THE EASIEST WAY
IN HOUSEKEEPING AND COOKING

Adapted to Domestic Use or Study in Classes

HELEN CAMPBELL

"If it were done, when 'tis done, then 'twere well
It were done quickly."

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AUTHOR'S PREFACE

The little book now revised and sent out with some slight additions, remains substantially the same as when first issued in 1880. In the midst of always increasing cookery-books, it has had a firm constituency of friends, especially in the South, where its necessity was first made plain. To enlarge it in any marked degree would violate the original plan, for which the critic will please read the pages headed "Introductory," where he or she will find full explanation of the growth and purpose of the book. Whoever desires more receipts and more elaborate forms of preparation must look for their sources in the bibliography at the end, since their introduction in these pages would practically nullify the title, proved true by years of testing at the hands of inexperienced housekeepers, whose warm words have long been very pleasant to the author of "The Easiest Way."

NEW YORK, June, 1893.

PUBLISHER'S PREFACE

We are delighted to bring this classic book to print in a large-size editon, perfect for referencing the recipes in the second part. Though some of the content of this book may seem outdated to the modern home-keeper, it is a glimpse into a bygone era that is most interesting. For those who lack training in the areas of homemaking and cooking, or for ladies who wish to get back-to-basics, it is, in fact, indispensible wisdom.

The recipes included are most brief, and reflect a simplicity that is to be envied in an era of fast food, processed food, and eye-catching, palate-pleasing overindulgence. We think you will be blessed by this treatise on home management essentials.

In this book, spelling is inconsistent, but is generally left as found in the original. As well, throughout the text (as in the original) the more archaic term "receipt" is used in place of the modern "recipe."

INTRODUCTORY

That room or toleration for another "cook-book" can exist in the public mind, will be denied at once, with all the vigor to be expected from a people overrun with cook-books, and only anxious to relegate the majority of them to their proper place as trunk-linings and kindling-material. The minority, admirable in plan and execution, and elaborate enough to serve all republican purposes, are surely sufficient for all the needs that have been or may be. With Mrs. Cornelius and Miss Parloa, Marion Harland and Mrs. Whitney, and innumerable other trustworthy authorities, for all every-day purposes, and Mrs. Henderson for such festivity as we may at times desire to make, another word is not only superfluous but absurd; in fact, an outrage on common sense, not for one instant to be justified.

Such was my own attitude and such my language hardly a year ago; yet that short space of time has shown me, that, whether the public admit the claim, or no, one more cook-book MUST BE. And this is why:—

A year of somewhat exceptional experience—that involved in building up several cooking-schools in a new locality, demanding the most thorough and minute system to assure their success and permanence—showed the inadequacies of any existing hand-books, and the necessities to be met in making a new one. Thus the present book has a twofold character, and represents, not only the ordinary receipt or cook book, usable in any part of the country and covering all ordinary household needs, but covers the questions naturally arising in every lesson given, and ending in statements of the most necessary points in household science. There are large books designed to cover this ground, and excellent of their kind, but so cumbrous in form and execution as to daunt the average reader.

Miss Corson's "Cooking-School Text-Book" commended itself for its admirable plainness and fullness of detail, but was almost at once found impracticable as a system for my purposes; her dishes usually requiring the choicest that the best city market could afford, and taking for granted also a taste for French flavorings not yet common outside of our large cities, and to no great extent within them. To utilize to the best advantage the food-resources of whatever spot one might be in, to give information on a hundred points suggested by each lesson, yet having no place in the ordinary cook-book, in short, *to teach household science as well as cooking*, became my year's work; and it is that year's work which is incorporated in these pages. Beginning with Raleigh, N.C., and lessons given in a large school there, it included also a seven-months' course at the Deaf and Dumb Institute, and regular classes for ladies. Straight through, in those classes, it became my business to say, "This is no infallible system, warranted to give the whole art of cooking in twelve lessons. All I can do for you is to lay down clearly certain fixed principles; to show you how to economize thoroughly, yet get a better result than by the expenditure of perhaps much more material. Before our course ends, you will have had performed before you every essential operation in cooking, and will know, so far as I can make you know, prices, qualities, constituents, and physiological effects of every type of food. Beyond this, the work lies in your own hands."

Armed with manuals,—American, English, French,—bent upon systematizing the subject, yet finding none entirely adequate, gradually, and in spite of all effort to the contrary, I found that my teaching rested more and more on my own personal experience as a housekeeper, both at the South and at the North. The mass of material in many books was found confusing and paralyzing, choice seeming impossible when a dozen methods were given. And for the large proportion of receipts, directions were so vague that only a trained housekeeper could be certain of the order of combination, or results when combined. So from the crowd of authorities was gradually eliminated a foundation for work; and on that foundation has risen a structure designed to serve two ends.

