vigorous development. A diet lacking in any essential element will cause failure of growth or of reproduction, or failure of function, or lowered vitality and lack of resistance against disease.

Many food products of civilized man are notably lacking in some of the known food essentials, and the use or over-use of such foods is the cause of failure of growth and health. Against such dangers we need "protective" foods that are especially high in the elements without which growth ceases, strength decays, functions fail and disease attacks, even though we seem well fed in mere food quantity.

High vitality foods cannot be proclaimed as a cure-all for disease, but in the light of modern knowledge, no one has a right to claim himself incurable until he has given the high vitality type of diet a fair trial.

The above praise of this food rating does not mean that foods that fail to rate high in this respect are to be condemned for all purposes. While the diet should never be wholly lacking in high vitality foods yet cer-

tain individuals have need for foods the highest rating of which is in one of the other groups.

Chemically considered, foods are rated high in vitality when they are high in the needed minerals and in the vitamins. These are the elements needed for life and health and which are most likely to be lacking in the civilized diet. Most errors in nutrition, and hence most failures in health, are due to the deficiency of these elements, and it is to the foods that are especially rich in them that we must most frequently look for the restoration of health or the renewal of vitality.

A man may be fat from the eating of too much energy foods and still be lacking in vitality, due to deficiencies in minerals and vitamins. Another man may be thin from the eating of insufficient growth foods, or insufficient energy foods, and also be taking insufficient vitality foods. A child may be eating an excess of protein, the distinctive element for growth, and yet fail to grow because he lacks the vitality elements or effects in the diet. Lastly constipation may be solved and yet vitality be lacking.

The highest ratings in this vitality effect are given to those foods which when added to the diet are likely to be most instrumental in overcoming deficiencies. There is no absolute measurement possible since many factors contribute to this effect. Some of these foods are rated high because they are very rich in some particular needed elements.

Others are moderately rich in several of the elements that contribute to the total vitality effect. All we can

do is to take these several factors into consideration, also the way the food is ordinarily used, and pass judgment upon its probable value when added to a typical diet, and rate it accordingly.

Naturally, in so complicated a problem there will be room for difference of opinion, and our ratings will probably stir up a lot of criticism and argument. But while we admit the imperfections of any such food rating system, we do not believe that is a sufficient reason to cause us to refrain from publishing these ratings, which we are convinced will be of great help to a large number of people.

All those who value their health will do well to familiarize themselves with these ratings. Naturally those whose health is already impaired will most value them. The high vitality foods in particular represent the kind of foods that build resistance against disease. Evidence is accumulating that many diseases hitherto assigned to other causes are due directly or indirectly to diets poor in these vital qualities of foods. The disease may be either a direct expression of the deficiency of some particular element, or more likely the deficiency of one or more elements may be a predisposing cause of lowering of resistance to disease germs or diseased conditions.

More specific measures may be needed to prevent or combat particular diseases, but a high vitality diet should always be part of the fundamental treatment or defence. Lowered vitality is a vague term; perhaps

it will have more definite meaning to re-define it as "lack of health and susceptibility to disease."

Unlike the medical theory of combating disease, the nutritional theory of preventing disease does not wait till the disease is upon us. Moreover it teaches that what will most likely cure disease will also most likely prevent it. In this connection let me say, *the most damning evidence that the medical system of combating disease is generally unsound is the fact that medicines are not recommended for people who are in good health and want to remain so.*

Any intelligent man who has had experience in the culture and care of plants or animals will recognize the soundness of the above statement at once.

If you do not recognize it, it is because you have been trained to think in a medically dominated world.

It should be further pointed out that no single food is as well adapted as is a reasonable variety of foods to serve as a source of the vitality factor in the diet. The wiser and more satisfactory plan is to incorporate a goodly number of the high vitality foods.

On the other hand there is nothing to be gained in attempting to make the diet exclusively of the very highest rating vitality foods. While we have no evidence that injury may occur from excess of the minerals and vitamins as found in natural foods, we do have plenty of evidence that when the diet has been so selected as to give ample quantities of all the needed elements, excess beyond that is without value.

To go to the extreme in this matter would result in

making a diet unduly expensive, troublesome to maintain, less satisfying to the taste, and more likely to be unbalanced and unsatisfying in respect to the energy, growth, reducing, or the bowel-action effects—all of which are to be fully considered in ratings in this book.

From this fact, it follows that a low vitality rating is not a condemnation of the particular food for use in a diet that is balanced by a general selection of other high vitality foods. A low vitality *diet* is what is condemned, not the individual *foods*.

This extreme view of condemning any use at all of a food because it is lacking in vital elements comes from over-enthusiasm and lack of a grasp of the facts of diet as a whole. Many of our readers, and especially those who have followed the teachings of Alfred McCann, go to extremes in this matter, and refuse to eat a single spoonful of "denatured" food under the sincere but foolish belief that the lack of minerals in a food makes that food an actual poison; whereas the danger only lies in adding such foods to a diet that is otherwise on the border line of mineral deficiency.

The real utility of these high energy foods (if they are intelligently used) will be more fully brought out when we discuss the "energy" effect of foods.

In this system of rating foods for their various effects we will show how to select a maximum health diet without the necessity of being extremists and condemning foods that lack in some particular quality or effect as if they were actual poisons. In the meanwhile you will find in these vitality ratings a valuable

guide to the general health diet which is the basis of all special purpose diets as well.

In the following menus you will also find practical suggestions as to how far one needs to go in selecting the special high vitality foods and combining them with more staple articles of lower vitality ratings.

The vitality ratings show important facts about foods, and these facts should be made use of with common sense in adapting them to our conditions and circumstances. To show such adaptations of these vitality ratings, three menus of three days each are given. No one is expected to follow them exactly, but rather to use them as examples, which together with the study of the tables of ratings, will enable you to improve upon the menus of your own devising.

The first of these menus is called "Normal Menu." It is a menu that is composed of foods that will give a total amount of minerals and vitamins which should prove sufficient for the maintenance of good health. The more deficient or low vitality foods are avoided, but on the other hand no extreme effort is made to secure an excess of vitamins. It illustrates a type of diet believed to be safe and wholesome, without going to extremes in the matter.

The second set entitled "Conventional Menus" contains many foods that are in conventional use and which alone are known to be deficient in minerals and vitamins. It is this type of diet without the special protective or high vitality foods which we have added that is known to be the cause of much poor nutrition

and ill health. The purpose of publishing this set of menus is to illustrate how they may be improved by adding a limited number of dishes or materials of high vitality ratings. It would be better and safer to choose the diet as a whole with practically all of the foods of the "A" rating or better, but it will often happen through indifference or prejudice certain members of a family will insist upon having many of the foods known to be deficient in vitality. It may be more practical to improve such a table by adding a few items of high vitality ratings rather than to attempt to discard favorite dishes altogether and substitute a wholly new bill. Moreover, if intelligently considered quite as good results may be had in this fashion of correcting the weakness of some foods by the special value of others.

The third set of "Special High Vitality Menus" are given to indicate combinations of foods that will be remedial of previous low vitality effects. Menus of this sort are certainly worth trying as a health measure in cases of under-nutrition or ill health that one suspects to be due to past deficiencies in the diet. The menu as given is exceedingly rich in all three vitamins, and contains ample minerals. So far as is known no harm can come from any excess of vitamins or minerals as found in ordinary foods. As a special weight gaining ration, more milk may be added. Where there is any trouble from intestinal putrefaction or auto-intoxication, it would be advisable to keep down the protein by using the yolks of eggs only whenever

feasible and eliminating the whites. This ration contains the best known high vitamin foods, with the exception of yeast (or vegex, a yeast extract). Either of these products may be added if desired. The cod-liver oil is another very special item, which may be used or not.

We do not yet know enough about the individual cases where these special high vitality products are required to say who will or who will not be benefited by their use. Certainly they have very unusual nutritive properties, as has repeatedly been demonstrated upon animals and in human cases. We cannot say whether a particular individual will be benefited by them or not, because we do not know whether he has suffered from the lack of the particular elements which they contain. But at least it is safer to experiment with high vitality foods in the hope of mending the missing link in the nutritional chain, than to experiment on drugs which have never been shown to have any relation to normal physiological processes.

The three vitality menus just mentioned are shown on the three pages following.

Normal Menus

Forming a diet of good vitality ratings

FIRST DAY

Breakfast

Shredded Wheat with
Berries and Cream
Soft Boiled Eggs
Buttered Whole Wheat Toast
Coffee Substitute

Luncheon

Macaroni and Cheese
Lettuce and Tomato Salad
Corn Muffins and Butter
Buttermilk
Stewed Apricots

Dinner

Potato Soup
Beefsteak
Carrots and Peas
Grape Juice Punch
Ice Cream

SECOND DAY

Breakfast

Corn Flakes and Cream
Bacon and Eggs
Whole Wheat Toast
Coffee Substitute

Luncheon

Creamed Chipped Beef
Baked Squash
Whole Wheat Bread and
Butter
Milk
Sliced Peaches with
Ice Cream

Dinner

Vegetable Soup
Baked Potatoes and
Bacon
Sauerkraut
Corn Muffins and Butter
Canteloupe

THIRD DAY

Breakfast

Grape Nuts and Cream
Stewed Prunes
Whole Wheat Cakes and
Honey
Coffee Substitute

Luncheon

Green Pea Omelet
Creamed Potatoes
Whole Wheat Bread and
Peanut Butter
Milk
Fruit Gelatine Dessert

Dinner

Oyster Stew
Broiled Fish
Combination Salad
Whole Wheat Muffins and
Butter
Lemonade
Ice Cream

Conventional Menus

Which would be deficient but for the high vitality foods as shown in *Italics*

FIRST DAY

Breakfast

Bacon and Eggs
Buttered Toast
Grapefruit
Cereal Coffee

Luncheon

Pork and Beans with
Tomato Ketchup
Lettuce and Tomato
Salad
Egg Corn Muffins
Canteloupe

Dinner

Tomato Soup
Beefsteak
French Fried Potatoes
Roasting Ears
White Bread and Butter
Orange Juice

SECOND DAY

Breakfast

Cream of Wheat with
Bran
Stewed Prunes
Milk

Luncheon

Spinach with *Egg*
Bran Muffins
Buttermilk
Tapioca Pudding

Dinner

Chicken Soup
Chicken with Rice
White Bread and Butter
Cabbage Slaw
Fruit Gelatine Dessert
Orange Eggnog

THIRD DAY

Breakfast

Bran Flakes
Biscuits and Honey
Cereal Coffee
Sliced *Oranges*

Luncheon

Lamb Chops
Creamed Potatoes
Egg Corn Muffins
Sliced *Oranges*

Dinner

Potato Soup
Roast Beef with Mashed Potatoes
Spinach
White Bread and Butter
Custard
Ginger Ale

Special High Vitality Menus

FIRST DAY

Breakfast

Grape Fruit
Bran and Raisins
Milk

Luncheon

Lettuce and Sardine Salad
dressed with Cod Liver Oil
Egg Corn Muffins and
Butter
Fruit Cup
Orangeade

Dinner

Tomato Soup
Cabbage and Cheese Salad
Bran Muffins and Butter
Junket with Sliced Oranges
Malted Milk with Egg

SECOND DAY

Breakfast

Sliced Oranges
Bran and Chopped Dates
Milk

Luncheon

Spinach with Eggs
Pineapple and Grapefruit
Salad and Mayonnaise
Lemonade

Dinner

Broiled Liver
Whole Wheat Bread and
Butter
Collards (or Cabbage)
Plain Custard
Ovaltine (or Cocoa)

THIRD DAY

Breakfast

Berries and Cream
Bran and Chopped Figs
Milk

Luncheon

Lettuce Salmon Salad
dressed with Cod Liver Oil
Cheese Wafers
Custard Junket
Grapefruitade

Dinner

Oyster Cream Stew
Bran Crackers
Sliced Tomatoes
Berries and Cream
Orange Eggnog

CHAPTER IV

Growth and Weight Gaining

THE rating for growth will serve for the following requirements:

Growth of Children.
Underweight Adults.
Pregnant Women.
Nursing Mothers.

Growth requires a high vitality type of food but also requires a good quality of protein. The best growth producing diet would not be an ideal diet for the adult who was not adding to his body tissues because it would be too high in protein. The foods that rate high in both Vitality and Growth are most important foods for children.

The best weight gaining diet is a true growth diet for an adult and its requirements are near enough like those for children that we can use the same rating. The underweight adult is not merely lacking in fat, for lack of fat, if the muscles and other body tissues are fully developed and nourished, would give the ideal weight and bodily condition for health. In true underweight or malnutrition, the whole body has failed to reach, or has later lost, its full development and needs true growth foods with which to build living tissues.

In the maternity diets, either prior to child-birth or while nursing, the requirements are a highly efficient

growing diet. Growth in the very young life is exceedingly rapid, but as the needs of the mother are combined with those of the child the balance of diet required is similar to that of the older child or that of the adult who is in need of rapid weight gains.

It is easier to take weight off the human body than it is to put it on. Fat people won't agree with this statement, because they find it the hardest thing in the world not to take on weight and a terrible burden to remove it. But if a fat man will eat as I tell him, I will positively guarantee that he will lose weight, whereas I cannot guarantee that I can put weight on a thin man.

