

FOOD AND COOKERY



ADDISON

FOOD AND COOKERY

By
H. S. ANDERSON

*Food Expert, Luna Linda
Sanitarium, California*

1917

PACIFIC PRESS PUBLISHING ASSOCIATION

Mountain View, California

Kansas City, Mo.

Portland, Ore.

Brookfield, Ill.

Calgary, Alberta, Canada

Cristobal, Canal Zone

Copyright 1915 by
THE COLLEGE PRESS
Loma Linda, California

Revised Fourth Edition
Copyright 1917 by
PACIFIC PRESS PUBLISHING ASSN.

PUBLISHERS' PREFACE

In presenting "Food and Cookery" to the public, it is not to add another cookbook to the many now in the hands of the perplexed housewives of America. This is the fourth and enlarged edition of a little work which has already made its way; and for this edition, hundreds of orders are already filed.

There is a demand for the book from those who know the first editions. There is a moral demand for the information it contains, in these days of world food scarcity and the need of wise food conservation, when the best food for the least money is called for.

The recipes are not prepared by a tyro, nor gathered from miscellaneous collections, nor compounded merely to please the taste.

The author has had a score of years of experience in every stage of cooking science and practical work, from mere helper to the chef. He has served for years under German and Swiss and Spanish and English and French chefs. For a year, he was second cook in the Calumet Club of Chicago, where he served European royalty; and for nearly the same length of time, in the California Club of Los Angeles; and he has also served in like capacity in many leading hotels in various cities.

For the last ten years, Mr. Anderson has given himself to the better side of the question,—healthful, palatable, scientific, economical cookery.

These recipes are all tested and tried, and retested and tried in connection with experienced chemical, medical, practical collaborators, in the Medical Missionary College and Sanitarium of Loma Linda, California, in which Mr. Anderson is food expert.

In highest confidence, we send the little book forth as a friend in the homes of a larger public.

PREFACE

In preparing this new edition of "Food and Cookery" for publication, our object has been to present a collection of simple, wholesome, and inexpensive recipes, many of which are new, together with suitable text matter on foods, and their uses in the body. This idea was suggested by the need of such a book in the training school for nurses and medical evangelists at the medical school and sanitarium, Loma Linda, California. It is hoped that the book will be found useful in other schools, as well as in many homes where the teaching of this subject is receiving attention.

While we have not attempted to write a treatise on vegetarianism, we do advocate the total disuse of the flesh of animals as food, and a more extensive use of grains, fruits, nuts, and other products of the vegetable kingdom, thus propagating a principle that tends essentially to true civilization, to universal humaneness, and to health and happiness generally.

The history of vegetarianism is as old as human history itself; and probably in every age there have been some who have practiced it either as a religious duty, or under the belief that they would thereby conserve the life forces, and be the better fitted for the pursuit of peace and happiness. Again, there are those who adopt a vegetarian course of diet in the belief that many diseases, such as gout, and gastrointestinal disorders, would largely disappear if the vegetarian diet were strictly adhered to. Another motive for adopting vegetarianism is undoubtedly economy. To a great extent, the human race is virtually vegetarian from necessity. Nor do we find that feebleness, either of mind or of body, necessarily ensues. Rather, experience shows the opposite to be the case.

It has been our endeavor to make the instruction and recipes so practical that the many who are desirous of reforming their diet may do so intelligently. To such, we would say that changes in the habits of a lifetime should be gradual and progressive, as the functions of the body do not readily adjust themselves to changes that are too radical. When flesh foods are left off, digestive juices of a different character are required; but it is a matter of only a short time until the system adjusts itself to the change.

It is certainly true that as one perseveres in a non-flesh diet for a length of time, the relish for spices and condiments diminishes; and as these really serve to blunt the sensitiveness of the palate, there gradually comes into evidence, when they are discarded, a keener discernment of the rarer and more delicate natural flavors, which are quite inappreciable to the taste accustomed to highly seasoned foods. One mistake to be avoided, however, is the opposite extreme. Food should never be served savorless and insipid. As one has expressed it, "When the goodman comes in expecting the usual roast mutton or kidney stew, do not set before him a dish of mushy barley or sodden beans." There is at command a variety of vegetarian dishes, practically unlimited, and savory enough to tempt the most fastidious.

The most common error of those who have eschewed flesh products is that, having developed the taste for natural foods, they are inclined to overeat. Many labor under the delusion that because they have discontinued the use of the more harmful articles of diet, they are licensed to eat all their appetite calls for. Soon they observe symptoms of intestinal indigestion, and attribute it to their having adopted the diet reform. The secret of success in avoiding this error is thorough mastication, and the eating of only a few kinds of food at one meal. The benefit de-

rived from food does not depend so much on the quantity eaten as on its thorough digestion and assimilation. Therefore if the time in which to eat is limited, the amount eaten should be proportionately limited.

The author gratefully acknowledges the valuable assistance of Dr. Lavina Herzer in the work of perfecting new recipes for this book; and of Mrs. J. J. Weir, long an associate teacher, in her contribution of new recipes; also of various sanitarium chefs and teachers, and energetic housewives, who have contributed both recipes and valuable subject matter for this work.

To know that the information contained herein will be the means of helping some others to the "more excellent way" will be reward sufficient for the author.

H. S. A.

CONTENTS

FOODS, THEIR USES IN THE BODY	- - - - -	9
ADAPTATION OF FOOD		
FOOD PRINCIPLES		
BALANCING THE FOOD		
TABLE OF FOOD VALUES		
NATURAL FOOD OF MAN	- - - - -	18
VEGETABLE AND FLESH FOODS CONTRASTED		
FOOD ECONOMY	- - - - -	23
TABLE OF FOOD ECONOMY		
PRACTICAL HINTS		
FOOD PREPARATION	- - - - -	27
OBJECTS SOUGHT IN COOKING		
PRINCIPLES OF SUCCESSFUL COOKERY		
FREE FATS IN COOKING		
COMBINATIONS AND MENU MAKING	- - - - -	34
PLANNING THE MEAL		
SIMPLE MENUS		
TABLE OF FOOD COMPOSITION		
COURSE OF COOKING LESSONS	- - - - -	44
LESSON OUTLINE		
ESSENTIALS TO SUCCESS		
TABLE OF MEASURES		
MISCELLANEOUS RECIPES	- - - - -	48
PASTEURIZED MILK		
BUTTERMILK		
BREAD	- - - - -	54
UNFERMENTED BATTER BREADS		
UNFERMENTED DOUGH BREADS		
FERMENTED BREADS		
PRINCIPLES OF BREAD MAKING		
BAKING		
SOUPS	- - - - -	74
GRAINS, NUT FOODS, ENTREES	- - - - -	80
LEGUMES		

GRAVIES AND SAUCES	- - - - -	95
VEGETABLES	- - - - -	98
DESSERTS	- - - - -	110
DRIED FRUITS		
PUDDINGS		
PIES		
CAKES		
ICINGS AND FILLINGS		
SALADS AND DRESSINGS	- - - - -	126
DRESSINGS		
VEGETABLE SALADS		
FRUIT SALADS		
TOASTS AND BREAKFAST DISHES	- - - - -	134
SANDWICHES	- - - - -	140
COOKERY FOR THE SICK	- - - - -	142
FRUIT ICES AND ICE CREAM	- - - - -	147
HOME CANNING	- - - - -	149
PRINCIPLES OF CANNING		
PRESERVATION IN SALT		
FRUIT CANNING		
JELLY MAKING		

FOODS

THEIR USES IN THE BODY

The problem of securing ample nutrition for the family board, and at a minimum cost, is one of growing importance, not only because of the high cost of food, but because more and more we are coming to realize that a healthy body is man's greatest asset.

In the support and maintenance of life, the first and most essential factor is the substance upon which it feeds. There is probably no other thing over which we have control, that produces so marked an influence over the body as the food we eat. Animals in their natural state seem to put the proper appreciation upon foods, in that they reject that which is harmful, and accept that as food which is good for them. Instinct should guide us to some extent in the choice of foods best suited to our own necessities; but civilization has created for man certain artificial environments, habits, and appetites, in the confusion of which his instincts are largely lost.

The grains, fruits, and vegetables have all the nutritive properties necessary for our existence. These, when prepared in a simple yet appetizing manner, will soon become extremely delicious and satisfying to the taste, so that the appetite will demand no other. When this condition is attained, foods begin to perform their natural functions, imparting to the body their latent powers, supplying with life and strength each nerve, muscle, and tissue.

All life must comply with certain unchangeable laws in order to be free. A man who succumbs to disease is not free, but in bondage. Disease is the outward expression or penalty of violated laws. Health is Nature's reward for conformity to her laws, and is that condition where the powers of construction excel the powers of destruction—in

other words, the maintenance of the bodily resistance at so high a level that should we be unable to avoid contact with disease, it would not be likely to affect us. By correct eating and the pursuit of natural habits, this condition can be maintained for many years.

ADAPTATION OF FOOD

The true function of food is to furnish material for the growth and repair of the body, to supply energy for muscular work, and to furnish heat to keep the body warm.

The diet that will secure this end necessarily varies with circumstances, depending largely upon the occupation of the individual, the climate in which he lives, and the season of the year. Some foods that are adapted for use at one season or in one climate are not suited to another. So there are different foods best suited to persons of different occupations. Often food that can be used with benefit by those engaged in hard physical labor is unsuitable for persons of sedentary habit.

In cold weather, we feed our furnaces to keep our houses warm; in warm weather, less fuel is used. The human body corresponds to a house; but people not uncommonly make the mistake of eating the same foods in warm weather, and in the same quantities, that they consume in cold weather. The result is a lack of energy, due to the clogging of the body furnace with excess of fuel, and not, as supposed, to insufficient food. In warm weather, the digestive organs cannot digest the same quantity nor the same kinds of food that they are capable of digesting in cold weather. Wisely, therefore, with the return of summer, Nature takes away the desire for many of the solid foods, such as beans, lentils, eggs, fats, or heat-producing foods, and furnishes us with greens, fresh fruits and vegetables, which are appetizing and cooling to the system.

FOOD PRINCIPLES

In order that it may be understood just what is meant by food principles, we may say they are six: *water, fats, carbohydrates, proteins, mineral matters, and vitamins*. Each has a different use in the body, and is necessary in a varied diet, though we require larger quantities of some than of others.

Water constitutes two thirds of the weight of the body, and enters into the composition of all the tissues and fluids. In one sense, however, water is not a food, for it tends neither to build up nor to furnish heat and energy to the body; yet it is perhaps the most essential of all elements. Life can be sustained for a much longer period of time without food than without water.

Fat is called a fuel food, because of its power to give heat to the body. Fats are divided into two forms, free fats and emulsified fats. Examples of free fat are butter and other solid fats, and oils, both animal and vegetable. Examples of emulsified fats are found in nearly all vegetables, especially in olives and nuts, and in milk and cream. The purest free fats are olive oil, corn oil, coconut oil, refined cottonseed oil, and peanut oil. These wholesome fats, so abundantly furnished in Nature's great store, exclude the need of animal oils and fats.

Carbohydrates are represented by the starches and sugars in various foods. For instance, grains, such as rice, corn, wheat, rye, oatmeal, buckwheat, etc., have an average of from seventy to eighty per cent starch; while dried fruits, such as raisins, prunes, dates, figs, rich in fruit sugar, contain an average of from seventy to eighty per cent carbohydrate. Both fats and carbohydrates furnish fuel for the body. They yield the heat that keeps it warm, and the energy that enables it to work.

Protein, or nitrogenous substances, are represented by the casein in milk, the curd being very highly nitrogenous;

the gluten of wheat; the albumen in the white of egg, it being the purest form of protein; the legumin in peas and beans; and the myosin of lean meat. The chief office of protein is to provide for the growth and repair of the muscle tissues of the body.

Mineral Matter and *Vitamines* are found in all natural foods, especially in the hulls and outer layers of grain, and in fresh vegetables and fruits. Mineral substances are used by the body to build the bones and the teeth, and to aid in the digestion. Vitamines are substances of unknown composition, which are essential to normal metabolism, and the lack of which in a dietary causes beriberi and other deficiency diseases.

Rice, one of our best known foods, is wholesome and nourishing; but if we remove the hulls, as is done in polishing, it loses its food value. Pigeons or chickens fed exclusively on polished rice quickly develop paralysis and die; but if the polishings are given them after they begin to be ailing, they grow well and strong. The reason is that the life-giving vitamines are in the coatings of the grain.

Dr. Casimir Funk, as quoted in the *Journal of the American Medical Association*, May 20, 1916, on the subject of "Vitamines a New Factor in Nutrition," says in part:

"Besides the ordinary food constituents, such as proteins, fats, carbohydrates, lipoids, and inorganic salts, to which the value of our food is due, a number of substances can be found in small quantities which are as indispensable to life as the former constituents. These substances I have designated 'vitamines,' and the diseases which arise from their lack, as deficiency diseases or 'avitaminoses.' . . . A certain amount of vitamine can take care of only a limited amount of carbohydrate; and when starch is increased in the diet, the amount of vitamine-containing foodstuffs must be increased in proportion."

"A second fact has been established in connection with the metabolism in the deficiency diseases, which is that in the absence of vitamine, we not only obtain a negative nitrogen balance, but the whole metabolism goes wrong. This is particularly noticed in the negative balance of inorganic constituents. The addition of vitamine puts the whole metabolism again on a normal basis. Vitamine, when properly prepared and added to a diet of polished rice, makes that diet complete. I have shown that no animal has yet been found able to live more than a short time on a vitamine-free food."

Fruits, because of their low nutritive qualities, are not as a rule estimated at their real value as food. Either fresh or cooked, they have a great dietetic value, and should be used generously and wisely. Fruits and fruit juices keep the blood in a healthy condition; they supply a variety of flavors, acids, sugar, and a necessary waste or bulky material for aiding in intestinal movement. These vegetable acids and essential oils impart palatability to the food, and assist functionally in the digestive process.

BALANCING THE FOOD

The calorie is the unit measure of heat used to denote the energy-giving power of food, and is equivalent to the amount of heat necessary to raise the temperature of one kilogram of water one degree centigrade, or about one pint of water four degrees Fahrenheit. The following general estimate has been made for the energy furnished to the body by one gram of each of the classes of nutrients:

- 1 gram* protein yields 4 calories of fuel value.
- 1 gram carbohydrate yields 4 calories of fuel value.
- 1 gram of fat yields 9 calories of fuel value.

—*Bulletin No. 142, United States Department of Agriculture.*

* 28.3 grams equal 1 ounce.

By the figures in the column at the right hand of the chart (page 15) is represented the total number of calories or food units contained in one pound of the various foods under consideration, the building material (protein) being represented by the diagonal lines, the fats by the dotted space, and the carbohydrates by the crosshatching, etc.

The vital part of all muscle tissue is protein. Every living cell requires its due allowance, for the wear and tear of tissue must be made good. While there is perhaps no article of diet except sugar and pure fat into which protein does not enter to a greater or lesser degree, yet there are foods that contain an unusually high percentage of protein, known as protein foods. These are the dried peas, beans, lentils, eggs, nuts, and meat.

Although protein, when oxidized in the body, is capable of yielding a certain amount of heat, it is inferior for this purpose to carbohydrates and fats, because, on being burned in the body, it also yields certain deleterious products, which throw upon the liver and the kidneys an unnecessary amount of labor, thus weakening them and rendering them more susceptible to the attacks of disease. Many of the ailments so prevalent to-day, such as rheumatism, gout, gastrointestinal disturbances, indigestion, and liver troubles, have been found to be closely associated with the habitual overeating of protein foods.

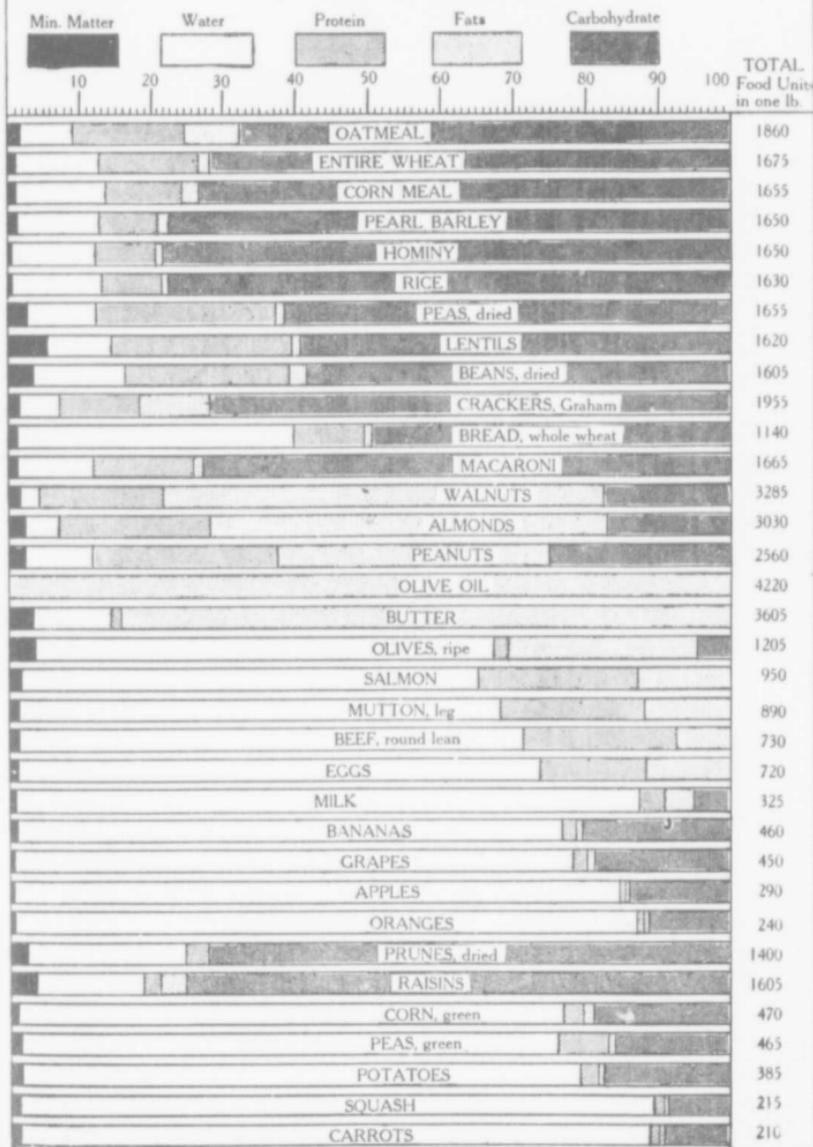
The fact that protein is absolutely essential for the growth and repair of the body—there being no other food principle that can take its place in furnishing muscle-building material—has a tendency to lead people to believe that they might be benefited by the consumption of large quantities of protein foods, when the fact is that the body can use only a limited amount for the development and repair of tissue.

There is wisdom in a diet that shall provide an abundance of carbohydrates and fats, protein being added only in sufficient amounts to meet the needs of the body for

FOOD VALUES

Organic { Nitrogenous { PROTEIN Tissue-forming Substances
 Non-nitrogenous { CARBOHYDRATES } Heat and Energy
 FATS

Inorganic Salts — Mineral Matters, Water



nitrogen, and for the growth of fresh muscle fibers. Careful experiments have demonstrated that the body is best sustained in health, and its strength and endurance promoted, by a diet which contains a proportion of about one ounce of protein to nine ounces of carbohydrates and fats. In an approximate day's ration of 2,500 calories, ten per cent, or about 250 calories, should be protein. The remainder of the diet, say ninety per cent of the calories, may be divided according to individual need or personal preference, between carbohydrates and fats, provided some amount of each is used. About twenty-five per cent fat and sixty-five per cent carbohydrates is considered a good proportion.

A new book entitled "How to Live," by Irving Fisher, professor of political economy, of Yale University, and Eugene Lyman Fisk, M. D., medical director of the institute, gives the following valuable suggestions, on pages 36-38, as to the protein requirement in a day's ration:

"Foods should be so selected as to give the ration the right amount of protein, or repair foods, on the one hand, and of fats and carbohydrates, or fuel foods, on the other. A certain amount of protein is absolutely essential. . . . The right proportion of protein has been the subject of much controversy. According to what are regarded as the best investigations, it is generally about ten per cent of the total number of heat units consumed. This does not, of course, mean ten per cent of the total weight, nor ten per cent of the total bulk, but ten per cent of the total nutriment; that is, ten calories of protein out of every one hundred calories of food."

"Most persons in America eat much more protein than this. But that ten calories out of one hundred is not too small an allowance is evidenced by the analysis of human milk. The growing infant needs the maximum proportion of protein. . . . Consequently an analysis of human mother's milk affords a clue to the maximum protein suit-

able for human beings. Of this milk, seven calories out of every one hundred calories are protein. If all protein were as thoroughly utilized as milk protein or meat protein, seven calories out of one hundred would be ample; but all vegetable proteins are not so completely available. Making proper allowance for this fact, we reach the conclusion that ten calories out of every one hundred are sufficient."

A study of the composition of food materials will enable us to see the wise provision made for man in the diet appointed for him in the beginning. Natural foods, just as they come from field and orchard, when taken in proper combination with each other, contain the different food elements balanced in about the right proportion to meet the needs of the body.

The various grains contain the food elements in quantities more nearly proportionate than any other foods. Wheat is regarded as a perfect food, and the representative of all foods, containing properties that so nearly represent the constituent parts of the body structure as to indicate a special providence in its being provided for the human family. Bread (entire wheat) is rightly called "the staff of life," and from time immemorial, has constituted the principal article of diet among all nations and in all climes. As a tissue builder, bread contains a proportion of about ten per cent protein, the recognized dietary requirement.

Bread of some kind, therefore, furnishes the basis, or "backbone," for the meal, suitable variety being provided by the addition of fruits and vegetables in season, alternating from day to day with one of the more solid foods, rich in protein, such as noodles, beans, macaroni, or other entrée as needed. With the addition of varying quantities of milk, cream, and eggs, the problem of balancing the food is not a difficult one, but a real pleasure.

NATURAL FOOD OF MAN

In order to understand what are the best foods, we must study God's original plan for man's diet. He who created man, and who understands his needs, appointed Adam his food, as it is written: "Behold, I have given you every herb yielding seed, . . . and every tree, in which is the fruit of a tree yielding seed; to you it shall be for food." Genesis 1: 29, A. R. V..

After the fall, when the ground was cursed for man's sake, the herb of the field was added to his diet. Genesis 3: 17, 18. After the Flood, when all vegetation had been destroyed by water, God permitted man to eat flesh. Genesis 9: 3, 4.

It is interesting at this point to note the comparison of the length of life of men who lived before the Flood, and who subsisted upon fruits and grains, with that of the generations living immediately after the Flood, who subsisted upon the flesh of animals, at least as part of their daily food. The following figures show that the average length of life for nine generations before the Flood, as recorded in Genesis 5: 3-32; 9: 29, was 912 years. The average for nine generations after the Flood, when flesh meats were used as food, was but 332 years. Genesis 11: 10-32.

<i>Before the Flood</i>		<i>After the Flood</i>	
NAME	AGE	NAME	AGE
Adam	930	Shem	600
Seth	912	Arphaxad	438
Enos	905	Salah	433
Cainan	910	Eber	464
Mahalaleel	895	Peleg	239
Jared	962	Reu	239
Methuselah	969	Serug	230
Lamech	777	Nahor	148
Noah	950	Terah	205
Average—912 years		Average—332 years	

"And Haran *died before his father* Terah in the land of his nativity." Genesis 11: 28. One would infer, from this scripture, that until about the tenth generation after the Flood, it was so unusual a thing for a child to die before its father, that mention is made of the fact in Holy Writ.

Following on, we briefly trace the history of the chosen people in their march down into Egypt, where they came under heavy bondage to the Egyptians until the time of their deliverance. When the prophetic period had expired, and the time for their release had come, God brought them out with a strong hand, to make them the depositaries of the Holy Oracles, and His peculiar treasure above all people. Through them, it was designed that all the world should come to a knowledge of the true God. Their health was jealously guarded, and a fleshless diet was given them. Exodus 16: 35; Joshua 5: 12. But they despised "the corn of heaven," and cried for flesh; so He permitted them to eat clean flesh. Numbers 11: 4-6; Deuteronomy 14: 3-20.

Coming down the stream of time, we find the average length of life growing shorter and shorter, until, in the time of David, the years of man were said to be only "threescore and ten"—an evidence that the race was not benefited in the least by a diet of flesh.

Later, in apostolic days, when the gospel was preached to the gentiles, the message of physical holiness was again proclaimed as a part of the gospel of salvation, in the words: "Ye are the temple of God. . . . If any man defile the temple of God, him shall God destroy; for the temple of God is holy, which temple ye are." 1 Corinthians 3: 16, 17. Then follows the statement of a great principle, defining the motive which should actuate the recipients of grace in the exercise of Christian temperance in all things, and which will prove a safe guide to follow in the selection of the kind and quantity of food best suited to the

keeping of the body in a state of health: "Whether therefore ye eat, or drink, or whatsoever ye do, do all to the glory of God." 1 Corinthians 10: 31.

This principle, if heeded, will control in all matters pertaining to the diet, as in every act of life, preserving us from intemperance in all its varied forms. "Every practice which destroys the physical, mental, and spiritual energies is sin. The laws of nature, as truly as the precepts of the Decalogue, are divine; and only in obedience to them can health be recovered and preserved."

The desire of God for every human being is expressed in the words, "Beloved, I wish above all things that thou mayest prosper and be in health, even as thy soul prospereth." 3 John 2. Here, as ever, inspiration places the health of the body on an equality with the health of the soul, as indeed they are dependent one upon the other.

To the chosen people, the laws relating to both spiritual and physical well-being were made plain; and on condition of obedience, He assured them: "The Lord will take away from thee all sickness." Deuteronomy 7: 15. "Ye shall serve the Lord your God, and He shall bless thy bread, and thy water; and I will take sickness away from the midst of thee." Exodus 23: 25. These promises are alike for us to-day; and it is the privilege of every child of God, through obedience, to know the meaning of His promise, "I am the Lord that healeth thee." Exodus 15: 26.

VEGETABLE AND FLESH FOODS CONTRASTED

In their growth, vegetable foods secrete no poisons; whereas in all animals, the very processes of life itself consist of the breaking down of tissue and the formation of numerous poisons. These poisons are in the flesh when the animal is killed, and no amount of cooking can remove them. By taking food of vegetable origin, we avoid burdening the system with this quantity of harmful sub-

stances, which must be disposed of at a great sacrifice to the eliminative organs.

Though we allow that animal products all contain a share of the nutritive constituents necessary for our existence, because the animal has taken sustenance from the vegetable kingdom, nevertheless, when we eat flesh, we are but eating vegetables and grains at second hand. The life that was in the vegetable passes into the eater; and though we may receive it in part, by eating the flesh of the animal, how much better to get it direct, by eating the food that God provided for our use!

In other words, the ox eats ten pounds of corn, and burns up from eight to nine pounds in making one pound of flesh. Many ashes result from this process, and these waste products (toxins) are responsible for a large share of the mischief caused by meat eating. "*Animal food, which we use and abuse, is not food, but continuous poisoning.*"—Huchard.

The process by which meat is made tender (ripe), is nothing but waiting for partial decomposition. During that time, insidious poisons have developed, and are added to those already present during life. This is not true of foods from the vegetable kingdom. These harbor within themselves the very essence of life, manifest in the tiny organ of reproduction, and if hidden in the earth, will soon give proof of life within. This assures us of the purity and freedom from putrefaction and poisons of the food that is to build bone and sinew.

Since many people have the impression that physical strength and health are dependent upon the use of animal food, we give the following quotation from "Ministry of Healing," by Ellen G. White, page 316, which throws much light on this important question, pointing out the advantages to be gained by the use of a simple and natural diet:

"It is a mistake to suppose that muscular strength depends on the use of animal food. The needs of the system

can be better supplied, and more vigorous health can be enjoyed, without its use. The grains, with fruits, nuts, and vegetables, contain all the nutritive properties necessary to make good blood. These elements are not so well or so fully supplied by a flesh diet. Had the use of flesh been essential to health and strength, animal food would have been included in the diet appointed man in the beginning.

"When the use of flesh food is discontinued, there is often a sense of weakness, a lack of vigor. Many urge this as evidence that flesh food is essential; but it is because foods of this class are stimulating, because they fever the blood and excite the nerves, that they are so missed. Some will find it as difficult to leave off flesh eating as it is for the drunkard to give up his dram; but they will be the better for the change.

"When flesh food is discarded, its place should be supplied with a variety of grains, nuts, vegetables, and fruits, that will be both nourishing and appetizing."