For the young housekeeper, beginning with little or no knowledge, but eager to do and know the right thing, not alone for kitchen but for the home as a whole, the list of topics touched upon in Part I. became essential. That much of the knowledge compressed there should have been gained at home, is at once admitted: but, unfortunately, few homes give it; and the aim has been to cover the ground concisely yet clearly and attractively. As to Part II., it does not profess to be the whole art of cooking, but merely the line of receipts most needed in the average family, North or South. Each receipt has been tested personally by the writer, often many times; and each one is given so minutely that failure is well-nigh impossible, if the directions are intelligently followed. A few distinctively Southern dishes are included, but the ground covered has drawn from all sources; the series of excellent and elaborate manuals by well-known authors having contributed here and there, but the majority of rules being, as before said, the result of years of personal experiment, or drawn from old family receipt-books.

To facilitate the work of the teacher, however, a scheme of lessons is given at the end, covering all that can well be taught in the ordinary school year: each lesson is given with page references to the receipts employed, while a shorter and more compact course is outlined for the use of classes for ladies. A list of topics is also given for school use; it having been found to add greatly to the interest of the course to write each week the story of some ingredient in the lesson for the day, while a set of questions, to be used at periodical intervals, fixes details, and insures a certain knowledge of what progress has been made. The course covers the chemistry and physiology of food, as well as an outline of household science in general, and may serve as a text-book wherever such study is introduced. It is hoped that this presentation of the subject will lessen the labor necessary in this new field, though no text-book can fully take the place of personal enthusiastic work.

That training is imperatively demanded for rich and poor alike, is now unquestioned; but the mere taking a course of cooking-lessons alone does not meet the need in full. The present book aims to fill a place hitherto unoccupied; and precisely the line of work indicated there has been found the only practical method in a year's successful organization of schools at various points. Whether used at home with growing girls, in cooking-clubs, in schools, or in private classes, it is hoped that the system outlined and the authorities referred to will stimulate interest, and open up a new field of work to many who have doubted if the food question had any interest beyond the day's need, and who have failed to see that nothing ministering to the best life and thought of this wonderful human body could ever by any chance be rightfully called "common or unclean." We are but on the threshold of the new science. If these pages make the way even a little plainer, the author will have accomplished her full purpose, and will know that in spite of appearances there is "room for one more."

HELEN CAMPBELL.

PART ONE

Housekeeping

CHAPTER I: THE HOUSE: SITUATION AND ARRANGEMENT

From the beginning it must be understood that what is written here applies chiefly to country homes. The general principles laid down are applicable with equal force to town or city life; but as a people we dwell mostly in the country, and, even in villages or small towns, each house is likely to have its own portion of land about it, and to look toward all points of the compass, instead of being limited to two, as in city blocks. Of the comparative advantages or disadvantages of city or country life, there is no need to speak here. Our business is simply to give such details as may apply to both, but chiefly to the owners of moderate incomes, or salaried people, whose expenditure must always be somewhat limited. With the exterior of such homes, women at present have very little to do; and the interior also is thus far much in the hands of architects, who decide for general prettiness of effect, rather than for the most convenient arrangement of space. The young bride, planning a home, is resolved upon a bay-window, as large a parlor as possible, and an effective spare-room; but, having in most cases no personal knowledge of work, does not consider whether kitchen and dining-room are conveniently planned, or not, and whether the arrangement of pantries and closets is such that both rooms must be crossed a hundred times a day, when a little foresight might have reduced the number certainly by one-half, perhaps more.

Inconvenience can, in most cases, be remedied; but unhealthfulness or unwholesomeness of location, very seldom: and therefore, in the beginning, I write that ignorance is small excuse for error, and that every one able to read at all, or use common-sense about any detail of life, is able to form a judgment of what is healthful or unhealthful. If no books are at hand, consult the best physician near, and have his verdict as to the character of the spot in which more or less of your life in this world will be spent, and which has the power to affect not only your mental and bodily health, but that of your children. Because your fathers and mothers have been neglectful of these considerations, is no reason why you should continue in ignorance; and the first duty in making a home is to consider earnestly and intelligently certain points.

Four essentials are to be thought of in the choice of any home; and their neglect, and the ignorance which is the foundation of this neglect, are the secret of not only the chronic ill-health supposed to be a necessity of the American organization, but of many of the epidemics and mysterious diseases classed under the head of "visitations of Providence."

These essentials are: a wholesome situation, good ventilation, good drainage, and a dry cellar. Rich or poor, high or low, if one of these be disregarded, the result will tell, either on your own health or on that of your family. Whether palace or hut, brown-stone front or simple wooden cottage, the law is the same. As a rule, the ordinary town or village is built upon low land, because it is easier to obtain a water-supply from wells and springs. In such a case, even where the climate itself may be tolerably healthy, the drainage from the hills at hand, or the nearness of swamps and marshes produced by the same cause, makes a dry cellar an impossibility; and this shut-in and poisonous moisture makes malaria inevitable. The dwellers on low lands are the pill and patent-medicine takers; and no civilized country swallows the amount of tonics and bitters consumed by our own.