There is really nothing strange about this positiveness with which a man can be reduced and this uncertainty with which his weight may be increased. Human flesh is pretty much like wealth. If a man spends more than he earns it is easy to get poor, either in flesh or in cash. But while it is simple to tell a man that he can accumulate cash by earning more than he spends, yet it doesn't always work out. Neither does it always work out in trying to accumulate flesh.

To grow or gain weight, one must eat enough, and both digest and retain it. Sometimes one just can't eat enough, or if he tries to force it down, it won't stay put. The growth or weight gaining impulse in the body is lacking, just as it is in a runt pig which eats at the same trough as his thriving litter mates and yet doesn't grow.

If a fat man is eating four pounds of food a day

and you take two pounds of it away from him, he has got to get thin. But if a thin man is eating two pounds a day and you prescribe four pounds it may founder him and make him so sick he can not eat at all. This very thing was tried out in England in an experimental laboratory. Four young men volunteered for the test. They were all in good health and moderate weight and they all set out to eat 5,000 calories a day—twice as much as they needed. Not one of them got fat. Instead everyone of them got sick and couldn't eat at all, and before their digestive power returned they all had lost weight.

That doesn't mean that less food is needed to put on weight. On the contrary more food is required, but the amount must be only a little more than necessary to maintain weight. Also the nature of the food must b such that the individual can digest and assimilate the slight additional quantity. Just how slight that quantity needs to be can be easily computed. Let us assume that a man is eating only enough to just maintain his weight and that he adds to that amount one egg a day which he digests and assimilates. An egg is composed of elements quite similar to the body and, if all is assimilated, should add flesh almost pound for pound. Allowing that only half of a two-ounce egg would be so assimilated, we still would have an ounce a day, or two pounds a month, or twenty-four pounds a year. In a year's time an egg a day, if it were actually used for growth or weight-gaining, would turn

the most under-sized man or child into a most husky specimen.

I cannot promise that an extra egg a day will always work out according to the theory but I state the theory of it to impress you with the fact that a *little* additional food which is digested and assimilated will furnish all the material needed for satisfactory weight gains. The practical application requires the selection of the very best type of foods for such use and the determination of the fact that a slight but steady quantity of *additional* food over that needed to maintain weight, is actually consumed. Before taking up the discussions of various foods for this purpose, let us first consider more fully the type of cases to which growth or weight-gaining diets apply.

First, we have the normal growth of children. The young animal of any species has a growth impulse, which, when it is furnished with the needed food elements, will result in growth until the normal adult size of the species or family is reached. Both the rate of growth and the final size attained are partly matters of inheritance and partly matters of nutrition. In other words, animals can be made to grow faster or slower by better or poorer feeding, and they can also be permanently stunted or made to attain a larger size than the so called "normal."

This idea of the normal being the ideal in popular thought is a fundamental error. There is no such thing as an absolute normal. Normal merely means a figure that has been accepted because it is the average

and the most common. Normal or average growth in children we accept as satisfactory because we do not particularly want our children to grow at a faster rate and become adult in stature before they have had time to learn enough to conduct themselves as adults in manners and morals. We feel sorry for a child of ten or a dozen years that has the stature of an adult. The opinion prevails that precocious children never turn out well.

I believe our popular ideas on this point are all wrong. If we could grow our children faster I believe they would be better specimens both physically and mentally. Only we should have to reconstruct our educational policies and customs to re-adjust them to a condition when a child in years and experience would not be put into difficulties because he was an adult in stature.

Just what could be done in more rapid child growing we do not know, for it has never been worked out experimentally as it has been with animals. But we can certainly grow rats and chickens at far faster rates than were formerly considered as normal. With the chickens practical poultrymen all warn us that it is bad business and tell us the chickens will "break down" and get leg weakness and other divers diseases, but we find this is all just a matter of ignorance and prejudice and that *the troubles formerly considered as due to too rapid growth are really caused by nutritional deficiencies; and when these are remedied then the*

faster our animals grow the better specimens they appear to be in every respect.

A problem of growth that is of especial interest in human affairs is that of stimulating growth after the time when growth ordinarily ceases. This is of special importance because so many children just grow as their parents, in the blissfulness of their ignorance, happen to feed them. When these children reach the age of maturity and discover that they are half a head lower than the rest of mankind they get dreadfully worried about it. This is especially true of young men, for, according to our mating ideas, a little woman is attractive to men but a little man is a joke to the women.

We cannot promise very much to these undersized individuals, if they have already passed the age when the normal growth impulse ceases, for no method of feeding has yet been worked out that will cause the adult again to start growing in stature. If the case is taken in hand young enough, good growth foods together with exercise may give a final spurt to growth and is well worth trying. Men sometimes grow up to the age of twenty-five.

As a more hopeful problem we have the case of the adult who doesn't ask for increase in vertical dimensions but for more flesh on his bones. That is a problem either of growing muscles, or taking on fat, or of both combined.

Diet alone won't grow muscles—that requires exercise. But it is also self-evident that muscles must have

nourishment for their growth impulse, imparted by the exercise, to draw from.

Fat can be more readily deposited on scrawny forms if the necessary nourishment can be assimilated

Besides growing muscles and growing fat there is also a growth possible, even in the adult, of the other body tissues. This is clearly demonstrated by fasting, during which all organs and tissues of the body lose weight and then regain it after the fast is broken. Hence, it follows that if through under-nutrition, caused by lack of enough assimilated food or through lack of some food essential, there exists a general underweight of all the living tissue, then growth can occur in the entire body if the nutrition be improved. In fact, practically every element of growth can occur even in the adult, except the growth of the skeleton upon which stature depends. That is the one growth which when it ceases (due to the fact that maturity has been reached) cannot thereafter be appreciably restored.

The last type of the growth problem is that of maternity. The growth of the child before birth or through the nursing of the mother is quite comparable in its food requirements to the growth of the very young child after it eats on its own account. But as the mother's own food requirements are those of the adult, the combined effect is about parallel to that of the older child or young person seeking to gain general development.

The best known growth food, either as demonstrated

by human or animal feeding, is milk. Naturally enough this should be so, as milk is created for that very purpose; and there is no other known food that has been created strictly for that purpose. The so called natural foods of man, whether figs or nuts or wheat or jack rabbits, were not created to be food for a man, but to perform their own functions in the life cycle of the particular plant or animal. That function is in no case as parallel to the growth of human tissue as is the growth of the calf for which a cow's milk has been elaborated.

Of foods largely used in the human dietary the second best growth food is eggs, whose natural purpose is the complete nourishment of the young chick in the shell and for some days after hatching. Any growth diet that omits both milk and eggs is likely to fall short of the maximum possibilities as a growth ration. But that does not mean milk and eggs are the only foods for growth, or that these alone would form the best growth ration.

Generally speaking the milk, and especially the milk and egg diet, is higher in protein than is needed for human growth. Milk, and eggs even more so have been provided in nature for a faster growing animal than the human being can ever be. As evidence of this, the new born infant—and the younger the animal the faster its growth—has in human milk a lower proportion of protein than is found in cow's milk. Therefore, we can supplement the milk diet for man with an addition of some easily assimilated carbohydrate

and have a better balanced growth diet. Milk and whole wheat are a pretty good combination. Milk and figs, or other sweet fruits, are another.

When the purpose is actually to fatten a thin individual even more readily absorbed forms of carbohydrates may be used. Neither starch nor cane sugar fills the bill as well as do milk sugar, malt sugar and corn sugar. Milk sugar is expensive except as one gets it in milk. Separated malt sugar is also expensive, though there are a number of malted products such as malted milk and Malted Grapenuts, Ovaltine, Meltose, etc., which will serve the purpose.

Corn sugar has recently been developed to a stage where it can be manufactured to compete with cane sugar commercially. Corn sugar is chemically the same sugar that is in your blood. It passes through the intestinal wall without chemical change and hence needs no more digestion than water. The chemical name of this sugar is dextrose and an alternate name is glucose, though the latter term is usually applied to the partly converted syrup, which also contains the gummy dextrines. The dry corn sugar is a comparatively recent achievement of science and is not yet generally known to the public. I predict that it has a great future and will replace cane sugar, much to the benefit of the public health and American agriculture.

I am calling your attention to a few of the products that have special qualities to recommend them for stimulating growth or weight gaining. This does not mean that other foods are bad for the purpose; in fact

the majority of foods are, as you will see from consulting the rating table, fairly satisfactory for the growing diet. Very few foods considered alone are prohibited in such a diet, though there are certain types of diet that are certainly bad for growth.

One of these is the type of diet that rates poor in vitality—the meat, white bread, potato and cane sugar type of diet the American public considers "regular food." This sort of "denatured diet" is bad for growth as it is bad for health in general, because it is deficient in salts and vitamins. A man whose tendency is to overeat and get fat can best avoid this deficiency by turning to the green vegetables and fruits, but this would not be correct for the underweight man and backward growing child. They can very easily make the mistake of jumping from the frying pan of conventional denatured foods into the fire of insufficient calories or protein of the fresh vegetable and fruit diet. You probably know the type that has made that blunder—the "skinny old maid" sort of "health nuts" who try to get fat on a reducing diet because they have adopted food reform ideas without comprehending them. These people would be as well off on a beefsteak and French fried potatoes—but far better off on milk and eggs, dried fruit, cereals, cream, cheese etc.—and enough exercise to give an appetite to digest the more nutritious foods.

As suggested at the beginning of this section there is a quantitative as well as a qualitative problem in weight gaining. One can easily go to extremes and

get poor results either by under-eating or attempted over-eating. I cannot prescribe exact quantities for you, as individual requirements vary too much. But here is a way in which you can work out the quantity problem for yourself.

In the first place you can depend on it that if you have been holding a constant under-weight you are actually not eating enough food. But if you suddenly make up your mind to get fat by eating a lot you will very likely over-do it, get indigestion and lose what appetite you have. Go at it this way: First, find out just how much you are eating by observing as accurately as possible how much you eat by habit and on which quantity we presume you are holding your weight fairly constant. Having noted this weight maintaining amount, then increase it about twenty per cent if your digestion is good, or ten per cent if your digestion is poor. Strictly avoid the kinds of food you have found difficult to digest and see to it that the diet includes some of the high rated growing foods—though it need not be exclusively of them.

If you are accurate in observing these quantities you will be sure to gain weight from this slight increase, unless your stomach is so delicate that it cannot stand this slight extra burden. In the latter case it will be up to you to experiment with different types of diet until you find one on which you can increase the total quantity of food, for you can never get fat by under-eating.

However, you can get fat sometimes by fasting!

You can do this as a man can get over a stream quicker by first backing off from it and then running forward to gain momentum for the jump. By fasting you can get the body so hungry for nourishment that it will develop new powers of digesting and utilizing the extra food.

The milk diet and the fasting cure are both specialized methods of gaining weight that have worked wonders in many cases. For further information on these special topics I must refer you to two books by Bernarr Macfadden—"The Miracle of Milk" and "Fasting for Health."

On pages 54 and 55 are two sets of menus. One is a growth menu for children, either normal or underweight; and for adults who are generally poorly nourished and wish to gain flesh and build up the vitality and the body generally. The second set of menus is distinctly a fattening ration and should not be used for children, but may be used for adults who are just lean and wish to put fat on their bones.

The distinction between adults who wish to grow and those who wish to fatten is not very great, since, unless the muscles be developed by exercise at the same time no very great amount of weight other than fat can be added to the adult body. As a matter of fact both rations are good, and if you don't know which is best adapted to your needs try one for a month and then the other and see on which ration you add the most weight.

Neither ration is devoid of the vital elements on

which good health in general may be built, but the fattening ration is higher in food sugars and food fats. In fact it is a heavy and very nourishing diet and will hardly seem in keeping with the light fruit and salad type of menus that we recommend for many purposes.

But this diet is prescribed for thin people to get fat on and is not recommended for those who have no trouble maintaining weight. It would be the worst sort of diet in the world for a fat man—though I dare say he would enjoy it.

If the digestion is not good this fattening diet may prove too much of a good thing. At the first evidence of a loss of appetite or symptoms of indigestion, cut down the food quantity or wait a few days and try it again. If this is not sufficient relief to enable you to handle the ration and make a weight gain thereon, then you had better give up and try the growth ration which is somewhat easier to assimilate and which may also be counted on as a good weight gaining ration.

Since satisfactory weight gaining rations depend so much upon the individual digestion and assimilation I will also suggest a few simple food combinations that have given good results. I will not attempt to work these out into full menus but will leave you to vary these a little for individual requirements or to add such few accessories as the appetite craves for the sake of variety.

I.

THE MILK DIET

From five to eight quarts of milk a day without other food. The milk diet is a curative regimen and full information as to its use and results to be expected will be found in Bernarr Macfadden's book "The Miracle of Milk."

II.

MILK AND SWEET FRUIT DIET

If this combination is used exclusive of other foods the daily quantity for the average adult would be three quarts of milk and one and a half pounds of dates, figs or raisins or any combination of them. This provides for a quart of milk and a half pound of the fruit at a meal. If this seems an overload one or two glasses of the milk may be taken between meals. This diet may be used on a partial basis, that is making one or two meals of these foods and the other meals of mixed diet. This will be wiser than adding these foods at a general meal.

III.

EGG YOLK AND ORANGE DIET

This is a very excellent combination, but is to be used supplementary to other meals as one would hardly try a full diet of this combination. The juice of a large orange with an egg yolk added should be taken together. Three such drinks a day in addition to ordinary meals should start the thinnest man to gaining weight.