Dr. Alexander Haig, a noted physician of London, in his book "Uric Acid as a Factor in the Causation of Disease," on page 864, writes as follows: "That it is easily possible to sustain life on the products of the vegetable kingdom needs no demonstration for physiologists, even if a majority of the human race were not constantly engaged in demonstrating it; and my researches show not only that it is possible, but that it is infinitely preferable in every way, and produces superior powers of both mind and body."

FOOD ECONOMY

"Economy is not saving, but wisely spending."—*Ruskin*.

The question of economical nutrition is best answered by a thorough and systematic plan of education regarding food values. Though a food may be known to be rich in nutritive constituents, and of a nature to be easily digested, we still have to find whether the nutriment yielded is obtained at a reasonable cost. When one realizes that the market price of a food is no indication of its real value, the practical importance of such a test is more convincingly felt; for in the market, one usually pays for flavor and rarity, and not for nutritive qualities. In other words, it is the demands of the palate that cost, and not those of nutrition.

By a study of the chemical analysis of various foods bought for a particular sum, this test may be applied without difficulty. On comparison, we find that twenty-five cents spent for round steak (lean), at twenty-five cents a pound, gives food to the value of 670 food units; twenty-five cents invested in whitefish, at fifteen cents a pound, buys 542 units; the same for oysters, at fifty cents a quart, yields only about 230 units; that amount for potatoes, at four cents a pound, obtains 1,938 units; while twenty-five cents spent for oatmeal, at seven and a half cents a pound, yields 6,200 units; the same for wheat flour, at eight cents a pound, 5,234 units; and in the form of well baked bread ready for use, 3,063 units.

The economic value of a food depends largely upon its capacity for producing energy. The ideal is found in such food products as the grains, including bread, rice, corn meal, macaroni, etc.; also in legumes, such as dried peas and beans; and in immature green vegetables, such as green corn, green peas, and the like. Adding to these milk, cream, and eggs, there is a wide variety from which

FOOD ECONOMY

*Calories of Protein and Total Calories
Obtained for 25 Cents
In Some General Articles of Diet*

<i>Articles</i>	<i>Price</i>	<i>25c will buy Pounds</i>	<i>Calories Protein</i>	<i>Total Calories</i>
Oysters (solids)	50c a qt.	1	108	230
Whitefish	15c a lb.	1 $\frac{2}{3}$	325	542
Eggs	40c a dz.	15 oz.	201	595
Beef (round lean)	25c a lb.	1	336	670
Peaches	4c a lb.	6 $\frac{1}{4}$	56	969
Apples	5c a lb.	5	27	1,100
Milk	10c a qt.	5	298	1,625
Potatoes	4c a lb.	6 $\frac{1}{4}$	200	1,938
Prunes (dried)	15c a lb.	1 $\frac{2}{3}$	53	1,983
Almonds	20c a lb.	1 $\frac{1}{4}$	260	2,075
Beans (dried)	18c a lb.	1 2-5	568	2,229
Butter	45c a lb.	5-9	10	2,253
Raisins	12 $\frac{1}{2}$ c a lb.	2	42	2,890
Bread (homemade)	10c a lb.	2 $\frac{1}{2}$	413	3,063
Crackers (Graham)	15c a lb.	1 $\frac{2}{3}$	300	3,258
Peas (dried)	12 $\frac{1}{2}$ c a lb.	2	888	3,310
Macaroni	12 $\frac{1}{2}$ c a lb.	2	483	3,330
Rice	10c a lb.	2 $\frac{1}{2}$	362	4,075
Wheat Flour (entire)....	8c a lb.	3 $\frac{1}{8}$	779	5,234
Corn Meal (granular)....	7c a lb.	3 4-7	594	5,911
Rolled Oats	7 $\frac{1}{2}$ c a lb.	3 $\frac{1}{3}$	970	6,200

to choose a diet of non-irritating and easily digested foods that take the lead as a source of nourishment both from the economic and also from the health point of view.

PRACTICAL HINTS

Careful planning, so as to avoid wastage, is one of the first steps in the attainment of successful household management. It is estimated that from fifteen to twenty per cent of all foods going into American kitchens is wasted. A few suggestions as to how the housewife may avoid a needless waste of food material in its care and preparation may be of interest.

In the first place, there should be a carefulness in the outlay, with freedom from extravagance. Plan the meals carefully from a select variety of only a few kinds of food, avoiding a large array of hearty and more expensive foods, which are not needed, and a great deal of which will be left over at the end of the meal. Preference should be given to the simpler and more inexpensive yet wholesome foods that are at hand every day.

All foods left over should be reheated before there is the first sign of spoiling. Many foods gain richness in reheating. No food should be left adhering to the kettles in which they are cooked. All fragments should be carefully saved and utilized.

Vegetables should not be pared too thickly. Neither should the water from cooked vegetables be thrown away; it contains valuable salts, and should be used for soups and gravies.

Thought should be given to the purchase and care of perishable foods. Overripe fruit, if purchased at all, should be purchased only for immediate use. Fruit kept in store should be examined often for the purpose of discarding any that may have begun to decay. Lemons should be laid on a shelf, space being left between, that they may not so readily mold.

Lettuce and celery may be kept by first wrapping them in dry paper, then wringing another paper or cloth out of water and wrapping around the outside, and keeping in a dark place.

All celery stalks left over, and their leaves, may be put into the warming oven and thoroughly dried to be kept for flavorings. The outer skins of red onions, while they have scarcely any flavor, are rich in coloring matter, and give a nice brown color to a vegetable broth or gravy; and they should be kept in a glass jar for use as needed.

Bread crusts should not be left to accumulate for too long a time, but should be used for making an entrée, or a simple pudding with raisins, or they may be put into the warming oven and thoroughly dried, ground through a mill, and kept for various uses.

Lastly, "preach the gospel of the clean plate." Too much food is ordinarily served at the first serving, with the result that good food which might have been saved finds its way into the garbage can. Small portions, with a second serving if desired, are always in good taste.

FOOD PREPARATION

"Food well cooked is partially digested."

Cookery as an art ranks highest in the department of useful knowledge, connected as it is with the welfare of every human being. When understood in all its bearings, and conducted on scientific principles, it promotes health, tends toward moral and social improvement, and adds the charm of contentment to everyday life.

The nutritive value of many foods depends upon how they are cooked. Many articles which, owing to their chemical condition or other cause, are quite unfit for nourishment when raw, are very nutritious when cooked. Cooking changes the food, and enables the saliva to get hold of it and convert it into sugar. Many inexpensive articles and "left-overs," if carefully prepared and attractively served, may be just as appetizing as more expensive foods, and will usually be found quite as nutritious.

OBJECTS SOUGHT IN COOKING

There are three chief purposes sought in cooking. The *first* is to change the mechanical condition of the food so as to make it more digestible. The *second* object is to develop its flavors, making it more palatable and inviting. The *third* is to kill by heat any disease germs, parasites, or other dangerous organisms it may contain.

In the *first object*, that of digestibility, we have to deal most of all with starch, as that is the most abundant of all foods. In its raw state, starch is not digested by saliva, and only in small quantities by the intestinal fluids; so in order for man to appropriate it, the woody envelope that incloses the starch granule must be broken, by being subjected to dry or moist heat. Boiling prepares the food and carries it only so far as soluble starch, leaving it subject to fermentation. Dry heat, or baking, forwards the proc-

ess into the dextrin stage; after which, through the process of digestion, it is brought to the maltose stage, where it is unfermentable.

All the common vegetables, such as potatoes, turnips, carrots, and beets, and different grains, such as rice, wheat, corn, oats, etc., neither taste good nor are easily digested until their starch, cellulose, and other constituents have been changed from their compact, indigestible form by the action of heat.

In the *second step*, development of food flavors, the object sought is to retain the valuable mineral salts and flavoring substances in the food. All young, tender vegetables, such as string beans, green peas, etc., should be cooked in water only sufficient to cover them, and the remaining liquid should be served with the vegetable. During the cooking, the cover should be drawn to one side of the stewpan or kettle, to allow the volatile bodies generated by the heat to pass off in the steam. These would otherwise impart to the vegetable a strong flavor and a dark color. Fresh vegetables should always be thoroughly cooked, but the cooking should stop while the vegetable is yet firm. Overcooking changes and toughens the texture of vegetable foods, destroys the coloring matters, and injures the mineral bodies that contribute to the flavor.

Vegetables should be allowed to simmer slowly during the cooking, as rapid boiling tends to chip off the surface of the food, making it less palatable, and with a loss in nutriment. Rapid boiling hardens some foods, for instance, green corn, which should be put into boiling water and let simmer slowly for twenty minutes.

Various cooking processes also have much to do with the development of the flavors in food, and rank in value as they do or do not retain the mineral or flavoring matters. *Baking* is the best method for potato, squash, dried beans, etc.; and by this method, no nutritive material is lost. *Steaming*, or cooking in a perforated vessel over

boiling water, is a good method for nearly all vegetables; and by this method, no nutritive material is lost, but the vegetables will have less flavor than when baked. *Steaming*, or cooking in so little water that it is almost boiled out at the end of the process, the remaining liquid being served with the food, is the best method for vegetables with which a sauce is desired. It is very suitable for young and tender spinach, which can be cooked with no additional water beyond that remaining on the leaves after washing. As greens age, they absorb bitter flavor, and must then be cooked in deep boiling water with the *cover off*. This method is also permissible for such strong flavored vegetables as cabbage, old onions, old beets, and old potatoes boiled in the skins. It is a wasteful method.

The *third* step is that of destroying disease germs, or other dangerous organisms that may be present. Food and drink may be very dangerous purveyors of disease. The bacteria of typhoid fever sometimes find their way into drinking water, and those of typhoid and scarlet fever and diphtheria into milk, and bring sickness and death to a large number of people.

Vegetables and fruits may become contaminated with the eggs of numerous parasites from the fertilizers applied to them. Raw fruits and vegetables should always be very thoroughly washed before they are served if there is any doubt as to their cleanliness. If the food is sufficiently heated in cooking, all organisms are killed.

PRINCIPLES OF SUCCESSFUL COOKERY

The two fundamental principles of successful cookery are: first, *simplicity*; second, *appetizing serving*. The meaning of simplicity in this connection is, to conserve and develop the natural flavors of the particular food under hand, and not to confuse it with so many foreign substances as to make the whole a nameless mixture.

God has placed in each food certain delicate flavors and attractive colors, which may be preserved in the food by proper cooking. A great lack of judgment is often observed in the way different foods are mixed together without regard to the effect of the flavor of one food upon the other; likewise in the addition of large quantities of strong flavored substances, such as bay leaf, sage, thyme, and onion, to foods of delicate flavor, whereby the identity of the food is largely lost.

A sprinkle of onion flavor with the potato, in making potato soup, adds greatly to its palatability; but a little too much onion will so cover up the delicate flavor of the potato as to make the soup a disappointment. Cream and tomato combined make a very palatable and nourishing soup, and the combination is agreeable. By the addition of fried bones, onion, and spices, however, the tomato flavor is so predominated by the stronger flavors as to make the soup a sort of nondescript, and consequently not in harmony with that simplicity in cookery which specializes on the development and conservation of those delicate flavors in food which are really satisfying to the natural taste.

The close affinity that exists between coloring matter in vegetable foods and their flavors, precludes any thought of retaining the one without the presence of the other. In order that the green color in fresh vegetables may be preserved, they should be put to cook in boiling water; for this seals up the cells, as it were, and prevents the escape of much of the valuable salts and coloring matter. And the water should be kept boiling continuously until the food is done. Cold water, when added to fresh vegetables in cooking, extracts both color and flavor from the food, leaving it more or less insipid to the taste. Exception is made in the making of soups and vegetable stews, where the object is to extract the flavors into the broth or the gravy.

The gift of taste came from God, just as much as sight or hearing; and we should derive enjoyment from the healthy exercise and proper use of these special senses. Through habitual indulgence in stimulants, condiments, and highly seasoned foods, the taste becomes perverted, and as a result, can detect but few flavors in food, principally salt, sweet, bitter, and sour. By partaking of simple food, carefully prepared, and served in an appetizing manner, the sense of taste may be so developed as to enable us to get genuine satisfaction from extracting good flavors out of the food we are eating, as a lover of music does from hearing a star musical performance, or as an artist does from seeing some masterpiece in an art gallery.

In the *second principle*, that of appetizing serving, the aim is to satisfy the sense of sight and the sense of smell, as both have a direct bearing upon the digestion of food.

It is a well established fact that all the juices which aid the digestive processes are called forth at sight of food that is appetizingly and attractively served. The simple garnitures which all may employ,—a sprig of green, a friendly flower, contrast in color and design—and care to provide clean linen and appropriate dishes for serving, will greatly enhance the pleasure of the children and the grown-ups at the family board.

God has provided for our eyes fruits and flowers in the most attractive designs and colors. The wonderful hues and tints of the fruits that are "good for food" tempt us to enjoy their delightful flavors. If, however, foods are served with spots of bruise in evidence, or revealing rough, untrimmed surfaces, or in cracked dishes, or otherwise out of harmony, wherein lies the inducement to partake of and appropriate these foods to the needs of the body?

"God saw everything that He had made, and, behold, it was very good." Genesis 1:31. His injunction to us, "Eat ye that which is good," calls our attention to the reason as well. We are made of that which we eat. Our

food becomes our lifeblood. It should therefore be pure and palatable. It should be served attractively, that it may best offer to the human body the nutrition its elements contain.

There is therefore the utmost need that sufficient time be given to the preparation and careful service of the daily food, since this is to become the life of these human temples God has given.

FREE FATS IN COOKING

The question of the use of free fats in cooking should receive careful and thoughtful consideration, inasmuch as any extreme course in either direction is fraught with consequences that are detrimental to health. Many of the edible plants are deficient in the fat element; and instinctively, it would seem, man puts cream or butter on his bread. Fresh vegetables, while they have their delicate and characteristic flavors, taste "flat" without the addition of a little cream or free fat of some kind.

Nature serves fats in the very best form to be utilized by the body; that is, emulsified. These wholesome fats are supplied in nuts and olives, also in the yolk of egg, and in milk and cream. When taken in this form, each minute globule of fat is surrounded with a thin envelope, which holds the fat particles apart, and protects the foods from the free fat, thus permitting them to be readily digested.

Digestion of free fat takes place mainly in the small intestines. The pancreatic juice contains an enzyme called *steapsin*, which has the power of emulsifying fats, and also of splitting them into fatty acids and glycerin. The bile is an important factor in the digestion of fat. It has the power of greatly increasing the activity of the pancreatic lipase, and of holding in solution the fatty acids formed by its action, so that they are more perfectly absorbed.

Free or neutral fats, if used too freely with meals, have a tendency to smear over the foods, and interfere with

their digestion. The prolonged retention of free fats in the stomach favors fermentation and rancidity, often producing heartburn and intestinal catarrh.

Free fats, however, are more digestible when cold than when hot, because hot fats not only coat but intimately penetrate the food with which it is cooked. This is especially true of fried foods, where each part of food is coated with a layer of fat, which keeps the digestive juices from acting on the other food elements.

In seasoning such foods as hash or baked dressing, where the cooked potato in the hash and the soaked bread in the dressing readily absorb fat, and thus tend to make the food difficult of digestion, let the free fat first be used in making a sauce or a gravy, and then add this to the food. In this manner, the fat is not liberated to coat the starch granules, as is the case when free fat by itself is mixed with the starch and baked.

COMBINATIONS AND MENU MAKING

"The stomach crammed from every dish
Of boil and roast, and flesh and fish,
Where wind and phlegm and acid jar,
And the whole man is one intestine war,
Longs oft for schoolboy's simple fare,
The temperate sleep, and spirits light as air."

In order to eat for health and efficiency, man must observe certain fixed laws in regard to the choice of his diet. He must have his due share of growth and repair foods, the proteins; there must be the proper proportion of carbohydrates and fats, heat and energy producers; blended with these, there must be such mineral matters as are necessary for the repair of bones and teeth, and a proper bulk to stimulate active elimination.

Not only does the body need all these elements, but for perfect health, they must be taken into the stomach in *right chemical combinations*. Many people who think that a certain food does not agree with them, may find that the trouble is not with the food, but with the fact that the foods eaten have disagreed with one another. Many foods which in themselves are good, if mixed indiscriminately with a number of other foods at the same meal, may become actually poisonous, and produce fermentation, acidity, gas in the stomach, and many other ills leading to most serious consequences.

W. O. Atwater, Ph. D., of the Department of Agriculture, Washington, D. C., in Farmer's Bulletin, No. 142, writes as follows: "How much harm is done by the injurious compounds sometimes formed from ordinary wholesome foods is seldom realized. Physiological chemistry is revealing the fact that these compounds may affect even the brain and the nerves, and that some forms of insanity

are caused by products formed by the abnormal transformations of food and body material."

Before entering into a discussion of any foods that may or may not be antagonistic to one another, it may be well to notice a few common practices which work at cross-purposes with Nature's efforts for our best good, and which, if persistently followed, will neutralize any benefit that could be derived from an otherwise strict regimen.

1. *Large Variety.*—The serving of any considerable number of foods at one meal leads inevitably to overeating, which overtaxes the digestive organs, and thus makes for fermentation, and poisoning rather than nourishing the system. Overtaxation of the digestive organs is a bad form of dissipation, and is said to be the cause of more disease, whether directly or indirectly, than is caused by all alcoholic dissipation combined, the latter often being due to the former. "The feast is worse than the fast," if it tempts the appetite beyond the legitimate needs of the body, or if it brings together elements that the digestive organs are unable to cope with.

Dr. Alexander Haig says on this point: "Diet as at present used is often the product of a vast amount of ignorance; it is the cause of a hideous waste of time and money; it produces mental and moral obliquities, destroys health and shortens life, and generally quite fails to fulfill its proper purpose. I may say also that simple food of not more than two or three kinds at one meal is a great secret of health." (Compare "Ministry of Healing," page 310.)

2. *Irregular and Too Frequent Eating.*—"If you keep your digestive mill constantly grinding, it will soon wear out."

Some people indulge the habit of eating between meals because of ignorance; but many more, because of insufficient will power to resist the inclination. This practice invariably results in enfeebled and disordered digestion,

and prepares the way for many diseases, by lowering the body's vitality, thus disposing it to sickness and premature old age.

As a rule, meals come too closely together. The stomach should have time to dispose of one meal before another is introduced, with an interval of rest between; because the muscles of the stomach need rest after active work, just as do the muscles of the arm. The glands must have time to become recharged with a good quality of gastric juice. At least five or six hours should intervene between meals.

Not more than three meals should be taken daily. The evening meal should be light, and composed of foods most easily digested, such as zwieback, crackers, fruit, and milk or cereal coffee, and should be eaten at least three hours before bedtime. As a result of eating late suppers, the digestive process is continued through the sleeping hours, causing restless dreams and improper digestion. Thus the system is deprived of the needed recuperation from the previous day's work. The result is that the morning finds the person awakening unrefreshed, with little relish for breakfast.

For most people, two meals are better than three. Especially is this so with people of sedentary habit and with brain workers. If there is an "all gone" feeling at night before one retires, this is not necessarily a sign that the body needs more food, but usually that it needs rest, in which case a drink of cold water is about all that is required, or at most some fruit juice or an orange. By morning, the "all gone" feeling will have vanished, showing that rest and not food was what the stomach demanded.

3. *Hasty Eating*.—"The teeth were put in the mouth, not in the stomach; so the first thing is to chew. If you chew long, you will live long, and you will not need to eat so much. If you taste your food before you swallow it, you will not have to taste it afterward."—*David Paulson, M. D.*

Mastication is an important part of digestion; and when foods are not thoroughly masticated, additional work is required of the stomach, and that organ is overworked, because of having to do the mouth's work in addition to its own. Hasty eating, or "bolting" of food, is a fruitful cause of overeating. The food does not remain in the mouth long enough, under this condition, to give the satisfaction that it gives when thoroughly masticated; so in an effort to satisfy the craving for food, more is taken than the body requires. Dry foods, which induce mastication, should have a prominent place in the dietary.

4. *Condiments*.—All condiments are excitants of the stomach and of the digestive tract, which they irritate and congest. Being agents of high seasoning, they serve to awaken the appetite, not to satisfy it. A few quotations from well-known authors on this subject follow:

"In this fast age, the less exciting the food, the better. Condiments are injurious in their nature. Mustard, pepper, spices, pickles, and other things of a like character, irritate the stomach and make the blood feverish and impure."—*Ministry of Healing*, page 325.

Dr. Gilman Thompson, in his book "Practical Dietetics," pages 289 and 293, says: "They at first cause more food to be eaten than necessary, and eventually destroy the appetite, developing chronic dyspepsia of an aggravated type." "An excess of vinegar habitually consumed with pickles, or otherwise, causes anæmia and emaciation by lessening the number of red corpuscles and reducing the alkalinity of the blood."

Vinegar is made from wine, beer, cider, and from various fruits by a process of fermentation, and is an irritant to the delicate internal linings of the alimentary canal. Lemon juice, pure and wholesome, should supplant it for table use, and will be found to meet all the requirements of an acid in the preparation of food.

5. *Stimulants*.—Stimulation serves to bring an excess of blood to the mucous surface of the stomach. This creates abnormal appetite, usually mistaken for hunger, to satisfy which, one overeats, with the result that the digestive organs are burdened with a quantity of food which it will tax the system to dispose of.

“Tea and coffee are drugs, not foods, and should come from the drug store instead of the kitchen.”

The principal and active constituents of tea and coffee are caffeine, tannic acid, and volatile oil. The effect of caffeine upon the body is to stimulate the nervous system. It removes the sense of fatigue, but produces sleeplessness, often followed by palpitation of the heart, indigestion, trembling, and many other evils. A noted author on *materia medica* (Potter) makes the following statement in regard to caffeine:

“Used to excess, it disorders digestion, and causes functional disturbances of the nervous system, shown by headache, vertigo, mental confusion, and palpitation of the heart. It increases secretion, blunts sensation, exerts reflex excitability, increases mental activity, and may produce insomnia and great nervous restlessness. It first briefly stimulates the heart and raises arterial tension, but soon depresses both.”

Dr. Gilman Thompson again on this point says: “The ill effects of excessive tea drinking—the ‘tea habit’—are referable to its action on the digestive and nervous systems, and are cumulative. If taken in large quantities with meals, tea precipitates the digestive ferments, retards the activity of digestion, and may occasion gastric irritation and catarrh. Constipation usually results. . . . The effect of the ‘tea habit’ on the nervous system is to overstimulate and then depress it, first producing restlessness, worry, and insomnia, and finally muscular tremors, sensory disturbances, and palpitation.” “In a recent report

upon insanity in Ireland, tea is mentioned as a contributing factor."—"Practical Dietetics," pages 250, 251.

PLANNING THE MEAL

Since the health and efficiency of the family so directly depend upon what they eat, no other study is more worthy of the housewife's attention than the art of planning harmony in her meals.

A small amount of food in right combination will give more energy than a large amount poorly combined. This makes the selection of foods a matter not only of health, but of economics; and when the principles of combining foods are rightly understood, very palatable and nutritious meals may be prepared from the most simple and inexpensive foods.

In the planning of meals, foods must be considered from two general standpoints, that of *nutrition* and that of *agreement together*. In reference to the first consideration—that of supplying the various food principles in right proportion—if we think of foods in the following four groups, and see to it that at least one food from each group is served at least once a day, the daily ration will lack no necessary kind of food material.

1. *Carbohydrates*.—These include cereal grains,—wheat, rye, corn, oats, rice, etc.; and their products,—bread, macaroni, noodles, breakfast foods, and the like; also potatoes, bananas, dried fruits, honey, etc.

2. *Fats*.—Olives, nuts, cream, butter, vegetable oils, etc.

3. *Proteins*.—Dried peas, beans, and lentils; milk, eggs, cottage cheese, nuts, macaroni, whole grains.

4. *Mineral Matter, Vitamines, and Body-Regulating Substances*.—Fresh fruits and vegetables of all kinds; whole grains, unbolted flours, meals, etc.

Food combinations, therefore, play an important part in a well balanced ration. For instance, potatoes, which

are mostly starch, and eggs, which are largely albumen and fat, may be combined in such a way as to furnish all the needed elements in right proportion. As rice is nearly all starch, and beans are rich in protein, these make an excellent combination. Nuts, rich in proteins and fats, and fruits, containing sugar and acids, also combine well. To a meal composed largely of potatoes and rice, which are deficient in proteins and fats, there may be added a little cream, a few ripe olives, and a few nuts, to balance the needed elements in a meal.

In seeking to provide foods that will give proper nourishment to the body, we should avoid the extremes in either of two directions: on the one hand, that which tends toward an impoverished diet; on the other hand, that which brings into one meal too many heavy, highly concentrated foods. For instance, it will be seen that fresh vegetables, especially the coarser kinds, contain a large proportion of water in their composition, and thus by themselves would fail of supplying the proper nutrition to the body; but when served with the more solid foods, as grains, nuts and nut foods, or legumes, they furnish the needed bulk to the food, and are rich in mineral matters.

A few general rules for combinations from the standpoint of *agreement* are given below.

Foods that agree well together are:

- Grains with fruit and nuts.
- Grains with milk.
- Grains with eggs.
- Grains with vegetables and nuts.
- Fruit and nuts.

Foods that do not digest well together are:

- Fruits and vegetables, especially the coarse vegetables.
- Milk and sugar in quantities.
- Foods cooked in fats.

Fruits, as a rule, are very easily digested; while coarse vegetables, such as turnips, carrots, beets, tubers, cooked cabbage, and the like, require from three to four hours or more for digestion. Therefore when the two are mixed in the stomach, the delayed process of vegetable digestion serves to detain the fruit juices until fermentation is the natural result. The finer or fruity vegetables, which ripen in the sun, such as green peas, green corn, tomatoes, pumpkin, squash, cucumbers, melons, and the like, may be used with subacid fruits, by most people in health; and this should be taken into consideration in the making out of the plans.

In order to choose foods that will combine well in a meal, it is a good plan to select some dish as the keynote, so to speak, and group around it such others as will harmonize with it.

A safe plan to follow is to see that the *soup*, the *relishes*, and the *dessert*, if used, harmonize with each other, as nearly every one will partake of all three of these. If fruit salad or fruit dessert is used, and a vegetable is chosen, it should be of the finer or fruity kind.

In the old-fashioned "boiled dinner," including cabbage, turnips, potatoes, onions, etc., the mixture of vegetables should govern the selection of both soup and dessert, which should be chemically in keeping with it. Fresh fruits, fruit soup, or fruit dessert should never be combined with this kind of meal; but grains, nuts, and bread or rice pudding may be used, with a soup of some kind of legume, as peas, or beans, etc., or other nutritious food.

Sugar and milk taken together in large quantities are especially harmful. The adding of much sugar to mushes, or its too free use in cakes and puddings, makes them less wholesome in proportion to the amount added. The following quotation is given from "Ministry of Healing," page 302, and is to the point:

"Far too much sugar is ordinarily used in food. Cakes, sweet puddings, pastries, jellies, jams, are active causes of indigestion. Especially harmful are the custards and puddings in which milk, eggs, and sugar are the chief ingredients. The free use of milk and sugar taken together should be avoided."

SIMPLE MENUS

The following menus are designed to represent a fair combination of foods in meals, both from the standpoint of nutrition, and also of agreement.

BREAKFAST

ORANGES	STEAMED NATURAL BROWN RICE	APPLE SAUCE
CORN DODGERS	CREAM HONEY	BAKED GARBANZOS

DINNER

LETTUCE	NEW ENGLAND DINNER	RIPE OLIVES
ENTIRE WHEAT BREAD	ENGLISH WALNUTS	

HOOVER PUDDING

LUNCHEON

BAKED BANANAS	GRAPES
RYE WAFERS	CREAM RICE CEREAL COFFEE

BREAKFAST

CANTALOUPE	SAVORY HASH	JELLIED EGG
CORN PUFFS	MILK	BUTTER

DINNER

	CREAM OF CORN SOUP	
SLICED TOMATO	WHOLE RICE WITH PEAS	COTTAGE CHEESE
RYE BREAD	STRAWBERRY WHIP	BUTTER

LUNCHEON

PEARS	STEWED PRUNES	MILK TOAST
CREAM ROLLS	CEREAL COFFEE	

The accompanying table gives the proportion of food elements in some of our most common foods. By a little study, one can become sufficiently intelligent along this line to keep the diet properly balanced.