If possible, let the house be on a hill, or at least a rise of ground, to secure the thorough draining-away of all sewage and waste water. Even in a swampy and malarious country, such a location will insure all the health possible in such a region, if the other conditions mentioned are faithfully attended to.

Let the living-rooms and bedrooms, as far as may be, have full sunshine during a part of each day; and reserve the north side of the house for store-rooms, refrigerator, and the rooms seldom occupied. Do not allow trees to stand so near as to shut out air or sunlight; but see that, while near enough for beauty and for shade, they do not constantly shed moisture, and make twilight in your rooms even at mid-day. Sunshine is the enemy of disease, which thrives in darkness and shadow. Consumption or scrofulous disease is almost inevitable in the house shut in by trees, whose blinds are tightly closed lest some ray of sunshine fade the carpets; and over and over again it has been proved that the first conditions of health are, abundant supply of pure air, and free admission of

sunlight to every nook and cranny. Even with imperfect or improper food, these two allies are strong enough to carry the day for health; and, when the three work in harmony, the best life is at once assured.

If the house must be on the lowlands, seek a sandy or gravelly soil; and avoid those built over clay beds, or even where clay bottom is found under the sand or loam. In the last case, if drainage is understood, pipes may be so arranged as to secure against any standing water; but, unless this is done, the clammy moisture on walls, and the chill in every closed room, are sufficient indication that the conditions for disease are ripe or ripening. The only course in such case, after seeking proper drainage, is, first, abundant sunlight, and, second, open fires, which will act not only as drying agents, but as ventilators and purifiers. Aim to have at least one open fire in the house. It is not an extravagance, but an essential, and economy may better come in at some other place.

Having settled these points as far as possible,—the question of water-supply and ventilation being left to another chapter,—it is to be remembered that the house is not merely a place to be made pleasant for one's friends. They form only a small portion of the daily life; and the first consideration should be: Is it so planned that the necessary and inevitable work of the day can be accomplished with the least expenditure of force? North and South, the kitchen is often the least-considered room of the house; and, so long as the necessary meals are served up, the difficulties that may have hedged about such serving are never counted. At the South it is doubly so, and necessarily; old conditions having made much consideration of convenience for servants an unthought-of thing. With a throng of unemployed women and children, the question could only be, how to secure some small portion of work for each one; and in such case, the greater the inconveniences, the more chance for such employment. Water could well be half a mile distant, when a dozen little darkies had nothing to do but form a running line between house and spring; and so with wood and kindling and all household necessities.

Today, with the old service done away with once for all, and with a set of new conditions governing every form of work, the Southern woman faces difficulties to which her Northern or Western sister is an utter stranger; faces them often with a patience and dignity beyond all praise, but still with a hopelessness of better things, the necessary fruit of ignorance. Old things are passed away, and the new order is yet too unfamiliar for rules to have formulated and settled in any routine of action. While there is, at the North, more intuitive and inherited sense of how things should be done, there is on many points an almost equal ignorance, more especially among the cultivated classes, who, more than at any period of woman's history, are at the mercy of their servants. Every science is learned but domestic science. The schools ignore it; and, indeed, in the rush toward an early graduation, there is small room for it.

"She can learn at home," say the mothers. "She will take to it when her time comes, just as a duck takes to water," add the fathers; and the matter is thus dismissed as settled.

In the mean time the "she" referred to—the average daughter of average parents in both city and country—neither "learns at home," nor "takes to it naturally," save in exceptional cases; and the reason for this is found in the love, which, like much of the love given, is really only a higher form of selfishness. The busy mother of a family, who has fought her own way to fairly successful administration, longs to spare her daughters the petty cares, the anxious planning, that have helped to eat out her own youth; and so the young girl enters married life with a vague sense of the dinners that must be, and a general belief that somehow or other they come of themselves. And so with all household labor. That to perform it successfully and skillfully, demands not only training, but the best powers one can bring to bear upon its accomplishment, seldom enters the mind; and the student, who has ended her course of chemistry or physiology enthusiastically, never dreams of applying either to every-day life.

This may seem a digression; and yet, in the very outset, it is necessary to place this work upon the right footing, and to impress with all possible earnestness the fact, that Household Science holds every other science in tribute, and that only that home which starts with this admission and builds upon the best foundation the best that thought can furnish, has any right to the name of "home." The swarms of drunkards, of idiots, of insane, of deaf and dumb, owe their existence to an ignorance of the laws of right living, which is simply criminal, and for which we must be judged; and no word can be too earnest, which opens the young girl's eyes to the fact that in

her hands lie not alone her own or her husband's future, but the future of the nation. It is hard to see beyond one's own circle; but if light is sought for, and there is steady resolve and patient effort to do the best for one's individual self, and those nearest one, it will be found that the shadow passes, and that progress is an appreciable thing.

Begin in your own home. Study to make it not only beautiful, but perfectly appointed. If your own hands must do the work, learn every method of economizing time and strength. If you have servants, whether one or more, let the same laws rule. It is not easy, I admit; no good thing is: but there is infinite reward for every effort. Let no failure discourage, but let each one be only a fresh round in the ladder all must climb who would do worthy work; and be sure that the end will reward all pain, all self-sacrifice, and make you truly the mistresses of the home for which every woman naturally and rightfully hopes, but which is never truly hers till every shade of detail in its administration has been mastered.