IV.

MILK AND HONEY DIET

More fattening effects can be secured from milk if the quantity of sugar be increased. But cane sugar is not the best for the purpose. Milk sugar would probably be the best, but malt sugar, corn sugar and honey are all good. If none of these are available corn syrup may be used. These food sugars may be added to sweet milk but better still to clabbered or buttermilk. Use not to exceed a quarter of a pound of the sugar or syrup to a quart of milk. A glass of the mixture three times a day in addition to ordinary meals should get results. More may be used if there is no disturbance of digestion; but make haste slowly on trying to fatten, or you may overdo it.

V.

SODA FOUNTAIN SUPPLEMENTARY PLAN

For those whose meals are dictated by others the soda fountain offers easy means of getting more total food. Each extra glass of the more nutritious soda fountain drinks adds considerably to the weight gaining stock of nutrients. The following types of drinks may be safely used: Milk shakes, egg nogs, malted milk, malted grapenuts, rich milk cocoa.

GROWING AND FATTENING MENUS

On the next two pages are given two sets of menus—one for growth and one for fattening.

Growing Menus

FIRST DAY

Breakfast

Grapenuts and Cream
Poached Egg on
Whole Wheat Toast
Glass of Milk

Luncheon

Salmon Salad with
Cod Liver Oil
Dates and Cheese
Lemonade

Dinner

Oyster Stew
Celery
Baked Bananas with
Bran Muffins
Gelatine Dessert

SECOND DAY

Breakfast

Two Boiled Eggs
Whole Wheat Toast
Bran Flakes and Raisins
with Cream
Glass of Milk

Luncheon

Cream Cheese and
Lettuce Salad
Corn Muffins and Peanut
Butter
Glass of Buttermilk

Dinner

Any Milk Soup
A Green Pea Omelet
Whole Wheat Bread
Custard Pie
Orange Juice

THIRD DAY

Breakfast

Shredded Wheat with
Baked Apple and
Bowl of Rich Milk

Luncheon

Sliced Tomatoes with
Mayonnaise Dressing
Spinach with Egg
Bran Muffins and Butter
Junket

Dinner

Macaroni and Cheese
Carrots or Turnips
Stewed Figs
Cup of Rich Milk
Cocoa

FOURTH DAY

Breakfast

Oatmeal with Bran
and Cream
Scrambled Eggs
Cup of Cocoa

Luncheon

Lettuce Salad with
Cream Dressing
and Grated Nuts
Whole Wheat Bread
with Fig Preserves
Cup of Custard

Dinner

Potato Milk Soup
Creamed Chipped Beef
Glass of Buttermilk
Any Fruit for Dessert

Fattening Menus

FIRST DAY

Breakfast

Large helping of
Stewed Figs and Cream
Bacon and Eggs
Glass of Milk

Luncheon

Cottage Cheese eaten with
Honey or Corn Syrup
Carrots and Peas
Bran Muffins and Butter
Cornstarch Custard

Dinner

Green Pea Soup
Broiled Liver
Baked Potatoes with
lots of Butter
Rich Ice Cream

SECOND DAY

Breakfast

Grapefruit with Honey
(or Sugar)
Eggs Poached in Milk
Whole Wheat Toast and
Butter and Marmalade

Luncheon

A Fruit Salad
Walnuts and Dates
eaten with Cream Cheese
Custard with Whipped Cream
Glass of Milk

Dinner

Potato Milk Soup
Carrots and Peas
Beefsteak
Stewed Figs and Cream
Glass of Grape Juice

THIRD DAY

Breakfast

Uncooked Rolled Wheat
with Grated Nuts and Honey
Dish of Prunes
Milk, half Cream

Luncheon

Lettuce and Cream Cheese
with Mayonnaise
Parsnips or Beets
Bran Muffins and Marmalade
Glass of Milk

Dinner

A Cheese Omelet
Baked Potatoes with
Plenty of Butter
Corn Muffins and Preserves
Rice Pudding

FOURTH DAY

Breakfast

Uncooked Rolled Oats
with Figs and Cream
Two Soft Boiled Eggs with
Butter and Bran Muffins
Glass of Milk

Luncheon

Cottage Cheese eaten with
Honey or Corn Syrup
Buttered Carrots
Whole Wheat Bread
with Peanut Butter
Glass of Buttermilk

Dinner

Creamy Milk Oyster Stew
Fried Fish or Chicken
Mashed Potatoes with
Butter and Milk
Custard or Pumpkin Pie
Orange Juice

CHAPTER V

Reducing

OUR reducing ratings of foods will serve as a guide in selecting foods. First, for removing fat; second, for checking fat formation; and third for combating the tendency toward over-eating whether the result is stored fat or other injurious effects.

Fat can be removed by fasting, but fasting does not solve the problem of preventing the fat reforming. Also, in the case of the very obese, a fast for a long enough time to eliminate all fat would result in the starvation of the body for the non-fat food requirements.

Fat can also be removed by any form of undereating. A meager diet of toast and tea would take off fat but it would be a very unsafe plan of reduction, for when taking food lacking in the vital elements these are exhausted more rapidly than during complete fasting.

The ideal reducing diet is one that supplies all the nutritive requirements except those that form fat. It is a low calorie but otherwise complete diet. Some of the best weight gaining foods, as milk, for instance, should be used, but in smaller quantities in the reducing diet, because of the excellent form of protein and vitality elements they contain.

By the use of only the "AAA" reducing foods rapid

reduction can be secured. Slower reduction can be obtained by a less strict adherance to this rating, while the tendency toward fat formation or over-eating can be checked by giving a moderate consideration to this rating and the avoidance of heavy eating of other foods, especially those rated high under Energy.

The Reducing ratings are somewhat similar to the Vitality ratings. At first thought it might appear to you that the Reducing ratings should be exactly opposite to those of the weight gaining or Growth ratings. But this is not the case, because proper weight gaining is not mere fattening. The Energy rating is more nearly the exact opposite of the Reducing rating.

That fatness has been popularly considered a blessing in the past is due to the observation that a starving man, or a very sick man, is thin. From this it was superficially reasoned that the opposite condition of fatness was an indication of health and was physically desirable. This illusion of the healthfulness of fatness has been exploded for all times by the revelation from the statistics of life insurance companies, involving hundreds of thousands of cases, and in which it is clearly shown that fatness decreases a man's chances of longevity and boosts the death rate. The fat man dies young—and no wonder, he does two men's work with one pair of legs. The exercise ought to be beneficial, but it isn't, because he gives it up and sits down and fans himself—no man ever restored his health with a palm leaf fan.

The realization that fatness is a health curse as well

as a curse to beauty has only recently penetrated the public mind. Indeed the gospel of the necessity of slenderness, or rather fat-less-ness, as the first essential of health, has still to reach the unread, unthinking half of the race.

Strenuous exercise, if the food intake be not increased thereby, will take off fat. One can reduce weight also in a Turkish bath, or any prolonged hot bath. But there is other weight to be lost from the body besides fat, and sweating out water as a reduction scheme is like trying to go broke spending lead nickels.

Massage, rubber garments and a thousand other schemes for "reducing without diet" are proclaimed—but it is so much easier to reduce with diet.

Drugs will reduce you, if they are potent enough to make your digestion quit functioning—and reducing drugs when effective, do that very thing. Purgatives will reduce those who are willing to make a cesspool of the stomach and a flushed sewer of the alimentary canal. Ipecac would work better and quicker.

Thyroid extract will reduce some people by speeding up the rate of metabolism. So will any good high fever. Typhoid fever inoculation, as a means of reducing obesity has been strangely overlooked by the germ fans. Blind pig hootch also proves effective in some cases, and better than any of these is a trip on a rough and stormy sea.

The easy, sane, safe and sensible method of reducing is by eating less food fuel than we burn up in the ordinary activities of life. To consume our fat we must

quit adding fat forming foods faster than we need them.

But all foods and all true food elements are fat forming, except the salts and vitamins and these compose mighty little of foods, pound by pound. Starch, sugars, protein and fat itself can all form fat, or spare the fat we have formed.

But there are forms of food that contain water, air and fiber, and these elements do not make fat. Their inclusion in the food substance we eat has a lot to do with the practical reducing diet. For example take a heap of lettuce leaves. It is nine-tenths air, and what isn't air is nine-tenths water and what isn't water is rather largely composed of fiber, salts and vitamins. All of which goes to make lettuce a good reducing food. It is physically impossible for a man to eat enough lettuce to get fat on it—though a cow might, because she has a stomach about half as big as she is. Because a man's belly is filled and his appetite satiated and his habit eating appeased, these reducing foods make it easier to reduce by eating than by fasting.

But bulk without substance alone is not the only element of a proper reducing diet, and there are other reasons for not reducing on bread and tea or candy and crackers than this mere trick of fooling yourself into the appearance of eating by consuming air and water. The fat individual has usually been living on a diet too high in fats and carbohydrates, and too low in minerals, vitamins and fiber. While surfeited with the heavy fuel foods, he has usually been starved for the vitality

foods. So his reducing diet should be a high vitality diet, to build up the non-fuel element of nutrition while he is giving the fueling of the furnace a well-earned rest.

The reducing foods are therefore high vitality foods that are also low energy foods. Cheese and butter and dried sweet fruits are high vitality foods, but they are also high energy or fuel foods. Hence the table of vitality ratings is not alone a sufficient guide for reducing diets.

It is also possible to reduce weight by food and yet reduce weight wrongly. In fact, I could prescribe you a diet that would reduce you, as drugs reduce you, by making you ill and stopping your power to digest and assimilate food substance. I have never done this thing for a human, because I didn't want to be tried for manslaughter. But in our laboratory we have done this thing to white rats, because rat slaughter is not a crime.

Any diet that will not support life because it is wholly devoid of the life giving essentials will reduce weight just as any acute illness will. Strange to say an exclusive diet of fattening foods will prove a reducing diet, and a most dangerous one, if all the vitality elements are entirely kept out of it.

We tried some of these inadequate diets on rats—not particularly fat rats but ordinary rats in fair state of health, and the most rapid reducing diet we found was one composed of straight tallow! Next to the tallow the most rapid reducing food we found was straight cane sugar.

Now you all know the story of the neighbor who stated that he gave his horse turpentine for bots, and after the other fellow tried it, added the information that the first horse had died. So don't try to reduce on tallow or sugar and then send your relatives around trying to collect your funeral expenses off me—because I am going to tell you right now that these rats which we reduced on tallow and sugar and such like fattening foods *DIED!*

But when we gave rats food like oranges and cabbage and such like high vitality foods, they reduced to very thin proportions without dying—*because while short of fuel elements they had an abundance of vital elements.*

We then tried three pens of rats, one on a fuel diet of fats, sugars and starches, one on a diet of high vitality foods, and one on a diet of air and water and such scenery as was available through the cage bars.

The first group reduced because their organs couldn't function, though there were foods, as measured in calories, in super-abundance. The second group reduced because there was a lack of fuel food, and the third because there was no food. Then when we got them pretty thin we put them all back on normal complete diets, and measured their health and vitality by the speed with which they regained their normal weight when they had weight making foods before them all the time.

The rats on the proper reducing diet got back their normal weights very quickly. Second in the list of

weight recovery were the rats that had fasted, but slowest to recover were the rats that had been reduced by the fuel foods wholly lacking in vital elements. These rats were sick rats, made sick by deficient diets.

We have good reason to believe that many a fat man shows a combination of fatness with deficiency disease from lack of proper vitality elements in the diet. To put that man on a still more deficient diet, that is to reduce him by feeding him merely less of the kind of foods that made him fat is dangerous business —for he may lose his weight and his health as well— or what health he has left to lose. He would be safer to fast, because in that case he is not adding to the over-proportion of deficient or demineralized and devitaminized substance he already carries. But to put him on a fuel-shy diet, that is at the same time a high-vitality diet, will revitalize him at the same time it reduces him.

I think this element of eating high vitality foods while reducing is so important that I even rate well as reducing foods some foods that if taken in excessive quantities are decidedly fattening, particularly milk and eggs. These are high protein foods as well as high vitality foods, but when the body is casting off fat it should be building up muscle. True it will take exercise as well as food to build muscle, and this, by the way, is the real reason for approving exercise combined with diet in cases of reduction.

The fat man, and even more so the fat woman, is not the possessor of a beautiful body—another reason

for building muscle as fat comes off; otherwise, on the beauty part of it, we would be jumping from the frying pan into the fire.

If we are building muscle we want protein with which to do it, but protein that is not actually utilized in forming body tissue becomes fuel and is about as fattening as sugar. Now if we consume large quantities of low grade protein, we don't help the general reducing or fuel cutting program. It is therefore better to include in the reducing diet a small quantity of protein food of known high quality, and this means milk (or cheese) and eggs. Even the fat of milk and eggs has a place in the reducing diet because it carries a vitamin.

A single glass of milk and an egg each day insure against protein deficiency and materially add to the safety and to the muscle growing powers of a reducing diet. A pint of milk and two eggs would be the limit of these foods I would recommend, however, for an adult.

Many sets of reducing menus have heretofore been published. The results obtained from using them have varied from complete success to discouraging failure. Where failure has resulted it has usually been due not to the quality of the ration used, but to the quantities being too liberal.