TABLE OF FOOD COMPOSITION

NAME	PORTION CONTAINING 100 CALORIES	WT. OF		PER CENT OF	
		100 C.	100 C.	Fat	Carbo- hydrates
	<i>A approx- imate</i>	<i>Ounces</i>	<i>Protein</i>		
Apple Sauce	ordinary serving	3.3	2	5	93
Apples, raw	2 apples	7.3	3	7	90
Apricots, cooked	large serving	4.6	6		94
Bananas	1 large	3.5	5	5	90
Beans, baked	small size dish	2.6	21	18	61
Beans, string	5 servings	16.6	15	48	37
Beets	3 servings	8.7	2	23	75
Bread, corn	small square	1.3	12	16	72
Bread, rye	2 small slices	1.4	14	2	84
Bread, white	ordinary thick slice	1.3	13	6	81
Bread, whole wheat	2 small slices	1.4	16	3	81
Butter	small pat . . . . .	.44	.5	99.5	
Buttermilk	1 1/4 glasses	9.7	34	12	54
Cake, sponge	small piece	2.5	19	10	71
Cantaloupe	ordinary serving	8.6	6		94
Carrots	2 servings	5.8	10	34	56
Corn Flakes	ordinary bowl . . . . .	.97	11	1	88
Corn, sweet	ordinary serving	3.5	13	10	77
Cottage Cheese	small serving	3.1	76	8	16
Grape Juice	small glass	4.2			100
Macaroni, cooked	ordinary serving	3.85	14	15	71
Milk, whole	small glass	4.9	19	52	29
Milk, skimmed	1 1/2 glasses	9.4	37	7	56
Hominy, cooked	large serving	4.2	11	2	87
Honey	4 teaspoonfuls	1.05	1		99
Olives, ripe	7 olives	1.3	2	91	7
Orange Juice	1 teacupful	6.6			100
Peaches	2 medium size	4.7	4	2	94
Peanuts	about 26 . . . . .	.62	20	63	17
Pears	1 large	5.4	4	7	89
Peas, green	1 serving	3.	23	27	50
Pecan Nuts	about 8 . . . . .	.46	6	87	7
Potatoes, baked	1 large	3.	11	1	88
Rice, cooked	ordinary bowl	3.1	10	1	89
Rolls, buns,	1 large	1.2	12	7	81
Soup, cream barley,	ordinary bowl	5.	14	33	53
Strawberries	2 servings	9.1	10	15	75
Sugar, granulated	1 1/2 tablespoonfuls . . . . .	.86			100
Sugar, maple	2 tablespoonfuls	1.03			100
Tomatoes, fresh	4 medium size	15.	15	16	69
Wheat Flour	4 tablespoonfuls . . . . .	.96	15	5	80
Zwieback	one thick slice . . . . .	.81	9	21	70

COURSE OF COOKING LESSONS

The following course of lessons is in no way intended as a complete guide to hygienic cookery. Of the great variety of ways that are healthful and nourishing, in which grains, fruits, nuts, and vegetables may be prepared, only a few of the most practical can be taken up here.

For class work, this course consists of a series of twenty lessons, two lessons each week, and each period occupying two hours; but it may be modified by the instructor according to convenience, the occasion, or the length of time given for class periods. The number of pupils composing a class should range from eight to twenty-four. Careful attention is given to the study of the nutritive values of foods, their digestibility, combinations, etc., and to the general principles involved in the making of menus. A study of the recipes, with accompanying instructions, before beginning the practical work of each class, will simplify the work, and aid the students in an understanding of the principles brought out.

LESSON OUTLINE

- Lesson 1. Pasteurized milk, lactosa, cottage cheese, vegetable butter, steamed natural rice, wheat sticks, prune whip.
- Lesson 2. Cream of tomato soup, baked dressing without eggs, brown gravy, steamed fruit pudding.
- Lesson 3. Whole rice with peas, corn dodgers, stewed beets, oat gruel, Hoover pudding.
- Lesson 4. Nut and potato pie, stewed carrots, buckwheat sticks, pumpkin pie without eggs.
- Lesson 5. Aërated wheat gems, Spanish rice, gluten gruel, lemon snow.
- Lesson 6. Vegetable salads, dressings, garnitures.
- Lesson 7. Family potato soup, ribbon bean loaf, baked bean purée, corn bread, Graham fruit pudding.
- Lesson 8. Macaroni family style, spinach, browned rice, corn meal crisps.

- Lesson 9. Vegetable gelatin, orange jelly, lemon jelly, berry jelly, fruit mold, vegetable loaf en aspic.
- Lesson 10. Julienne soup, bean patties, rice and egg croquettes, apple and raisin pudding.
- Lesson 11. Noodles, soy bean-rice loaf, soy bean-rice patties, lemon pie, junket.
- Lesson 12. Cream of corn soup, loaf cake, plain icing, toast water.
- Lesson 13. Peas with noodles, macaroni au gratin, baked eggplant, cream sauce, gluten biscuit.
- Lesson 14. Principles of bread making, wheat bread, gluten bread, rolls, buns.
- Lesson 15. Potato stew with dumplings, grano cereal, cream rice pudding.
- Lesson 16. Savory hash, fruit crisps, rice water, albumenized milk, fruit soup.
- Lesson 17. Wheat puffs, baked Lima beans, duchess potato, pressed fruit pudding.
- Lesson 18. Principles of canning and preserving—practical work.
- Lesson 19. Fruit salads, baked banana, jellied egg, lemon whey.
- Lesson 20. Layer cake, frosting, ornamenting.

ESSENTIALS TO SUCCESS

In this work, as in any other, two things are vital to success,—first a careful planning, and then the carrying out of the plans made; as expressed in the terse sentence, "Plan your work, then work your plan."

All the ingredients necessary for the preparation of a dish should be at hand and carefully measured before we begin to combine them. Accuracy in measuring and carefulness in combining are as essential to the success of a recipe as is the knowledge of what is to go into it.

The effect of heat at different temperatures, and the time of exposure to it, must be understood. But this knowledge can come only as a result of experience.

The following articles are necessary for measuring: a cup holding exactly one half pint, with thirds and fourths indicated, teaspoons and tablespoons of regulation sizes,

and a common table knife. To insure uniformly good results, *level measurements* have been adopted by leading teachers in cookery, as the best guide that can be given; and these will be used throughout this book. The following table of measures may be used as a guide:

TABLE OF MEASURES

3 teaspoons	equal 1	tablespoon
2 tablespoons of sugar or liquid.....	equal 1	ounce
16 tablespoons	equal 1	cup
4 cups	equal 1	quart
2 cups sugar and most liquids.....	equal 1	pound
10 eggs	equal 1	pint
9 whites	equal 1	cup
12 yolks (large).....	equal 1	cup

To measure a cupful of any dry ingredient, fill the cup, rounding slightly by placing material in the cup with a spoon; and with the sharp edge of a case knife, brush off all material that is piled above the brim. Care must be taken not to shake the cup.

To measure a teaspoon or tablespoon of dry ingredients, dip the spoon into the same, and with the edge of a case knife turned toward the tip of the spoon, brush off all that extends above its edge. For one half spoonful, divide with a knife lengthwise of the spoon, and push out one half; divide halves crosswise for quarters. The term "sifted flour" implies that flour is sifted once before measuring.

In combining ingredients, three movements are employed, described as follows:

1. *Stirring*, a circular motion made with a spoon through the ingredients, continued until all are blended.

2. *Beating*, a turning of ingredients over and over rapidly by means of a spoon or an egg whip, to inclose air by continually bringing the under part to the surface, allowing the utensil used to be brought constantly in con-

tact with the bottom of the dish, and up through the whole mixture.

3. *Folding*, a turning over and over of the ingredients; best accomplished by a vertical, downward motion of spoon or whip, bringing it up through the mixture, and each time allowing it to come in contact with the bottom of the dish, repeating until all is thoroughly blended. This is a slower movement than that of beating, and its object is so to mix ingredients that the air already introduced may not escape.

MISCELLANEOUS RECIPES

Butter Substitutes.—The great increase in tuberculosis among cattle, as well as the continued rise in price of nearly all foodstuffs, has created a desire for some substitute for dairy butter which would prove inexpensive, yet wholesome and appetizing. The following preparations are now used to a considerable extent, both for cooking and for table use, and can be prepared in a few minutes' time. In the following recipes, throughout the book, dairy butter may be substituted for vegetable butter if desired, the same amount being used that is given for vegetable butter.

EMULSIFIED VEGETABLE OIL

Secure a high grade of cottonseed or corn oil. Beat one egg slightly, and add the oil, a few drops to begin with, stirring constantly and increasing the oil gradually. Add two teaspoonfuls of lemon juice, then more oil, until three cups of oil have been used, and the mixture is smooth and quite thick. Salt to taste, and put into a well covered crock, and use the same as dairy butter.

VEGETABLE BUTTER

Take three cupfuls of any good coconut product on the market, such as kokofat, kaola, or a good brand of hydrogenated vegetable fat, such as crisco.* Add the juice of half a small lemon, salt to taste, and a few drops of vegetable butter color. Mix with spoon or fork, until the color of dairy butter. The juice from carrots, obtained by grating, and pressing out in a cloth, may be used instead of lemon juice and butter color if desired, and is rich in vitamine content.

* The mention of a proprietary substance in a recipe must not be taken as a guarantee by the authors. We know very little about the manufacture of the above named products; but we have reason to believe they are wholesome, and contain no animal fat.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

PASTEURIZED MILK

Experiments made by the Bureau of Animal Industry, (*Reference*—M-2. 212. 9), United States Department of Agriculture, Washington, D. C., have shown that the tubercle bacilli and the bacilli of typhoid were killed when milk in which either of the above organisms had been placed experimentally was kept at a temperature of 140 degrees F. (60 degrees C.) for twenty minutes; also, that heating milk to 185 degrees F. in the so-called "flash" Pasteurizing apparatus, and then cooling it, serves to destroy any tubercle bacilli that may be present.

Method.—Place a rack or a piece of thick wire netting in the bottom of a pail or a large saucepan. Arrange the bottles of milk on the rack. Wipe the mouths and caps of the bottles with a wet cloth, but do not remove the caps. Make an opening in the cap of one of them, large enough to insert a thermometer, which must be previously sterilized. Surround the bottles with cold water until the water reaches nearly to the top of the bottles. Place over the fire, and bring quickly to the temperature of 150 degrees F., as indicated by the thermometer within the bottle. Remove from the saucepan, cover with a cloth, and let stand on the table for twenty minutes, after which cool gradually by setting the bottles into warm water, then cooler, and lastly cold water. Set on ice if it is available, and do not remove the caps until the milk is needed.

BUTTERMILK

The therapeutic value of buttermilk is well known to the medical profession.

People who suffer of such diseases as acute diarrhea, gastritis, and intestinal diseases, during the hot season, often find the use of sour milk the best means of combating the trouble. The claim put forth is that many of the

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

putrefactive bacteria of the large intestine are gradually replaced by the harmless lactic acid germs.

In making buttermilk with acid-forming ferments, first destroy the other germs that are always found in milk. This is accomplished by heating the milk before starting to make the lactosa. Lactone tablets contain the active ferment in a latent form. Thus a number of hours is required for them to develop actively, and this is accomplished by keeping the milk at about 85 degrees Fahrenheit. The fireless is a good place to set the milk in which the lactic germs are to develop.

Starter.—Bring one pint of milk to the boiling point, then set the dish into a pan of cold water to cool. When lukewarm, add one half lactone tablet, dissolved in a little water. Mix well, cover tightly, and set in a warm room or in a fireless until coagulated, which will require from eight to twelve hours or more, according to the temperature of the room in which it is kept. As soon as the milk has thickened, set it in the refrigerator, if available; and in twenty-four hours, you have your starter. It is of no account unless it has thickened. This starter will keep for days, but it is not good to drink, and there is no need of keeping it after the first lactosa is made.

Lactosa.—Bring one quart of milk to the boiling point, then cool by setting in cold water. When lukewarm, add one tablespoonful of the starter, and mix well. Cover, and set in a warm room or in a fireless until it coagulates, which should take from four to twelve hours, according to the temperature of the room in which it is kept. As soon as it is thick, set into the refrigerator, or in a cool place; and when cold, it is ready to drink. Beat smooth with an egg whip before serving. This should keep sweet for two or three days. The next time it is made, use this lactosa for a starter, one tablespoonful to a quart of milk. If the milk tastes too acid, or if it is covered with a thin

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

HOMEMADE CEREAL COFFEE

$\frac{2}{3}$ cup corn meal 2 cups bran $\frac{1}{2}$ cup molasses
 $\frac{1}{2}$ cup boiling water

Mix the dry ingredients in a bowl. Add the hot water to the molasses, and mix well. Pour the wetting on the grain, rub between the hands, and mix thoroughly. Put into a baking pan, and bake in a good oven until well burned, stirring often, so that the color may be uniform and almost black. Remove from the oven, and use the same as ordinary coffee.

FRUIT COFFEE

Take dried figs, wash and cut into pieces. Lay on a pie tin, and bake until black and crisp. Break up, add boiling water, let simmer for a few moments, and serve the same as cereal coffee.

GRANO CEREAL

2 cups pastry flour $\frac{1}{2}$ cup rolled oats $\frac{1}{4}$ cup corn meal
 Large $\frac{1}{2}$ cup water $\frac{1}{4}$ teaspoonful salt

Mix all the dry ingredients. Add the water slowly, stirring constantly through the flour, so as to avoid getting any particles of flour too wet, and mix to a stiff dough. Work on the board for a few moments. Then roll out $\frac{1}{4}$ inch thick, cut into strips, lay in a baking pan, prick with a fork, and bake to a light brown color. When cold, grind through a food chopper, using a coarse knife.

NOODLES

1 egg 1 tablespoonful water or milk About $1\frac{1}{4}$ cups pastry flour
 A few grains of salt

Beat the egg slightly with a fork. Add the water and the salt. Mix in flour sufficient to make a very stiff dough. Knead well, divide into two pieces, and roll out to the thickness of paper, having the board well floured. Let dry for a few minutes. Then cut into strips $1\frac{1}{2}$ inches wide,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

pile these in tiers, and cut crosswise into fine shreds with a sharp knife. These will keep well if dried after being shredded.

PARCHED CORN

Select a fine grade of ripe sweet corn. Shell, and lay in a baking pan in shallow layers, put into the oven, and brown very lightly, stirring often. While it is yet hot, after removing from the oven, add a little vegetable butter and a sprinkle of salt. Mix well, and serve.

CREAM ROAST FLOUR

Sift flour into a baking pan, about two inches deep. Put into a moderate oven, and stir often until lightly toasted, but not browned at all. Sift again, and keep for use as needed.

BROWN FLOUR

Sift flour into a baking pan, put into a good oven, and cook to a nice brown, stirring often, so that it may be uniform in color and not scorched. Sift again into a crock, and keep for future use.

BREAD CROUTONS

Trim the outer crust from stale bread. Cut into $\frac{1}{2}$ -inch cubes. Bake in an oiled baking pan, stirring often, until a light brown all the way through. For soup croutons, cut the bread into $\frac{1}{4}$ -inch cubes, and bake the same as above.

SOUP ROYALE

Separate 1 egg. Add 1 teaspoonful milk to the white, and 2 teaspoonfuls milk to the yolk. Add a pinch of salt, and beat lightly with fork, to mix. Oil two timbale molds, and have the bottom of the molds lined with paper. Pour the egg yolk and the white into the separate molds, and poach in a pan of water until just "set." When cold, slice and cut into any desired shape for soup garniture.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

BREAD

Bread is the most important article of diet, and deserves more attention than it receives. Considering the conveniences that exist everywhere, and the widespread knowledge of bread making, it seems unnecessary and wrong to find poor bread on the table. "Homemade bread requires care and attention; and then you have the real staff of life."

Breads are divided into two classes: 1. Unfermented—made light by the introduction of air into the dough or batter; 2. Fermented—made light by a ferment, yeast being usually employed.

Space will not permit us at this time to enter into an extended discussion of the effects following the use of sodium bicarbonate (soda) and baking powders in bread making. However, a few quotations from authoritative sources may be of interest.

Harvey W. Wiley, food expert and chemist, in his book "Foods and Their Adulteration," under the caption "Harmfulness of Baking Powder Residues," page 253, has the following to say:

"The question of harmfulness of the residues left by the various forms of baking powder is one which has been of much interest to the hygienist and physician. It is not claimed in any case that the residues are beneficial. The principal question which has been discussed is, which of them is the least harmful. This is a question which it is not proper to enter into in this manual. It might, however, not be out of place to say that the use of chemical reagents for leavening bread is not so advisable as the ordinary fermentation."

"It would be better, evidently, if all people used more yeast breads and less baking powder rolls. At the same time, the utility and convenience of baking powder cannot be denied, and this is a factor which must be taken into

consideration in the general discussion and final resolution of the question."

Dr. I. P. Pavlov, professor in the Imperial Military Academy of Medicine, St. Petersburg, writes as follows: "Concerning the effects of a continued addition of sodium bicarbonate to the food,—such an addition for a length of time markedly depresses the secretory activity of the pancreas, and brings it down to an unusually low level." "To sodium bicarbonate (soda), an inhibitory influence must be ascribed."—"The Work of the Digestive Glands," pages 113, 145.

In regard to the destructive action of soda on vitamins in food, the Monthly Bulletin, Indiana State Board of Health, of June, 1916, contains the following: "Another disease called pellagra, which frequently ends in insanity and death, is also produced by eating devitaminized foods. It is found that soda kills vitamins; therefore we must not put soda into our foods. . . . Biscuits made light with bicarbonate of soda (baking soda), and which always have a 'soda taste,' are very unwholesome. . . . Cooks should not use bicarbonate of soda in cooking dried beans, dried corn, dried peas, and the like, even if it does hasten the process."

From the book "Ministry of Healing," pages 300, 301, we read: "The use of soda or baking powder in bread making is harmful and unnecessary. Soda causes inflammation of the stomach, and often poisons the entire system. Many housewives think that they cannot make good bread without soda, but this is an error. If they would take the time to learn better methods, their bread would be more wholesome, and to a natural taste, it would be more palatable."

Air may be incorporated into a batter by beating. The use of eggs will aid in the process, because the white of egg, on account of its viscous nature, readily catches air and helps convey it into the batter. The following recipe for wheat puffs will help to illustrate these principles:

UNFERMENTED BATTER BREADS

WHEAT PUFFS

1 $\frac{3}{4}$ cups sifted pastry flour	$\frac{1}{4}$ cup whole wheat flour
$\frac{1}{2}$ teaspoonful salt	1 teaspoonful vegetable fat
	1 egg separated
	1 cup milk

Make a batter of the flour, milk, salt, oil, and yolk of egg, and stir smooth. Beat the white stiff, and pour the batter gradually into the beaten white, and mix, using the folding motion. Pour by large spoonfuls into hot, well oiled iron gem pans, and bake in a quick oven to a nice brown.

CURRANT PUFFS

Use the above recipe, and as soon as the irons are filled with batter, sprinkle a few dried currants into each mold, and bake the same as the above recipe.

CORN MEAL PUFFS

1 cup pastry flour	$\frac{1}{2}$ cup corn meal (toasted lightly in the oven)
$\frac{1}{2}$ teaspoonful salt	2 teaspoonfuls vegetable fat
1 scant cup milk	1 egg separated

Make a batter of the flour, corn meal, milk, oil, salt, and yolk of egg, and stir smooth. Beat the white stiff, and gradually fold the batter into the beaten white, and bake the same as wheat puffs.

AERATED WHEAT GEMS

1 cup whole wheat flour	$\frac{1}{2}$ cup white bread flour	$\frac{1}{2}$ teaspoonful salt
1 tablespoonful melted vegetable butter	1 $\frac{1}{4}$ cups milk	

Make a batter of the flour, salt, fat, and cold milk, and beat for a couple of minutes. The milk should be cold, and the irons heated in a good oven. Fill each mold with a large spoonful of the batter, and bake the same as wheat puffs. This kind of bread is best if mixed the night before, and set in a cold place overnight.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

AËRATED CORN MEAL GEMS

½ cup white bread flour	1 cup corn meal (lightly toasted in the oven)
½ teaspoonful salt	1 tablespoonful melted vegetable butter
	1 ¼ cups milk

Make a batter at night, of the flour, corn meal, fat, salt, and milk. Beat for a few minutes, and let stand in a cold place overnight. In the morning, pour into hot, well oiled iron gem pans, and bake the same as wheat gems.

CORN BREAD

1 ½ cups corn meal	2 tablespoonfuls whole wheat flour
2 ½ tablespoonfuls vegetable butter	2 tablespoonfuls sugar
1 ¼ teaspoonfuls salt	1 ½ cups boiling water
	2 eggs separated

Mix all the dry ingredients in a bowl, add the butter, pour on the boiling water in a slow stream, stirring continuously. Add two or three tablespoonfuls cold water if needed, to make a medium smooth batter. Beat the whites stiff. Beat the yolks, and fold them into the beaten whites. Into this, work the corn mixture, and mix, using the folding motion. Pour into a shallow oiled baking pan, and bake in a quick oven. Success in making this bread will depend largely on following the directions in having the water *boiling hot*, and then pouring it over the meal in a slow stream, as too rapid pouring will dissolve the starch granules, and consequently it will absorb too much water, and as a result, it cannot be made light in baking.

CORN DODGERS

1 cup corn meal (preferably toasted lightly in the oven)	
1 ½ tablespoonfuls vegetable fat	½ teaspoonful salt
1 tablespoonful brown sugar	1 ½ cups boiling water

Mix all the dry ingredients, add the fat, and pour on the boiling water all at once and stir smooth. A few tablespoonfuls of water may be added if needed, to make the batter of a consistency barely to drop from a spoon, but not run. Drop from the side of a large spoon, into an

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

oiled baking pan, in oblong shapes, and bake in a quick oven.

CORN CAKE

Take the above corn mixture, and spread in an oiled baking pan $\frac{1}{4}$ inch deep, and bake in a hot oven.

JOHNNYCAKE

1 cup corn meal	2 tablespoonfuls whole wheat flour
1 tablespoonful sugar	1½ tablespoonfuls vegetable fat
½ teaspoonful salt	1 cup boiling milk
	1 egg separated

Put the corn meal and the flour into the oven until lightly toasted. Mix all the dry ingredients. Add the fat and pour on the boiling milk all at once, and stir. Two or three tablespoonfuls more of cold milk may be added if needed to make smooth, but the mixture must not be soft. Beat the white stiff. Beat the yolk, and fold the yolk into the beaten white. Add the corn mixture, and mix, using the folding motion. Drop from the side of a spoon into an oiled pan, in oblong shapes, leaving space between, and bake in a quick oven.

HOT CAKES

¾ cup coarse zwieback crumbs	3 tablespoonfuls flour
¼ teaspoonful salt	1 teaspoonful brown sugar
	2 eggs
	1 cup warm milk

Heat the milk to about 115 degrees. Mix all the dry ingredients well, pour the milk over them, and let stand ten minutes. Separate the eggs. Beat the yolks, and stir them into the crumb mixture. Beat the whites stiff, fold the crumb mixture into the beaten whites, and bake on an oiled soapstone griddle.

UNFERMENTED DOUGH BREADS

The earliest forms of bread were "unleavened breads." This term has been applied to hard breads, such as the Passover cakes of the Israelites, and other breads in the

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

ENTIRE WHEAT STICKS

1 $\frac{3}{4}$ cups entire wheat flour $\frac{1}{2}$ teaspoonful salt 1 tablespoonful sugar
 2 tablespoonfuls vegetable fat $\frac{1}{2}$ cup cold water

Mix all the dry ingredients, add the melted fat, and rub between the hands to distribute the oil evenly. Add the water slowly, and mix the same as for wheat sticks, except that this dough may be a little softer, because of the entire wheat used.

WALNUT STICKS

Add $\frac{1}{3}$ cup chopped walnuts to the flour of either of the above recipes for sticks, and bake the same as wheat sticks.

FRUIT CRISPS

1 $\frac{1}{2}$ cups pastry flour $\frac{1}{2}$ cup whole wheat flour $\frac{1}{2}$ teaspoonful salt
 3 tablespoonfuls sugar 2 $\frac{1}{2}$ tablespoonfuls vegetable fat
 Scant $\frac{1}{2}$ cup cold water Sultana raisins or figs

Wash the raisins, and lift them out of the water. Put them on the fire with barely enough moisture to heat them through. As soon as the water is evaporated, remove from the fire, and grind through a coarse food mill. Mix all the dry ingredients. Add the oil, and rub the flour between the hands to distribute the oil evenly. Add the water slowly, only sufficient to mix into a stiff dough, following directions for mixing cream rolls. Work the dough together, and roll out into a long strip, about the thickness of pie crust. Spread the fruit over half of the dough. Then fold the remaining half over the fruit, and roll lightly with a rolling-pin to press the dough together. Cut into squares, prick with a fork, lay in a baking pan, and bake on the top grate of a hot oven, to a very light brown. Care must be used not to overcook this bread, as the fruit sugar burns very quickly. Remove from the oven before the fruit has had time to cook too much.

DATE ROLLS

Make pastry from the above recipe. Roll out to the thickness of pie crust, cut into strips 2 $\frac{1}{2}$ inches wide,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

moisten the back edge of the strip of pastry, place stoned dates end to end in the middle of the strip, and fold up the front edge of the pastry. Then roll over until the edges meet, and cut into 3-inch lengths. Bake in a moderate oven until light brown.

CORN MEAL CRISPS

1 cup corn meal 1 cup pastry flour $\frac{1}{2}$ teaspoonful salt
 1 tablespoonful sugar 2 tablespoonfuls vegetable fat
 $\frac{1}{2}$ cup water

Mix all the dry ingredients, add the oil, and rub between the hands. Add the water, and mix to dough. Roll out $\frac{1}{4}$ inch thick, and cut with a biscuit cutter. Prick with a fork, and bake to a light brown.

RYE WAFERS

1 cup rye flour 1 cup pastry flour 2 $\frac{1}{2}$ tablespoonfuls vegetable fat
 2 tablespoonfuls brown sugar $\frac{1}{2}$ teaspoonful salt
 Scant $\frac{1}{2}$ cup water, or just enough water to hold the flour
 together to stiff dough

Mix all the dry ingredients, add the oil, and rub the flour between the hands to distribute the oil through the flour. Add the water slowly, and mix the same as for wheat sticks. Roll out $\frac{1}{4}$ inch thick, cut with a biscuit cutter, prick with a fork, and bake to a light brown color.

RYE STICKS

Take the above dough, and roll out $\frac{1}{2}$ inch thick. Cut into long strips about $\frac{1}{2}$ inch wide, then again crosswise into 3-inch lengths. Lay in a baking pan, leaving a little space between, and bake to a light brown color.

BUCKWHEAT STICKS

1 cup buckwheat flour 1 cup pastry flour $\frac{1}{2}$ teaspoonful salt
 2 $\frac{1}{2}$ tablespoonfuls vegetable fat 2 tablespoonfuls brown sugar
 Scant $\frac{1}{2}$ cup water

Mix and bake the same as for rye sticks.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

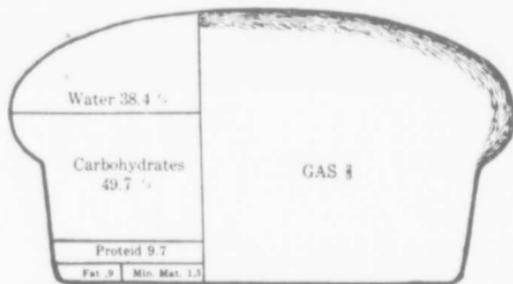
BUCKWHEAT WAFERS

Roll out the above dough to $\frac{1}{4}$ inch thick, cut with a biscuit cutter, prick with a fork, and bake to a light brown color.

FERMENTED BREADS

Weight for weight, bread must be considered one of the most nutritious of foods. The fact that more than three fifths of it consists of solid nutriment, and less than two fifths of water, gives it a special place in the list of foods; and there are no animal foods, and but few cooked vegetable foods, that can be compared with it.

In the study of the chemical composition of bread, we find that two thirds of the volume of a good loaf of bread is made up of gas; and of the solid part, less than forty per cent is water. Of the chemical constituents necessary



for proper nutrition, bread yields a large proportion of carbohydrates, a liberal amount of protein and mineral matter, and a small amount of fat, making it one of the most nutritious and well balanced articles of diet.

"The common use of superfine white flour in bread making is neither healthful nor economical." While the white-flour products have a high total nutritive value, they are really an impoverished food; for in rejecting the germ and the bran, the miller discards some of the most

useful constituents of wheat. With the germ, proteid and fat are lost; and when the outer layers of the wheat, which are impregnated with mineral matter, are separated from the kernel, the bread is left almost void of these substances, which are so indispensable to health.

To the natural taste, there is something lacking, something not satisfying, in white bread, but which is found in that made from the whole grain. This leaves a craving which many attempt to satisfy with rich pastries, meat, spices, and condiments. Fine-flour bread is also a frequent cause of constipation and other unhealthy conditions.

In order to make good bread, it is necessary to have good flour. The strength of a flour is determined by the quantity of gluten it contains. Gluten is the chief proteid of wheat. Its elastic qualities, when mixed with water, and acted upon by yeast, allow the gas formed to expand without danger of escape. A flour in which the gluten is strong and tenacious will resist a much stronger pressure of gas than one with scant or weak gluten. Similarly, the amount of water that should be used will vary with the strength of the flour; for the stronger the gluten in the flour, the more liquid it will absorb; and the softer the wheat, the less water will be needed.