The house, then, is the first element of home to be considered and studied; and we have settled certain points as to location and arrangement. This is no hand-book of plans for houses, that ground being thoroughly covered in various books,—the titles of two or three of which are given in a list of reference-books at the end. But, whether you build or buy, see to it that your kitchens and working-rooms are well lighted, well aired, and of good size, and that in the arrangement of the kitchen especially, the utmost convenience becomes the chief end. Let sink, pantries, stove or range, and working-space for all operations in cooking, be close at hand. The difference between a pantry at the opposite end of the room, and one opening close to the sink, for instance, may seem a small matter; but when it comes to walking across the room with every dish that is washed, the steps soon count up as miles, and in making even a loaf of bread, the time and strength expended in gathering materials together would go far toward the thorough kneading, which, when added to the previous exertion, makes the whole operation, which might have been only a pleasure, a burden and an annoyance.

Let, then, stove, fuel, water, work-table, and pantries be at the same end of the kitchen, and within a few steps of one another, and it will be found that while the general labor of each day must always be the same, the time required for its accomplishment will be far less, under these favorable conditions. The successful workman,—the type-setter, the cabinet-maker, or carpenter,—whose art lies in the rapid combination of materials, arranges his materials and tools so as to be used with the fewest possible movements; and the difference between a skilled and unskilled workman is not so much the rate of speed in movement, as in the ability to make each motion tell. The kitchen is the housekeeper's workshop; and, in the chapter on *House-work*, some further details as to methods and arrangements will be given.

CHAPTER VII:THE BODY AND ITS COMPOSITION

"The lamp of life" is a very old metaphor for the mysterious principle vitalizing nerve and muscle; but no comparison could be so apt. The full-grown adult takes in each day, through lungs and mouth, about eight and a half pounds of dry food, water, and the air necessary for breathing purposes. Through the pores of the skin, the lungs, kidneys, and lower intestines, there is a corresponding waste; and both supply and waste amount in a year to one and a half tons, or three thousand pounds.

The steadiness and clear shining of the flame of a lamp depend upon quality, as well as amount of the oil supplied, and, too, the texture of the wick; and so all human life and work are equally made or marred by the food which sustains life, as well as the nature of the constitution receiving that food.

Before the nature and quality of food can be considered, we must know the constituents of the body to be fed, and something of the process through which digestion and nutrition are accomplished.

I shall take for granted that you have a fairly plain idea of the stomach and its dependences. Physiologies can always be had, and for minute details they must be referred to. Bear in mind one or two main points: that all food passes from the mouth to the stomach, an irregularly-shaped pouch or bag with an opening into the duodenum, and from thence into the larger intestine. From the mouth to the end of this intestine, the whole may be called the alimentary canal; a tube of varying size and some thirty-six feet in length. The mouth must be considered part of it, as it is in the mouth that digestion actually begins; all starchy foods depending upon the action of the saliva for genuine digestion, saliva having some strange power by which starch is converted into sugar. Swallowed whole, or placed directly in the stomach, such food passes through the body unchanged. Each division of the alimentary canal has its own distinct digestive juice, and I give them in the order in which they occur.

First, The saliva; secreted from the glands of the mouth:—alkaline, glairy, adhesive.

Second, The gastric juice; secreted in the inner or third lining of the stomach,—an acid, and powerful enough to dissolve all the fiber and albumen of flesh food.

Third, The pancreatic juice; secreted by the pancreas, which you know in animals as sweetbreads. This juice has a peculiar influence upon fats, which remain unchanged by saliva and gastric juice; and not until dissolved by pancreatic juice, and made into what chemists call an *emulsion*, can they be absorbed into the system.

Fourth, The bile; which no physiologist as yet thoroughly understands. We know its action, but hardly *why* it acts. It is a necessity, however; for if by disease the supply be cut off, an animal emaciates and soon dies.

Fifth, The intestinal juice; which has some properties like saliva, and is the last product of the digestive forces.

A meal, then, in its passage downward is first diluted and increased in bulk by a watery fluid which prepares all the starchy portion for absorption. Then comes a still more profuse fluid, dissolving all the meaty part. Then the fat is attended to by the stream of pancreatic juice, and at the same time the bile pours upon it, doing its own work in its own mysterious way; and last of all, lest any process should have been imperfect, the long canal sends out a juice having some of the properties of all.

Thus each day's requirements call for

		PINTS.
Of	saliva	3¾
	gastric juice	12
	bile	3¾
	pancreatic juice	1½
	intestinal juice	½
		21½

Do not fancy this is all wasted or lost. Very far from it: for the whole process seems to be a second circulation, as it were; and, while the blood is moving in its wonderful passage through veins and arteries, another circulation as wonderful, an endless current going its unceasing round so long as life lasts, is also taking place. But without food the first would become impossible; and the quality of food, and its proper digestion, mean good or bad blood as the case may be. We must follow our mouthful of food, and see how this action takes place.