The whole trouble is in the fact that it is not at all easy either for the dietitian to plan or the user to carry out menus with exact quantities prescribed. All people do not have the same requirements for food and a ration that would speedily reduce a big active man

might actually fatten a small, quiet moving woman.

Even if the food requirements of the individual were known there is still opportunity to trip up in the following of a prescribed menu unless scales be used to weigh each food portion. A "helping" or a "dish" or even a "cupful" is a very vague term and according to the nature of the food used or the judgment of the person, and may vary widely in the matter of actual net weight of the water free food substance—which is what counts. For instance a cupful of rice if measured dry is equal to four cupfuls measured after boiling. In many other cases less clearly understood, the amounts of water contained when the food is weighed, or both the water and the air contained, if the food is measured, throw all calculations awry.

Experience has therefore taught that the most practical and helpful method is to suggest the kinds of food to be served, and leave it to the judgment of the individual as to what quantities are to be used. Of course, if you are looking for a chance to conclude that reducing diets are all a fake, and thus find an excuse to say you tried it and it didn't work, you can certainly find it. Having thus thrown sand in the eyes of your conscience, you can then go on being fat and friendless, though the doctor and the undertaker ought to be cordial, since you are drumming up business for them.

But if you really mean business, this problem of being left to judge the size of food portions ought not to bother you long, because there is an absolute way to check up on your judgment. A good pair of

scales is all you need. Weigh yourself (on the same scales once a week, and with the same weight of clothing), and then readjust your ideas of the size of food helpings according to your success in losing weight.

Don't weigh every day, it will only get you confused and discouraged. The error in weights due to the amount of food material in the alimentary canal, and the amount of water in the body, is relatively so great, even with the most careful precaution to have it the same, that daily weighing is meaningless. But weekly weighing is significant and should be your guide to food quantities. Remember that there is a weight loss when one first takes on a lighter diet, due to the lesser average contents of the digestive system. Therefore the weight lost the second week is not likely to be as great as the first week. But from the second week on the loss should be a pretty accurate measurement of the actual fat lost from the body.

For ordinary reduction start using portions such as are served at a conventional table. Look up the reducing food ratings and select your items from the various groups of foods. Use two or three items for the two light meals of the day and three to five items for the heavy meal of the day.

Of course, the more items you can select from the "AAA" foods the faster you should reduce. But the quantities as well as the ratings count. This is especially true of milk, butter, cheese, eggs, sweet fruits and starchy vegetables. Use them for a complete safe diet, but use them sparingly.

Bran, mineral oil, leafy foods, melons, tomatoes and acid fruits, if sugar is not added, can be used practically as freely as you like. But with most anything else you can fail to reduce if you don't keep watch on the quantities as well as the qualities.

I will now give you two sets of menus, which, the quantities being right, should give rapid and slow reduction. To make the nature of these menus plainer I will give the ratings of each food as you will find them in tables (or in some cases a compromise rating where different ingredients enter into the same dish).

These two sets of menus are given on the next two pages.

Menus for Rapid Reduction

FIRST DAY

Breakfast

AAA Canteloupe
AAA Cup of Bran

Luncheon

AAA Lettuce and Tomato Salad
AAA Sliced Oranges and *AA* Pineapple
AA Glass of Buttermilk

Dinner

AAA Spinach with *AA* One Hard Boiled Egg
AAA Celery and Olives
AAA Watermelon

SECOND DAY

Breakfast

AA Blackberries
AAA Cup of Bran

Luncheon

AAA Endive Salad with *AAA* Cottage Cheese
AA Sliced Peaches
AAA Orangeade

Dinner

AAA Brussels Sprouts
AAA Sliced Tomatoes
AAA Canteloupe
AA Glass of Buttermilk

THIRD DAY

Breakfast

AAA Cup of Bran

Luncheon

AAA Cabbage Slaw with *AAA* Mineral Oil Dressing
AA Huckleberries
AA Lemonade

Dinner

AAA Green Peppers Creamed with *AA* Hard Boiled Egg
AAA Sliced Tomatoes and *AAA* Cucumbers
AAA Gelatine with Oranges and Pineapple

FOURTH DAY

Breakfast

AAA Grapefruit
AAA Cup of Bran

Luncheon

AAA Lettuce and *AAA* Cucumber Salad
AAA Gelatine with Peaches
AAA Orange
AA Eggnog

Dinner

AAA Boiled Cabbage Dressed *AAA* with Lemon Juice
AA Baked Squash
AAA Skimmilk Junket
AA Peaches

Menus for Slower Reduction

FIRST DAY

Breakfast

AA Bran Flakes
AA Two Soft Boiled Eggs
A One Slice Whole Wheat Toast
AA Any Coffee Substitute

Luncheon

AA Fruit Salad with
AAA Cottage Cheese
AA Baked Squash with
A Butter
AA Junket

Dinner

AA Vegetable Soup (without fat added)
A Broiled Chicken
AAA Lettuce and Tomato Salad
AAA Fruit Gelatine Dessert

SECOND DAY

Breakfast

A Cornflakes
A Dish of Prunes
AA Glass of Milk

Luncheon

AAA Cabbage Slaw or
A Lettuce with Cream Cheese
Whole Wheat Bread Sandwich
AAA Fruit Gelatine Dessert

Dinner

AAA Tomato Soup
A Creamed Chipped Beef
AAA Endive and Cucumber Salad
A Ice Cream

THIRD DAY

Breakfast

A Shredded Wheat with
AA Blackberries
AA One Egg on
A Whole Wheat Toast
AA Any Coffee Substitute

Luncheon

A Carrots and Peas
AA Oranges and Figs
AA Cheese and Celery
A Grape Juice

Dinner

AA Cream of Celery Soup
A Small Lean Steak
AAA Sauerkraut
AAA Fruit Gelatine Dessert

FOURTH DAY

Breakfast

A Whole Boiled Wheat with
A Figs or Dates
AA Glass of Milk

Luncheon

A Baked Potato and Onion
A with Butter
AA Berries with
A Ice Cream

Dinner

AA Oyster Stew
A Broiled Fish
AAA Cabbage Slaw or
AAA Sauerkraut
AAA Lemonade

CHAPTER VI

Energy

THE term "energy" as applied in this method of food rating should not be confused with the idea of "energetic" as the word is commonly used to mean general health and vitality.

Energy as a scientific word means actual physical power or force. We speak of the amount of energy required to raise a weight a certain distance or perform other definite physical work. The best understood way of measuring energy is in horse power, the method of rating power as developed by an engine or electric motor.

As applied to a man, energy refers to the actual physical work that he performs. The term does not mean that a man feels energetic, or, to use the slang, "full of pep." Nor is the term a measure of a man's strength because a strong man may be lazy and not exert his strength. Time is also a factor in the expenditure of energy. A small child at play expends more physical energy in a day than would a strong man in performing the greatest feat of strength but which required only a few minutes time.

The explanation of this term energy is necessarily to keep you from confusing this food rating with the vitality ratings or other measures of health building food values.

All of us utilize a considerable proportion of our food as a fuel supply for oxidation in the muscles from which process both heat and energy are derived, just as heat and energy are derived from oxidizing or burning coal in a locomotive. The ordinary processes of living, such as breathing, the circulation of blood, and the motions of the digestive organs consume such food fuel even when we are quietly sleeping. The moment we arise and exert external physical activity this fuel consumption increases.

We all need some of these fuel or energy foods. Indeed it is hard to find foods that are not fuel containing—as the fat man who wishes to consume his stored fuel soon finds out. But the greater the amount of muscular work performed the greater is the amount and the *proportion* of fuel food required.

Foods that rate high in the fuel or energy content are therefore more suitable to the use of those performing physical labor than they are for those whose expenditure of physical labor steadily for long hours counts up in total food energy required much more than does extremely active physical labor for a brief period.

Many of the conventional foods composed largely of starch, sugars and fats are good energy foods but have little value otherwise. Therefore the individual doing light physical labor, and whose total food consumption is therefore small, is in grave danger of living upon a diet which gives him a sufficient or exces-

sive amount of energy foods but a deficiency in the non-energy elements.

The man doing heavy physical labor must of necessity consume a larger total quantity of food. His liability to food deficiencies is therefore less, because his physical labor consumes only the oxidizable or fuel elements of food and does not materially increase the need for minerals, vitamins or protein. For this reason, the man who is working hard can use a more deficient or more fuel diet than can the man doing light labor.

This fact also explains a part of the supposed benefits to health that come from physical activity. The worker is not so easily starved for the rare food elements because he consumes more total food.

This is merely a matter of arithmetical proportions. Let us suppose that a man requires one gram of calcium per day to maintain the normal balance of calcium salts in his blood. If he consumes five hundred grams of food containing one tenth of one per cent of calcium he would only secure half a gram of this important element. But if this same man were engaged in physical labor that would result in his consuming an additional five hundred grams of the same low calcium food, he would then secure the full gram of calcium needed, for additional calcium is not required by his muscular labor.

This same principle applies to all of the food elements that go to compose the actual tissues and fluids

of the body or to support the functions that are not increased by muscular labor.

This outlined explanation may seem a dull theory, but its practical application gives us the reason why men doing hard physical labor can be nourished on a diet that would ruin the health of those engaged in a more sedentary occupation.

Naturally the sedentary worker requires a smaller amount of food than the laborer, and therefore he should use such materials as will positively furnish the needed vitamins, minerals and quality proteins that his diet may be complete and balanced.

In our present food markets it so happens that foods that are mere energy bearers and which are poor in the vitality elements are also the inexpensive foods. This seems a lucky condition because it enables a laboring man to live more economically. At least this would have been the old conception of the situation, although at the present time, when bricklayers are better paid than college professors, the fact does not seem particularly gratifying to the more lean and learned gentlemen.

It also happens that many of the foods which have been condemned by modern health scientists, but which largely compose the ordinary diet, are also of this type of high energy and low vitality foods and are therefore safer for the physical laborer than for the brain worker. If we therefore suggest foods for the physical laborer which are of the commonplace, abundant and often condemned sorts it is not with any

idea of reserving the tidbits for the white collared and soft handed folk, but for the real reason that old well-known and "substantial" foods are actually better suited to the working man's needs.

Indeed the chief trouble with our present day food habits is that our most used foods are entirely too much mere energy foods. In the last generation or so we have evolved from a nation wherein the majority of people were physical laborers into a stage of society where the labor for a larger portion of men requires them to lift nothing heavier than a fountain pen. The man who most needs caution in his eating is the business man who was either engaged in physical labor in his younger days or brought up at a table where the serving habits were established by the needs of a previous generation of physical laborers. Such a man, as long as his health does not break, is usually proud of his appetite and continues by habit to eat a laborer's type of food while he is performing a clerk's duties. The result is either an overload of food energy, causing obesity and indigestion or an under supply of vitality elements, resulting in one or more of the numerous food deficiencies and consequent diseases.

The half knowledge of food scientists a generation ago made matters worse. A little knowledge is a dangerous thing, and it so happened that the earlier knowledge of food related almost entirely to their energy values. If we go back to the beginning of food science half a century ago we find the belief that meat, being composed of animal muscles, was the best

source of muscular energy. This notion was disproved when two scientists climbed Mt. Blanc and made careful observations of the amount of protein which they metabolized, and which can be accurately calculated by the nitrogen in the urine. This experiment proved that protein could not be the sole source of muscular energy; further study showed the true source of muscular energy to be oxidizable value of food as measured in calories.

Fat is the most oxidizable food and will supply about two and one half times as much energy per pound as any other type of food. Starches and sugars are the most abundant source of energy in the ordinary, diet. While of a lower calorie value per pound, they are consumed in larger quantities. Protein, whether muscle meat or from other sources may be utilized for the production of energy only by first being converted into a carbohydrate, which is then utilized for oxidation as sugar would be. That protein can be so utilized is shown by the fact of carnivorous animals living on lean prey. But all the protein cannot be so utilized and there is always a nitrogenous element which becomes a waste product and must be eliminated in the form of urea.

With the knowledge that this fuel energy value of foods was the source of bodily heat and physical work came the scheme of measuring all foods by calories—a conception of foods which tells only a part of the truth and is often worse than useless knowledge. Properly understood the caloric value of foods is im-

portant information, whether it be applied to the cutting down of calories for the fat man who is getting too many of them, or to figuring up of calories to find the most economical diet for a man doing physical labor.

The notion that lean meat is a good energy food is popular the world over. It has this much scientific basis. When lean meat (protein) is taken in excess of the body's true protein requirements, the result is that the excess is immediately destroyed as protein, and the excessive nitrogen is eliminated. This frees a certain amount of carbohydrate material in the protein which is immediately available as fuel for energy production and which seems to be burned as if to get rid of it. This effect can actually be measured by the increase of heat generated by the body during the digesting and disposing of a meat meal as compared with a low protein meal.

For this reason meat is certainly a bad warm weather food as it generates heat whether we need it or not. It is possible that part of this energy can be diverted to heavy physical labor just as an extra supply of fuel thrown into the fire will speed up an entire engine. That is the latest scientific theory for the use of meat in the laborer's diet. It is not a very important factor and probably forms but a small part of the explanation of why the workingman wants his meat. That want is more largely based on the fact that a man doing heavy work has a good appetite and meat tastes good to him.

This question of whether meat increases the power to do work has been much argued. Indeed most of the old fashioned vegetarian debates center around the relative strength of the lion and gorilla.