The best bread flour is in reality the cheapest, for it makes more and better bread than the same quantity of soft wheat flour. The best flour is of a cream white color; and when a handful is taken and squeezed, it will not retain the imprint of the fingers, but will fall like dry sand. Ordinary pastry or soft wheat flour, when handled in this way, will retain its shape in the hand.

PRINCIPLES OF BREAD MAKING

Fermented bread is usually made by mixing to a dough, flour, water, salt, and yeast, a small amount of sugar being added to hasten fermentation. The dough is then kneaded

until it is elastic to the touch and does not stick to the board, the object being to incorporate air and to distribute the yeast uniformly. It is then covered, and allowed to rise until it has doubled its bulk and does not respond to the touch, or when tapped sharply, *gradually but stubbornly begins to sink*. At this stage, the dough is *proofed* (ripe), and is ready to be worked down, and will require all the way from two to three and a half hours, according to the grade or consistency of the flour used, and to the temperature of the room in which it is set, to rise. This process is best accomplished at a temperature ranging from 75 to 85 degrees Fahrenheit. The bread is then worked down well, turned over in the bowl, and allowed to rise again until about half again its former bulk. It is then turned out on a lightly floured board, and kneaded a little to break the air bubbles, and to distribute evenly the gas formed. It is then molded into loaves and put into pans for baking.

Bread should never be allowed to rise until it begins to fall of itself. At this stage, it has risen too much, and borders on sourness. There are three stages of fermentation; namely, alcoholic, acetous, and putrefactive. Bread should be baked during the alcoholic stage. If fermentation is allowed to go on after the yeast has done its work, bacterial action begins which results in sour bread.

It is very important to know when the bread is sufficiently light *after it has been placed in the pans*. It should never be allowed to rise to its limit before it is put into the oven, but should continue to rise for the first ten minutes after it has been put into the oven. It is better if baked a little too soon than if allowed to rise too much. If it is allowed to rise too much, it will be coarse grained and tasteless. If the bread gets too light in the pans, it may be molded over again and allowed to rise as before.

To test the lightness of the dough in the pans, press the loaf gently. If it responds promptly to the touch, it may

be allowed to rise more. If it responds weakly, it should be put into the oven immediately.

Bread made from whole wheat or Graham flour must not be allowed to go quite so far in the process of fermentation as white bread, and should be watched closely during the successive stages of development, as it rises in less time than white bread. The coarse consistency of the whole grain allows the gas to escape more readily from the dough than from that made of a strong white flour.

Entire whole wheat bread is readily made from hard wheat flour—that is, from wheat which is grown where the summers are short and not too hot—with no white flour. The dough must be soft, and is a little more difficult to handle; but all the mineral substances and vitamins contained in wheat, and which are so essential to our well-being, are then retained in the bread, adding much to its flavor and wholesomeness.

The Western wheat, also that grown farther south, is a soft wheat, and does not of itself make good bread, but may be combined with a strong gluten flour. Very often Graham or whole wheat flour is made from this kind of wheat, and is then used in bread making in the proportion of about one part Graham or whole wheat to two parts strong white bread flour.

Bread is also made by setting a sponge at the beginning, making a batter of the water, yeast, and part of the flour, and letting it rise until the batter is charged with the yeast, then adding any other ingredients, as fruit and shortening for fruit bread, shortening for buns, or cracked grain for coarse bread, and working all into a dough. Ordinary white bread, whole wheat, and Graham are sometimes made by the same process. A sponge is sufficiently light when it appears frothy and is full of bubbles. The time required will vary with the quantity and quality of yeast used, and the temperature of the room in which it is set to rise.

As a general rule, with the best quality of bread flour, three measures of flour to one of water are required to make a dough of the proper consistency. For whole wheat or Graham bread, less flour is used to the same amount of liquid. The whole wheat and Graham flours used in the following recipes are made from Kansas hard wheat.

BAKING

Bread should be baked in a quick oven to begin with. The oven should not be so hot as to burn the outside of the loaf before the inside is cooked, but should be of such a temperature that the bread may rise for the first ten minutes, and then have sufficient crust to hold it up, when the fire should be closed up to hold a steady heat until the bread is done. For the small loaves, forty to forty-five minutes is generally sufficient; for the larger ones or those of ordinary size, one hour to an hour and a quarter. A well baked loaf may be lifted from the pan and placed upon the palm of the hand without burning it. This should always be the case when bread is well baked and the moisture evaporated. When done, remove from the pans and lay on the side on a wire rack to cool. If brushed over the top with warm water just after it is taken out of the oven, the crust of the bread will keep softer, and will have a nice color.

YEASTS

The most convenient yeast is that sold as compressed yeast. It should be used only when fresh. Its freshness may be determined by its light color and absence of dark streaks. When compressed yeast is not obtainable, very good bread is made from dried yeast, as in the following recipe.

LIQUID YEAST

1 cake dried yeast 2 cups potato water $\frac{3}{4}$ cup sugar

Drain the water from mashed potatoes at noon; and when it is cooled to about 100 degrees, add the sugar, and

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

the yeast cake broken up. Put into a glass jar, and set in a *warm place* until evening. The liquid should measure two cups.

MOTHER'S BREAD

Night Sponge.—Add 3 cups of water to the above liquid yeast, having the liquid about the temperature of the room in which the bread is set to rise. Beat in 7 cups white bread flour to smooth batter. Cover, and if the weather is cold, wrap in cloth until the morning.

Dough.—In the morning, add 3 tablespoonfuls salt, 3 tablespoonfuls sugar, 3 tablespoonfuls melted vegetable fat, and beat into the sponge. Add 1 cup more water, about 120 degrees F., pouring it in gradually, and stirring as it is poured in. This takes the chill off the sponge and hastens the rising of the bread. Add 8 cups entire whole wheat flour, and about 2½ cups more of white flour, or enough to make a medium dough. Mix into a dough with a large spoon, and turn out on a lightly floured board. Rub off all particles of dough sticking to the sides and bottom of the dish, and knead until it is elastic to the touch, and does not stick to the board, using as little additional flour as possible to keep the dough from sticking to the board. If the dough is kept in motion continuously, very little additional flour will be needed, and the kneading will require about eight minutes.

Oil the bowl, and drop in the bread. Turn the dough over in the bowl so that the surface will be oiled, to keep a crust from drying on. Cover, and set in a warm room to rise until it doubles its bulk, and *when tapped sharply, it gradually but stubbornly begins to sink*. This will require from one and one half to two hours or more, according to the temperature of the room and of the ingredients. At this point, the dough is worked down well, turned over in the bowl, and let rise again until scarcely

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

elastic to the touch. Then put into an oiled bowl, cover, and set in a warm room to rise until when tapped sharply, it begins to sink—about 2 hours or more. Then work together, turn over in the bowl, and let rest until it begins to rise again, which will take about 20 minutes. Then mold into loaves, and put into pans for baking. Follow directions for proofing, molding, and baking, as given for "mother's bread."

WHEAT BREAD

3 cups whole wheat or Graham flour 2½ cups white bread flour
 2 cups water ½ cake compressed yeast 1 tablespoonful salt
 1 tablespoonful sugar 1 tablespoonful vegetable fat

Dissolve the yeast in 2 teaspoonfuls water. Add the liquid, salt, sugar, and vegetable fat. Add the flours, and mix into a dough, reserving a handful of flour for the board. Turn out on the board, and knead until elastic to the touch. Then put into an oiled bowl, cover, and let rise until when tapped sharply, it begins to sink—about 3 hours or more. Then work down, turn over in the bowl, and let rest until it begins to rise again—about 30 minutes. Then work together, turn out on board, mold into loaves, and put into pans for baking. Follow directions for molding, proofing, and baking as given for "mother's bread."

RAISED CORN BREAD

3 cups water ½ cake compressed yeast 4 cups best bread flour
 2 cups corn meal 1 tablespoonful salt 3 tablespoonfuls sugar
 2 tablespoonfuls melted vegetable fat

Sift the flour into a large bowl, leaving a space at one side of the flour for the sponge. Dissolve the yeast in 2 teaspoonfuls water, add 1 cup warm water, and pour on the side of the flour. Stir enough flour into this liquid to make a thin, smooth batter. Cover, and set in a warm place until light—about 1 hour. In order to incorporate enough moisture into the bread, so that it will not dry out after baking, put the corn meal into a small bowl, and pour on gradually, in a slow stream, 2 cups boiling water,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

stirring as it is being poured in, and let stand half an hour. When the sponge is sufficiently light, add the salt, sugar, and vegetable fat, and mix well. Add the scalded and warm corn meal, and mix all into a soft dough. Turn out on a floured board, and knead until elastic to the touch. Then return to an oiled bowl, cover, let rise, and finish the same as for "mother's bread."

RYE BREAD

2 cups warm water $\frac{1}{2}$ cake compressed yeast
 $1\frac{1}{2}$ tablespoonfuls melted vegetable fat 1 tablespoonful brown sugar
 $1\frac{1}{4}$ tablespoonfuls salt 4 cups white bread flour 3 cups rye flour

Dissolve the yeast in 2 teaspoonfuls water, add the liquid, and beat into this 3 cups white bread flour to smooth batter. Cover, and set in a warm room until light—about 2 hours. Add the salt, sugar, and oil, and beat into the sponge. Mix in the rye flour, and the remaining cup of white flour, reserving a handful of flour for the board, and mix to a dough. Turn out on the board, and knead until elastic to the touch. Then return to oiled bowl, cover, and let rise until when tapped sharply, it begins to sink. Work down well, turn over in the bowl, and let rest until half again its original bulk. Turn the dough out on the board, and roll out six buns, and lay in an oiled pie tin, to rise for "rye biscuit."

Divide the remaining dough into two pieces, and roll out into the shape of ordinary rye bread loaves. Lay in an oiled baking pan, leaving space between. Brush over the surface of each loaf with oiled brush, cut three gashes across each loaf with a sharp knife, and let rise until light. Then bake in a quick oven.

FRUIT BREAD

$2\frac{1}{2}$ cups warm water $\frac{1}{2}$ cake compressed yeast $\frac{1}{4}$ cup vegetable fat
 $\frac{1}{4}$ cup sugar 1 tablespoonful salt $1\frac{1}{2}$ cups sultana raisins
 6 cups entire whole wheat flour, or enough to make a medium soft dough

Dissolve the yeast in 2 teaspoonfuls water, add the liquid,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

and beat into this 3 cups entire wheat flour to smooth batter. Cover, and set in a warm room until light—about 1½ hours. Add the vegetable fat, sugar, and salt, and beat into the sponge. Have the raisins soaked overnight, and warmed. Mix all the ingredients to a medium soft dough, turn out on a lightly floured board, and knead until elastic to the touch. Then put into an oiled bowl, cover, and set in a warm room to rise until when tapped sharply, it begins to sink. Then work down, and let rest until it begins to rise again—about 15 minutes. Then mold into loaves, and put into pans for baking. Follow directions for proofing, molding, and baking as given in recipe for “mother’s bread.”

STEAMED BROWN BREAD

1 cup scalded milk ½ cake compressed yeast 1 cup Graham flour
 ¾ cup corn meal (lightly toasted in the oven) ½ cup rye flour
 ½ cup bran 1 teaspoonful salt ½ cup warm molasses
 1 tablespoonful vegetable fat ¾ cup sultana raisins

Dissolve the yeast in 2 teaspoonfuls water, add the warm milk, and beat in the Graham flour to a smooth batter. Cover, and set in a warm room for 2 hours. Add the salt, warm molasses, and oil, and beat into the sponge. Have the raisins soaked overnight, and warmed. Mix all the ingredients with a heavy spoon until thoroughly mixed. Cover, and let rise until when tapped sharply, it *begins* to sink. Then work down well. Put at once into an oiled pail with tight-fitting cover, and steam for 2 hours. Turn out on an oiled pie tin, and bake in the oven for 15 minutes. ¾ cup of rye *meal* can be substituted for the rye flour and bran, when on hand.

PARKER HOUSE ROLLS

1 cup scalded and warm milk ½ cake compressed yeast
 2½ cups bread flour 2 tablespoonfuls vegetable fat
 2 tablespoonfuls sugar ½ teaspoonful salt

Dissolve the yeast in 2 teaspoonfuls water, add the warm milk, and beat in 1 cup white flour to smooth batter. Cover,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

and set in a warm room for 2 hours. Add the salt, sugar, and fat, and beat into the sponge. Add the balance of the flour, reserving a handful for the board, and mix to a soft dough. Turn out on a floured board, and knead gently until elastic, being careful that it does not stick to the board. Put into an oiled bowl, cover, and let rise until when tapped, it begins to sink. Then work down well, and let rest until half again its original bulk. Work together, and turn out on a floured board. Divide into 1½-ounce pieces, then divide each piece into two. Roll out into small, round buns, and lay on a well floured board. When they have risen to nearly half again their original bulk, make a crease through the center, with a small roller the size of a broom handle. Oil one half, fold the other half over, and press together. Lay in an oiled baking pan, let rise until *very light*, then bake in a quick oven.

SHORTCAKE

Use the same ingredients as in the preceding recipe, except add 1 egg, slightly beaten, to the sponge when it is light, and this will require ½ cup more of flour. Mix to dough, and raise the same as the preceding. Roll out to ¼ inch thickness, and lay in an oiled baking pan. Brush over with oil, and sprinkle with flour, then with sugar. Press down with a spoon so the particles of flour get moistened on the top. Let rise until *very light*, and bake in a quick oven.

GLUTEN BISCUIT

4 cups bread flour

1½ cups cold water

Mix to a dough. Then break and pull apart until very elastic, and soak in water for ½ hour. Wash out the starch, changing the water, pouring the water off slowly, so as not to lose any of its gluten, until the water runs clear. Then let stand in cold water for from 5 to 6 hours

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

to ripen. Drain, cut into pieces about the size of a small egg, lay in an oiled tin, leaving plenty of space between, and bake until brown on the entire surface.

DIABETIC BREAD (Strong in Gluten)

Take the above "ripe" gluten, work in warm water to take off the chill, drain well, and put into a bowl. Dissolve $\frac{1}{2}$ cake compressed yeast in 1 tablespoonful water, add 1 tablespoonful flour, and make smooth. Work this into the gluten with $\frac{1}{2}$ teaspoonful salt. Then work in gradually 1 cup flour by pulling the gluten apart and dipping it into the flour, until all the flour is absorbed in the gluten. Then work in 2 tablespoonfuls melted vegetable fat in like manner. Put into an oiled bowl, cover, and set in a warm room to rise. When very light, work down, and let rest until it begins to rise again. Then mold into a loaf, and put into pan for baking. Let rise until light, and bake in a good oven.

CUT ZWIEBACK

Cut stale bread into slices about $\frac{3}{4}$ of an inch thick, put into a shallow baking pan in single layers, and set in a slow oven until thoroughly dried. Then put into a moderate oven, and allow it to brown to a golden color through the entire thickness.

PULLED ZWIEBACK

Take fresh bread, break carefully, pulling into pieces instead of using pressure. The pieces should be about the size of a medium apple. Proceed to dry and bake the same as for cut zwieback.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

SOUPS

Soups may be divided into two classes:

1. Broths, or thin soups, to which are added cooked grains, or vegetables cut in various shapes and sizes for garniture, and to give variety and flavor. While these thin soups are lacking in the nourishment to be found in those made of more solid foods, they are valuable for the stimulating effect they have on the gastric juice; and when taken at the beginning of the meal and in small quantities, they aid in the digestion of the more solid foods.

2. Those which usually have as their basis cooked vegetables, grains, or legumes, forced through a strainer, and thinned with the liquid in which they were cooked, or with milk or cream, or both. Like all other foods, soups require the action of the saliva for digestion, and when eaten slowly with some dry food, as sticks or croutons, are both appetizing and nourishing.

VEGETABLE JULIENNE

$\frac{1}{2}$ medium sized potato	$\frac{1}{4}$ cup carrot	$\frac{1}{4}$ cup turnip
1 tablespoonful chopped onion	1 stalk celery	
$\frac{1}{2}$ cup cauliflowerets, or new peas, green string beans, or any fresh vegetable in season		
$\frac{1}{2}$ small tomato	1 teaspoonful vegetable butter	2 cups vegetable broth
2 cups cold water	Chopped parsley	Salt to taste

Cut all the vegetables into fine shreds, about $\frac{3}{4}$ -inch lengths. Put all the vegetables except the parsley, tomato, and potato, into a saucepan, with the butter and 2 tablespoonfuls of water. Cover, and cook slowly over the fire, stirring often to keep the vegetables from scorching. Let simmer thus until the water is evaporated. Then add all the liquid, the potato and tomato, and salt to taste. Let boil gently until the vegetables are thoroughly done, add the chopped parsley, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

while cooking. Put the diced carrot and onion into a saucepan, with the vegetable butter and $\frac{1}{4}$ cup water, and let simmer until the water is absorbed, stirring often. Add 2 cups of broth from the beans, salt to taste, and let the vegetables simmer until well cooked. Add them to the bean soup, boil up well, add the chopped parsley, and serve.

CREAM OF BARLEY

$\frac{1}{2}$ cup pearl barley (soaked in water overnight) 6 cups hot water
 1 onion 1 carrot 1 stalk celery $\frac{1}{2}$ teaspoonful salt
 1 cup milk 1 tablespoonful vegetable butter

Drain the barley, add the hot water, salt, whole onion, carrot, and celery, and cook until well done, and the liquid reduced to three cupfuls. Remove the onion and carrot with a silver fork. Then drain. Put $\frac{1}{3}$ of the cooked grain into another vessel for garniture for the soup. Put the balance of the grain through a colander. Add the cooked barley, the milk, and the butter. Salt to taste, reheat, and serve. Cream may be used instead of the milk and butter.

FAMILY POTATO SOUP

2 cups sliced raw potato 4 cups cold water 2 teaspoonfuls salt
 1 teaspoonful chopped onion $1\frac{1}{2}$ tablespoonfuls vegetable butter
 1 cup milk or thin cream Chopped parsley

Put the water, potato, onion, and salt into a saucepan, and boil until the potato is well done and broken. Add the hot milk and the vegetable butter, and beat into the soup. Add the chopped parsley, and serve.

LIMA BEAN SOUP

1 cup Lima beans 6 cupfuls water 1 onion
 1 stalk celery Salt to taste

Wash the beans, add the other ingredients, and let cook gently until extra well done. Remove the onion, and mash the beans through a colander, season with cream, or milk and vegetable butter, and serve with croutons.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

CREAM OF LETTUCE

1½ cups sliced raw potato	3 cups cold water
1 cup shredded lettuce (pressed down)	1½ teaspoonfuls salt
1½ tablespoonfuls vegetable butter	1 tablespoonful chopped onion
2 cups hot milk	

Add the potato, onion, and salt to the water, and bring to a boil. When the potato is about half done, add the lettuce, and cook rapidly until the vegetable is well cooked. Mash through a colander. Add the butter to the hot milk; mix well, and add to the soup. Put through a coarse strainer, salt to taste, and serve. If cream is used, omit the milk and butter.

CREAM OF TOMATO NO. 1

2 cups tomato pulp	1½ cups cream	1 tablespoonful flour
	Salt to taste	

Heat the tomato pulp gradually to the boiling point, and thicken slightly with the flour made smooth with cold water. Heat the cream in a double boiler. Then set on the table, and pour the tomato gradually into the cream, stirring meanwhile. Salt to taste, strain, and serve.

CREAM OF TOMATO NO. 2

2 cups tomato pulp	1 cup water	2 teaspoonfuls vegetable butter
1 tablespoonful cream	roast flour	1 cup canned milk
	Salt to taste	

Bring the tomato, water, and butter to a boil. Thicken slightly with the flour made smooth with cold tomato or water. Salt to taste, add canned milk (unheated), strain, and serve.

CREAM OF GREEN PEAS NO. 1

Cook new peas in sufficient water to cover, adding salt to taste. Mash through a colander, add hot rich cream to suit, strain, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

CREAM OF GREEN PEAS NO. 2

$\frac{1}{2}$ can green peas (drained) 1 cup water $\frac{1}{2}$ teaspoonful salt
 Sprinkle of onion 1 tablespoonful vegetable butter
 2 teaspoonfuls flour 1 cup hot milk

Bring the water, peas, and onion to a boil, and let simmer for a few moments. Then rub through a colander. Rub the butter and flour together in a small saucepan, add a little of the hot milk, and stir smooth. Add the balance of the milk, and boil up, stirring constantly. Then add the peas, and salt to taste. Reheat, strain, and serve.

CREAM OF CORN

1 cup corn pulp 1 cup water 1 cup hot milk
 1 tablespoonful vegetable butter 2 teaspoonfuls flour Salt to taste

Have the corn ground through a fine mill. Add the water, and let simmer gently for 15 minutes. Rub the butter and flour together in a small saucepan, add a little of the milk, and stir smooth. Add the rest of the milk, and boil up. Add the corn mixture, salt to taste, strain through a coarse strainer, and serve.

CREAM OF VEGETABLE OYSTER

1 $\frac{1}{2}$ cups sliced vegetable oysters 2 cups water 1 cup hot milk
 1 tablespoonful vegetable butter 2 teaspoonfuls flour
 1 $\frac{1}{2}$ teaspoonfuls salt

Wash and scrape the salsify, and drop into cold water. Slice very thin. Add the required water and salt, and boil until well done, and the liquid is reduced to about 1 cup. Take out $\frac{1}{3}$ of the vegetable, to be used for garniture for the soup, and mash the remainder through a colander. Rub the butter and flour together in a small saucepan, add a little of the hot milk, and stir smooth. Add the remainder of the milk, and boil up. Add this to the mashed vegetable, and strain. Add the cooked vegetable oysters, reheat, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

FRUIT SOUP NO. 1

1 cup water 2 tablespoonfuls sago 1 teaspoonful lemon juice
1 cup blackberry or strawberry juice Sugar to taste

Wash the sago in cold water, and drain well. Bring the water to a boil, add the sago, and cook gently until clear. Add the fruit juices, also hot, and sweeten to taste. Very nice served cold.

FRUIT SOUP NO. 2

2 cups berry juice $\frac{1}{2}$ cup stewed raisins 6 cooked prunes
3 tablespoonfuls sago Sugar to taste 2 cups water

Wash the sago the same as for the preceding, and put to cook in two cups of hot water until the sago is clear. Stone and quarter the prunes, mix all the ingredients, and sweeten to taste.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

GRAINS, NUT FOODS, ENTREES

To those seeking to provide a balanced diet, a few suggestions may be helpful. In many homes, meat is regarded as the chief part of the meal; and, naturally, foods that are prepared to take the place of meat are denominated "meat substitutes." A wrong impression often associated with the use of this word, is that meat is a standard by which to judge the merits of other foods that are to take its place in the dietary.

The nutriment of meat being practically all protein, a well balanced meal is nearly impossible when meat is eaten. There is almost certain to be an excess of the protein element in such a meal. This excess of protein, as stated in a preceding chapter, tends to bring about early degeneracy of the human body and shorten life. Therefore our aim should not be to bring the percentage of protein up to that contained in meat; for this would only serve to defeat one of the main objects in view,—that of balancing the food elements in a meal.

A comparison between the body and the locomotive engine serves as an illustration for studying the fuel value of foods. While iron is essential to keep the engine in repair, the greatest demand will be for fuel with which to heat the boiler. So in the vital economy, protein is essential for the growth and repair of tissue; but beyond this, it is inferior to carbohydrates and fats. And as different kinds of wood and coal are capable of giving off different degrees of heat, and also giving off that heat in longer or shorter periods of time, so different kinds of foodstuffs work in about the same way. Also, certain kinds of coal, after being burned, leave a residue of clinkers to be raked out of the furnace; so when a person overeats of protein foods, there is an extra amount of work for the kidneys, to rid the system of accumulated poisons.

For practical purposes, it may be said that grains—wheat, rice, corn, oats—have an average nutritive value of over 80 per cent; legumes—dried peas, beans, lentils, and peanuts—about 85 per cent; nuts—almonds, filberts, walnuts—over 90 per cent; dried fruits—dates, figs, raisins—about 80 per cent. Thus we find in grains, fruits, and nuts, a basis for ample supply of all-round building food.

The various nut foods on the market, composed chiefly of grains and nuts, contain the nutritive elements of food in a very concentrated form, and should not be eaten too freely, but should be combined with other foods. A few examples of how they may be made into appetizing dishes will be given in some of the following recipes. Other nut foods of a similar nature may be used in the place of the ones given, if desired.

LEGUMES

The most common representatives of this family which are used as foods are the various kinds of beans and peas, also lentils. Taking the world over, legumes are, next to cereals, the most valuable and the most extensively used among vegetable foods. They are found in all climates and all countries. The lentil is one of the most ancient of food plants. It has been grown from early times in Asia and the Mediterranean countries.

Many people with weak digestion often experience distress after eating boiled beans or peas. By the removal of the hulls, this trouble may be largely overcome; and in this manner, they may be made into a variety of dishes that are appetizing as well as nourishing.

STEWED LIMA BEANS

Pick the beans over, wash them thoroughly, and lift them from the water to remove any small pieces of grit that may be on the bottom of the kettle. Put them on the

fire in cold water, bring to a boil, and skim. Add one teaspoonful of vegetable oil to each two cups of beans, and let them boil gently until they are thoroughly done. Salt should be added during the cooking, to give them flavor.

BAKED LIMA BEANS

Soak 1 cup of Lima beans overnight, and in the morning, slip off the skins between the thumb and the finger. Put them in a small baking pan with $\frac{1}{2}$ teaspoonful salt, 2 teaspoonfuls brown flour, 1 teaspoonful vegetable butter, and enough cold water to cover them. Put a pan over them, and set them into the oven to cook, adding a little water as needed, so they will not cook dry. When they are about done, remove the pan from the top, and let them brown nicely. Service for five persons.

BROWNE'D BEAN PURÉE

2 cups bean purée	3 tablespoonfuls rich cream
1 tablespoonful cream roast flour	Salt

Boil beans the same as for stewed Lima beans. Drain in a colander, saving the broth for soups or gravies. Mash through the colander, having them as dry as possible. Mix all ingredients, put into an oiled baking pan, brush over with a little thin cream or vegetable butter, and bake in a quick oven to a light brown color. Service for five persons.

RIBBON BEAN LOAF

1 cup Lima bean purée	1 cup kidney bean purée
3 tablespoonfuls rich cream	2 tablespoonfuls cream roast flour
Salt to taste	

Cook the beans separately until well done but not soft. Drain well, and mash through a colander, having the pulp as dry as possible. Add 1 tablespoonful of the cooked flour, $1\frac{1}{2}$ tablespoonfuls of cream, and salt to each, and mix well. Place in alternate layers in a brick-shaped tin, and bake

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

in a moderate oven until hot through and a nice brown. Serve with cream tomato sauce or gravy. Service for eight.

BEAN PATTIES

2 cups bean purée 1½ tablespoonfuls vegetable butter
 1 tablespoonful chopped onion 3 tablespoonfuls flour 1 egg
 Scant ½ cup hot milk A sprinkle of sage Salt to taste

Cook the beans the same as in the preceding recipe, and mash through a colander, having the pulp as dry as possible. In case it is too soft, it may be put into the oven for a few minutes. Make a paste as follows, for holding the food together: Put the butter, onion, and savory into a small saucepan, and let simmer for a few moments, but do not brown. Add the flour, and mix; then the milk, and stir smooth. Add the egg, slightly broken up, and stir over the fire until smooth and a very thick paste. Salt to taste, and add the bean purée. Mix well, and let cool. Then roll out into small, round cakes about $\frac{3}{4}$ inch thick, mark on the top with a knife, lay in an oiled baking pan, brush over with cream or milk, and brown lightly in a hot oven.

RICE AND EGG CROQUETTES

2 cups steamed natural rice 2 eggs (hard boiled)
 1 tablespoonful chopped parsley

Mix the chopped parsley and the chopped hard-boiled egg, and add to the rice. Make a paste the same as for bean patties, and mix in the ingredients. Dip a small timbale or ice cream mold in milk, fill with the croquette mixture, turn out on an oiled baking pan, and brown in a quick oven. Serve with any desired sauce. Chopped, cooked macaroni may be substituted for rice if desired.

BEANS WITH NOODLES

Wash 1 cup of navy beans, and cook gently until thoroughly done, adding salt while cooking. Drain, and add

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

to the liquid enough water to make 3 cups. Add 2 teaspoonfuls vegetable butter, and bring to a boil. Sprinkle in the noodles as given on page 52, and let boil gently for 15 minutes. Add the cooked beans, shake together, reheat, and serve.