When the different juices have all done their work, the *chyme*, which is food as it passes from the stomach into the duodenum or passage to the lower stomach or bowels, becomes a milky substance called *chyle*, which moves slowly, pushed by numberless muscles along the bowel, which squeeze much of it into little glands at the back of the bowels. These are called the mesenteric glands; and, as each one receives its portion of chyle, a wonderful thing happens. About half of it is changed into small round bodies called corpuscles, and they float with the rest of the milky fluid through delicate pipes which take it to a sort of bag just in front of the spine. To this bag is fastened another pipe or tube—the thoracic duct—which follows the line of the spine; and up this tube the small bodies travel till they come to the neck and a spot where two veins meet. A door in one opens, and the transformation is complete. The small bodies are raw food no more, but blood, traveling fast to where it may be purified, and begin its endless round in the best condition. For, as you know, venous blood is still impure and dirty blood. Before it can be really alive it must pass through the veins to the right side of the heart, flow through into the upper chamber, then through another door or valve into the lower, where it is pumped out into the lungs. If these lungs are, as they should be, full of pure air, each corpuscle is so charged with oxygen, that the last speck of impurity is burned up, and it goes dancing and bounding on its way. That is what health means: perfect food made into perfect blood, and giving that sense of strength and exhilaration that we none of us know half as much about as we should. We get it sometimes on mountain-tops in clear autumn days when the air is like wine; but God meant it to be our daily portion, and this very despised knowledge of cookery is to bring it about. If a lung is imperfect, supplied only with foul air as among the very poor, or diseased as in consumption, food does not nourish, and you now know why. We have found that the purest air and the purest water contain the largest proportion of oxygen; and it is this that vitalizes both food and, through food, the blood.

To nourish this body, then, demands many elements; and to study these has been the joint work of chemists and physiologists, till at last every constituent of the body is known and classified. Many as these constituents are, they are all resolved into the simple elements, oxygen, hydrogen, nitrogen, and carbon, while a little sulphur, a little phosphorus, lime, chlorine, sodium, etc., are added.

FLESH and BLOOD are composed of water, fat, fibrine, albumen, gelatine, and the compounds of lime, phosphorus, soda, potash, magnesia, iron, etc.

BONE contains cartilage, gelatine, fat, and the salts of lime, magnesia, soda, etc., in combination with phosphoric and other acids.

CARTILAGE consists of chondrine, a substance somewhat like gelatine, and contains also the salts of sulphur, lime, soda, potash, phosphorus, magnesia, and iron.

BILE is made up of water, fat, resin, sugar, cholesterine, some fatty acids, and the salts of potash, iron, and soda.

THE BRAIN is made up of water, albumen, fat, phosphoric acid, osmazone, and salts.

THE LIVER unites water, fat, and albumen, with phosphoric and other acids, and lime, iron, soda, and potash.

THE LUNGS are formed of two substances: one like gelatine; another of the nature of caseine and albumen, fibrine, cholesterine, iron, water, soda, and various fatty and organic acids.

How these varied elements are held together, even science with all its deep searchings has never told. No man, by whatsoever combination of elements, has ever made a living plant, much less a living animal. No better comparison has ever been given than that of Youmans, who makes a table of the analogies between the human body and the steam-engine, which I give as it stands.

ANALOGIES OF THE STEAM-ENGINE AND THE LIVING BODY.

The Steam Engine in Action takes:	***The Animal Body in Life takes***:
1. Fuel: coal and wood, both combustible.	1. Food: vegetables and flesh, both combustible.
2. Water for evaporation.	2. Water for circulation.
3. Air for combustion.	3. Air for respiration.
And Produces:	***And Produces***:
4. A steady boiling heat of 212° by quick combustion.	4. A steady animal heat, by slow combustion, of 98°.
5. Smoke loaded with carbonic acid and watery vapor.	5. Expired breath loaded with carbonic acid and watery vapor.
6. Incombustible ashes.	6. Incombustible animal refuse.
7. Motive force of simple alternate push and pull in the piston, which, acting through wheels, bands, and levers, does work of endless variety.	7. Motive force of simple alternate contraction and relaxation in the muscles, which, acting through joints, tendons, and levers, does work of endless variety.
8. A deficiency of fuel, water, or air, disturbs, then stops the motion.	8. A deficiency of food, drink, or air, first disturbs, then stops the motion and the life.

Carrying out this analogy, you will at once see why a person working hard with either body or mind requires more food than the one who does but little. The food taken into the human body can never be a simple element. We do not feed on plain, undiluted oxygen or nitrogen; and, while the composition of the human body includes really sixteen elements in all, oxygen is the only one used in its natural state. I give first the elements as they exist in a body weighing about one hundred and fifty-four pounds, this being the average weight of a full-grown man; and add a table, compiled from different sources, of the composition of the body as made up from these elements. Dry as such details may seem, they are the only key to a full understanding of the body, and the laws of the body, so far as the food-supply is concerned; though you will quickly find that the day's food means the day's thought and work, well or ill, and that in your hands is put a power mightier than you know,—the power to build up body, and through body the soul, into a strong and beautiful manhood and womanhood.