Mr. Bernarr Macfadden while wrestling in his younger days made an effort really to determine whether meat would add to his power in the sport. Here is his conclusion:

"In my own experience as a wrestler many years ago I tried out various kinds of diet and observed their effects upon myself very carefully. I found that meat would increase my actual strength but would lessen my endurance. I could lift a heavier weight under the influence of the diet in which meat was liberally supplied, but I could not lift a lighter weight so many times. I also discovered that eggs did not have this effect on my endurance though they seemed nearly, if not quite, equal to meat as a means of supplying immediate strength.

"Both strength and endurance were essential to my work as a wrestler, and I adopted, after many experiments, a diet containing limited quantities of meat. I did not use meat oftener than once in two to four days and the bulk of my diet consisted of eggs, whole wheat bread, vegetables and fruits. Upon this diet I maintained such fitness that no competitor ever gained a single fall out of me in my favorite style of wrestling, though many of them were fifteen to fifty pounds heavier than I."

This experience of Mr. Macfadden agrees with the

general view of those who have studied the question and found that meat is good for the immediate strength but bad for endurance.

In long distance races vegetarians have shown up better than meat eating competitors.

In the workman's diet the meat question comes down to this: He does not need meat to perform physical labor. Meat is a good source of immediate strength but an extravagant source of total energy. Meat tastes good—if one likes it—and through habit and notion gives one the impression that he is being well fed.

A strong man doing hard physical labor can consume meat in larger quantities with less danger of ill results than the man doing light work. This is not because he requires meat for the muscular exertion but because muscular action speeds up circulation and elimination so that it is easier to get rid of the excessive nitrogenous waste which comes from the meat diet. A man doing heavy labor has a rate of blood circulation that may be several times as rapid as that of a man who sits quietly at his desk.

Considering the above facts, meats are classed fairly well in our energy ratings for a diet for heavy physical labor. As a matter of fact the actual calories in meat depend chiefly upon how much fat is included. Fat meat is a cheap source of energy, while lean meat is an expensive source of energy, but meat of any kind is safer in a high energy diet than it would be in a low energy diet. Therefore we say the hard worker may eat meat if he wishes but caution him when he

lays down the shovel and takes up the pen, to lay aside also his appetite for big beef-steaks.

Considerable discussion has arisen concerning the type of diets used by the famous athletes. The fact that some well known prize fighter, swimmer or base-runner achieved his stunts on ordinary diet, is sometimes quoted as evidence that "food cranks" are all wrong and that all of us should eat, drink, and be merry today and call the doctor, when we die tomorrow.

It seems sound reason to assume that because the man who can knock a baseball further than any one else in the world is living on corn beef and cabbage, that corn beef and cabbage must be the most efficient diet. But your professional athlete consumes large quantities of food, because he has large expenditures of energy, and because of large amounts of food consumed he is less likely to suffer food deficiencies. On the other hand his large amount of exercise will help him more readily to eliminate any excess of food elements taken in addition to his needs. Food deficiencies being avoided by large intake and food excess being eliminated by extra circulation, the strenuous athlete is able to thrive on a diet that would be the ruin of health for the quiet little man who only reads about his hero's exploits. As long as stomachs hold out and kidneys do not break down any diet that yields enough total energy will enable the professional athlete to go on with his achievements. The trouble comes later when he quits his sport for quieter ways of life.

Another question often debated is whether a man

can perform as much work on the Physical Culture type of diet as he can on beefsteak and potatoes. The answer is this, that a sufficient source of energy of most any type will enable a man to keep going so long as his health and vitality are good. This is true alike of a conventional and a reform type of diet. The man who when put on a diet of bread and milk, or peanuts and figs, finds himself weak or unable to work without his steak and coffee is unconsciously using his dietetic prejudices as an excuse for laziness. He may be honest in his faith in the need of "substantial food," since the subconscious mind makes liars of us all, but his sudden weakness is of the mind and not of matter.

The hard working man requires a high calorie diet, but he does not need a table of calories to enable him to get it. All he needs is money in his pocket.

The man who is doing physical labor is the least likely to undereat if the food is available; he is also the least likely to overeat, and his overeating is going to do him less harm because of his activities.

The heavy worker is not often fat, though occasionally I meet a quarryman or a shovel artist who is impeded in his labor by too big a waist line. The fat laborer who actually labors and stays fat is of necessity an enormous eater. Such men are popularly considered the most robust of us all, yet they are actually short-lived.

I believe it will be most helpful in making clear the principles just pointed out—if you be given three contrasted types of menus. The first of these is for the

light worker—that is the individual taking little or no exercise and perhaps inclined to become fat. The second menu is for the man doing heavy physical labor, and this menu you will note includes many foods we would not recommend for others. The third menu is frankly a compromise menu suggested for the table of families where light and heavy workers eat together. Perhaps you will say: "Then why do we need any other kind?" The answer is that some of you will need the other types either because your hard worker will insist upon the foods he has been used to—and which he can safely use—or, because light workers, especially if they tend to become fat, will find the temptation too great to overeat when they are set down to a table of foods substantial enough to satisfy a stone mason's appetite.

On the next three pages are given three sets of menus—one for light workers only, one for the heavy worker, and one, a compromise between the two types of workers.

Menus for Light Workers Only

FIRST DAY

Breakfast

Grapefruit
Flaked Cereal with Cream
Glass of Milk

Luncheon

Lettuce and Tomato Salad
Chicken or Sardine
Sandwiches
Fruit Gelatine Dessert

Dinner

Cream of Asparagus Soup
Salmon Patties
Orange Gelatine
Grape Juice

SECOND DAY

Breakfast

A Soft Boiled Egg
Slice of Whole Wheat Toast
Glass of Orange Juice

Luncheon

Cabbage and Celery Salad
Dates and Cream Cheese
Junket for Dessert

Dinner

Tomato Soup
Chipped Beef on Toast
Pineapple Salad
Lemonade

THIRD DAY

Breakfast

Grapefruit
A few Raw Figs eaten
with Nut Meats
Glass of Milk

Luncheon

Spinach with Egg
Bran Muffins and
Orange Marmalade
Combination Fruit Cup

Dinner

Cream of Celery Soup
Cottage Cheese Salad
Peach Gelatine
Orangeade

FOURTH DAY

Breakfast

Jelly Omelet with
Whole Wheat Toast
Glass of Orange Juice

Luncheon

Creamed Codfish
String Beans
Grapes or Peaches
Cup of Custard

Dinner

Cream of Onion Soup
Tomato Omelet
Ice Cream
Cranberry Juice Drink

Menus for the Heavy Worker Only

FIRST DAY

Breakfast

Oatmeal
Bacon and Eggs
Biscuits
A Dish of Prunes
Cereal Coffee

Luncheon

Mutton Stew with Vegetables
Corn Bread
Potato Salad
Pumpkin Pie

Dinner

Green Pea Soup
Beefsteak and Mashed Potatoes with Gravy
Stewed Turnips
Milk or Cocoa
Apple Pie and Cheese

SECOND DAY

Breakfast

Buckwheat Cakes and Sausage
Stewed Figs
Cup of Cocoa

Luncheon

Baked Pork and Beans
Cabbage Slaw
Cranberry Sauce
Rice Pudding

Dinner

Beef Soup
Boiled Beef with Cabbage and Potatoes
Milk or Cocoa
Fig Pudding

THIRD DAY

Breakfast

Oatmeal and Cream
Ham and Eggs with French Fried Potatoes
Sliced Bananas
Cereal Coffee

Luncheon

Macaroni and Cheese
Green Peas
Corn Bread
Apple Sauce
Cocoanut Pie

Dinner

Navy Bean Soup
Pork Chops with Sweet Potato
Cranberry Sauce
Milk or Cocoa
Raisin Pie

FOURTH DAY

Breakfast

Waffles and Syrup with Bacon
Stewed Apricots
Cup of Cocoa

Luncheon

Boiled Ham with Kraut
Sweet Potatoes
Bread Pudding

Dinner

Cream of Potato Soup
Baked Fish or Chicken with Rice or Hominy
Stewed Tomatoes
Milk or Cocoa
Peaches and Cream with Cake

Compromise Menus for the Light and Heavy Workers

FIRST DAY

Breakfast

Soaked Prunes
Poached Eggs on
Whole Wheat Toast
Glass of Milk

Luncheon

Lettuce Salad with
Cream Cheese and Ripe Olives
Baked Parsnips
Boiled Wheat Pudding

Dinner

Tomato Soup
Liver and Bacon
Boiled Beets
A dish of Berries or Peaches
Milk

SECOND DAY

Breakfast

Baked Apple and
Cream
Bacon and Eggs
Bran Muffins
Glass of Milk

Luncheon

Salmon Salad
Baked Potatoes with
Butter
Whole Wheat Bread and
Fruit Preserves
Milk

Dinner

Cream of Potato Soup
Lamb Chops with Baked
Potato and Spinach
Custard
Grape Juice

THIRD DAY

Breakfast

Whole Wheat Waffles
with Honey or Fruit Jam
Glass of Milk

Luncheon

Meat or Nut Loaf
Stewed Tomatoes
Baked Squash
Fruit-Nut-Gelatine

Dinner

Chicken Soup
Chicken Salad with
Cranberries and Celery
Pears or Plums
Milk or Buttermilk

FOURTH DAY

Breakfast

Baked Apple
Shredded Wheat or
Grapenuts
Cup of Cocoa

Luncheon

Chicken Fricasee with
Rice
Cabbage Slaw
Cranberry Sauce
Walnut Cake and Ice Cream

Dinner

Green Pea Soup
Fried Oysters
Kale or Spinach
Bran Muffins with
Stewed Fruit

CHAPTER VII

The Prevention of Constipation

CONSTIPATION has been named the mother of diseases. It is also a disease on its own account. The insurance of the correct rate of passage of the food through the intestines and the proper and normal evacuation of the residue is one of the most important phases of the diet for health.

The neglect of this effect in food selection, whether from ignorance, carelessness or a sense of squeamish delicacy, is a greater factor in the production of ill health than any other phase of diet.

The civilized tendency to refine foods is in a large measure responsible for the modern prevalence of constipation—the mother of diseases. One of the strongest arguments in favor of natural foods, as long advocated by *Physical Culture,* is in the remedy of this fault of the conventional diet.

Probably some confusion exists between the idea of the natural coarse or fibre-containing food and the food that is rich in the chemically vital elements. The confusion of these ideas comes largely from the advocacy of whole wheat in the place of white flour products. Wheat bran is one of our best fibre or cellulose containing foods. The wheat bran and germ also rate better than white flour in vitamins and salts. Hence the advocacy of the whole wheat is

for more than one purpose. If the problem of constipation is otherwise properly taken care of and the vitamin and mineral elements provided for, and the thorough mastication which the firmer whole wheat bread encourages is not neglected, then indeed white flour bread might be used without harm.

But we do not approve of white flour for the simple reason that the use of whole wheat products is the simplest and surest way of taking care of all these problems.

However it comes to be, the fact is that man is born into the world with an intestine that is planned to carry a given load of fibre or non-digestible residue. Other species of animals have more or less capacity in this respect according to the kind of diets for which they are fitted. A cow has a very large intestinal capacity and is built to live on grass. Human foods would give her a dreadful case of constipation. The cat on the other hand has a relatively small intestine and is fitted to live on meat. The cat simply couldn't handle cow food as she would have no place to put it.

Man's natural diet lies in between these two extremes and he has made the mistake, under civilization, of trying to live on a cat's diet of fibreless food. The result is that it takes about a week for him to accumulate sufficient indigestible residue to give the large intestine enough traction on the load to move it along.

If our indigestible food residues were all that there was in the intestine it wouldn't make much difference. But there are a lot of other things in that part of the

anatomy. There are the excretions from our general physiological functionings, some of which were designed to find an exit from the body along with the food wastes. There are also bacteria and their waste products. These bacteria live on both the food residues and the body wastes. The longer these "bugs" remain in their fertile feeding grounds the more numerous they become, and the decomposition products of their activities are most offensive, and in some cases actually poisonous.

The disease or body poisoning comes in from the re-absorption of both our own body wastes and the wastes of the life activity of these germs of decomposition. Of recent years the effect of the absorption of such poisons has been termed auto-intoxication, and this does not refer to being drunk with the idea of joy riding.

The greatest factor in the cause of constipation is the use of refined, fibre-free foods—these artificial foods of man's civilized ingenuity that have only the food elements left in them and the non-food elements taken out, and so fail to leave an indigestible residue. As a result of the use of such foods the bowel fails to clear itself and the foods, so nicely refined and cleaned of their non-food elements, become sources of poisoning and disease.

A contributing factor to this main cause of constipation is the decreased physical activities of civilized man. This aggravates the situation in several ways. For one thing it decreases the food consumption re-

quired, and hence by that proportion the amount of food and of food residue in the alimentary passage.

To attempt to eat more food when it is not required by the bodily activities is not a remedy, because the antidote becomes worse than the poison. Surplus food that is digested and absorbed leads to obesity and a host of other forms of disease; while the portion left undigested, being more readily decomposable than fibre, leaves that much greater a mass of material for the bacterial putrefactions, so that evil from such constipation as exists becomes much greater.

Lack of physical activity decreases the muscular development of the body. This means weaker muscles in the diaphragm and abdominal wall—which are instrumental in expelling the body wastes. The general lack of development of the voluntary muscles probably also results in a lower tone of the actual muscles in the intestinal walls. Lastly, the reduced activities of the body decrease the massaging effects or the pushing and churning about of the intestines, all of which would help to move the food residues along their way.