PEAS WITH NOODLES

2 cups green peas 2 cups water (preferably potato water)
2 tablespoonfuls rich cream 1½ cups noodles Salt to taste

Put the peas to cook in boiling water, enough to cover. Add salt to taste. Let cook gently until tender. Put the cream into a small fry pan, and stir over the fire until the oil separates from the albumen. As soon as the albumen turns a light brown, add to the stewed peas, and boil up. Add the potato water, and, when boiling hot, sprinkle in the noodles, and let boil 15 or 20 minutes, and serve.

BEANS WITH DUMPLINGS

Cook 1 cup navy or Lima beans with sufficient water to cover, and salt to taste. When done, add 2 teaspoonfuls vegetable butter, and drop in the dumplings as given for "potato stew with dumplings," on page 86. Cover the vessel, let boil gently for 15 minutes, and serve.

BROWN BEANS WITH MINT SAUCE

Cook brown beans with water to cover, salt to taste, and a little vegetable butter. Let simmer until they are well done and the liquid is reduced low. Serve with a spoonful of mint sauce poured over each order, or serve separately, in bowls.

STEWED SOY BEANS

Soak the beans overnight, and cook several hours, until tender. Add salt to taste, and let simmer until the liquid is reduced to rich consistency. Then serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

RICE AND SOY BEAN LOAF

1½ cups soy bean purée	1 cup steamed natural rice
2 teaspoonfuls vegetable butter	½ tablespoonful cream roast flour
3 tablespoonfuls soy bean broth	Salt to taste

Take the boiled soy beans, drain, and mash through a colander, having the pulp as dry as possible. Rub the flour and the butter together, add the broth, and stir smooth. Add this sauce to the cooked rice, and mix with a fork. Add the soy purée, and mix well. Salt to taste, pack in an oiled brick-shaped tin, and bake until hot through, and a nice brown.

RICE AND SOY BEAN PATTIES

Take the soy-bean-rice mixture described in the preceding recipe, and roll out into small patties about $\frac{3}{4}$ inch thick. Mark on the top with a knife, brush over with milk or cream, and brown lightly in a hot oven.

STEWED GARBANZOS (Chick-Peas)

Wash 1 cupful garbanzos, and soak overnight. Drain, add 2½ cups water, and let simmer until they are thoroughly done and the liquid is reduced to a rich consistency. Add salt while cooking.

BAKED GARBANZOS

Take the above recipe of cooked garbanzos, pour into an oiled baking pan, cover, and bake in a moderate oven until the liquid is reduced and the peas begin to brown on the bottom. Serve with baked apple or apple sauce.

SAVORY VEGETABLE LOAF

1½ cups soaked stale bread	¾ cup cooked brown beans
1½ tablespoonfuls vegetable butter	1 tablespoonful chopped onion
1½ tablespoonfuls brown flour	½ cup milk
	1 egg
Sage, marjoram, and salt to taste	

Soak the bread in cold water, and press out lightly. Put the butter, onion, and savory into a small pan, and simmer

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

for a few moments, but do not brown. Add the brown flour, then the milk, and stir smooth. Mash the beans with a spoon, break the egg with a fork, and mix all ingredients. Put into an oiled baking tin, and bake until set and a nice brown.

NUT AND POTATO PIE

2 cups sliced raw potatoes 1½ cups cold water 1 teaspoonful onion
 1¼ teaspoonfuls salt 1 tablespoonful vegetable or dairy butter
 1 scant tablespoonful flour Chopped parsley
 Nut food or baked dressing cold (page 89) Hard-boiled egg Pie crust

Add the sliced potato, onion, and salt to the water, and cook until done. Drain, and lay the sliced potato into an oiled baking pan. Put the butter and the flour into a small saucepan, and mix. Then add a little of the potato water, and stir smooth. Add the rest of the liquid, boil up, and pour the sauce over the sliced potato. Lay a few slices of hard-boiled egg, and the same of nut cere or sliced cold dressing, over the potato, and sprinkle lightly with chopped parsley over all. Cover with thin pie crust, mark into squares with a knife, brush over with milk, and bake to a nice brown. Service for five.

POTATO STEW WITH DUMPLINGS

2 cups raw potato cut into half-inch squares 2½ cups cold water
 1 teaspoonful chopped onion 1¼ teaspoonfuls salt
 2 tablespoonfuls vegetable butter 2 tablespoonfuls flour

Stew.—Bring the water, potato, onion, and salt, to a boil. Rub the butter and the flour smooth in a small saucepan. Add a little of the potato water, and stir smooth. Add more water, boil up, and pour over the potato stew.

½ cup water 2 tablespoonfuls vegetable butter A sprinkle of salt
 ⅔ cup sifted pastry flour 2 eggs

Dumplings.—Bring the water, salt, and butter to a boil. Add the flour all at once, and stir smooth. Stir over the fire for a few moments, until the flour is thoroughly

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

scalded. Then set on the table. Break in 1 whole egg, and stir with a spoon until the egg is absorbed in the paste, and the paste is smooth and thick. Then add the other egg in like manner. Drop from the side of a tablespoon into the boiling stew, having first dipped the spoon into the hot liquid to avoid the dumplings' sticking to the spoon. Cover, and let boil about 15 minutes, or until the potato is thoroughly done, and the sauce of a nice consistency to dish up.

VEGETABLE GLUTEN STEW

2 medium sized raw potatoes	2 medium small turnips
2 medium small carrots	2 tablespoonfuls diced onion
2 teaspoonfuls salt	3 gluten biscuit (page 72)
3 tablespoonfuls brown flour	2 tablespoonfuls vegetable butter
	4½ cups cold water

Cut the carrots and the turnips into large pieces, add the diced onion, salt, water, and the gluten biscuit (quartered and lightly browned in the oven until crisp), and bring to a boil. Let boil for 10 minutes. Then rub the flour and the butter together in a saucepan, add a little of the water from the vegetables, and stir smooth. Add more water, boil up, and pour again over the vegetables. Add the cut potato, and let simmer until the vegetables are thoroughly done, and the sauce is reduced to nice consistency to dish up. Sprinkle chopped parsley over the top of each dish.

WHOLE RICE WITH PEAS

½ cup uncooked natural rice	1½ cups hot water
1½ cups cooked new peas	1 tablespoonful vegetable butter
2 teaspoonfuls flour	3 tablespoonfuls pea broth

Wash the rice thoroughly, drain, add the hot water, and let boil gently until the water is evaporated and the rice looks dry. Then cover, and set on the edge of the stove to steam for 15 minutes. Rub the butter and the flour together in a small saucepan, add the pea broth, and stir

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

over the fire until smooth. Add the cooked rice, and mix with a fork. Then add the cooked new peas, mix lightly, put into the oven in a covered dish until hot through, and serve.

LENTIL AND RICE LOAF

	2 cups steamed natural rice	1 cup lentil purée
1 tablespoonful	chopped onion	1 tablespoonful vegetable butter
1 tablespoonful	brown flour	3 tablespoonfuls vegetable broth
$\frac{1}{2}$ cup	chopped walnuts	A sprinkle of sage Salt to taste

Put the butter, onion, and savory into a small saucepan, and simmer for a few moments. Add the brown flour, then the vegetable broth, and stir over the fire until smooth. Add the cooked rice, and mix with a fork. Mix all ingredients, pack lightly in an oiled bread tin, and bake until hot through and brown on top.

BAKED RICE ITALIENNE

$\frac{1}{2}$ cup natural rice, raw	$\frac{1}{2}$ cup macaroni, raw	1 tablespoonful onion
1 small clove garlic	$1\frac{1}{2}$ tablespoonfuls vegetable butter	
2 tablespoonfuls sweet bell pepper	$1\frac{1}{2}$ cups tomato pulp	
$1\frac{1}{2}$ cups water	Salt	Thyme

Put the rice into frying pan, and brown over the fire or in a hot oven to a light golden brown. Add $\frac{1}{2}$ teaspoonful salt and the water, and let cook down dry. Set on the edge of the stove with cover on, and let steam. Break the macaroni up very small, and put to cook in boiling salted water. Cook until thoroughly done. Then wash and drain in a colander. Put the sweet pepper, onion, garlic, and thyme into a pan with the butter, and stir over fire for a few moments. Add the tomato, and boil up well. Salt to taste, and pour over the rice. Mix well. Put a layer of the rice-tomato in a small baking pan, sprinkle the macaroni evenly over it, season with small bits of vegetable butter or thick cream. Then pour on the rest of the rice, and bake $\frac{1}{2}$ hour or more. Service for five persons.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

brown flour, and mix. Then add the milk, and stir smooth. Press the bread out well, and mix all ingredients. Salt to taste, and bake in an oiled pan to a nice brown.

ROASTED POTATO WITH DRESSING

Cook medium sized pared potatoes in a saucepan until about half done. Drain, and lay in an oiled baking pan. Sprinkle with salt, then with flour, and brush over each potato with an oiled brush. Put into a quick oven, and bake until partly browned. Then fill in between the potatoes with either of the foregoing dressings, and finish baking together. Serve with brown gravy.

ROAST NUT MEAT WITH DRESSING

Open a pound can of nut cero or other nut food, split through the center lengthwise, lay in an oiled pan, brush the top over with oil or vegetable butter, and put in the oven until a slight crust forms on the meat. Then pour over it a thin brown sauce, and continue to bake for $\frac{1}{2}$ hour, basting it now and then over the top with gravy. When done, lift out on a carving board, slice, and serve with either of the preceding dressings, as follows: Lay the nut food on a carving board, put a spoonful of dressing on the platter, lay a slice of nut food on the top, and pour a spoonful of gravy on half of the food. Serve with a sprig of parsley at one end, and a small piece of cranberry jelly, if at hand.

BAKED MACARONI FAMILY STYLE

1 cup macaroni raw	1 cup tomato pulp	1 tablespoonful onion
1 tablespoonful vegetable butter	A sprinkle of sage or thyme	
1 egg	Salt to taste	

Break the macaroni into inch lengths, drop into boiling salted water, and cook until thoroughly done. Then wash, and drain in a colander. Put the butter, onion, and a little sage or thyme into a saucepan, and stir over fire for a

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

few moments, but do not brown. Add the tomato, and bring to a boil. Salt to taste. Then pour the hot mixture slowly into the beaten egg, stirring it briskly as it is being poured in. Add the cooked macaroni, pour all into an oiled baking pan, and bake to a light brown. Service for five persons.

BAKED MACARONI AND OLIVES

$\frac{1}{2}$ cup uncooked macaroni	$\frac{1}{2}$ cup chopped ripe olives
1 tablespoonful chopped onion	2 tablespoonfuls tomato
1 cup of water in which the macaroni was cooked	
1 tablespoonful vegetable oil	$2\frac{1}{2}$ tablespoonfuls flour
Salt and celery salt to taste	

Break the macaroni into half-inch lengths, drop into boiling salted water, and cook until it is well done. Put the oil into a small pan on the stove, and when hot, add the flour, and stir until browned. Then add the onion and the chopped olives, and let them cook a few minutes. Then add 1 cup macaroni water and 2 tablespoonfuls tomato. Let it boil 5 minutes. Have the macaroni well drained, and while it is hot, put it into the gravy. Turn into a baking dish, grate a few fresh bread crumbs over the top, and with a spoon press them down so they become moistened through. Bake until a nice brown. Service for four persons.

MACARONI AU GRATIN

Break macaroni into inch lengths, drop into boiling salted water, and let boil until thoroughly done. Then wash in cold water, and drain well. Mix with enough cream sauce (page 96) to season nicely. Pour into an oiled baking pan, grate fresh bread crumbs over the top, and press down with a spoon so they become well moistened. Sprinkle over with rich cream or small pieces of vegetable butter, and bake to a nice brown.

NOODLES AU GRATIN

Sprinkle the noodles given on page 52 into boiling salted water, and let boil gently for 15 or 20 minutes. Drain well,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

mix with cream sauce, and bake the same as for macaroni au gratin.

SPAGHETTI IN TOMATO

$\frac{5}{8}$ cup raw spaghetti 2 cups tomato pulp 2 tablespoonfuls onion
 2 tablespoonfuls vegetable butter A small clove of garlic if desired
 A pinch of thyme 4 tablespoonfuls cream roast flour Salt to taste

Break the spaghetti into inch lengths, drop into boiling salted water, and let boil until thoroughly done. Then wash in cold water, and drain well. Put the butter, onion, garlic, and thyme into a small saucepan, and stir over the fire for a few moments. Add the flour, and mix. Then add a small quantity of the tomato, and stir smooth. Stir in the rest of the tomato, and boil up. Salt to taste, add the spaghetti, and let simmer until it is of a consistency to dish up and not run on the platter.

BAKED SPAGHETTI EN CROUSTADE

Take the proportion of cooked spaghetti given in the above recipe, add sufficient cream sauce to moisten nicely, and pour into an oiled baking pan. Chop 2 hard-boiled eggs fine, and mix with 2 teaspoonfuls chopped parsley. Sprinkle over the spaghetti, and press down with a spoon into the cream. Cover with pie crust, mark into squares with a knife, brush over with cream or milk, and bake to a nice brown.

CEREAL FILLETS

2 cups milk $\frac{1}{2}$ cup corn meal, toasted lightly in the oven
 2 teaspoonfuls vegetable butter Salt to taste

Heat the milk to the boiling point, and sift in the corn meal gradually, stirring as it is being added, to prevent lumping. Add salt and butter, and let cook gently for about 20 minutes. Then pour into an oiled bread tin, and let cool. When cold, cut into squares or triangles, and dip first into flour, then into cream, or milk and egg, then again into fine bread or cracker crumbs. Lay in an oiled baking pan, brush over with cream or milk, and bake to

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

a nice brown, in a quick oven. Serve with maple sirup or jelly.

OLIVE FILLETS

1 dozen chopped ripe olives 2 tablespoonfuls chopped onion
 2 teaspoonfuls chopped parsley Sage or marjoram $\frac{1}{2}$ cup milk
 2 tablespoonfuls brown flour Salt to taste
 1 tablespoonful vegetable butter

Put the butter, onion, parsley, and savory into a small saucepan, and simmer for a few moments. Add the brown flour and the chopped olives, and stir. Then add the milk, and make smooth. Cut white bread into thin slices, trim off the crust, and spread lightly with vegetable butter. Cover with a spread of the olive filling, and lay another slice of bread over this. Press together, and cut into triangles. Lay in an oiled baking pan, pour over it a thin cream-tomato sauce, and let simmer in the oven until hot through, basting now and then with a spoon, and serve.

VEGETABLE LOAF EN ASPIC

Wet an ordinary bread tin with cold water. Then garnish the bottom with slices of hard-boiled egg, parsley, and cooked string beans or peas, and fill in with cold baked dressing (page 89) or nut food cut into large squares, until the pan is nearly full.

Have a good vegetable broth, boiled with a few outer skins of red onions to give color. Take $1\frac{1}{2}$ cups broth, 1 teaspoonful grated onion, salt to taste, and add $\frac{1}{2}$ cup vegetable jelly as prepared on page 117. Mix well, and pour immediately over the food prepared in the dish. Shake slightly so as to allow the gelatin to get beneath the food. Then let stand until cold, invert on a platter, and serve.

WALNUT ROAST

$\frac{1}{2}$ cup ground walnuts 1 cup zwieback crumbs 1 cup warm milk
 $\frac{1}{2}$ cup steamed natural rice 2 tablespoonfuls chopped onion
 1 tablespoonful chopped parsley 1 tablespoonful vegetable butter
 1 egg 1 tablespoonful brown flour

Pour $\frac{3}{4}$ cup of the milk over the crumbs, and let stand for 5 minutes. Put the butter, onion, and parsley into a

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

small vessel, and stir over the fire for a few moments. Add the flour, then the milk. Stir smooth, and set on the table. Add the slightly beaten egg, the ground wainuts, salt to taste, and mix. Add the crumbs, and lastly, fold in the rice with a fork, press into an oiled baking pan, and bake to a nice brown.

WALNUT TIMBALES

2 cups stale bread cut in small dice $\frac{1}{2}$ cup ground walnuts
 1 tablespoonful onion 1 cup milk 1 tablespoonful vegetable butter
 1 egg $\frac{1}{4}$ cup tomato Sage and salt to taste

Beat the egg, add the milk, pour over the diced bread, and let soak 20 minutes. Put the onion, sage, and butter into a small pan, and simmer for a few moments. Add the tomato, and boil up well. Mix all ingredients thoroughly. Salt to taste. Oil 5 timbale molds, divide the mixture among them, set into a pan of water, and bake until set. Serve with tomato or tomato-cream sauce.

NEW ENGLAND DINNER

4 medium sized potatoes 4 small carrots 4 turnips 6 small onions
 $\frac{1}{2}$ small cabbage $1\frac{1}{2}$ tablespoonfuls vegetable butter Salt to taste

Quarter the peeled carrots and turnips. Add the onions whole, and put into a saucepan with water to cover. Add the salt, and bring to a boil. Separate the leaves of the cabbage, drop into boiling water, and let boil for 5 minutes. Drain, and add to the vegetables. When the carrots are about half cooked, add the potatoes cut into halves, and the vegetable butter. Salt to taste, and let cook gently until all the vegetables are thoroughly done. To dish up, lay the cooked cabbage first on the center of the platter. Then arrange the vegetables around the cabbage, alternating the vegetables, a carrot, a turnip, an onion, a potato, etc., having them so arranged that the points turn away from the cabbage. Pour over a few spoonfuls of the broth from the cooked vegetables, and serve. A slice of nut food may be served with each order if available.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

GRAVIES AND SAUCES

BROWN GRAVY

2 tablespoonfuls crisco or vegetable oil 3 tablespoonfuls flour
1 tablespoonful onion 1½ cups vegetable broth or potato water Salt

Put the oil into a small frying pan, and when hot, add the flour, and keep stirring until well browned. Then add the onion, and stir for a few minutes. Add a little of the liquid, and stir smooth. Add the rest of the liquid, and boil up well. Salt to taste, strain, and serve.

EGG GRAVY

2½ tablespoonfuls crisco or vegetable oil 4 tablespoonfuls flour
1 teaspoonful onion 2 cups potato water or almost any vegetable broth
1 egg Salt to taste

Put the oil into a frying pan, and when hot, add the whole egg. Break the yolk, and stir very little until brown and crisp. Remove the brown egg from the oil, and chop fine. Brown the flour in the oil, the same as in the preceding recipe, and when light brown, add the onion, and stir for a few minutes. Add the chopped egg and a third of the liquid, and stir smooth. Add the remainder of the liquid, and boil 5 minutes.

BROWN CREAM GRAVY

Cook down ½ cup sour cream, stirring constantly, until the oil and the albumen separate and the albumen turns a *light brown* color. Then add enough brown flour to take up the oil thus made. Add potato water or vegetable broth, and finish the same as the preceding recipe.

COUNTRY GRAVY

Use the same proportions of flour and oil as in either of the foregoing recipes, but substitute milk in place of vegetable broth, and the flour should not be browned too much.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

CREAM SAUCE

1 cup hot milk 1½ tablespoonfuls vegetable butter
 Scant 2 tablespoonfuls flour Salt to taste

Rub the butter and the flour together in a small saucepan. Add ½ cup hot milk, and stir smooth. Add the rest of the milk, and boil up. Salt to taste, and serve.

NUT SAUCE

Dissolve 2 tablespoonfuls nut butter in a little hot milk, and stir into the foregoing cream sauce.

EGG SAUCE

Add 2 chopped hard-boiled eggs to the above cream sauce, mix, and serve.

TOMATO SAUCE

1 cup tomato pulp 1 tablespoonful vegetable butter
 Scant 2 tablespoonfuls cream roast flour ½ teaspoonful onion
 A pinch of thyme Salt to taste

Put the butter, onion, and savory into a small saucepan, and simmer for a few moments. Add the cooked flour, then the tomato, and stir smooth. Boil up, salt to taste, strain, and serve.

TOMATO CREAM SAUCE

Stir ½ cup hot rich cream or cream sauce into the foregoing tomato sauce, strain, and serve.

BRAZIL NUT SAUCE

5 Brazil nuts ground fine 4 tablespoonfuls flour
 1½ cups potato water or milk

Brown the flour in a frying pan on top of the stove. When it is a light golden color, add the nuts, and stir through the flour for 5 minutes. Add half the liquid, and stir smooth. Add the remainder of the water, and let it cook 10 minutes. Salt to taste, strain, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

VEGETABLES

Vegetables may be divided into two great classes:

1. Coarse or fibrous vegetables, comprising the roots, tubers, stems, bulbs, and leaves.

2. The finer or fruity vegetables, as tomato, squash, pumpkin, green peas, corn, immature beans (shelled), cucumbers, melons, etc.

Vegetables are characterized by their large amount of cellulose; and as water enters largely into their composition, they are by no means the most nutritious diet. Food, however, in order to supply perfectly the needs of the vital economy, must contain water, and indigestible as well as nutritive elements. Vegetables are therefore dietetically of great value, as they furnish large quantities of organic fluids, and are rich in those mineral elements which are necessary for maintaining the alkalinity of the blood, and for the repair of the bony structures.

Perhaps no food is more generally used by rich and poor alike in making up their daily bill of fare; yet how often the vegetable is spoiled in cooking! In the first place, the portion of the vegetable next to the skin contains the greater quantity of mineral matter and flavoring substances. Hence all thin-skinned vegetables, such as carrots, oyster plant, etc., should be scraped. Others should be pared as thinly as possible.

Vegetables, like all starchy foods, should be put to cook in boiling water, as by the application of hot water, the starch grains are caused to swell and burst, and this gives the starch an opportunity to escape through the cellulose.

Whenever possible, vegetables should be cooked the same day they are gathered. If necessary to keep green vegetables for any length of time, do not put them in water, as that will dissolve and destroy some of their juices. Lay them in a cool, dark place. A stone floor is best. Old vegetables should be immersed in cold water for an hour

or more just before cooking, to make them more tender.

Young, tender vegetables, as lettuce, tomatoes, water cress, etc., served in the uncooked state, are valuable for the water and potash salts they contain, also for the stimulating effect they have on the appetite.

NEW PEAS

Shell peas as soon after picking them as possible, drop into cold water, and skim off any dry leaves or imperfect peas that come to the top. Then dip the peas out of the water with the hands, drop them into boiling water enough to cover, add salt, and let them cook gently until they are well done and the liquid is reduced to one third its original quantity. Season with a little vegetable butter or cream if desired.

STRING BEANS

String beans should be picked while young and tender. Break them between the hands to remove any stringy fiber, and remove the ends. Put to cook in boiling water enough to cover, salt to taste, and let boil gently until they are done and the liquid is reduced to a nice consistency for flavoring the vegetable. Add a little vegetable butter or cream, reheat, and serve. String beans that are a little old when picked, should be lifted out of water, put into a vessel with a little vegetable oil, and let steam for 15 minutes before hot water is added, and they will be much more tender.

NEW ASPARAGUS

Put the stalks into a deep pan of water, and wash well, that sand and grit may sink to the bottom. Change the water, and lift them out, tie them in bundles of about 3 portions each, lay on a board, and trim off the root stems, leaving the stalks about 4 inches in length. Drop into boiling salted water, and cook until tender. Then set the saucepan off the stove until ready to serve. Lift out and

drain, lay on a platter, cut and remove the strings, and send to the table. Serve with rich cream sauce.

ASPARAGUS TIPS AND NEW PEAS

Break the tender part of asparagus into $\frac{1}{2}$ -inch lengths, and cook in just enough water to cook well. Add salt while cooking. Cook new peas separately. Mix, and add sufficient cream or cream sauce to season. Shake together, reheat, and serve.

STEWED TOMATO

Pour boiling water over ripe tomatoes, and let remain a few seconds. Then drain, remove the skins and stems, with the hard green parts, and cut into halves. Put into a saucepan with about 1 teaspoonful vegetable butter to each 2 cups of tomato, and salt to taste. Boil up well and serve.

BREADED TOMATO

Cut stale bread into half-inch cubes, and brown in the oven until crisp all through. Drop them into the boiling stewed tomatoes, and serve.

BAKED TOMATO

Select medium sized, solid tomatoes, peel them, and with the point of a knife, cut out a little of the hard part of the stem end. Lay them close together in a baking pan, sprinkle with salt and sugar, and put a speck of vegetable butter in each cavity. Then bake until done but not broken.

SCALLOPED TOMATO

1 cup toasted croutons 1 $\frac{1}{2}$ cups stewed tomato
1 tablespoonful vegetable or dairy butter A sprinkle of sugar
Salt to taste

Put $\frac{1}{2}$ cup of croutons into the bottom of an oiled baking dish, pour over these 1 $\frac{1}{2}$ cups of tomatoes seasoned, sprinkle the remaining half cup of croutons over the top,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

press them down with spoon so they are all submerged, put the butter over the top, and bake to a nice brown.

SUMMER SQUASH

When young and tender, summer squash need only be washed and quartered. Steam until tender, and press between two colanders or in cheesecloth until quite dry. Mash, and season with salt and cream. When the squash is older, it must be peeled and have the seeds removed before cooking.

SCALLOPED SUMMER SQUASH

2 cups cooked summer squash 1 cup milk 2 cups stale bread
1 tablespoonful vegetable butter 1 egg Salt

Cook the squash in salted water or steam until done, drain well, and mash. Trim off the brown crust from stale white bread, and cut the white part into small dice. Beat the egg, add the milk and a little salt, and pour over the bread, letting it soak 10 minutes. Add the squash and the butter to the soaked bread, mix lightly, and lay in an oiled baking pan. Sprinkle a little cream or butter over the top, and bake until thoroughly done and a nice brown.

BAKED SUMMER SQUASH

Cut summer squash into thick slices, drop into boiling salted water, and cook until nearly done. Drain, and lay in an oiled baking pan. Put a spoonful of cream sauce over each piece, and brown quickly in the oven.

SCALLOPED EGGPLANT

Use one medium large eggplant (two cups after being cooked). Pare the eggplant, quarter, and slice $\frac{1}{2}$ inch thick. Then drop into boiling salted water, and cook until well done. Drain and mash. Use the same proportions of diced bread, milk, and egg as for scalloped summer squash. Mix and bake the same as for scalloped squash.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

BREADED EGGPLANT

Pare, and cut into thick slices. Drop into boiling salted water, and cook until slightly underdone. Then drain. Dip each piece first into flour, then into cream, or milk and egg, then into fine bread or cracker crumbs. Lay in a baking pan, brush over with cream, or milk and a small piece of vegetable butter. Cover, and bake until thoroughly done. Then remove the cover, and brown lightly.

BAKED EGGPLANT

Pare eggplant, and cut into slices about $\frac{3}{4}$ inch thick. Drop into boiling salted water, and let cook until nearly done. Drain, and lay in an oiled pan. Pour a spoonful of cream sauce over the top of each piece, and brown lightly in a quick oven.

CORN ON COB

Add milk or a small quantity of lemon juice to the water for corn, bring to boil, put in the ears of corn, boil up well, then set on the edge of the stove to draw for 20 minutes. Salt, if added, should be put in after the corn is cooked, as it toughens the kernels and turns them a red color.

GREEN CORN SAUTE

Put $\frac{1}{2}$ cup of rich cream into an oiled frying pan, with a teaspoonful of chopped onion if desired. Let cook down until it nearly separates. Then add 2 cups corn cut off the cob, with salt. Toss in the pan over the fire until thoroughly heated through, and serve.

BAKED CREAM CORN

1 cup corn pulp	$\frac{3}{4}$ cup rich milk	1 egg
$\frac{1}{2}$ cup light colored zwieback crumbs		$\frac{1}{2}$ teaspoon salt
A sprinkle of celery salt		

Warm the milk to about 120 degrees, pour it over the crumbs, and let them soak. Have the corn ground through

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

a fine mill, mix all the ingredients, put into an oiled baking pan, put a teaspoonful of butter or a little cream over the top, and bake until set and a nice brown.

CAULIFLOWER IN CREAM

Remove all green leaves from cauliflower, and divide into bouquets or pieces about the size of a large hen's egg. Wash, and soak in salted water for 20 minutes. (This will remove any worm that might be hid in the flower.) Drop into boiling salted water, and cook until tender. Then set off the stove. Lift the pieces carefully out of the water, drain, and lay on a platter. Pour a spoonful of cream sauce over each piece, and serve.

CAULIFLOWER AU GRATIN

Cook the cauliflower the same as in the preceding recipe. Drain, and lay in an oiled baking pan. Put cream sauce lightly over all. Grate fresh bread crumbs over, and sprinkle with cream or small pieces of vegetable butter. Press the crumbs into the cream with a spoon to moisten them, and brown in a quick oven.