ELEMENTS OF THE HUMAN BODY.

		Lbs.	Oz.	Grs.
1.	Oxygen, a gas, and supporter of combustion, weighs	103	2	335
2.	Carbon, a solid; found most nearly pure in charcoal. Carbon in the body combines with other elements to produce carbonic-acid gas, and by its burning sets heat free. Its weight is	18	11	150
3.	Hydrogen, a gas, is a part of all bone, blood, and muscle, and weighs	4	14	0
4.	Nitrogen, a gas, is also part of all muscle, blood, and bone; weighing	4	14	0
5.	Phosphorus, a solid, found in brain and bones, weighs	1	12	25
6.	Sulphur, a solid, found in all parts of the body, weighs	0	8	0
7.	Chlorine, a gas, found in all parts of the body, weighs	0	4	150
8.	Fluorine, supposed to be a gas, is found with calcium in teeth and bones, and weighs	0	3	300
9.	Silicon, a solid, found united with oxygen in the hair, skin, bile, bones, blood, and saliva, weighs	0	0	14
10.	Magnesium, a metal found in union with phosphoric acid in the bones	0	2	250
11.	Potassium, a metal, the basis of potash, is found as phosphate and chloride; weighs	0	3	340
12.	Sodium, a metal, basis of soda; weighs	0	3	217
13.	Calcium, a metal, basis of lime, found chiefly in bones and teeth; weighs	3	13	190
14.	Iron, a metal essential in the coloring of the blood, and found everywhere in the body; weighs	0	0	65
15.	Manganese.}			
16.	Copper metals.} Faint traces of both these metals are found in brain and blood, but in too minute portions to be given by weight.			
	Total	**154**	**0**	**0**

The second table gives the combinations of these elements; and, though a knowledge of such combinations is not as absolutely essential as the first, we still can not well dispense with it. The same weight—one hundred and fifty-four pounds—is taken as the standard.

COMPOSITION OF THE BODY.

		Lbs.	Oz.	Grs.
1.	Water, which is found in every part of the body, and amounts to	109	0	0
2.	Fibrine, and like substances, found in the blood, and forming the chief solid materials of the flesh	15	10	0
3.	Phosphate of lime, chiefly in bones and teeth, but in all liquids and tissues	8	12	0
4.	Fat, a mixture of three chemical compounds, and distributed all through the body	4	8	0
5.	Osseine, the organic framework of bones; boiled, gives gelatine. Weight	4	7	350
6.	Keratine, a nitrogenous substance, forming the greater part of hair, nails, and skin. Weighs	4	2	0
7.	Cartilagine resembles the osseine of bone, and is a nitrogenous substance, the chief constituent of cartilage, weighing	1	8	0
8.	Hæmoglobine gives the red color to blood, and is a nitrogenous substance containing iron, and weighing	1	8	0
9.	Albumen is a soluble nitrogenous substance, found in the blood, chyle, lymph, and muscle, and weighs	1	1	0
10.	Carbonate of lime is found in the bones chiefly, and weighs	1	1	0
11.	Hephalin is found in nerves and brain, with cerebrine and other compounds	0	13	0
12.	Fluoride of calcium is found in teeth and bones, and weighs	0	7	175
13.	Phosphate of magnesia is also in teeth and bones, and weighs	0	7	0
14.	Chloride of sodium, or common salt, is found in all parts of the body, and weighs	0	7	0
15.	Cholesterine, glycogen, and inosite are compounds containing hydrogen, oxygen, and carbon, found in muscle, liver, and brain, and weighing	0	3	0
16.	Sulphate phosphate, and salts of sodium, found in all tissues and liquids	0	2	107
17.	Sulphate, phosphate, and chloride of potassium, are also in all tissues and liquids	0	1	300
18.	Silica, found in hair, skin, and bone	0	0	30
		154	**0**	**0**

With this basis, to give us some understanding of the complicated and delicate machinery with which we must work, the question arises, what food contains all these constituents, and what its amount and character must be. The answer to this question will help us to form an intelligent plan for providing a family with the right nutrition.

PART TWO

Cooking

STOCK AND SEASONING

The preparation called STOCK is for some inscrutable reason a stumbling-block to average cooks, and even by experienced housekeepers is often looked upon as troublesome and expensive. Where large amounts of fresh meat are used in its preparation, the latter adjective might be appropriate; but stock in reality is the only mode by which every scrap of bone or meat, whether cooked or uncooked, can be made to yield the last particle of nourishment contained in it. Properly prepared and strained into a stone jar, it will keep a week, and is as useful in the making of hashes and gravies as in soup itself.