When decreased bodily activities occur they are generally parallel to increased refinement of foods. White collars and white flour generally travel hand in hand, both being the signs and trade marks of the sissiness of super-refinement and softness and laziness of civilization. With the refinement of food and the decrease of intestinal action comes a further decrease,

because of the decay of the muscles of the intestine from lack of exercise of those muscles.

Yet another factor of civilized and indoor life that abets constipation is that social and working hours and habits render the act of defecation more inconvenient and more easily postponed. So to the causes of constipation already enumerated is added the *habit of constipation,* which grows from what it feeds on, as the periods between the bowel evacuations become longer and more irregular.

So you have the causes stated and their statement suggests the remedy to all logical minds—the remedy being the removal of the causes. But all minds are not logical, and especially not when there is money to be made by being illogical. Now it so happens that a thousand odd years ago some searcher after poisons wherewith the king could kill his superfluous wives, discovered that certain chemical or drug substances had the power to cause the contents of the bowels to be expelled hastily and unnaturally.

Physics, purges or laxative drugs have always been and still are the mainstay of the medical and drugging business. Probably half of all of the medicines ever given or taken in the world have been of this nature and for this purpose. "Physic" in the olden language is used as a term synonymous with medicine. Shakespeare said "Throw physic to the dogs, I'll have none of it." Neither would the dogs for that matter!

The first thing when the doctor comes is a dose of physic; and the commonest advice as to what to do

before the doctor comes is to give a dose of physic and then maybe he won't need to come.

Any druggist will tell you that if you took the bowel-moving medicines off his shelves he would have to give up his business. Once the doctors' supreme tool, physics have become the greatest of the self-administered medicines, with the result that the doctors had to invent new and disguised kinds.

Why all this medical physicing? Because constipation is the mother of half of the diseases and the step-mother of the rest of them; it is a good bet that if we destroy the mother the orphan may perish. And the doctor called in an emergency is right enough, perhaps, in giving his physic, for he wants to show quick results and that will do it. But the use of physic continually is a poor crutch; yes, it is worse than a crutch; it is like a sling remaining on an arm that has healed and keeping it from full recovery.

Drug remedies for constipation do not remove the causes and do not effect a cure. They merely purge the bowel of its contents by causing a copious flow of water from the bowel walls in an effort to wash out the offending substance—very like quinine will cause water to flow in the mouth so that one may spit out the bitter poison. All poisons do not react in this fashion but some do and these are the ones that are useful as physics. Of course they cannot be violent poisons. There are in fact some food substances such as common salt or green fruit which act as a physic when taken in a sufficient dose.

But the principle is all wrong. At best being physiced is being given an artificial diarrhea, a condition in which digestion is interrupted by the forcing of the half-digested material out of the body along with the decomposing residues and excretory matter. I believe there are cases when this wrong method of cleansing the bowels may be justified by the need of haste, or the lack of other remedies being available. But such desperate situations should not often be got into and will not be by any intelligent man who has learned how to care for his health. As for the habitual use of physic, it has no justification or excuse except ignorance and indifference to health.

A far better remedy is the resumption of the physical activities, the lack of which has been one of the contributing causes. Special exercises to massage the abdominal contents and to strengthen the abdominal muscles are good, yet it is foolish to depend upon them to the neglect of the primary remedy of restoring the natural food fibre to give the bowels something to work on.

The internal bath or enema is also a very useful remedy and a much safer one than drug purging. It does not effect the action of the small intestine, and in that fact lies both a disadvantage and an advantage. The conjestion and clogging is much more abundant in the large intestine, yet the action of the small intestine is also important. The enema does not reach it, whereas the physic does—and cleanses it of both what should be removed and what should remain. The proper diet

keeps the whole intestinal content moving along at right speed, and is therefore better than either physic or enema.

Last of our non-food remedies for constipation is the use of an intestinal lubricant as distinguished from either natural foods or unnatural drugs. Mineral oil has this function of being non-digestible as are the food-fibre residues, and also of being lubricating. The action is not that of the purge which causes water to be secreted into the intestine, for oil is physiologically inactive and merely lubricates the passage.

The use of mineral oil as an intestinal lubricant I believe to be an important discovery and I wholly approve of it, but it should be used as a supplementary remedy along with proper foods.

You will note that I list mineral oil as a "food" for this purpose. You may note that it was also listed as a food for the purpose of reduction. If food be defined as only those substances that are digested, this is a mis-classification. But if we took into our mouths only substances that were completely digested we would die. Hence, I prefer the more practical definition of food as anything from which we benefit by swallowing it. This classifies mineral oil as a very excellent food for the two purposes as rated.

Agar, likewise has no digestible food value but rates high as a food for either reduction or constipation.

The rating of foods for their effect in preventing constipation depends chiefly upon the amount of fibre present in them. By fibre in natural foods we mean

the cellulose. Wood is cellulose, so is cotton, and so is paper which is made from wood or cotton. Linen and hemp are other examples of nearly pure cellulose. Agar is also pure cellulose but is peculiar in that it is soluble in hot water and forms a jell upon cooling. It is an excellent remedy for constipation.

Man does not eat wood or cotton because while he needs cellulose he doesn't need that much of it. But lesser proportions of similar fibrous substances exist in nearly all plant structure. The plant substances selected for food are indeed those that have the least cellulose, and the most digestible non-fibre material But uncivilized man was not able to find enough food material wholly free from this fibre to adapt or evolve his digestive apparatus to work on a fibre-free diet. The average amount of cellulose that existed in the natural foods which he did select—fruits, nuts, seeds, tender shoots and leaves, roots and tubers,—gave a diet with a moderate amount of cellulose, and to this diet man's digestive tract became fitted to function. More cellulose would mean a lack of enough digestible materials. Men eat that way during famines and live as miserable skeletons on a goat's diet of grass and leaves and bark. But the other extreme of eliminating all cellulose is nearly as bad and introduces us to the mother of disease.

It took the invention of a knife to enable man to peel apples and potatoes. It took the invention of mills and bolting cloth to enable him to peel wheat and corn. It took the invention of presses and evapora-

tion to enable him to get the sugar out of beets and throw the fibrous pulp away. All this cleverness in eliminating the woody peels and fibre of foods seemed clever, but it was too clever, the thing was over-done; and half the world is sick because of it!

If you take the list of modern foods as they come to the table and think them back to their natural sources you will find that a very great number of them have been de-fibered. From this fact, and its known ill consequences on health, has come the idea of going back to nature in matters of diet and eating things only as they grow. However, that is a crude conception of the problem.

For instance, it doesn't work well with meats—at least we don't want to work it. A snake can swallow his chicken or rabbit, hide and hair, but I prefer mine peeled. The meat diet, as we take it is always de-fibred. The Esquimo gets by with it, and he consumes a lot of excess fat, all of which is not digested, and so he gets an intestinal lubricant. Milk and eggs and fruit juices all are decidedly fibre-free, but that is not a reason for condemning them. They have other excellent qualities.

There is in fact no occasion to condemn any food solely because it is free from fibre; it is the diet or the intake for the meal or the day that should have its correct quota of fibre. The reason why we rate high the fibre foods such as bran is because they are the best *corrective* foods for the fibre deficiencies of the conventional diet—not because they would be suitable

foods for an entire diet. Whereas in some of our previous-purpose ratings one should select all "AAA" foods for best results, it would hardly do under this heading. However, there are few foods that have the extreme laxative effect of bran, and the majority of our good laxative foods such as whole wheat and many fruits and vegetables—foods of the general type of the natural diet of primitive man in this respect are rated as "AA."

Since it is the total amount of fibre left from the digestion of the food as a whole that produces the effect, common sense should tell you that this amount can either be derived from a lesser quantity of very fibrous foods or from a somewhat greater quantity of food carrying a lesser quantity of fibre. Which type of food to use will therefore depend on the other foods used and upon your own tastes and conveniences in the matter.

Other than the fibre content of foods there are certain chemical effects that have to do with proper bowel action. Thus milk; while it may prove constipative in the sense of not encouraging frequent bowel movements, yet because it yields a safer type of intestinal residue and a less harmful sort of bacterial growth is decidedly safer in connection with constipation than either meat or eggs. Cheese, on the other hand, while classed as equal to milk in growth effect does not rank as well in respect to bowel residue and bowel action. The difference between milk and cheese is due to the

milk sugar—this milk sugar is removed in making cheese.

When constipation is present protein foods give much more evil effects because of the putrefaction of the undigested proteins. The presence of carbohydrates in the intestine results in a different type of bacterial growth which gives an acid medium and checks the growth of the alkaline-loving protein putrefiers, which generate the poisons that cause the auto-intoxication. Hence while carbohydrate foods may be as constipative in a mechanical sense they deserve better ranking in an anti-constipation table because they are not chemically as offensive.

Leafy greens do not give as cleanly an intestinal residue as does bran. For cleaning out the bowel thoroughly, as at the beginning of a fast, nothing seems as efficient as a combination of mineral oil and bran.

In the ratings we have tried to take all of the above principles into consideration. The "AAA" rating is limited to those few materials which are decidedly remedial and a small portion of which in the diet will overcome the constipating effects of other ingredients.

The "AA" ratings are given to those foods which carry ample fibre or other non-constipating elements to eliminate their own residues and perhaps act somewhat remedially for the remainder of the diet.

The "A" rating is neutral, being neither particularly constipating nor remedial of that effect.

The foods not rated are those generally accepted as decidedly constipating.

In applying these ratings in selecting a diet you must remember that constipation is an individual factor and much depends on how well established is the habit of constipation. We can say that a lettuce diet is reducing or a cream diet fattening with much more certainty than we can say that a given food will produce a given effect on bowel action. Some people would remain constipated on whole wheat bread and some would have loose bowels on white bread.

There is also a confusing factor because people who are used to "curing" constipation by physics assume that they are constipated unless their bowels are actually loose. Since loose bowels are caused by incomplete digestion, this condition may be brought about from any number of causes, including the use of foods which are really constipating but which may give indigestion to some people and hence a diarrheal condition that eliminates the constipation for the time, not by curing it, but by causing an opposite disease. In healthy bowel action the passage moves frequently and easily but it is not liquid in form.

At best we must admit that there is an individual factor involved that cannot be reduced to the same system for every one. But in our rating tables we can give you a general guide that should assist you in working out a type of diet which will give best results for you.

Under the previous heading we have suggested

sample menus but will not do so under this head because constipation is largely an individual matter and is usually solved by the addition of a few special dishes.

Mineral oil is a very effective remedy for constipation, especially when used in addition to proper fibre-containing foods. It should not be taken "before retiring" as a medicine but taken immediately after a meal, or better still served with other food in a meal Mineral oil can be poured over bran or the cereal and is not unpalatable. It can also be served as a salad oil in any way that salad oil is used. Mineral oil should never be used in cooking but only in preparing uncooked dishes. The total amount served for the day should not exceed the amount required for bowel lubrication.

Of the strictly food remedies for constipation the best and most widely used is bran. Bran will have the same essential effect whether it is taken with the rest of wheat as whole wheat or used as the separate bran. It is all a matter of how much you find you require.

The advocates of either type of product will naturally argue in favor of their product. The whole wheat people will say that you should take your bran in its natural form with the other ingredients of the wheat—and this is all right if you eat enough of whole wheat or whole wheat products to get the quota of bran you need. The bran advocates will tell you that if bran is a good thing you ought to have pure bran instead of bran combined with flour or other parts of the grain.

This argument does have a practical point to back it up, in the fact, with the less concentrated form of bran-containing foods it is sometimes hard to get enough of it. But to this argument the whole wheat people can come back and say: "Yes, but our product is more palatable than pure bran, and hence you will stick to it better and so in the long run get more bran." Then the other man comes back and says: "Yes, but our bran *is palatable.*"

So you see it is a matter of individual choice and the only sensible thing to do is to try all kinds and ways of eating bran and then choose the one you like the best and stick to it.

In addition to the use of bran straight merely for remedial purposes, it may be used in numerous ways in breads, muffins, etc. The total amount of bran consumed daily is the important point rather than the form in which it is taken.

The making of bran muffins is generally understood but not so many people know how to make a bran yeast bread. The following recipe will therefore be helpful:

BRAN YEAST BREAD

1½ cups bran
1½ cups boiling water
1 tablespoon shortening
1½ teaspoons salt
1/3 cup molasses
1 yeast cake
½ cup luke warm water
4 cups bread flour

Pour boiling water over the bran. Add the shortening, molasses and salt and let the mixture stand until lukewarm. Add the yeast which has been softened in

lukewarm water. Sift in the flour. Beat well. Let the dough rise until double in bulk. Beat and put into a greased bread pan. Let rise again. Bake in a moderate oven (400 degrees to 370 degrees) for fifty minutes.

WHOLE WHEAT BREAD

13½ cups flour	1 level teaspoon butter
5 cups luke warm water	2 level teaspoons salt
1¼ cups milk	3 level teaspoons sugar

1 cake yeast

In conclusion I here give a recipe for making whole wheat bread, for this splendid food is an excellent remedy for constipation as well as a staff of life in a health diet in general.