STEWED VEGETABLE OYSTER

Wash salsify, scrape with a knife, and drop immediately into water to keep from turning a dark color. Slice or cut into any desired shape. Put 2 cups of the vegetable into a saucepan, with hot water to cover, and salt to taste. Let boil gently until it is done and the water is reduced to 1 cupful. Put 1 tablespoonful vegetable butter into a saucepan with $\frac{1}{2}$ tablespoonful flour, and mix. Add a little of the liquid, and stir smooth. Add the rest of the liquid, and boil up. Pour over the vegetable, and let simmer for 10 minutes or more.

SCALLOPED VEGETABLE OYSTER

Prepare the vegetable as in the preceding recipe, slice very thin, and cook tender. Put layers of the oysters in a

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

baking pan, dredging each layer with flour. To each pint of vegetable thus prepared, heat 1 cup of milk to boiling, beat in enough vegetable butter and salt to season, pour this over the vegetable, and bake to a nice brown.

STEWED CARROTS

2 cups sliced young carrots 1½ cups water 1 teaspoonful salt
2 teaspoonfuls vegetable butter 1 teaspoonful flour

Add the water and the salt to the sliced carrots, and let boil gently until they are done and the liquid is reduced to ½ cup. Rub the butter and the flour together in a small saucepan, add a little of the broth, and stir smooth. Add the rest of the broth, and boil up. Add the cooked carrots, reheat, and serve.

CARROTS IN CREAM

Add a little rich cream or cream sauce to the foregoing recipe, and shake together, reheat, and serve.

CARROTS WITH EGG SAUCE

Add 2 or 3 sliced hard-boiled eggs to the foregoing creamed carrots.

CARROTS AND GREEN PEAS

Use the recipe for stewed carrots, adding an equal quantity of cooked peas. Reheat and serve.

STEWED BEETS

Scrub small beets without breaking the skin. Do not trim the roots, or the juice will run out. Boil until tender, drain, cover with cold water, and push off the skins with the hands. Cut each beet into eighths lengthwise. Put 1 tablespoonful of vegetable butter into a saucepan with ½ tablespoonful flour, and rub together. Add ¼ cup cold water, and stir smooth. Pour on ½ cup boiling water, and stir until it boils up well. Add 1 tablespoonful lemon

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

juice, and salt to taste. Add the beets, reheat, and let them stand 10 minutes or more before serving. A few chopped onions may be added to the roux in making the sauce, if desired.

BUTTERED BEETS

Cook the beets the same as directed in the preceding recipe, and slice them *thin*. Put into a saucepan with salt and enough vegetable butter to season. Add a little lemon juice, reheat, and serve.

SCALLOPED BEETS

Add enough rich cream sauce to sliced boiled beets to moisten them, and lay in a baking pan. Grate fresh crumbs over the top, moistening them with a little cream or milk. Put small bits of vegetable butter on top, and brown in the oven.

STEWED TURNIPS

Peel young turnips, and cut them into quarters or eighths lengthwise. Put into a saucepan with water barely to cover them. Add salt, and let simmer until they are done and the water is mostly absorbed. Add a little rich cream or cream sauce, shake together, reheat, and serve.

BAKED PARSNIPS

Wash and scrape parsnips. Cut them lengthwise into slices about $\frac{1}{2}$ inch thick. Put them to boil in just enough water to cover, and salt to season. When tender, remove from the saucepan, lay them close together in an oiled baking pan. Pour a spoonful of rich cream sauce over each piece, and bake to a nice brown.

STEWED PARSNIPS WITH EGG SAUCE

Prepare the parsnips for cooking, the same as in the foregoing recipe. Slice, or cut into small pieces, cover with water, add salt to taste, and boil gently until done. Drain, add enough egg sauce to season well, reheat, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

SPINACH

Pick the greens over carefully, and wash in several waters to remove grit. If the greens are very tender, lift them out of the water, drain well, and put them into a saucepan with a little salt and vegetable butter to season, adding no water. Cover, and cook until done, turning them over in the pan now and then. When greens are more matured, cook them in deep boiling water with the cover off. When done, drain, cut fine, and season with vegetable butter and salt to taste. Reheat, and serve with quartered lemon or hard-boiled egg, or both.

STEWED OKRA AND TOMATO

2 cups sliced okra 3 large new tomatoes or 1 cup canned tomato
2 teaspoonfuls vegetable butter Salt to taste Onion flavor if desired

Wash the okra pods, remove the stem ends, and slice $\frac{1}{4}$ inch thick. Add salt and a sprinkle of onion, and water to cover, and let cook gently until nearly done. Then add the tomato, and let simmer until the vegetables are thoroughly done, but not mashed. Add the butter, shake together, and serve.

BOILED ONIONS

Remove the outer skins from medium small white onions, cover with water, and bring to a boil. Drain, add more boiling water, salt to taste, and let cook gently until done. Put $1\frac{1}{2}$ tablespoonfuls vegetable butter into a small pan, add 1 tablespoonful flour, and rub together. Add $\frac{1}{4}$ cup onion broth, and stir smooth. Add $\frac{3}{4}$ cup more of broth, and boil up. Add the boiled onions, let simmer for 10 minutes, and serve.

ONIONS IN CREAM

Add rich cream or cream sauce to the above boiled onions, shake together, reheat, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

SMOTHERED CUCUMBERS

Pare medium sized cucumbers, and slice into hot cream sauce. Cover, let simmer until they are tender, and serve.

CUCUMBERS WITH EGG SAUCE

Add sliced hard-boiled egg to the above smothered cucumbers, shake together, and serve.

STEWED CELERY WITH PEAS

Wash celery, and shred with a knife. Cover with hot water, and let boil gently until done and the liquid mostly evaporated. Cook the peas separately, drain, and mix with the celery. Rub together 1 tablespoonful vegetable butter and $\frac{1}{2}$ tablespoonful flour in a small saucepan. Add $\frac{1}{4}$ cup liquid from the vegetable, and stir smooth. Add $\frac{2}{3}$ cup more of liquid, and boil up. Add the cooked vegetables, reheat, and serve.

SUCCOTASH

Take 2 cupfuls stewed green Lima beans, add 1 cupful stewed sweet corn, and 2 teaspoonfuls vegetable butter or a little cream. Reheat and serve. Dry beans well cooked and canned corn may be used instead of new vegetables if desired.

STEWED CABBAGE

Trim a small cabbage, cut into halves, remove the stem, and separate the leaves, dropping them into boiling salted water. Let cook gently with cover off, until done. Then drain. Put a little cream and vegetable butter into a saucepan, add the cabbage, reheat well, and serve.

ROASTED POTATO

Steam or boil pared raw potatoes until they are about half cooked. Then drain, and place in an oiled baking pan. Sprinkle with salt, then with flour, brush over each potato with an oiled brush, and bake to a nice brown.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

SCALLOPED POTATO

Slice pared raw potatoes thin. Put a layer of the sliced potatoes into an oiled baking pan, and sprinkle with salt and flour. Repeat the process until the pan is about three fourths full. Pour over the potatoes enough milk to cover them. Put small bits of vegetable butter on top, and bake until thoroughly done.

KENTUCKY POTATO

Add finely chopped onion and parsley to each layer of the foregoing scalloped potatoes, and bake the same as the above recipe. Water may be used in place of the milk, if desired, a little more of the butter being used than when milk is used.

POTATO DUCHESS

4 cups hot mashed potatoes	1 egg yolk	Salt
1 tablespoonful vegetable butter	Thin cream	

Boil pared potatoes, drain, mash through a potato ricer, and set on the edge of the stove. Add the butter, the cream, the beaten yolk, salt to taste, and mix well. Put into a pastry bag with a star tube, and press out on an oiled pan in large rose shapes, or lap on a board, and form into diamond or leaf shapes. Brush over with cream or milk, and bake in a quick oven.

POTATO EN SURPRISE

Put the above potato mixture into a pastry bag, and make round potato borders on an oiled baking sheet, leaving a hollow in the center. Fill this cavity with nicely seasoned green peas or spinach. Cover with the potato, brush over with cream, and bake the same as the preceding.

ROASTED SWEET POTATO

Steam or boil sweet potatoes until the skins can be scraped off easily. Lay in an oiled baking pan, and sprinkle with salt. Then brush over each potato with vegetable oil, and bake until done and a nice brown.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

GLAZED SWEET POTATO

Boil sweet potatoes until done, peel, and cut into quarters lengthwise, if not too large. Lay them close together in an oiled baking pan, dust with salt to season, and sprinkle sugar lightly over all. Brush over with vegetable oil, and brown nicely.

MASHED SWEET POTATO

Pare the potatoes, and steam, or drop into boiling water and cook until done. Drain, mash, and season with rich cream or butter and salt.

DESSERTS

The most wholesome desserts are those furnished us by nature, and which require no preparation, as fruits, either fresh, dried, or cooked, and nuts. The nutriment in fruits consists chiefly of natural fruit sugars, which are ready for absorption; and they should form a part of every day's dietary.

Fruits, because of their attractive colors, sweet aroma, and delicious flavors, are the very best appetizers, appealing to the sense of sight, smell, and taste. They satisfy a natural craving for something dainty at meals without burdening the system with extra work, and with little danger of excess. As it is written, "Of every tree of the garden thou mayest *freely eat.*" Genesis 2:16. No danger of "auto-intoxication" here; but, on the other hand, fruit acids are cleansing, and their alkaline substances are valuable for improving the condition of the blood.

Cane sugar is quite different from fruit sugar, in that it needs to be digested, or converted into fruit sugar, in order to be utilized by the body. Saliva does not exert any influence upon cane sugar, neither does the gastric juice. The intestinal juice aids in converting it into fruit sugar; but there is more or less danger of fermentation's being set up, and the irritant thus formed aids in bringing about catarrhal conditions. If one subsists largely upon fruits, the desire for artificial and highly sweetened foods will disappear. No other foods are so well suited for children as are fruits. All children have a craving for sweets. This is natural, at least to some degree; and they should be supplied with sweets designed by nature to satisfy this desire.

As a rule, far too much sugar is used in food. "Sweet breads, sweet cakes, . . . perpetuate indigestion and make dyspeptics." We should exercise care, however, to provide suitable dishes to take the place of the more harm-

ful ones, ever remembering that "diet reform must be progressive." The free use of milk and sugar taken together is especially harmful, and should be avoided. Their place should be supplied, as far as possible, by preparations of fruit, and a variety of grains served in an appetizing manner. A simple cake may be made without the large quantities of butter, sugar, milk, and eggs ordinarily used, which are difficult of digestion. A few examples of such cake will follow.

DRIED FRUITS

In many localities, during the winter months, it is difficult to obtain fresh fruits; but good varieties of dried fruit can be purchased in the markets at any season of the year.

The high temperature to which dried fruit is usually subjected in cooking, produces a strong flavor, which few people relish. In the process of drying, the water is evaporated from the fruit; and if this moisture can be restored to the fruit before cooking, the original flavor is retained, and to a large extent, it will have the appearance of fresh fruit. Instead of dried fruit's being cooked several hours, as is customary in many homes, it needs to be cooked no longer than fresh fruit of the same variety, after the water is restored to it. Exception is made of dried prunes, which may be simmered a long time.

STEWED DRIED PRUNES

Wash thoroughly several times in warm water. Then cover with water, and let soak from 12 to 24 hours, or until sufficient water has been absorbed to make them soft as fresh, ripe fruit. Boil slowly until thoroughly done, and little or no sugar will be required.

STEWED DRIED APRICOTS

Ripe apricots are never sour unless brought to a high temperature in cooking. Wash the fruit thoroughly in

warm water, and let soak for 24 hours or more, or until the fruit is as soft as fresh fruit. If properly soaked, apricots will require very little cooking. Heat gradually over a slow fire, using the water in which they were soaked, but do not let them come quite to the boiling point. Let them simmer on the edge of the stove until they are thoroughly scalded, and they will be fairly sweet without sugar.

STEWED DRIED PEACHES

Wash thoroughly, cover with warm water, and soak overnight. If the fruit was ripe when dried, the skins will slip off easily. If there are a few pieces that were not ripe, and that are not loosened, use a knife for these. After removing the skins, add fresh water, and soak several hours, when the peaches will be soft, like fresh peaches. Do not boil, but simmer slowly until done. Sweeten to taste.

PUDDINGS

PRESSED FRUIT PUDDING

Stewed blackberries or strawberries Gruanose biscuit Sugar

Lay the biscuit in a baking pan in a warm oven until thoroughly dried out and lightly browned. Pour the berries into a colander. Lay a layer of crumbled biscuit in the bottom of a brick-shaped tin, dip enough of the juice over the biscuit to moisten it, sprinkle lightly with sugar, and cover with a layer of berries about half an inch deep. Then repeat, having the berries on top. Set the pudding dish inside a larger pan, then put on top of the pudding, with a weight, a pan equal in size to that in which the pudding is. Let stand and press for several hours, or overnight. When ready to serve, cut in squares, and serve a teaspoonful of whipped cream on top of each serving.

PRUNE PUDDING

Soak dried prunes overnight. Cook them for 2 or 3 hours, with a few slices of lemon added to give them

flavor. Drain, and save the juice separately. Put the prunes through a colander to remove the pits, sweeten with sugar if needed, and flavor with vanilla. Trim the crust off thinly from a loaf of fruit bread, and cut into slices about half an inch thick. Line a granite baking pan with the bread, pour over enough juice to soak up the bread, and cover with the prune pulp about half an inch deep. Repeat the process, leaving the prune pulp for the top. Put into the oven until it is barely hot through, so it will set. Cool, cut into squares, and serve with a teaspoonful of whipped cream on top of each serving.

PRUNE WHIP

$\frac{1}{2}$ cup prune pulp White of 1 egg 1 tablespoonful sugar
A few drops of vanilla

Prepare prunes the same as for prune pudding. Beat the white stiff and dry, add sugar and vanilla, and beat again. Then fold in the prune pulp. Serve on a sauce dish with a teaspoonful of whipped cream on top.

APPLE TAPIOCA PUDDING

$\frac{2}{3}$ cup minute tapioca 2 cups boiling water 6 tart apples
A small slice of lemon peel $\frac{1}{2}$ cup sugar

Wash the tapioca, and drain it well. Add the boiling water and the lemon peel, and cook in a double boiler until transparent. Pare and quarter the apples, removing the cores. Place in a baking pan, sprinkle the sugar over the apples, cover, and bake until the apples are nearly tender. Pour the cooked tapioca over the fruit, and continue baking until done. Then cool.

STRAWBERRY WHIP

1 cup strawberries White of 1 egg $\frac{1}{2}$ cup sugar
1 teaspoonful lemon juice

Choose well ripened strawberries, wash them, and remove the stems. Put all the ingredients into a bowl, and

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

beat with a wire egg whip until light and fluffy, which will take 20 minutes or more. Pile lightly on a dish, and pour a border of crushed fruit or red fruit juice unsweetened around the whip on each dish.

APPLE SNOW

2 tart apples ($\frac{2}{3}$ cup after being cooked) Whites of 2 eggs
 $\frac{1}{4}$ cup sugar 1 teaspoonful lemon juice

Steam or boil the apples with just enough water to cook them soft. Mash through a fine strainer. Add the sugar and the lemon juice. Beat the whites stiff and dry. Fold in the cooked apples. Serve on a small dish, with $\frac{1}{2}$ teaspoonful of red jelly on top.

GRAHAM FRUIT PUDDING

2 $\frac{1}{2}$ cups water 6 tablespoonfuls sugar $\frac{2}{3}$ cup seeded raisins
 $\frac{1}{2}$ cup Graham flour, toasted lightly in the oven 1 slice lemon
 A few grains of salt

Add the sugar, lemon, raisins, and a few grains of salt to the water, and bring to a boil. Add 4 tablespoonfuls of cold water to the Graham flour to mix smooth. Let the water, sugar, and raisins boil gently until the liquid measures 2 cups. Then pour a little of the hot mixture into the wetted Graham, and stir. Pour the Graham mixture into the boiling liquid, stir smooth, and let simmer for a few minutes. Then pour into wetted molds and let cool. Serve with cream or lemon sauce.

STEAMED FRUIT PUDDING

1 $\frac{1}{2}$ cups soaked stale bread 1 cup seedless sultana raisins
 The grated rind of $\frac{1}{2}$ lemon 3 tablespoonfuls sugar 1 egg
 1 tablespoonful vegetable butter

Soak the raisins overnight, drain, and put on a slow fire until hot through. Then add the vegetable butter. Have the bread soaked in cold water until soft all the way through, and press out lightly. Beat the egg, and mix all the ingredients, using a silver fork. Put into a thin cloth, leaving

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

a little room to rise, and steam for 1½ to 2 hours. Turn out on an oiled pie tin, bake for a few minutes, and serve with lemon sauce. This last baking may be omitted if not convenient. If seeded raisins are used, they should be added without soaking.

CREAM RICE PUDDING

½ cup uncooked white rice 5 cups milk ½ cup sugar Vanilla flavor

Wash the rice in several waters, drain, add to the hot milk, and cook in a double boiler for 45 minutes. Add the sugar and the flavoring, pour into an oiled baking pan, and bake in a moderate oven. As soon as the first crust forms, stir it down, at the same time stirring the rice; and when the rice is thoroughly done, allow the crust to brown, and remove from the oven. A few raisins may be added if desired.

LEMON SNOW

¾ cup water ½ cup sugar 2 tablespoonfuls lemon juice
2 tablespoonfuls cornstarch White of 1 egg A pinch of salt

Mix the sugar and the starch thoroughly. Bring the water to a boil, stir in the sugar and starch until smooth and thick, and let simmer for a few moments. Beat the white stiff. Then pour the hot mixture into the beaten white in a steady stream, beating as it is being poured in. Add the lemon juice and a few grains of salt, and mix. Then pour into wetted molds, and let cool. Serve with custard sauce.

HOOVER PUDDING

¾ cup cooked oatmeal ¾ cup milk 1 egg Vanilla flavor
2 tablespoonfuls sugar

Beat the egg slightly, add the sugar and the vanilla, and mix with the milk. Work gradually into the cooked oatmeal, pour into an oiled pan, put into a pan of water, and bake in a medium oven until just set. Let cool and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

bake until set. A few seedless raisins added make a nice combination.

BLANCMANGE

1 cup rich milk 2 tablespoonfuls cornstarch 1 tablespoonful sugar
 White of 1 egg A few grains of salt Vanilla

Put the milk into a double boiler, and when boiling hot, add the sugar and the salt. Stir in the cornstarch, rubbed smooth in a little cold milk. Cover, and let cook 15 minutes. Beat the white of egg stiff. Then pour the hot mixture into the beaten white, the same as for lemon snow, adding a few drops of vanilla. Turn into wetted molds, and serve with cream or fruit sauce.

STRAWBERRY FLUMMERY

Use the recipe for blancmange. When cold, dish up in glasses, with crushed strawberries poured over it.

VEGETABLE GELATIN

Put $\frac{1}{2}$ ounce of vegetable gelatin (agar-agar) to soak in warm water for 30 minutes. Drain, and add 2 cups boiling water. Let boil gently for about 10 minutes, or until it is clear. Strain through a fine strainer, and keep warm until ready for use. The jelly should measure 2 cups.

ORANGE JELLY

1 cup orange juice 6 tablespoonfuls lemon juice $\frac{1}{2}$ cup water
 $\frac{2}{3}$ cup sugar $\frac{2}{3}$ cup vegetable jelly

Dissolve the sugar in the fruit juice and water, and add the hot jelly. Mix well, pour into wetted molds, and let set.

LEMON JELLY

$\frac{1}{2}$ cup lemon juice $\frac{3}{4}$ cup sugar $1\frac{1}{4}$ cups water
 $\frac{2}{3}$ cup vegetable jelly

Mix and mold same as the foregoing.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

BERRY MOLD

1½ cupfuls juice from stewed and sweetened berries ½ cup sugar
 4 tablespoonfuls lemon juice ⅔ cup vegetable jelly

Mix and mold the same as orange jelly.

FRUIT JELLY

Arrange a nice assortment of fresh or cooked fruits, well drained, in a glass bowl. Take 1¾ cups light-colored fruit juice, add ¼ cup lemon juice, ¼ cup strawberry or loganberry juice, and sweeten to taste. Add ⅔ cup vegetable jelly, mix well, and pour over the fruit in the dish. Let set and serve.

PIES**PLAIN PASTRY**

1½ cups sifted pastry flour 6 tablespoonfuls solid vegetable fat
 ⅓ teaspoonful salt Scant 5 tablespoonfuls cold water

Mix the flour and the salt in a bowl. Add the fat, and cut into the flour with a silver fork or knife, in order to blend. Avoid rubbing the ingredients with the hands, as that would make the mixture too oily. Add the water slowly, and mix through the dry ingredients with a fork. Form lightly and quickly with the hands into a soft dough, and lay on a floured board. Use a light motion in handling the rolling-pin, and roll *from the center outward*.

BEATEN OIL CRUST

1½ cups sifted pastry flour 6 tablespoonfuls cottonseed or corn oil
 ⅓ teaspoonful salt 4 tablespoonfuls water

Mix the flour and the salt in a bowl. Put the oil into a small bowl, and add the water in a slow stream, beating constantly to emulsify the oil. Pour onto the flour, and mix with a spoon, drawing the flour into the wetting from the sides to a medium soft dough. Turn out on a floured board, and use the same as plain pastry.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

GRANO CRUST

$\frac{3}{4}$ cup grano cereal $\frac{2}{3}$ cup thin cream

Pour the cream over the grano cereal, and stir until the cream is absorbed. Then spread evenly on the bottom and sides of pie tin, using a spoon. Have the rim quite thick. Bake until done, and add filling.

CRUST SHELLS

Roll out either of the above pastries to cover a pie tin. Press well down into the tin. Then press off the surplus edge around the rim. Prick with a fork on bottom and sides to keep the crust from blistering. Bake to a light brown.

APPLE PIE

Line a pie tin with crust. Sprinkle in the bottom a little flour mixed with a little sugar. Fill the plate with sliced or chopped tart apples, rounding it up a little. Dust with flour. Add one teaspoonful vegetable butter to each pie. Sprinkle over about $\frac{1}{2}$ cup or less of sugar, according to the tartness of the apple and the size of the pie. Run a wet brush around on the edge of the crust. Roll out a top crust, perforate with fork or knife, and lay on top. Press the edges together; trim, and mark by pressing the teeth of a table fork down on the rim of the crust all the way around. Brush over with cream or milk, and bake in a medium oven.

PRUNE PIE

Remove the stones from cooked prunes slightly sweetened. Roll out bottom crust as for apple pie. Add the stoned prunes, 1 tablespoonful lemon juice, 1 teaspoonful vegetable butter, and $\frac{1}{4}$ cup sugar or more. Cover with top crust, and bake the same as apple pie.

STRAWBERRY PIE NO. 1

Wash and stem ripe strawberries. Roll them in powdered sugar, and fill a crust shell. Cover with whipped cream, cut, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

STRAWBERRY PIE NO. 2

Fill a crust shell with strawberry whip, as given in recipe on page 113. Cut and serve.

RAISIN PIE

1½ cups seedless sultana raisins 2 cups water
1 tablespoonful lemon juice 1 scant tablespoonful cornstarch
1 teaspoonful vegetable butter ½ cup sugar

Wash the raisins, and soak overnight. Bring to a boil. Then sift the sugar and the starch together thoroughly, add to the raisins, and let boil for 10 minutes. Add a pinch of salt, and let cool. Line a large pie tin with crust, add raisins, lemon juice, and butter, cover with a top crust, and bake the same as apple pie.

PUMPKIN PIE

1¼ cups canned pumpkin 1 cup milk 1 egg ½ cup sugar
1 tablespoonful molasses 1 tablespoonful light browned flour
1 teaspoonful melted vegetable butter or a little cream
Vanilla flavoring A few grains of salt

Beat the egg. Add the molasses, salt, cream or butter, and the sugar mixed with the flour. Beat well. Add the pumpkin, and mix well. Then stir in the milk and a little flavoring; and when thoroughly mixed, pour into a large pie tin that has been lined with pie crust, and bake until set. If one tablespoonful cornstarch is sifted with the sugar, the egg may be omitted, if desired.

PUMPKIN PIE WITHOUT EGGS

1½ cups cooked pumpkin Scant ½ cup sugar
1 tablespoonful molasses 4 tablespoonfuls cream roast flour
1½ cups hot milk 1 teaspoonful vanilla flavor ½ teaspoonful salt

Mix the sugar with the browned flour, and add to the pumpkin. Then combine all ingredients, and bake the same as the preceding recipe.

LEMON PIE

1 large cup sugar 1¾ cups water 4 tablespoonfuls cornstarch
1 egg Grated rind of 1 lemon 3 tablespoonfuls lemon juice
¼ teaspoonful salt 2 tablespoonfuls vegetable butter

Sift the sugar and the starch together into a granite saucepan, pour the *boiling* water over these while stirring,

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

constantly. Use care not to make the mixture stiff. Sift the flour over slowly, and mix, using the folding motion. Bake in an unbuttered pan 20 minutes or more, having a small pan of hot water under the cake while baking. When done, turn upside down on a rack, and leave in the pan until cold. Cover with plain icing.

JELLY ROLL

Line a baking pan with manila paper. Spread layer cake mixture about $\frac{1}{2}$ inch deep on the paper, and bake on the top grate in a quick oven. Lay a sheet of manila paper on the table, and sprinkle lightly with sugar. Then as soon as the cake is done, turn bottom side up on the sugared paper, and carefully remove the paper from the bottom of the cake. Spread the cake with red jelly. Then take hold of the edge of the paper with the fingers, and roll the cake into a roll with the sugared paper around to hold it together until cold.

LADY FINGERS

1 cup sifted pastry flour $\frac{1}{2}$ cup sugar 3 egg yolks 3 whole eggs
Lemon flavor A few grains of salt

Put the yolks and the whole eggs into a round-bottomed bowl, and set into a pan of boiling water, the same as for layer cake, and beat quickly until the mixture is blood warm or a little more. Then set the bowl on the table, and continue beating rapidly until the mixture is cold, and so thick that it will pile nicely when dropped from a spoon or a batter whip. Add the flavor, sift the flour again over the batter, and fold in lightly with a large spoon. Put into a pastry bag with a lady finger tube, and press out on a paper-lined pan, about $1\frac{1}{2}$ inches in length, and about the size of a pencil or a crayon, leaving space between. Dust over thickly with powdered sugar, and bake on the top grate in a quick oven, to a light brown color. When they are cooled off, turn the paper upside

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

down on the table, and wet the paper with cold water on the bottom side. Turn right side up again, and let rest about 2 minutes. Then remove the cakes, and stick them together.

ICINGS AND FILLINGS

BOILED FROSTING

$\frac{3}{4}$ cup sugar $\frac{1}{4}$ cup water White of 1 egg Flavor

Dissolve the sugar in the water, and continue to stir until it boils. Then let boil undisturbed until a *long, hair-like thread* will blow from a spoon dipped in the sirup and lifted. Pour it in a slow stream into the beaten white, beating as it is being poured in. Add flavoring, and beat until light and creamy, and cold enough to spread on cake.

PLAIN ICING

Add confectioner's sugar (powdered sugar) to a small amount of light-colored fruit juice,—pineapple, pear and lemon, or lemon juice and water. Stir in enough sifted sugar to form a consistency to spread on cake. This icing will not dry out as quickly as boiled icing, and it forms a crust over the surface very readily.

ORNAMENTAL FROSTING

For lettering and ornamenting a cake, use the following: Beat one white of egg until frothy but not stiff. Add sifted powdered sugar gradually, beating constantly until so thick that it will not run on a plate. Make a small funnel of a good grade manila paper. Put a teaspoonful of the frosting into the funnel, cut a little piece off the point of the funnel, and press out the sugar in the form of letters and simple decorations. In making roses and leaves for a decoration, the frosting must be stiff enough to hold up when pressed out, to retain the shape of leaves, etc.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

STRAWBERRY FILLING

1 cup crushed strawberries $\frac{1}{2}$ cup heavy cream Sugar to taste

Whip the cream, and fold in the sweetened and crushed berries. Spread between cakes.

ORANGE FILLING

$\frac{1}{2}$ cup orange juice Grated rind of $\frac{1}{2}$ orange
2 tablespoonfuls lemon juice 1 teaspoonful vegetable butter
 $\frac{1}{2}$ cup sugar 2 tablespoonfuls flour A few grains salt 1 egg yolk

Mix the flour and the sugar together. Add a little of the juices to the flour and sugar, and stir smooth. Add the yolk, slightly beaten, a few grains of salt, and the butter, and mix. Add the orange rind and the rest of the juices, and heat gradually, stirring constantly until it thickens. Then cool, and spread between layers. This filling must not be cooked more than necessary to thicken, or the acid will cut the starch and thin the mixture.