The first essential is a tightly-covered kettle, either tinned iron or porcelain-lined, holding not less than two gallons; three being a preferable size. Whether cooked or uncooked meat is used, it should be cut into small bits, and all bones broken or sawn into short pieces, that the marrow may be easily extracted.

To every pound of meat and bone allow one quart of cold water, one even teaspoon of salt, and half a saltspoon of pepper. Let the meat stand till the water is slightly colored with its juice; then put upon the fire, and let it come slowly to a boil, skimming off every particle of scum as it rises. The least neglect of this point will give a broth in which bits of dark slime float about, unpleasant to sight and taste. A cup of cold water, thrown in as the kettle boils, will make the scum rise more freely. Let it boil steadily, but very slowly, allowing an hour to each pound of meat. The water will boil away, leaving, at the end of the time specified, not more than half or one-third the original amount. In winter this will become a firm jelly, which can be used by simply melting it, thus obtaining a strong, clear broth; or can be diluted with an equal quantity of water, and vegetables added for a vegetable soup.

The meat used in stock, if boiled the full length of time given, has parted with all its juices, and is therefore useless as food. If wanted for hashes or croquettes, the portion needed should be taken out as soon as tender, and a pint of the stock with it, to use as gravy. Strain, when done, into a stone pot or crock kept for the purpose, and, when cold, remove the cake of fat which will rise to the top. This fat, melted and strained, serves for many purposes better than lard. If the stock is to be kept several days, leave the fat on till ready to use it.

Fresh and cooked meat may be used together, and all remains of poultry or game, and trimmings of chops and steaks, may be added, mutton being the only meat which can not as well be used in combination; though even this, by trimming off all the fat, may also be added. If it is intended to keep the stock for some days, no vegetables should be added, as vegetable juices ferment very easily. For clear soups they must be cooked with the meat; and directions will be given under that head for amounts and seasonings.

The secret of a savory soup lies in many flavors, none of which are allowed to predominate; and, minutely as rules for such flavoring may be given, only careful and frequent *tasting* will insure success. Every vegetable, spice, and sweet herb, curry-powders, catchups, sauces, dried or fresh lemon-peel, can be used; and the simple stock, by the addition of these various ingredients, becomes the myriad number of soups to be found in the pages of great cooking manuals like Gouffée's or Francatelli's.

Brown soups are made by frying the meat or game used in them till thoroughly brown on all sides, and using dark spices or sauces in their seasoning.

White soups are made with light meats, and often with the addition of milk or cream.

Purées are merely thick soups strained carefully before serving, and made usually of some vegetable which thickens in boiling, as beans, peas, etc., though there are several forms of fish *purées* in which the foundation is thickened milk, to which the fish is added, and the whole then rubbed through a common sieve, if a regular purée-sieve is not to be had.

Browned flour is often used for coloring, but does not thicken a soup, as, in browning it, the starchy portion has been destroyed; and it will not therefore mix, but settles at the bottom. Burned sugar or caramel makes a better coloring, and also adds flavor. With clear soups grated cheese is often served, either Parmesan or any rich cheese being used. Onions give a better flavor if they are fried in a little butter or dripping before using, and many professional cooks fry all soup vegetables lightly. Cabbage and potatoes should be parboiled in a separate water before adding to a soup. In using wine or catchup, add only at the last moment, as boiling dissipates the flavor. Unless a thick vegetable soup is desired, always strain into the tureen. Rice, sago, macaroni, or any cereal may be used as thickening; the amounts required being found under the different headings. Careful skimming, long boiling, and as careful removing of fat, will secure a broth especially desirable as a food for children and the old, but almost equally so for any age; while many fragments, otherwise entirely useless, discover themselves as savory and nutritious parts of the day's supply of food.

SOUPS

BEEP SOUP WITH VEGETABLES.

For this very excellent soup take two quarts of stock prepared beforehand, as already directed. If the stock is a jelly, as will usually be the case in winter, an amount sufficient to fill a quart-measure can be diluted with a pint of water, and will then be rich enough. Add to this one small carrot, a turnip, a small parsnip, and two onions, all chopped fine; a cupful of chopped cabbage; two tablespoonfuls of barley or rice; and either six fresh tomatoes sliced, or a small can of sealed ones. Boil gently at least one hour; then add one saltspoonful each of pepper, curry-powder, and clove. If the stock has been salted properly, no more will be needed; but tasting is essential to secure just the right flavors. Boil a few minutes longer, and serve without straining.

This is an especially savory and hearty soup, and the combinations of vegetables may be varied indefinitely. A cup of chopped celery is an exceedingly nice addition, or, if this is not to be had, a teaspoonful of celery salt, or a saltspoonful of celery-seed. A lemon may also be sliced thin, and added at the last. Where tomatoes are used, a little sugar is always an improvement; in this case an even tablespoonful being sufficient. If a thicker broth is desired, one heaped tablespoonful of corn-starch or flour may be first dissolved in a little cold water; then a cup of the hot broth gradually mixed with it, and the whole added to the soup and boiled for five minutes.