Put yeast in a cup of luke warm water and set aside to dissolve. Mix sugar, salt and butter with four cups of water and then add the dissolved yeast. Be sure the mixture is warm. Next add the flour and turn in a bread mixer for seven minutes. Cover the mixer and let stand at a temperature of about eighty degrees until it rises to twice its bulk. This should take about four hours. If the temperature is not high enough it will take longer and probably not turn out so well. This dough should fill three large pans about half full and should be allowed to rise in the pans for about twenty minutes, in a warm place. After rising it should fill the pans. Bake for about fifty to sixty minutes, then remove from oven, butter the loaves and let stand to cool.

CHAPTER VIII

Our New Food Rating Tables

IN the following tables all American foods in general use are rated for the five purposes that have been fully discussed in the preceding chapters.

You will note that there are four degrees of quality or effect for which the foods are rated under each head. The highest rating is "AAA" which means very superior quality or a high degree of the effect being considered.

In many cases this means a curative or remedial effect that will do much to offset lack of the same quality in other ingredients of the diet.

The second highest rating is "AA," and this indicates a very good effect but somewhat less in degree or intensity than the "AAA" rating.

The single "A" rating may be considered a neutral effect, being for the purpose considered neither an improvement in the general menu nor one giving an opposite effect.

The foods that have "—" in the rating space are without value for the purpose under consideration and may in practice be considered contrary to or harmful for that purpose.

THE LEADING BRANDS OF APPROVED FOODS ARE NAMED

Following the ratings of each kind of food we give

the leading brands of that food which are packed, manufactured, and are on general sale in the United States. (Where the name of the brand has been used to indicate the kind of food, as "Grapenuts" or "Shredded Wheat," the brand is not repeated after the ratings.)

The appearance of a brand of food in this list indicates that to the best of the writer's knowledge and belief such brand is a pure and wholesome representative of the food and entitled to the ratings given under the general heading of that particular kind of food.

Our object in listing these brands of foods has been to offer practical suggestions in the purchase of good foods and to connect up these suggestions with the food ratings to indicate the specific use, values and effect that may be expected from them.

It should be noted, however, that it has not been practical to list every brand of food that may be on sale in various parts of the United States, and your purchases should be guided by the general rating of the kind or type of food as well as by the specific mention of the approved brands.

We have, however, intentionally refrained from listing any brands of those kinds of food, the use of which we believe should be discouraged, as for instance, white flour, cane sugar and meat products.

Fruits

APPLES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

FRESH	CANNED	DEHYDRATED
Skookum	Curtice	King's
Wenatchee	Del Monte	Magic Chef

APRICOTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	*A*	*A*

DRIED	CANNED	DEHYDRATED
Sunsweet	Del Monte	Carque's
	Libby's	King's
	Monarch	Magic Chef

AVACADO

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*AA*	*A*

BANANAS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

BLACKBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

CANNED

Curtice
Del Monte
Libby's

BLUEBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

CANTELOUPE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	*AAA*	—	*A*

CHERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

CANNED

Curtice
Del Monte
Libby's
Monarch
Snider's

CITRON

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*A*

DRIED

Dromedary

CRANBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

Eatmor (American Cranberry Exchange)

CURRANTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

DATES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

DRIED

Dromedary
Carque's

FIGS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AAA*

DRIED

Bishop's Calarab
Blue Ribbon
Carque's Black Mission

CANNED

Lindlahr's Black Mission
Dromedary
Purple Ribbon

GOOSEBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	—	*A*

GRAPES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*AA*

CANNED

Del Monte
Libby's

GRAPEFRUIT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

FRESH

Blue Goose

CANNED

Curtice
Dromedary
Monarch Grapefruit Hearts
Robinson's Sweet Hearts of Grapefruit
Robinson's Sweet Meat of Grapefruit
Royal Brand
Spanish American Grapefruit Hearts

HUCKLEBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	—	*AA*

JAMS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	*A*

CANNED

Armour's
Battle Creek Marmalade
Beechnut
Chiver's
Crosse & Blackwell's
Curtice Blue Label
Daggett's
Del Monte
Gibbs'
Geneseo Jam Kitchen
Gordon & Dilworth
Heinz
Leggett's Premier
Libby's
Monarch
Red Wing
Robertson's
Snider's
Welch's
Wilson's

JELLIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	—

CANNED

Armour's
Beechnut
Curtice Blue Label
Del Monte
Geneseo Jam Kitchen
Heinz
Libby's
Welch's
Wilson's

LEMONS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

FRESH

Sunkist

LOGANBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

CANNED

Del Monte
Libby's
Monarch

DEHYDRATED

King's

MUSKMELON (*see Canteloupe*)

OLIVES, GREEN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	*A*

CANNED

American Importers of Spanish Green Olives
Carque's
Cresca
Del Monte
Gulden's
Heinz
Leggett's Premier
Libby's
Monarch
Van Camp's

OLIVES, RIPE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

CANNED

California Ripe Olives Association, Brands (Sunripe)
Albers'
Carque's
Del Monte
Ehmann
Gifford's
Heinz
Heniet
Ideal
Leggett's Premier
Libby's
McNally's
Mt. Ida
Old Mission
Olivedale
Rocca Bella
San Juan
Sierra
Sunland
Sylmar

ORANGES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

FRESH

Satsuma
Sealdsweet
Sunkist

PEACHES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	—	*A*

DRIED	CANNED	DEHYDRATED
Blue Ribbon	Curtice	Carque's
	Del Monte	
	Geneseo	
	Libby's	
	Monarch	
	Purity Cross	
	Sniders'	

PEARS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	—	*A*

FRESH	CANNED	DEHYDRATED
California Bartlett	Del Monte	King's
	Curtice	Carque's
	Geneseo	
	Libby's	
	Monarch	
	Purity Cross	
	Snider's	

PERSIMMONS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

PLUMS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	—	*AA*

CANNED

Curtice
Del Monte
Libby's

PINEAPPLE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

FRESH

West Indian

CANNED

Del Monte
Hawaiian, grated
Hawaiian, crushed
Libby's
Monarch

PRUNES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AAA*

DRIED

Mistland
Sunsweet

DEHYDRATED

King's

CANNED

Carque's
Geneseo
Libby's
Lindlahr's
Richardson & Robbins'

QUINCE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*A*

RAISINS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

DRIED

Carque's
Del Monte
Sun-maid

RASPBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

CANNED

Curtice
Del Monte
Geneseo
Libby's
Monarch
Snider's

STRAWBERRIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

CANNED

Curtice
Del Monte
Libby's
Purity Cross
Snider's

TOMATOES

(Tomatoes are classed as a fruit in nutritional effect, but are also listed under the usual vegetable classification.)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

WATERMELON

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	*AAA*	—	*A*

Vegetables

ASPARAGUS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AA*

CANNED

Del Monte
Libby's
Monarch

ARTICHOKES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

BEANS, STRING

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AA*

CANNED

Burnham & Morrill's
Del Monte
Monarch

BEANS, LIMA *(Fresh)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	*A*

CANNED

Burnham & Morrill's
Curtice Blue Label
Purity Cross
Snider's

BEANS, LIMA *(Dry)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

BEANS, NAVY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

BAKED

Armour's
Beechnut
Burnham & Morrill's
Campbell's
Del Monte
Heinz
Libby's
Marshall's Brown Beauty
Monarch
Snider's
Van Camp's
Wilson's

BEANS, SOY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	—	*AA*	*A*

Height's Soy Bean Flour

BEANS, RED KIDNEY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

CANNED

Curtice Blue Label
Del Monte
Heinz
Monarch
Snider's
Van Camp's

BEETS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	—	*A*

CANNED

Curtice Blue Label
Del Monte
Leggett's Premier
Libby's
Monarch
Snider's

BEET TOPS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AA*

BRUSSELS SPROUTS

AAA	*A*	*AAA*	—	*AAA*

CANNED
Del Monte

CABBAGE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

CANNED
Burnham & Morrill's
Del Monte
Libby's

DEHYDRATED
Magic Chef

CARROTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	—	*AA*

CAULIFLOWER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AAA*

CELERY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AA*

CHARD

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AAA*

COLLARDS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

CORN, FRESH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	*AA*

DEHYDRATED
Magic Chef

CANNED
Curtice Blue Label
Del Monte
Leggett's Premier
Monarch
Purity Cross
Snider's

CUCUMBERS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	*AAA*	—	*AA*

DANDELIONS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

EGG PLANT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	—	*AA*

ENDIVE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

GARLIC

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

GREENS (*see Various Leaf Vegetables*)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

KALE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

KOHLRABI

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

KRAUT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AAA*

CANNED

Armour's
Curtice
Del Monte
Heinz
Libby's
National Kraut Packers
Snider's
Van Camp's
Wilson's

LEEKS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

LETTUCE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

LENTILS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

Goldmark's Royal

MUSHROOMS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

MUSTARD LEAVES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

OKRA

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

ONIONS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

PARSNIPS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	*A*

CANNED

Burnham & Morrill's

PARSLEY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

PEAS, DRY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

PEAS, GREEN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*A*	*A*

CANNED

Curtice Blue Label
Del Monte
Leggett's
Monarch
Purity Cross
Snider's
Van Camp's

PEPPERS, GREEN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AA*

CANNED
Del Monte

PIMIENTOS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AAA*	—	*AA*

CANNED
Del Monte

POTATOES, IRISH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*A*	—

POTATOES, SWEET

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*A*	—

CANNED
Del Monte
Libby's

PUMPKIN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*AA*	—	*A*

CANNED
Curtice
Del Monte
Libby's
Van Camp's

DEHYDRATED
Magic Chef

RADISHES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*AA*	—	*A*

RHUBARB

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

RUTABAGAS

AA	*A*	*AA*	—	*A*

SALSIFY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

SPINACH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AAA*

POWDERED	CANNED	DEHYDRATED
Magic Chef	Del Monte	King's
	Libby's	Magic Chef
	Monarch	
	Snider's	
	Van Camp's (Calif.)	

SQUASH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*AA*	—	*A*

CANNED

Curtice
Del Monte

TOMATOES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

CANNED

Curtice Blue Label
Del Monte
Libby's
Monarch
Purity Cross
Richardson & Robbins'
Snider's

TURNIPS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

WATERCRESS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	—	*AA*

Animal Products

BUTTER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AAA*	*A*

BUTTERMILK

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*AA*	*A*	*AA*

CHEESE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*A*	*AAA*	—

Ancre
Baumert
Elkhorn
Kraft
Liederkranz
Mac Laren's
Monroe
Moxley's
Pabst
Phenix
Sharpless
Shefford

CHEESE, COTTAGE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AAA*	*AAA*	*A*	—

CHEESE, SOFT CREAM

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*A*	*AA*	*A*

Philadelphia

CREAM

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	*A*	*AA*	*A*

Klim Brand Powdered Cream
Alpine Evaporated Cream

COD LIVER OIL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*AAA*	*AA*	*AAA*	*A*

Scott's Emulsion
Squibb's

EGGS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*AA*	*A*	—

EGG WHITES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	*AAA*	—	—

EGG YOLKS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*AAA*	*A*	*AA*	*A*

GELATINE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*AA*	*AAA*	*A*	*A*

Cooper's
Cox's
D-Zerta
Jello
Knox's
Minute
Royal

ICE CREAM

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	*A*	*A*	*A*

JUNKET (*of Whole Milk*)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*AA*	*A*	*A*

Hanson's Junket Tablets

MILK, FRESH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*AA*	*A*	*A*

MILK, EVAPORATED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*AA*	*A*	*A*

CANNED, UNSWEETENED

Alpine
Armour's
Borden's
Carnation
Danish Pride
Dairylea
Libby's
Nestle's
Pet
Sealect
Van Camp's

MILK, CONDENSED *(Canned, Sweetened)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	*A*	*AA*	*A*

Borden's Eagle Brand
Clover
Lion
Libby's
Magnolia

MILK, POWDERED OR DRY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA.*	*A*	*A*	*A*

Dryco
Klim
Krystalak

MILK, SKIMMED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AAA*	—	*A*	*A*

MILK, CLABBERED, SOUR OR CULTURED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AAA*	*A*	*A*	*AA*

Fer-mil-lac
Kumyss
Zoolak

Cereals

BARLEY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	*A*

Robinson's Patent Barley
Farwell & Rhines Barley Crystals

BRAN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AAA*	*A*	*AAA*

Farwell & Rhines Bran
Jackson's Parched Bran
Johnson's Educator Bran
Kellogg's Bran
Pillsbury's Health Bran
Pettijohn's Bran
Post's Bran (See Bran Flakes)
Sanitarium Bran

BRAN FLAKES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	*AA*	*AAA*

Post's Bran Flakes — Pep

CORN FLAKES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

Armour's Corn Flakes
Kellogg's Corn Flakes
Post Toasties
Quaker Quakies

CORN (*see Hominy*)

CORN MEAL (*Yellow*)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

FARINA

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

FORCE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*AA*

GRAPENUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

HOMINY, PREPARED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

HOMINY, WHOLE GRAIN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

H. O. OATS (*see Oatmeal*)

KELLOGG'S KRUMBLES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*AA*

MACARONI AND SPAGHETTI

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

PACKAGE	COOKED AND CANNED
American Beauty	Beechnut
Fould's	College Inn
Golden Age	Franco-American
Goodman's	Heinz
King Midas	Libby's
Maas	Purity Cross
Mother's	Van Camp's
Mueller's	
Skinner's	