LEMON FILLING

Juice and rind of 1 large lemon 1 cup powdered sugar
2 eggs A pinch of salt

Beat the eggs. Add the lemon juice, salt, rind, and sugar. Stir over the fire until it thickens. Let cool, and spread between layers.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

SALADS AND DRESSINGS

Salads, composed chiefly of green, tender vegetables, or fruits and nuts, and served with a dressing, are valuable as a means of supplying fat. They are also valuable for their mineral salts. When carefully prepared and daintily served, salads are among the most appetizing adjuncts of a meal, and owe much of their food value to this very attractiveness.

Plain salads that require oil and lemon juice for dressing should not be prepared until the moment they are wanted. Should they be mixed long before they are served, the lettuce will be found flabby, and the dressing watery and insipid.

Garnishing or decorating salads is important, inasmuch as the most deliciously blended salad will not be appreciated unless it is attractive in appearance. Wild flowers neatly arranged with alternate tufts of green are pretty during summer. In cold weather, garnish with pretty designs cut from beets, turnips, radishes, carrots, etc.

DRESSINGS

MAYONNAISE DRESSING

Yolk of 1 egg 1½ tablespoonfuls lemon juice ⅓ teaspoonful salt
1 cup olive or refined cottonseed oil

Beat the yolk. Add the oil drop by drop to begin with, then increase as it gets started, adding now and then a little lemon juice to thin the dressing to proper consistency. Add salt last, as it has a tendency to "break" the mayonnaise when added to the yolk at the beginning.

BOILED DRESSING

⅓ cup cream ⅓ teaspoonful cornstarch 2 tablespoonfuls lemon juice
2 teaspoonfuls vegetable butter 1 egg yolk Salt to taste

Heat the cream in a double boiler. Rub the starch smooth with a little cold milk, and stir into the hot cream.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

Cover, and let cook for 10 minutes. Beat the yolk, add the butter and lemon juice, and mix well. Pour the hot cream gradually into the yolk mixture, stirring as it is being poured in. Then return to the fire, and continue stirring until of the right thickness. Salt to taste, and let cool.

CREAM MAYONNAISE

Whip $\frac{1}{4}$ cup heavy cream slightly. Add to the boiled dressing and an additional spoonful of lemon juice.

FRENCH DRESSING

A few grains of salt $1\frac{1}{2}$ tablespoonfuls olive or cottonseed oil
Scant tablespoonful lemon juice $\frac{1}{2}$ teaspoonful grated onion

Dissolve the salt in the oil with a spoon. Add the ingredients in the order given, and beat with a spoon to emulsify the liquids. Use immediately.

CREAM DRESSING

$\frac{1}{2}$ cup thick cream 3 tablespoonfuls lemon juice
1 tablespoonful sugar Salt

Whip the cream until quite thick but not stiff. Then add sugar, salt, and lemon juice, and serve.

GOLDEN FRUIT SAUCE

$\frac{1}{2}$ cup pineapple juice or orange juice 2 tablespoonfuls lemon juice
3 tablespoonfuls sugar 1 teaspoonful cornstarch
1 egg yolk A few grains of salt

Put the juices into a small saucepan, and bring to a boil. Mix the starch with the sugar, and add enough of the fruit juice to mix smooth. Beat the yolk slightly, and add to the sugar and starch mixture. Then pour in gradually the hot liquid, stirring as it is being poured in. Stir on the edge of the stove until it thickens, but do not boil, or the acid will neutralize the starch. Add a few grains of salt, and let cool.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

VEGETABLE SALADS

LETTUCE AND TOMATO SALAD

Arrange lettuce leaves on a plate. Have a ripe tomato peeled and cooled. Lay on lettuce leaves. Run a sharp knife across the middle of the tomato, cutting it nearly in two, then crosswise, so that the four quarters fall back, yet hold together underneath. Drop a teaspoonful of salad dressing into the center of the tomato, and serve.

POINSETTIA TOMATO

Select a small ripe tomato, wash, and wipe with a cloth. With a sharp-pointed knife, cut through the skin, from the stem end, across the tomato, dividing the skin into about 8 parts, so as to resemble poinsettia leaves. Run the blade of a penknife under each leaf, and pull it back on the plate, until all the leaves lie on the plate, and attached to the tomato stem. Cut the tomato crosswise the same as in the previous recipe, and serve with mayonnaise.

STUFFED TOMATO

Pour boiling water over ripe tomatoes. Pour it off again immediately, and replace with cold water. Remove the skins. Take medium small tomatoes, hollow out carefully, and fill the cavity with finely diced celery and cucumber, seasoned with grated onion and salad dressing. Serve on lettuce leaf.

TOMATO EN SURPRISE

Scald and peel a tomato. Cut off a liberal slice from the blossom end, which must be kept for covering. Hollow out the center of the tomato, and turn upside down in a dish to drain. Cut cooked asparagus tips into half-inch lengths, season with mayonnaise, and refill the cavity in the tomato. Cover with the slice of tomato, and serve on lettuce leaf.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

POTATO SALAD

Cold boiled potato Chopped or grated onion Hard-boiled egg
 Chopped parsley Boiled dressing

Peel the potatoes, quarter lengthwise, and slice very thin. Add chopped onion and parsley, sprinkle with salt, and season with boiled dressing. To dish up, pile on a platter or a plate in oblong shape, having the salad piled high and narrow, leaving the sides of the plate vacant for garnitures. Garnish with lettuce, and hard-boiled egg cut into quarters, at each side, and sliced boiled beet cut into fancy shapes, at each end of salad and on top.

ITALIAN SALAD

1 cup cooked macaroni cut into small rings $\frac{1}{2}$ cup diced celery
 $\frac{3}{4}$ cup finely diced carrot $\frac{1}{2}$ cup cooked green peas
 2 teaspoonfuls grated onion Mayonnaise or boiled dressing

Mix all ingredients, season with dressing, and serve on lettuce leaf.

NUT AND CELERY SALAD

$\frac{1}{2}$ cup diced nut loaf or nuttose $\frac{1}{2}$ cup diced celery

Put the diced nut food into an oiled pie tin, and brown lightly in the oven, stirring often to prevent scorching. Add to the diced celery, and season with boiled dressing and a little chopped or grated onion. Serve on lettuce leaf.

MACEDOINE SALAD

$\frac{1}{2}$ cup diced boiled potatoes $\frac{1}{4}$ cup diced boiled carrots
 $\frac{1}{4}$ cup diced boiled turnips $\frac{1}{3}$ cup green peas
 1 teaspoonful grated onion

Mix all ingredients, and season with boiled dressing.

BEAN SALAD

$\frac{1}{2}$ cup cold boiled beans $\frac{1}{2}$ cup diced celery $\frac{1}{2}$ cup diced lettuce
 1 teaspoonful grated onion

Mix all ingredients, and season with mayonnaise or boiled dressing.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

EGG SALAD

Dice hard-boiled eggs, season with boiled dressing, serve on a bed of lettuce, and sprinkle with chopped parsley.

COLD SLAW

Select crisp, tender cabbage. Cut through lengthwise, then through each half, and remove the solid part. Shred very fine with a sharp knife. Season with grated or chopped onion, salt, and lemon juice, or mix with cream dressing or cream mayonnaise.

BEEF AND EGG

$\frac{3}{4}$ cup diced boiled beets 1 hard-boiled egg diced
1 teaspoonful chopped onion

Mix all ingredients, and season with mayonnaise or boiled dressing.

WATER LILY SALAD

Cut a hard-boiled egg through lengthwise. Mash half of the yolk through a strainer. Put the other half yolk into a dish, and mash up with a fork, adding enough boiled dressing to season well. Cut each half of the cooked white into three pieces lengthwise, to represent petals. Arrange on a plate of lettuce. Place a spoonful of the yolk mixture in the center, sprinkle the crumbed yolk over the salad, and serve.

COMBINATION SALAD

Sliced tomato Sliced cucumber Sliced green onion Sliced radishes
Lettuce French dressing

Pare the vegetables, slice very thin, and put into a bowl. Tear the lettuce into large pieces, add to the vegetables, and set on ice if available. Just before serving, pour over enough French dressing to season, using it scantily.

CUCUMBER SALAD

$\frac{3}{4}$ cup sliced cucumber $\frac{1}{2}$ cup *thinly sliced* boiled potato
1 tablespoonful chopped sweet bell peppers 1 teaspoonful grated onion

Pare the cucumbers, slice thin, and put into ice water slightly salted, for half an hour. Then drain, and wring

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

out in cloth. Mix all ingredients, season with a small quantity of French dressing, and serve on lettuce leaf.

SWEET POTATO SALAD

1 cup diced boiled sweet potatoes 2 stalks crisp celery cut into dice
2 teaspoonfuls each of chopped onion and sweet bell pepper
Chopped parsley

Mix all ingredients, and season with French dressing the same as the above.

SLICED BEETS IN LEMON

1 cup water $\frac{1}{2}$ cup lemon juice 2 tablespoonfuls sugar
1 teaspoonful salt 1 bay leaf Boiled beets

Add the salt, sugar, and lemon juice to the water, and bring to a boil. Slice the cooked beets into the hot liquid, add the bay leaf, cover with a plate so as to keep the beets submerged in the liquid, and let cool. A hard-boiled egg may be put whole into the bowl with the sliced beets, and served with a sprig of green leaves stuck into one end for garniture, if desired.

STRING BEAN SALAD

Use canned or freshly cooked string beans. Drain well, and season with chopped onion and French dressing.

FRUIT SALADS

STUFFED DATE SALAD

Remove the pits from washed dates, refill each with a half walnut meat, and press together. Put into a salad bowl, and wet with lemon juice. Let stand 15 minutes, then serve on lettuce leaf.

FRUIT BASKET

Select medium sized, well colored oranges. Hold an orange between the thumb and the first finger, letting the

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

side of the orange rest on the table. With a small, pointed knife, start in the middle of the orange, and run the blade about 2 inches into the center, then again and again, all the way around, in such a manner that the orange will part in two halves, leaving the edge ruffled with small points of peel, like the teeth of a coarse saw. Run the point of the knife around each half, near the peel. Then with a teaspoon, dip out the fruit in one piece. Cut the orange center into small cubes, to which add equal quantities of diced banana and pineapple, and a few ripe strawberries if available. Add fruit sauce to season, and fill the orange shells, having them well rounded with fruit. Serve on a white plate, with three small orange leaves or lettuce leaf for garniture.

* FRUITS AND NUTS

$\frac{1}{2}$ cup diced oranges $\frac{1}{2}$ cup diced bananas
Chopped walnuts $\frac{1}{2}$ cup diced pineapple

Mix the fruits, and season with fruit sauce. Dish up on a lettuce leaf, and sprinkle chopped walnuts over the top.

CROWN PRINCE SALAD

Line a small plate with crisp lettuce. Take slices of orange, and dispose around the side of the dish. Fill in with sliced banana, pineapple cut into large pieces, orange cut likewise, and ripe strawberries. Pile the fruit high, and pipe whipped cream on top and sides with pastry bag, to represent a crown.

FRUIT SALAD

Cut equal quantities of orange, pineapple, banana, and mellow apple into small dice. Season with fruit sauce or cream mayonnaise, and serve on lettuce leaf. A few ripe strawberries when in season improve the combination.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

WALDORF SALAD

$\frac{3}{4}$ cup finely diced apples $\frac{1}{2}$ cup diced celery Chopped walnuts
Cream mayonnaise dressing

Mix the apples with the dressing first, to keep them from turning dark. Mix all the ingredients, adding the walnuts just before serving, so as to avoid turning the salad a dark color. Serve on lettuce leaf, with a bit of dressing on the top.

RIBBON APPLE SALAD

Select small, fine-grained red apples. Core and pare, leaving the skin in the shape of a ring near the stem end of the apple. Remove some of the inner portion of the apple, being careful not to break the shell. Fill the cavity with equal quantities of finely diced celery and apple, seasoned with cream mayonnaise. Put a small funnel of crisp lettuce in the top of the apple, into which drop a teaspoonful of dressing. Serve on apple leaves or lettuce leaf.

RAISIN SALAD

$\frac{1}{2}$ cup seeded raisins, sliced $\frac{2}{3}$ cup finely diced apple

Prepare the raisins first, then the apples. Mix, and season with cream mayonnaise dressing. Serve on lettuce leaf.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

TOASTS AND BREAKFAST DISHES

Toasts are especially nice for breakfast. They are a light food, yet appetizing and nourishing.

STRAWBERRY TOAST

Bring fresh strawberries to the boiling point with enough sugar to sweeten. When done, dip a piece of zwieback into the juice to soften, lay the toast on a platter, and cover with strawberries. Pour a spoonful of juice over all, and serve. The juice may be thickened a little with corn-starch if desired, before dishing up.

CREAM TOAST

Moisten zwieback in hot thin cream, lay on platter, pour a spoonful more of cream over, and serve.

PRUNE TOAST

Rub well cooked prunes through a fine colander. Add enough of the prune juice to make it of the consistency to spread on toast and not run off. Reheat, and dip a slice of zwieback in hot milk or prune juice to soften, lay on a platter, and cover with the prune pulp.

CREAM PEAS ON TOAST

$\frac{3}{4}$ cup green pea pulp $\frac{1}{4}$ cup thin cream Salt to taste

Bring the peas to a boil, drain off the liquid, and mash the peas through a colander, having them separate from the liquid in which they were cooked. Add the hot cream and salt to taste. Reheat, dip a piece of zwieback in hot milk to soften, lay on a platter, and cover with cream peas, which should be thick enough not to run off.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

SULTANA TOAST

Dip toasted triscuit or zwieback into hot cream, lay on a platter, cover with a large spoonful of stewed raisins, and place a spoonful of whipped cream on top if available.

WALNUT CREAM TOAST

1 cup hot milk 1½ tablespoonfuls vegetable butter Chopped walnuts
 1½ tablespoonfuls cream roast flour Salt to taste

Rub the flour and the butter together in a small saucepan. Add ⅓ cup milk, and stir smooth. Add the remainder of the milk, and boil up. Salt to taste. Dip a slice of zwieback into hot milk to soften, lay on a platter, and spread over with a spoonful of cream sauce. Sprinkle finely chopped walnuts over the cream toast, and serve immediately.

CREAM TOMATO TOAST

Dip a slice of zwieback in hot milk or tomato juice, lay on a platter, and cover with a spoonful of cream tomato sauce.

NUT AND POTATO HASH

2 cups diced cold boiled potatoes ½ cup hot milk
 1½ tablespoonfuls chopped onion 1½ tablespoonfuls vegetable butter
 ½ cup diced nut cero or cold baked dressing cut into dice
 1 tablespoonful light browned flour Salt A sprinkle of sage

Put 1 tablespoonful of butter, the onion, and the sage into a small saucepan, and stir over the fire for a few moments. Add the browned flour, then a small quantity of the milk, and stir smooth. Add the rest of the milk, and boil up. Salt to taste, and add the nut cero to the gravy. Sprinkle the potatoes with a little salt. Then pour over them the hot mixture, and mix lightly. Put into an oiled baking pan, sprinkle a little cream or small bits of vegetable butter over the top, and bake to a light brown color. Vegetable stock or hot water may be used instead of milk if desired, a little rich cream being added to the roux.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

MASHED POTATO CAKES

Take the duchess potato mixture, page 108, roll into small, round cakes, mark on top with a knife, lay in an oiled baking pan, brush over with cream, and bake on the top grate of a hot oven, to a nice brown.

CREAMED POTATO

2 cups chopped cold boiled potatoes Salt
1 cup cream or 1 tablespoonful vegetable butter
added to 1 cup milk

Put the cream, or the milk and butter, on the fire, and when it comes to a boil, add the potatoes, with salt to taste. Let them simmer, stirring now and then until they are creamy and begin to thicken. Then put them on the top grate of a medium oven to brown lightly.

SCRAMBLED EGG WITH NEW TOMATO

Scald and peel two medium sized ripe tomatoes, cut them into quarters, and put on the stove in a small covered saucepan. Add a little salt, and bring to a good boil. Turn them into a colander, and drain off the juice. Then add 1 teaspoonful vegetable butter, and reheat. Have a skillet oiled. When hot, break in 2 eggs. Stir quickly, so they will cook evenly. When they are soft cooked, add the tomatoes, mix lightly, and serve on toast.

PLAIN OMELET

1 egg 1 tablespoonful milk Salt

Beat the yolk until thick, add the milk, and mix well. Add a few grains of salt to the white, and beat until stiff. Fold the yolk mixture into the white, and turn into a hot oiled frying pan. Put into the oven, and bake until barely set. Then, while it is still in the pan, turn one half of the omelet over the other half by slipping a knife under one side and turning it over the other section. Invert on a hot platter, and serve at once.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

COOKED GRAINS

General Rules for Cooking Grains.— Add salt to boiling water in the inside part of a double boiler. Add the dry grains slowly to the boiling water, stirring constantly. Let boil undisturbed until the cereal begins to thicken. Then put on the cover, and set into the outside part of the double boiler, which should be filled a third full of boiling water. Cook slowly, covered, for 3 hours or more, and keep up the quantity of water in the outside boiler if this should boil away. Cereal cooked in the fireless cooker, of course, needs no further attention after the compartment is covered. Dates or steamed raisins lightly stirred in, a few minutes before the cereal is removed from the fire, make a pleasing variety.

ROLLED OATS

$\frac{3}{4}$ cup rolled oats 2 cups boiling water $\frac{1}{2}$ teaspoonful salt

Follow general rules for cooking grains, as given above.

CORN MEAL MUSH

$\frac{1}{2}$ cup corn meal lightly toasted in the oven
1 $\frac{3}{4}$ cups boiling water $\frac{1}{4}$ teaspoonful salt

Follow directions, and cook the same as rolled oats.

STEAMED NATURAL RICE

$\frac{1}{2}$ cup natural brown rice 1 $\frac{3}{4}$ cups hot water

Wash the rice in several waters, drain, add the boiling water, and let boil until the water is evaporated and the rice looks dry. Then cover, let stand on the edge of the stove to steam for 15 minutes, and serve.

CREAMED RICE

Add sufficient hot cream, or milk and a little butter, to the above cooked rice to make it creamy, but not too soft. Reheat and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

BANANA-RICE

Slice two bananas into the above hot creamed rice. Cover, let stand five minutes, and serve.

STEAMED WHEAT

1 cup cleaned wheat 5 cups hot water $\frac{3}{4}$ teaspoonful salt

Wash the wheat in several waters, and let soak overnight. Drain, add the salt and the hot water, and let boil over the fire for half an hour. Then set into a fireless on a hot stone overnight. In the absence of a fireless, cook the same as steamed rice.

STEAMED PEARL BARLEY

$\frac{1}{2}$ cup pearl barley $2\frac{1}{2}$ cups hot water $\frac{1}{4}$ teaspoonful salt

Soak the barley in cold water overnight, drain, add the hot water and the salt, and cook the same as for steamed wheat.

GRANO CEREAL WITH DATES

1 cup boiling water $\frac{1}{2}$ cup grano cereal 6 dates
A few grains of salt

Sprinkle the cereal into the boiling water, and stir until thick. Add the stoned and quartered dates, mix, and serve with cream.

BROWNEED RICE

$\frac{1}{2}$ cup natural rice $1\frac{3}{4}$ cups boiling water

Put the rice into a small frying pan, and stir over the fire until a very light brown color. Add the boiling water, and cook the same as for steamed natural rice.

PARCHED CORN GRITS

Parch the corn the same as directed in the recipe on page 53, and grind through a coarse mill. Put $3\frac{1}{2}$ cups of water into a small pail, add $\frac{1}{2}$ teaspoonful salt, and bring to a boil. Sprinkle into this boiling water 1 cupful

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

of the grits. Let boil over the fire for 15 minutes. Then set on a hot stone in a fireless overnight.

FETERITA GRITS

Feterita is one of the newest grain crops introduced into America, having been brought to America through the agency of the Department of Agriculture. Feterita grows readily in the southwest, owing to its drouth-resisting qualities. It resembles the Kafir corn and milo maize, but is somewhat softer, and for this reason, gives better satisfaction in cooking. Analysis shows that feterita closely resembles corn in composition, and has a nutritive value practically as high as has corn. For breakfast cereal, prepare and cook as follows:

Put into a baking pan, and toast lightly, to set the kernel. Grind through a coarse mill, and use the same proportion of the grain and the water, and cook in the same manner, as for parched corn grits.

SANDWICHES

In a family where lunches have to be put up, it is a very important matter to know how these lunches may be prepared in a wholesome manner. For making sandwiches, the bread should be reasonably fresh, should be cut thin and even, and spread scantily with butter. Then spread filling on one slice, place the other slice over, and cut into desired size and style.

NUT AND JELLY

Add chopped walnuts to jelly, and spread on buttered bread.

NUT BUTTER AND OLIVE

Dissolve the nut butter with cold water to thick cream. Add chopped olives. Serve a leaf of lettuce and mayonnaise between slices if desired.

NUT AND TOMATO

Mash equal parts of nuttolene and tomato to a paste with a fork. Season. Serve with lettuce leaf and mayonnaise.

EGG SANDWICH

Chop hard-boiled eggs very fine, season with mayonnaise, and serve with lettuce leaf.

BEAN SANDWICH

Spread bean purée on buttered bread, using lettuce and mayonnaise dressing.

TOMATO SANDWICH

Peel tomatoes, slice thin, and serve with mayonnaise.

EGG AND TOMATO

Scramble eggs soft. Add an equal quantity of stewed, drained tomatoes. Mix well, let cool, and use.

DATE AND NUT

Grind walnuts and dates through a mill. Season with lemon juice.

HONEY AND NUT

Use $\frac{1}{2}$ cup honey, 1 tablespoonful lemon juice. Add chopped walnuts to make stiff paste.

RAISIN SANDWICH

Chop $\frac{1}{2}$ cup seeded raisins and $\frac{1}{2}$ cup walnuts very fine. Add $1\frac{1}{2}$ tablespoonfuls mayonnaise and $\frac{1}{2}$ teaspoonful lemon juice. Mix into paste, and spread on thinly buttered bread.

NUT AND FRUIT

Grind equal parts of steamed dried figs and seeded raisins together through a mill or chop fine. Add enough chopped walnuts to spread nicely on bread. Season with lemon juice.

LEGUME SANDWICH

Slice cold "savory vegetable loaf" (page 85) into thin slices. Lay on slices of buttered bread. Cover with a lettuce leaf and salad dressing if available. Cut and serve.

CUCUMBER SANDWICH

Slice cucumbers thin. Add grated onion and salt to taste. Butter the bread thinly. Fill between slices with cucumber, lettuce leaf, and mayonnaise or salad dressing.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

COOKERY FOR THE SICK

Invalid cookery deals with the preparation of foods that will sustain life with as little demand as possible upon the digestion, and also the selection of those foods which will furnish material for rebuilding and repairing waste, again without laying too much burden on the digestion.

While the invalid's meal should generally be of a simple nature, there should be the greatest daintiness in serving it, and an effort should be made to create a desire for food to replace the distaste that often exists.

The tray should be covered with spotless linen, should be carefully laid, and should not have the appearance of being overcrowded. Appearance, quantity, and temperature must all be considered when the tray is prepared, as well as the ease of eating.

The temperature of the food has a marked influence on digestion. Therefore a few general rules for serving food to the sick may be of value, as follows:

1. Serve hot dishes as hot as possible, and cold dishes as cold as consistent with digestion.
2. If food must be carried some distance to a patient, devise means of keeping it hot en route.
3. Always heat cups and plates before using them to serve any hot food.
4. Bring to the invalid, at each meal, only the quantity that is likely to be eaten, so far as can be judged. A large amount may so discourage a faint appetite that nothing will be eaten.
5. Nutritive Value.—The nurse should be a student of the classification of foods, their fuel value and digestibility, thus being able to regulate the needed rations for her patients.
6. So far as possible, let the element of pleasant surprise enter into the planning of the invalid's meal. The break-

fast tray should be made as attractive as possible. A few bright flowers will make it look cheery and inviting.

The diet prescribed for patients who are very ill is usually altogether liquid, while a less rigid diet is known as "light diet"; and the food for convalescents includes the most nourishing and easily digestible foods to be found.

Gruels, in which the starches are prepared by long, slow, and very thorough cooking, should be carefully seasoned, and of a consistency to be taken through a siphon.

OATMEAL GRUEL

$\frac{1}{4}$ cup oatmeal 2 cups water A few grains of salt
Cream or milk if desired

Sprinkle the oatmeal into the boiling water, and let it continue to boil until it begins to thicken slightly. Then set into a double boiler, and let cook for 2 hours. Strain through a fine strainer, and dilute it with a little hot water if it is too thick. Reheat, and season with cream if desired.

CORN MEAL GRUEL

3 tablespoonfuls corn meal 2 cups boiling water A few grains of salt

Prepare and finish the same as for oat gruel.

GLUTEN GRUEL

1 cup boiling water 2 tablespoonfuls gluten meal A few grains of salt

Sift the gluten slowly into the boiling water, stirring briskly to avoid having it form into lumps. Let it boil until of the desired thickness. A little cream may be added before serving, if desired.

GRANOSE GRUEL

1 granose biscuit $1\frac{1}{2}$ cups boiling water A few grains of salt

Cook, strain, and serve the same as gluten gruel.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

RICE WATER

2 tablespoonfuls rice 2 cups cold water A few grains of salt
 Cream or milk if desired

Wash the rice, and put into the cold water. Heat gradually to the boiling point, and let it continue to cook until the rice is soft. Strain. Reheat the rice water. Add a little milk or cream if desired.

BARLEY WATER

3 tablespoonfuls barley 1 quart cold water

Wash the barley, and let it soak overnight. Change the water and rinse thoroughly. Add 1 quart of water, and let it cook until the liquid measures 1 cupful. Serve plain, or seasoned with a few grains of salt and a little cream if desired.

TOAST WATER

2 slices stale bread 1 cup boiling water

Cut bread into $\frac{1}{8}$ -inch slices, and remove the crusts. Put into a baking pan, and bake in a slow oven until thoroughly dried and well browned. Break into pieces, add water, cover, and let stand 1 hour.

FLAXSEED TEA

$\frac{1}{4}$ cup flaxseed 2 cups boiling water 2 tablespoonfuls lemon juice

Wash the flaxseed in cold water. Drain well. Add boiling water, and let boil gently for 1 hour. Strain, add lemon juice and a little sugar if desired, and serve.

HOT MALTED MILK

1 heaping tablespoonful malted milk 1 cup water A few grains of salt

First add a little warm water to malted milk to make a smooth paste. Add boiling water, beat well, and serve.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

ALBUMENIZED WATER

White of 1 egg $\frac{1}{2}$ cup water

Stir the white of the egg (using a silver fork), that the albumen may easily dissolve as the water is added gradually. Add a few grains of salt, strain, and serve.

LEMON ALBUMEN

White of 1 egg 1 tablespoonful lemon juice Chipped ice
 $\frac{1}{2}$ glass water

Put the white of the egg and a little chipped ice into a glass. Beat slightly with a fork to break and coagulate the egg. Add lemon juice and water, mix well, and serve.

ALBUMENIZED MILK

1 cup milk White of 1 egg

Sterilize and cool the milk. Put into a glass jar with the white of the egg, and shake until the two are blended. A speck of salt may be added if desired.

PEPTONIZED MILK

1 tube Fairchild's peptonizing powder $\frac{1}{2}$ cup cold water
 1 pint fresh milk

Put the powder into a sterilized quart bottle, add water, and shake until the powder is dissolved. Then add the milk, shake well, and set into a vessel of water about 115 degrees F., and keep at that temperature for 10 minutes. Serve immediately. Put the remainder on ice to check artificial digestion.

FRUIT EGGNOG

$\frac{1}{2}$ cup grape juice or prune juice 1 egg separated
 A sprinkle of sugar if desired

Beat the egg yolk and white separately. Add the sugar if needed, and the fruit juice, to the beaten yolk, and mix well. Finish and serve the same as for cream eggnog.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

FRUIT ICES AND ICE CREAM

Fruit ices and ice cream are often recommended by physicians for particular cases. The following suggestions on the use of ices and ice cream, by a physician of long practical experience, will be a help to the nurse or the mother:

"Fruit ice is a very useful article of food for those who are suffering with a gastritis where there is an absence of hydrochloric acid. It has the effect of reducing the inflammatory condition, and at the same time supplies the patient with nutrition. It is not a good plan to take fruit ice in connection with a large meal, as it lowers the temperature of the stomach, and the latter cannot perform its functions until it has reached its normal temperature again.

"Ice cream is a useful article of food for a person who is suffering with gastric ulcer and inflammation of the stomach, due to excess of hydrochloric acid, as it is both nutritious and cooling to the stomach.

"The combination of sugar and milk does not seem to do any particular damage under these conditions, for the large amount of hydrochloric acid seems to neutralize any evil effects. It is not a useful article of food for an individual with a normal stomach. The materials used should be of the best quality, for frequently we have severe ptomaine poisoning from eating an inferior quality of ice cream."