CLEAR OR AMBER SOUP.

This soup needs careful attention. It may be made of beef alone, but, if desired very rich for a special dinner, requires the addition of either a chicken or a knuckle of veal. Allow, then, for the best soup, a soup-bone,—the shin of beef being most desirable,—weighing from two to three pounds; a chicken; a slice of fat ham; two onions, each stuck with three cloves; one small carrot and parsnip; one stalk of celery; one tablespoonful of salt; half a saltspoonful of pepper; and four quarts of cold water.

Cut all the meat from the beef bone in small pieces; slice the onions; fry the ham (or, if preferred, a thick slice of salt pork weighing not less than two ounces); fry the onions a bright brown in this fat; add the pieces of beef, and brown them also. Now put all the materials, bones included, into the soup-kettle; add the cold water, and let it very gradually come to a boil. Skim with the utmost care, and then boil slowly and steadily for not less than five hours, six or even seven being preferable. Strain, and set in a cold place. Next day remove the fat, and put the soup on the fire one hour before it will be wanted. Break the white and shell of an egg into a bowl; add a spoonful of cold water, and beat a moment; add a little of the hot soup, that the white may mix more thoroughly with the soup, and then pour it into the kettle. Let all boil slowly for ten minutes; then strain, either through a jelly-bag, or through a thick cloth laid in a sieve or colander. Do not stir, as this would cloud the soup; and, if not clear and sparkling, strain again. Return to the fire, and heat to boiling-point, putting a lemon cut in thin slices, and, if liked, a glass of sherry, into the tureen before serving. A poached egg, or a boiled egg from which the shell has been peeled, is often served with each plate of this soup, which must be clear to deserve its name.

WHITE SOUP.

Veal or chicken must be used for this soup; and the stock must always be prepared the day beforehand, having been flavored with two chopped onions and a cup of cut celery, or celery-seed and other seasoning, in the proportions already given. On the day it is to be used, heat a quart of milk; stir

one tablespoonful of butter to a cream; add a heaping tablespoonful of flour or corn-starch, a saltspoonful of mace, and the same amount of white pepper. Stir into the boiling milk, and add to the soup. Let all boil a moment, and then pour into the tureen. Three eggs, beaten very light and stirred into the hot milk without boiling, make a still richer soup. The bones of cold roast chicken or turkey may be used in this way; and the broth of any meat, if perfectly clear, can serve as foundation, though veal or chicken is most delicate.

MOCK TURTLE SOUP.

A calf's head is usually taken for this soup; but a set of calf's feet and a pound of lean veal answer equally well. In either case, boil the meat in four quarts of water for five hours, reducing the amount to two quarts, and treating as stock for clear soup.

Remove all fat, and put on the fire next day, half an hour before dinner, seasoning it with a saltspoonful each of mace, powdered thyme, or sweet marjoram and clove. Melt a piece of butter the size of a walnut in a small saucepan; add a heaping tablespoonful of flour, and stir both till a bright brown. Add soup till a smooth thickening is made, and pour it into the soup-kettle. Cut about half a pound of the cold meat into small square pieces,—*dice* they are called,—and put into the tureen. Make forcemeat balls by chopping a large cup of meat very fine; season with a saltspoonful each of pepper and thyme; mix in the yolk of a raw egg; make into little balls the size of a hickory-nut, and fry brown in a little butter. Squeeze the juice of half a lemon into the tureen with (or without) a wine-glass of sherry. Pour in the soup, and serve. If egg-balls are desired, make them of the yolks of two hard-boiled eggs rubbed fine. Add the yolk of a raw egg, a tablespoonful of melted butter, a saltspoon of salt and half a one of pepper, and flour enough to make a dough which can be easily handled. Roll out; cut into little dice, and make each into a ball by rolling between the palms of the hands. Boil five minutes in the soup.

MUTTON BROTH.

Prepare and boil as directed for stock. The broth from a boiled leg of mutton can be used, or any cheap pieces and trimmings from chops. One small turnip and an onion will give flavoring enough. On the day it is to be used, add to two quarts of broth half a cup of rice, and boil for half an hour.

CHICKEN BROTH.

Even an old fowl which is unusable in any other way makes excellent broth. Prepare as in any stock, and, when used, add a tablespoonful of rice to each quart of broth, boiling till tender. A white soup will be found the most savory mode of preparation, the plain broth with rice being best for children and invalids.

TOMATO SOUP WITHOUT MEAT.

Materials for this soup are: one large can, or twelve fresh tomatoes; one quart of boiling water; two onions; a small carrot; half a small turnip; two or three sprigs of parsley, or a stalk of celery,—all cut fine, and boiled one hour. As the water boils away, add more to it, so that the quantity may remain the same. Season with one even tablespoonful each of salt and sugar, and half a teaspoonful of pepper. Cream a tablespoonful of butter with two heaping ones of flour, and add hot soup till it will pour easily. Pour into the soup; boil all together for five minutes; then strain through a sieve, and serve with toasted crackers or bread.