MALT-O-MEAL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*AA*

OATMEAL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*A*

ROLLED OATS	STEEL CUT OR GROATS
Armour's	(Scotch & Irish)
Hecker's	Douglas' Scotch
H-O Oats	Grant's Scotch
Mother's	Inglis' Scotch
National	McCann's Irish
Purity	Robinson's Scotch
Quaker	
3-Minute Oat Flakes	

PHOSFO

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

POST TOASTIES *(see Corn Flakes)*

RALSTON WHEAT FOOD

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

ROMAN MEAL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

RICE, PUFFED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

RICE, BROWN OR UNPOLISHED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*A*

Carque's
Comet
Leggett's Premier
Lindlahr's

RICE, WHITE OR POLISHED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

RICE-O-LA

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*A*

RYE, ROLLED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

SHREDDED WHEAT (AND TRISCUIT)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

SPAGHETTI *(same as Macaroni)*

TAPIOCA *(listed under Starches)*

UNCLE SAM'S HEALTH FOOD

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

WHEATENA

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

WHEAT, CRACKED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

Carque's
Great Valley Mills
Tyler's Macerated Wheat

WHEAT, PUFFED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*AA*

WHEAT, ROLLED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

Pettijohn's
Farwell & Rhines

WHEAT, WHOLE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

Berhalter's Cooked Whole Wheat
Whole Grain Wheat

Flour and Bakery Products

BISCUITS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

BREAD, WHITE FLOUR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

BREAD, WHOLE WHEAT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

Keepwell Bread
Ward's Homespun

BREAD, RYE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

BUCKWHEAT FLOUR (*Cakes*)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

Aunt Jemima
Hecker's
Pillsbury's

CAKE (*average recipe*)

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

CHEESE WAFERS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	—	*AA*	—

National Biscuit Co.
Loose-Wiles

COOKIES *(white flour)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

COOKIES *(bran or whole wheat flour)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	—	*AA*	*AA*

Genevieve Jackson's Honey Brannies

CORN BREAD *(made with egg)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

CORN MEAL, WHOLE GRAIN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

Great Valley Mills

CORN MEAL, DEGERMINATED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

CRACKERS *(white flour)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

CRACKERS *(whole wheat)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

Battle Creek Food Co.'s
Carque's
Educator Crackers
Holland Rusk Co.'s
Lindlahr's
Loose-Wiles Graham Crackers
N.B.C. Graham Crackers
N.B.C. Whole Wheat Wafers
Wheatsworth Crackers

CRACKERS *(oatmeal)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

Battle Creek Food Co.'s
N.B.C. Oatmeal Crackers

CRACKERS, GRAHAM *(see whole wheat crackers)*

DOUGHNUTS *(white flour)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	—

FLOUR, WHITE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

GRAHAM FLOUR

(Graham flour is the same as whole wheat flour)

FLOUR, WHOLE WHEAT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*AA*	*AA*

Carque's
Enright's "All O' the Wheat"
Farwell & Rhines (including pancake flour)
Franklin Mills
Hecker's
Klar's Good Health Flour
Pillsbury's
Purina Whole Wheat
Puritan
Wheatsworth (including pancake flour)

FLOUR, PREPARED PAN CAKE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

FRUIT CRACKERS AND COOKIES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*AA*

Battle Creek Food Company's
Jackson's Fig-gle Sticks
Lindlahr Fruit Crackers
Loose-Wiles Fig Bars
N.B.C. Fig Newtons
N.B.C. Raisin Fruit Biscuit

GLUTEN FLOUR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

Battle Creek Food Co.'s
Educator
Farwell & Rhines
Hoyt's

RYE FLOUR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

ZWEIBACK

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	*A*

Loose-Wiles
National Biscuit Co.

Meats

BACON

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	—

BEEF, LEAN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*AA*	*A*	*A*	—

BEEF, FAT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

BEEF, DRIED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*AA*	*A*	*A*	—

BRAINS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	—	*A*	—

HAM, CURED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

LIVER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*AAA*	—	*A*	—

MUTTON

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

PORK, FRESH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

VEAL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*AA*	—	*A*	—

Poultry

CHICKEN

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*A*	—

DUCK

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

GOOSE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

TURKEY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	*A*	—	*AA*	—

Fish

CLAMS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*AA*	—	—

Burnham's Clam Bouillon
Burnham's Clam Chowder
Burnham & Morrill's
Crown
Davis
Doxsee's

CODFISH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

Beardsley's
Burnham & Morrill's
Crown
Davis
Gorton's

CRABS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—
Crown				Davis

FISH PASTES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

Crosse & Blackwell

HERRING

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

Burnham & Morrill's
Davis
Marshall's

LOBSTER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*A*	—

Davis
Purity Cross

OYSTERS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*AA*	—	—

SALMON

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

Booth
Columbia River
Davis
Del Monte
Libby's
Wilson's

SARDINES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

Booth's Crescent Brand
Booth Fisheries
F. E. Booth
Frank E. Davis
Van Camp's (Calif.)

SHRIMP

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

Booth Fisheries
Crown
Davis

TUNA FISH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	*A*	*A*	—

Crown
Curtis
Del Monte
Van Camp's

Nuts

ALMONDS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	—	*AAA*	*A*

Blue Diamond
Carque's

ALMOND BUTTER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	—	*AAA*	*A*

Carque's

BRAZIL NUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	—	*AAA*	*A*

CHESTNUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*AA*	—	*AA*	—

COCOANUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

COCOANUT—PREPARED

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

Baker's
Dromedary
Dunham's
Schepp's

COCOANUT OIL (*listed under fats and oils*)

FILBERTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

HAZELNUTS *(see Filberts)*

HICKORY NUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

PEANUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

Pennant Brand
Carque's

PEANUT BUTTER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

Armour's — Gibbs' — Monarch
Beechnut — Heinz — Van Camp's
Carque's — Libby's

PECANS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

Carque's
Funsten
Keystone (Patrician)
Southland (Gold Medal)

PIGNOLIAS OR PINE NUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

WALNUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

Carque's — Diamond Brand — Sunland

Sugars and Starches

CANDY, PLAIN SUGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AA*	—

CANDY, NUT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	—

CANE SUGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AA*	—

CORN STARCH

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AA*	—

CORN SUGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	—

Cerelose

CORN SYRUP

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	—

Karo
Penick

FRUIT CONFECTIONS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*AA*

Genevieve Jackson's Fruit Confections
Mrs. Plowman's Stuffed Fruits
Porter's Natur-Sweets
Physical Culture Candy

HONEY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	*A*

Carque's California
Paton's Orange Blossom
Root's Airline

MAPLE SYRUP OR MAPLE SUGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	—

Barrel Brand
Cary's
Curtice
Frost Elf

MAPLE AND CANE SYRUP

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	—

Barrel Brand
Log Cabin

MALTOSE OR MALT SUGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	*A*

Meltose

MILK CHOCOLATES

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

Cailler's
Eatmor
Hershey's
Ideal
Nestle's
Peter's
Runkel's
Thompson's (*Malted*)

MILK SUGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	*A*

MOLASSES *(made from Cane Sugar)*

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AA*	—

Amolco
Barrel Brand
Brer Rabbit
Dunbar's Open Kettle
Grandmother's Old Fashioned
Rosemere

SORGHUM

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	—	—	*AA*	—

TAPIOCA

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AA*	—

Fats and Oils

BUTTER

(Listed under Animal Products)

COCOANUT BUTTER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

Alco Nut Butter
Kingnut
Dinner Bell
Nucoa
Troco

COD LIVER OIL

(Listed under Animal Products)

CORN OIL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

Mazola

COTTON SEED OIL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

Wesson Oil

HYDROGENATED FATS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

Crisco
Short-o
Snowdrift
Snowflake
Vanco

LARD

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

MINERAL OIL

(*Listed under Miscellaneous Products*)

NUT MARGARINE (*see Cocoanut Butter*)

OLEOMARGARINE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

Dixie
Good Luck
Spredit
Swift's
Yankee Bell

OLIVE OIL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*AA*

Carque's
Ehmann
Heinz
Pompeian
Star Brand
Troco

PEANUT OIL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	*AAA*	*A*

PEANUT BUTTER (*see Nuts*)

Beverages

APPLE JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*AA*

(Fruit juices to which abundant sugar has been added would take an "A" rating for energy.)

Apple-Ju
Duffy's

COCOA AND CHOCOLATE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	—

Baker's
Bensdorp's
Royal Dutch
Ghirardelli's
Hershey's
Hauswaldt's
Huyler's
Ideal
Lowney's
Maillard's
Havsome
Monarch
Phillips
R. P. Swiss Milk Cocoa
Runkel's
Suchard's
Van Houten's
Wilbur's
Whitman's

COCA-COLA

(Has no food value and contains caffeine, a habit-forming drug.)

COFFEE

(Has no food value and contains caffeine, a habit-forming drug.)

COFFEE SUBSTITUTES

Many beverages are in use that contain little or no food value (except sugar used to sweeten them, or milk or cream added). This does not condemn their use, since a pleasant and harmless beverage, either as a cold drink or a warm drink, is not to be opposed merely because it has no great nutritional value. As we are in the habit of using beverages that are often distinctly harmful, the harmless beverages may indeed serve a very distinct health purpose as substituting for harmful ones, for instance the use of ginger ale in the place of coca-cola or an alcoholic drink, and the use of these coffee substitutes for coffee.

Carque's Fig Cereal
Instant Postum
Kafex
Kaffee Hag
Lindlahr's Health Coffee
Mo-Ko
Postum
Sanka

CONCENTRATED FRUIT SYRUPS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*A*

Hay's "Five Fruits"
Za-Rex

GINGER ALE

(Has no food value, but is not unwholesome.)

Beechnut
Canada Dry
Clicquot Club
Cantrell & Cochrane
Clysmic

GRAPEFRUIT JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

GRAPE JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	*A*	*AA*

Armour's
Calwa
Red Wing
Welch's

LEMON JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

Merrill-Soule (Powdered)
Sun-Crush

LIME JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

Roses's

LOGANBERRY JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

Phez

MALTED GRAPENUTS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	—	*AA*	*A*

MALTED MILK

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	*A*	*AA*	*AA*

Borden's
Horlick's
Thompson's

MILK

(*Listed under Animal Products*)

ORANGE JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

Sun Crush
Mission Brand

OVALTINE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*AA*	*A*	*A*	*A*

PINEAPPLE JUICE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*A*	*AA*	—	*AA*

ROOT BEER

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	—	—

Clicquot Club
Hires'

TEA

(Tea has no food value and contains caffeine and tannin.)

Miscellaneous

AGAR

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	*AAA*	—	*AAA*

CHILI SAUCE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*A*	—	*A*

Beechnut
Del Monte
Heinz
Leggett's Premier
Libby's
Monarch
Snider's
Van Camp's

CHOP SUEY

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

Purity Cross

FLAVORING EXTRACTS

(No food value, for flavoring only)

Baker's
Burnett's
Colburn's
Dr. Price's
Garrett's
Kitchen Bouquet
Morrow's
Sauer's
Virginia Dare

FRUIT PUDDINGS

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AA*	*A*

(Plum puddings are difficult to digest but where they are digested their food value is high.)

Curtice Blue Label
Heinz Fig
Heinz Plum
Libby's
Purity Cross Date
Purity Cross Fig
Richardson & Robbins' Plum

GELATINE *(see Animal Products)*

HEALTH FOOD SPECIALTIES

Carque's Ceresea
Carque's Fruit Laxative
Carque's Fig Nuts
Dextri-Maltose (Mead Johnson Co.)
Phosfo (Klar Co.) (See Cereals)
Phospho (Phospho Food Co.)
Battle Creek Food Co. Products*

*(A large list of approved Health Foods which are too numerous to list and classify.)

JELLO

(See Gelatine under Animal Products)

MINERAL OIL

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	*AAA*	—	*AAA*

Nujol
Squibb's

MUSTARD AS A CONDIMENT

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
—	—	—	—	—

MAYONNAISE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
A	*A*	—	*AAA*	*A*

Colman's
Durkee's
Heinz
Hellman's Blue Ribbon
Gold Medal
Leggett's Premier
Monarch
Royal
Snider's
Van Camp's

NUJOL

(See Mineral Oil)

PECTIN

(Too small food value to rate but a very convenient, and wholesome food product, very useful in making jelly.)

Certo Sure-Jell

SOUPS

(Too many kinds to list—see rating of chief ingredients—The following are approved brands.)

Burnham's
Campbell's
College Inn
Franco-American
Heinz
Libby's
Purity Cross
Snider's
Van Camp's
Richardson & Robbins'

SALT

(Salt has no food value as expressed in our rating system–but it is essential to life and should be used in moderate, not excessive quantities.)

Diamond Crystal
Morton's
Morton's Iodized Salt (for Goitre)
Worcester

TOMATO KETCHUP

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AA	*A*	*AA*	—	*A*

Beechnut
Curtice Blue Label
Del Monte
Heinz
Libby's
Leggett's Premier
Monarch
Snider's
Van Camp's
Pritchard's (Pride of the Farm)

VEGEX OR MARMITE

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*AA*	*AAA*	*A*	*A*

YEAST

Vitality	*Growth*	*Reduction*	*Energy*	*Constipation*
AAA	*AA*	*AAA*	*A*	*AAA*

Fleischmann's Yeast
Magic Yeast
Yeast Foam