GRAPEFRUIT ICE

$\frac{2}{3}$ cup grapefruit juice $\frac{1}{2}$ cup water $\frac{3}{4}$ cup sugar or more

Add the sugar to the water, and bring to a boil. When cool, add the grapefruit juice, and freeze, using about 1 part salt to 3 or 4 parts ice. Too much salt makes a

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

coarse-grained ice. The beaten white of an egg may be added if desired.

LEMON ICE

$\frac{1}{4}$ cup lemon juice $\frac{2}{3}$ cup water $\frac{1}{2}$ cup sugar or more

Make the same as grapefruit ice.

STRAWBERRY ICE

2 cups strawberries $\frac{1}{2}$ cup sugar or more $\frac{1}{2}$ cup water
1 tablespoonful lemon juice

Wash well colored ripe berries, and remove the stems. Put them into a bowl, sprinkle over the sugar, cover, and let stand an hour. Then mash them well, add the water, and press through a fine strainer or cheesecloth to express as much juice as possible. Add the lemon juice and freeze.

APRICOT ICE

1 cup stewed apricot pulp 2 tablespoonfuls lemon juice
 $\frac{1}{4}$ cup water Sugar to taste

Stew the apricots with enough sugar to sweeten. When cool, mash through a fine colander, add lemon juice and water, and freeze. A little additional sugar may be required.

ICE CREAM

$\frac{2}{3}$ cup rich cream $\frac{1}{2}$ cup milk 1 tablespoonful sugar Vanilla flavor

Mix the ingredients, and freeze the same as fruit ice.

HOME CANNING

The object of this chapter is to aid the housewife in answering the question of how to preserve the surplus vegetables and fruits from the home garden, so that they may be carried over into the winter months, and thus utilize to the best advantage all home products. Much valuable instruction on the subject of canning and conservation of foods is furnished in convenient form through the medium of "Farmers' Bulletins," issued by the Department of Agriculture, Washington, D. C., and is available to all. Following are general principles which direct in this work, and a knowledge of which is essential to successful canning.

PRINCIPLES OF CANNING

The great secret of canning lies in complete sterilization. The air we breathe, the water we drink, all fruits and vegetables, are teeming with minute forms of life, which we call bacteria or molds or germs. These germs are practically the sole cause of decomposition, or rotting. In other words, air that has been freed from germs by heat or mechanical means can be passed continuously over canned articles without affecting them in the least.

Germs that cause decay may be divided into three classes, yeasts, molds, and bacteria. All three of these are plants of a very low order, and all attack plants of a higher order in somewhat the same way. The yeast plant thrives in substances containing sugar, which it breaks up into carbonic acid and alcohol. Molds, like yeasts, thrive in mixtures containing sugars, as well as in acid vegetables, such as tomatoes, where neither yeasts nor bacteria readily grow.

The spoiling of vegetables is due primarily to bacteria. These are much more resistant to heat than are yeasts.

They thrive in milk, and in vegetables rich in protein, such as peas and beans. All known species of molds require air in which to work; but this is not true of bacteria, certain species of which will live and cause vegetables to spoil even when no air is present. Bacteria are so small that they can be seen only with the microscope, and they reproduce themselves with amazing rapidity. One bacterium, under favorable conditions, will produce about twenty millions in the course of twenty-four hours. Accordingly, certain vegetables spoil more rapidly than others, because they furnish a better medium for bacterial growth.

The reproduction of bacteria is brought about by one of two processes. The germ either divides itself into two parts, making two bacteria where only one existed before, or else it reproduces itself by means of spores. These spores may be compared to seeds of an ordinary plant, and they present the chief difficulty in canning vegetables. While the parent bacteria may be readily killed with a temperature of boiling water, the seeds retain their vitality for a long time at that temperature, and upon cooling, will germinate and begin their destructive work.

Therefore it is necessary, in order to sterilize a vegetable completely, to heat it to the temperature of boiling water, and to keep it at that temperature for about one hour, on two or three successive days, or else keep it at the temperature of boiling water for a long period of time,—two to five hours. The boiling on the first day kills all the molds, and practically all the bacteria, but does not kill the spores, or seeds. As soon as the jar cools, these seeds germinate, and a fresh crop of bacteria begin their destructive work upon the vegetable. The boiling upon the second day kills this crop of bacteria before they have had time to develop spores. The boiling upon the third day is not always necessary, but is deemed advisable in order that the sterilization may be complete.

In the use of a glass jar with screw top, the rubber ring has a tendency to soften by the third boiling, and thus give some difficulty in sealing the jar. Experiments made at the College of Agriculture, Berkeley, California, have shown that with the addition of a certain proportion of wholesome acid to the brine on the vegetables, such as lemon juice, they may be canned much the same as fruit. For large quantities, the proportion is as follows: "For corn, about one and one half teacups lemon juice to the gallon of brine; for beans and peas, about one teacup lemon juice; and for other vegetables, about three fourths teacup to the gallon of brine."

This is especially suitable for home canning, where the vegetables are picked a jar or two at a time, and thus they can be boiled in an ordinary saucepan, the same as fruit. It appears that after the bacteria have been destroyed by boiling, the spores, as they germinate, find an unfavorable medium for growth because of the acid in the brine, and hence the vegetable keeps perfectly. This is especially suitable for beans, peas, and pumpkin. Some persons do not relish the flavor when lemon is added to corn; but for string beans, peas, pumpkin, etc., the lemon flavor is scarcely noticeable.

STRING BEANS

Select young, tender string beans, and break into the desired lengths. Wash, drop into boiling water sufficient to cover, and salt to taste. Let boil continuously for 30 minutes. Have glass jars and caps sterilized. Lift a jar out of boiling water, and put on a scalded rubber ring. For a quart jar, take $\frac{1}{2}$ cup of the hot liquid from off the beans, add $1\frac{1}{2}$ tablespoonfuls lemon juice, and bring to a boil. Pour immediately into a hot glass jar, and fill with the cooked string beans. Add enough of the remaining hot liquid to overflow the jar. Then screw the cap on tightly, invert, and let cool.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

PUMPKIN

Select well matured red pumpkins. Pare thin, remove the seeds, and cut into small blocks. Put into a saucepan, cover with hot water, and let boil gently until nearly cooked. Have a common wash boiler on the stove, with a false bottom and boiling water. Lift glass jars out of boiling water. Put on rubber rings. Add $1\frac{1}{2}$ tablespoonfuls lemon juice to each quart jar, and fill with the pumpkin. Avoid mashing. Fill the jars to the brim with the remaining hot liquid, and screw caps on, not too tight. Set the jars into the hot water, cover the boiler, and let boil for 1 hour. Then remove from the boiler, re-tighten the caps, invert, and let cool.

GREEN CORN

The amount of sugar in sweet varieties of corn diminishes rapidly after the ear is pulled from the stalk. Therefore it should be canned as soon as possible after being pulled. Select ears with full grains, husk them, and brush off the silks with a stiff brush. Wash, drop into boiling water, and let boil 5 minutes to set the milk and to expel the air. Then dip into cold water. Shear off the corn with a sharp knife, and fill into glass jars to within $\frac{3}{4}$ of an inch from the top. Add 1 teaspoonful salt to each quart, and fill with hot water. Screw the top on without a rubber, and set on the false bottom of a wash boiler. Add enough warm water to come about two thirds up the sides of the jar. Cover the boiler, bring gradually to a boil, and keep the water boiling for 2 hours for quarts, and $2\frac{1}{2}$ hours for 2-quart jars. At the end of that time, remove the caps, put on the rubbers, and fill the jars to overflowing with boiling water. Screw the caps down tight, re-cover the boiler, and let boil continuously for 1 hour more. Then remove the jars from the boiler one at a time, re-tighten the caps, invert, and let cool.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

TOMATOES (Cold Pack)

Select only sound, ripe tomatoes. Dip into scalding water for 1½ minutes, or until the skins loosen. Dip into cold water, and remove the stems and the skins. Cut into halves, and pack directly into glass jars, pressing down with a tablespoon. Add no water. Season with 1 teaspoonful salt to each quart.

Put the rubbers in place, and put the caps on loosely. Set on the false bottom in a water bath, the same as for canned corn, and bring gradually to a boil. Let boil gently for 20 minutes after boiling begins. Remove the cover from the boiler. Open the jars, one at a time, press down the tomato with a silver spoon, and fill with boiling stewed tomato. Then screw the cap down tight. Re-cover the boiler, and let boil 5 minutes more. Then remove from the boiler, re-tighten caps, invert, and let cool.

TOMATOES (Hot Pack)

Prepare the tomatoes the same as in the preceding recipe, and place in an open kettle. Bring gradually to the boiling point, and let simmer until thoroughly cooked through. Have the jars and the caps sterilized. Lift them one at a time out of boiling water, adjust the rubber, and fill with boiling tomato. Put on the cap, and screw down tightly, being careful not to touch the inner part of jar, rubber, or jar cap with the fingers in handling. Invert and let cool.

PRESERVATION IN SALT

Vegetables can be preserved more cheaply than in cans or jars, and more simply for household use than by drying. The method makes use of the preservative qualities of salt. The following formula is given out by the Division of Viticulture, College of Agriculture, Berkeley, California:

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

"The vegetables are first washed and sliced. Weigh them, and take 1 pound of salt for each 2 pounds of prepared vegetables. A layer of salt is first placed on the bottom of the crock or barrel, and then a layer of vegetables. Similar layers are alternated until the vessel is full, finishing with a layer of salt. A wooden cover is then applied, and weighted with a stone or similar object that will not be acted upon by the brine. After a few days, there will be a considerable shrinkage in volume, and the vessel can be filled with more layers, and weighted as before. These methods are suitable for most root vegetables, string beans, cabbage, and cucumbers. The large quantities of salt used in these methods must be removed by soaking before the vegetables can be eaten."

Green corn, after blanching (boiling on the cob for five minutes), may be cut from the cob in fairly large kernels, and preserved in salt by this latter method.

FRUIT CANNING

Fruits are usually slightly acid, and in general, do not support bacterial growth. So it comes about that canned fruits are more commonly fermented by yeasts. The yeasts are very easily destroyed, being killed at less than boiling temperature. Hence bacteria can be left out of the consideration necessary in the canning of vegetables.

Fruit should not be subjected to long cooking, but should be cooked only long enough to insure its preservation. A large quantity of sugar spoils the flavor of the fruit, and is likely to make it less easily digested.

SELECTION OF FRUIT

The selection of fruit is one of the first steps toward successful canning. The flavor is not developed until the fruit is fully ripe; but the fruit is at its best for canning and for jelly making just before it is perfectly ripe. In all the soft fruits, the fermentative stage follows closely

upon the perfectly ripe stage. Therefore underripe fruit is better than overripe, for canning purposes. This is especially important in jelly making, for the reason that in the overripe fruit, the pectin begins to lose its jelly-making quality. The fruit should be carefully sorted, as unripe fruit requires longer cooking than perfectly ripe fruit, and both should not be cooked in the same jar.

PREPARATION FOR CANNING

All jars, caps, and utensils should be put on the fire in cold water, brought to the boiling point, and kept boiling for ten minutes before they are used for canning fruit. Two methods are in general use, the *cold pack* and the *hot pack*. By the cold pack method, the prepared fruit is packed into sterilized jars and covered with sirup. The jars are then cooked in a hot bath for the required time, and sealed. By the hot pack method, the fruit is cooked in sirup or water, in an open vessel, and then put into hot jars and sealed immediately.

The quantity of sugar that should be used will vary with the kind of fruit, and somewhat with the locality in which it is grown. In the following method, the proportions of sugar used may be taken as an average. More or less sugar may be used as the case may require.

SIRUPS

Apricots,	2-2½	quarts	water	to	1	quart	of	sugar
Peaches,	2½-3	"	"	"	"	"	"	"
Pears,	3-4	"	"	"	"	"	"	"
Plums;	1-1½	"	"	"	"	"	"	"

COLD PACK

Prepare the fruit by paring, and coring or pitting, as needed. Pack the fruit into sterilized glass jars. Then complete the filling of the jars with sirup. The sirup should be boiled, but care should be exercised not to break the jars. Let the jars stand, after being filled, for 30

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

minutes or more, that the fruit may absorb water, and it will not break down so easily in cooking, and will more nearly resemble its natural state after it is cooked. Remove the covers, and refill each jar if necessary. Then place the filled jars, with rubbers in place, and caps on loosely, on the false bottom of an ordinary wash boiler, and add warm water until it reaches about two thirds the height of the jars. Place the cover on the boiler, and heat gradually to the boiling point, counting the time from the moment the steam issues out from under the cover of the boiler. For soft fruits, as apricots, peaches, and plums, 10 minutes is sufficient after boiling begins. Pears, apples, and prunes will require about 20 to 30 minutes, or until the fruit appears tender on being pierced with the point of a sharp knife.

The fruit having been boiled the required time, the cover is removed, the caps are screwed down tightly, and the jars are inverted or left lying on the side until cold. In the cooking of soft fruits, care should be exercised to preserve the natural color and appearance of the fruit. This will depend almost wholly on the cooking; that is, on letting the fruit stand in the sirup for a certain length of time before cooking, then seeing to it that the fruit is not overcooked, as overcooking would cause it to shrink up and lose its natural appearance.

CANNING BERRIES

Berries are a very delicate fruit, and break down very easily when canned by the cold pack method, and because of this, are generally cooked in the open kettle. For each quart of berries, use 1 cup of granulated sugar. Put a layer of berries into a granite dish, sprinkle with sugar, cover with another layer of berries, and so on. If extra juice is desired on the fruit, a little water may be added. Let the berries and sugar stand in a cool place

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

for several hours. Then drain off the juice, and bring to a boil. Pour in the berries carefully, and shake the dish once in a while to keep the fruit heating evenly. As soon as it comes to a good boil, draw the saucepan to the edge of the stove, and dip into hot jars with a handled cup. Put the covers on quickly, and screw them on tight. Lay the jars on the side, and turn them once in a while during the cooling; and when cold, and set upright, the berries will be evenly distributed through the jar.

CANNING FRUIT WITHOUT SUGAR

Fruit of any kind suitable for canning may be preserved without sugar. The sugar can be added when the fruit is used, exactly as is done with fresh fruit. If the fruit when canned is thoroughly ripe, it may be eaten without any additional sugar, and is sweet enough for many tastes. The riper the fruit, provided it is sound, the more sugar, flavor, and nutriment it contains.

Ripe fruits are excellent for making butters. About 1 cupful of sugar to 12 cupfuls of fruit pulp should be used if sweet butter is desired; but the following recipe, if followed, will give a butter which has a sweetness and flavor that are greatly relished, without the use of sugar.

APRICOT BUTTER

Select overripe fruit, the riper the better, provided it is sound. Wash and pit. Scoop out the pulp from each half, and mash, or put through a colander, rejecting the skins. Do not heat the fruit in the skins, as that extracts a strong acid flavor. Cook the pulp down to the desired stiffness, adding neither water nor sugar. Pour into glass jars, with rubbers on, and screw the covers down tight. Place on the false bottom of a water bath, and into the boiler pour water the same temperature as the fruit, until it reaches about two thirds the height of the jars.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

Cook for 20 minutes after boiling begins. This last boiling is to make sure that the sterilization of the fruit is complete, and thus insure its keeping qualities. Remove the cover from the boiler, tighten the covers again, invert, and let cool.

JELLY MAKING

Because of the concentration of a large amount of cane sugar in jelly, it is rendered less wholesome, and should be used sparingly, if at all. Most women, however, desire to put up a few glasses of jelly to have on hand for special purposes, and a few recipes will be given for the kinds more commonly used. The fruit juice may be put up in glass jars, the same as canned fruit, if desired, and the jelly can be made as needed.

Large fruits, such as apples, should yield about 3 quarts of strained juice from 8 quarts of apples and 4 quarts of water. Juicy plums will require only 3 or 3½ quarts of water to 8 quarts of fruit. Add the water to the fruit, and simmer slowly until done. Then hang up in a bag to drip. The time of boiling the juice after adding the sugar will depend on the concentration of the fruit juice, the proportion of sugar, and the pectin, and, in all probability, the degree of acidity. The two principal causes of failure in jelly making are: first, the common practice of adding too much sugar; second, the differing composition of fruit juices.

In a dry time, the juice in fruit is not very abundant, and the percentage of sugar is high. On the other hand, if fruit is picked after a rain, the amount of water in the juice increases. As a result, the fruit from the very same tree yields juice with less sugar after a rain. These facts will explain why the amount of sugar that must be added to make the juice "jell" varies at different times.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

PLUM JELLY

If the juice is very much diluted, it should be boiled before the sugar is added, to concentrate it, so that the cooking after the sugar is added will not be too long. To each quart of juice, add 1 quart of sugar, bring to a boil, skim, and let boil gently until, when a spoon is dipped into the jelly and lifted, it is coated with jelly. Then pour into hot glasses, and set away until cool. Another test used, perhaps more frequently, is the cooling test. Drop a teaspoonful of the jelly into a saucer, set in a cool place, and stop the boiling of the jelly until you determine whether the mixture will set. As soon as the jelly is hardened, pour a thin coat of hot paraffin over the top of each glass, and it is ready to store.

CURRENT JELLY

Select currants that are not too ripe. Wash them, but do not stem. Drain well. Mash a small quantity at a time in a stone crock, with a potato masher, and squeeze through cloth. Then strain the juice again without squeezing, so that the liquid may be clear. Put the liquid on the fire, in a porcelain-lined kettle, and bring to a boil. Heat the sugar in the oven separately; and when the juice has boiled from 15 to 20 minutes, stir in the hot sugar, and continue stirring until it is dissolved. Bring to a boil, skim, and let boil 2 minutes. Take glasses out of hot water, fill them with the boiling liquid, and set away until jellied. Then cover with paraffin, as usual.

CRANBERRY JELLY

1 quart cranberries 1 pint water 1 pint sugar

Pick berries over, wash, and drain well. Add 1 pint water to the berries, and let boil 8 minutes after boiling begins. Mash through a colander, add sugar, and bring to a boil. Skim, and let boil gently for 4 minutes. Then pour into hot glasses or jars. When set, pour hot paraffin over the top of each glass.

(USE LEVEL MEASUREMENTS FOR ALL INGREDIENTS.)

INDEX

Miscellaneous Recipes

Brown Flour	53
Buttermilk	49
Cereal Coffee, Homemade	52
Cottage Cheese	51
Cream Roast Flour	53
Croutons, Bread	53
Emulsified Oil	48
Fruit and Nut Bars	51
Fruit Coffee	52
Grano Cereal	52
Lactosa	50
Noodles	52
Nuttese	51
Parched Corn	53
Pasteurized Milk	49
Soup Royale	53
Vegetable Butter	48

Unfermented Batter Breads

Aerated Corn Meal Gems	57
Aerated Wheat Gems	56
Corn Bread	57
Corn Cake	58
Corn Dodgers	57
Corn Meal Puffs	56
Currant Puffs	56
Hot Cakes	58
Johnnycake	58
Wheat Puffs	56

Unfermented Dough Breads

Buckwheat Sticks	61
Buckwheat Wafers	62
Corn Meal Crisps	61
Cream Rolls	59
Date Rolls	60
Entire Wheat Sticks	60
Fruit Crisps	60
Rye Sticks	61
Rye Wafers	61
Walnut Sticks	60
Wheat Sticks	59

Fermented Breads

Bran Biscuit	68
Brown Bread, Steamed	71
Corn Bread, Raised	69
Diabetic Bread	73
(Strong in Gluten)	73
Entire Whole Wheat Bread	68
Fruit Bread	70

Gluten Biscuit	72
Liquid Yeast	66
Mother's Bread	67
Parker House Rolls	71
Rye Bread	70
Shortcake, Raised	72
Wheat Bread	69
Yeasts	66
Zwieback	73

Soups

Bean Soup Army Style	75
Cream of Barley	76
Cream of Corn	78
Cream of Green Peas	77
Cream of Lettuce	77
Cream of Tomato	77
Cream of Vegetable Oyster	78
Family Potato Soup	76
Farmers' Favorite	75
Fruit Soup	79
Lima Bean Soup	76
Vegetable Chowder	75
Vegetable Julienne	74

Grains, Nut Foods, Entrées

Bean Loaf, Ribbon	82
Bean Patties	83
Bean Purée, Browned	82
Beans, Baked Lima	82
Beans, Brown, with Mint Sauce	84
Beans, Stewed Lima	81
Beans, Stewed Soy	84
Beans with Dumplings	84
Beans with Noodles	83
Cereal Fillets	92
Croquettes, Rice and Egg	83
Dressing, Baked	89
Dressing Without Eggs	89
Garbanzos, Baked	85
Garbanzos, Stewed	85
Gluten Vegetable Stew	87
Hash, Nut and Potato	135
Lentil and Rice Loaf	88
Loaf, Ribbon Bean	82
Loaf, Rice and Soy Bean	85
Loaf, Savory Vegetable	85
Loaf, Vegetable, en Aspic	93
Macaroni au Gratin	91
Macaroni Family Style	90
Macaroni with Olives	91
New England Dinner	94

Grains, Nut Foods, Entrees

Noodles au Gratin	91
Noodles with Beans	83
Noodles with Peas	84
Nut and Potato Pie	86
Nut Meat with Dressing, Roast	90
Olive Fillets	93
Patties, Bean	83
Patties, Soy Bean and Rice..	85
Peas with Noodles	84
Peas with Whole Rice	87
Potato and Nut Hash	135
Potato, Roasted with Dressing	90
Potato Stew with Dumplings..	86
Ribbon Bean Loaf	82
Rice and Egg Croquettes....	83
Rice and Lentil Loaf	88
Rice and Soy Bean Loaf	85
Rice and Soy Bean Patties ..	85
Rice, Baked Italienne	88
Rice, Spanish	89
Rice with Peas	87
Roast, Walnut	93
Savory Vegetable Loaf	85
Soy Bean and Ric Patties....	85
Soy Beans, Stewed	84
Spaghetti en Croustade	92
Spaghetti in Tomato	92
Spanish Rice	89
Vegetable Gluten Stew	87
Vegetable Loaf en Aspic	93
Vegetable Loaf, Savory	85
Walnut Timbales	94

Gravies and Sauces

Brazil Nut Sauce	96
Brown Cream Gravy	95
Brown Gravy	95
Country Gravy	95
Cream Sauce	96
Custard Sauce	97
Egg Gravy	95
Egg Sauce	96
Lemon Sauce	97
Mint Sauce	97
Nut Sauce	96
Tomato Cream Sauce	96
Tomato Sauce	96

Vegetables

Asparagus, New	99
Asparagus Tips and New Peas	100
Beans, String	99
Beets, Buttered	105
Beets, Scalloped	105
Beets, Stewed	104
Cabbage, Stewed	107

Carrots and Green Peas.....	104
Carrots in Cream	104
Carrots, Stewed	104
Carrots with Egg Sauce	104
Cauliflower au Gratin	103
Cauliflower in Cream	103
Celery with Peas, Stewed	107
Corn, Baked Cream	102
Corn on Cob	102
Corn Sauté, Green	102
Cucumbers, Smothered	107
Cucumbers with Egg Sauce..	107
Eggplant, Baked	102
Eggplant, Breaded	102
Eggplant, Scalloped	101
Okra and Tomato	106
Onions, Boiled	106
Onions in Cream	106
Parsnips, Baked	105
Parsnips with Egg Sauce....	105
Peas, New	99
Potato, Creamed	136
Potato, Duchess	108
Potato en Surprise	108
Potato, Kentucky	108
Potato, Roasted	107
Potato, Scalloped	108
Potato, Sweet	108
Spinach	106
Squash, Baked	101
Squash, Scalloped	101
Squash, Summer	101
String Beans	99
Succotash	107
Sweet Potato	108
Sweet Potato, Glazed	109
Sweet Potato, Mashed	109
Tomato, Baked	100
Tomato, Breaded	100
Tomato, Scalloped	100
Tomato, Stewed	100
Turnips, Stewed	105
Vegetable Oyster, Scalloped..	103
Vegetable Oyster, Stewed....	103

Dried Fruits

Apricots, Stewed	111
Peaches, Stewed	112
Prunes, Stewed	111

Puddings and Jellies

Apple and Raisin Pudding..	116
Apple Snow	114
Apple Tapioca Pudding	113
Berry Mold	118
Blancmange	117

Puddings and Jellies

Bread Pudding	116
Cream Rice Pudding	115
Croquettes of Rice, Jelly	116
Flummery, Strawberry	117
Fruit Jelly	118
Fruit Pudding, Graham	114
Fruit Pudding, Pressed	112
Fruit Pudding, Steamed	114
Gelatin, Vegetable	117
Graham Fruit Pudding	114
Hoover Pudding	115
Jelly, Berry	118
Jelly, Fruit	118
Jelly, Lemon	117
Jelly, Orange	117
Lemon Snow	115
Pressed Fruit Pudding	112
Prune Pudding	112
Prune Whip	113
Rice Pudding, Cream	115
Steamed Fruit Pudding	114
Strawberry Flummery	117
Strawberry Whip	113
Vegetable Gelatin	117

Pie Crust

Beaten Oil Crust	118
Crust Shells	119
Grano Crust	119
Plain Pastry	118

Pies

Apple Pie	119
General Rules	121
Lemon Pie	120
Prun Pie	119
Pumpkin Pie	120
Pumpkin Pie Without Eggs	120
Raisin Pie	120
Strawberry Pie	119

Cakes, Icings, Fillings

Boiled Frosting	124
Jelly Roll	123
Lady Fingers	123
Layer Cake	121
Lemon Filling	125
Loaf Cake	122
Orange Filling	125
Ornamental Frosting	124
Plain Icing	124
Strawberry Filling	125
White Mountain Cake	122

Salad Dressings

Boiled Dressing	126
Cream Dressing	127
Cream Mayonnaise	127
French Dressing	127
Golden Fruit Sauce	127
Mayonnaise Dressing	126

Vegetable Salads

Bean Salad	129
Beet and Egg	130
Beets in Lemon	131
Cold Slaw	130
Combination Salad	130
Cucumber Salad	130
Egg Salad	130
Italian Salad	129
Lettuce and Tomato	128
Macedoine Salad	129
Nut and Celery Salad	129
Poinsettia Tomato	128
Potato Salad	129
String Bean Salad	131
Stuffed Tomato	128
Sweet Potato Salad	131
Tomato en Surprise	128
Water Lily Salad	130

Fruit Salad

Crown Prince Salad	132
Fruit Basket	131
Fruit Salad	132
Fruits and Nuts	132
Raisin Salad	133
Ribbon Apple Salad	133
Stuffed Date Salad	131
Waldorf Salad	133

*Toasts and Breakfast Dishes**Grains*

Barley, Steamed	138
Cooked Grains	137
Corn Grits, Parched	138
Corn Meal Mush	137
Feterita Grits	139
Grano Cereal with Dates	138
Oats, Rolled	137
Rice-Banana	138
Rice, Browned	138
Rice, Creamed	137
Rice, Steamed Natural	137
Wheat, Steamed	138

Toasts

Cream Peas on Toast	134
Creamed Potato	136

Toasts

Cream Toast	134
Cream Tomato Toast	135
Hash, Nut and Potato	135
Mashed Potato Cakes	136
Plain Omelet	136
Prune Toast	134
Scrambled Egg with New Tomato	136
Strawberry Toast	134
Sultana Toast	135
Walnut Cream Toast	135

Sandwiches

Bean Sandwich	140
Cucumber Sandwich	141
Date and Nut	141
Egg and Tomato	140
Egg Sandwich	140
Honey and Nut	141
Legume Sandwich	141
Nut and Fruit	141
Nut and Jelly	140
Nut and Tomato	140
Nut Butter and Olive	140
Raisin Sandwich	141
Tomato Sandwich	140

Cookery for the Sick

Albumenized Milk	145
Albumenized Water	145
Banana, Baked	146
Barley Water	144
Corn Meal Gruel	143

Eggnog, Cream	146
Eggnog, Fruit	145
Flaxseed Tea	144
Gluten Gruel	143
Granose Gruel	143
Jellied Egg	146
Junket	146
Lemon Albumen	145
Lemon Whey	146
Malted Milk, Hot	144
Oatmeal Gruel	143
Peptonized Milk	145
Rice Water	144
Toast Water	144

Fruit Ices and Ice Cream

Apricot Ice	148
Grapefruit Ice	147
Ice Cream	148
Lemon Ice	148
Strawberry Ice	148

Home Canning

Apricot Butter	157
Berries	156
Canning Fruit Without Sugar	157
Cranberry Jelly	159
Currant Jelly	159
Green Corn	152
Plum Jelly	159
Preparation for Canning	155
Pumpkin	152
Selection of Fruit	154
String Beans	151
Tomatoes	153