THE ORDER OF THE ESSENES
2527 SUNSET DRIVE
TAMPA 6, FLORIDA

EPARTMENT OF INSTRUCTION

YOU ARE TAKING
ANOTHER STEP

TOWARD UNDERSTANDING:-

The third set of instructions comes with this letter, and with it our sincere faith that you will not be content to continue to grope darkly and painfully in the fog-bound valleys, and that you are athirst for the quickening waters of truth.

"The heights of great men reached and kept were ne'er attained by sudden flight, but they, while their companions slept, were toiling upward in the night," are words of wisdom, the expression of a universal principle.

You understand that you have taken years to acquire your present accepted opinions, your habits of thoughts and action. Your condition physically and mentally is the result of your past. Your social and financial position is an effect of long standing causes. Life Science is a study of causes, and how to motivate them - human engineering.

It is quite reasonable that you are not going to be interpenetrated with truth and understanding in just a few short lessons. You are not just being prepared. You would not be content to risk life's super-structure upon a day's foundation.

There are unlimited possibilities for you. You will soon come to appreciate this -- When you do, a new day will dawn for you.

When Christ, who was an Essene, taught that "as you give, so shall you receive," he was not talking religion; he was expounding a metaphysical law that always works. The time and thought that you give to this study cannot be lost. No effort is ever lost. Men are not rewarded nor punished for their deeds, but by them.

If on all occasions you express thankfulness, that giving has an appropriate reward for you in the cosmic universe. If in your work you give your very best efforts, that form of giving will be rewarded though you may not appreciate it at the moment. Each should be a stylist in his work.

This is a world of cause and effect, of action and reaction, of law, of perfect order. Those who have helped to make this course available to you know it and live it, and give joyously that you may know, and knowing, may express beautifully and responsibly.

May you have understanding,

THE ORDER OF THE ESSENES

J. Hamner Davis

Enc. 3

THE Essenes

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Instruction 3 — **Assuring to the acceptable and accepted HEALTH, HAPPINESS AND SUCCESS.**

It is the dominant trend of your secret thoughts which make or break your whole career, which beautify or mar your personality and which render you either radiant or repressive.

Therefore, be more careful of your thinking than you are of your money, if you would safeguard the greater values.

. . . . THOUGHT GEMS . . . .

It is the ship at the wharf, not the ship at sea, that rots fastest — the still pool, and not the running brook, that stagnates.

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There has been too much attention to so-called sages, wise men, politicians, self-appointed saviours of the lowly. It is proposed to save by formula, it has never been and will never be thus—individual regeneration and not mass regeneration is the answer.

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Startling physical improvements and permanent character changes are very commonplace when a change takes place in the innermost thoughts—when fear, jealousy and mental strains are weeded from the garden of the heart. A new day has dawned when you rout out mental conflict.

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Men have looked away from themselves and at things so long, that they come to esteem each other by what each has and not by what each is.

●

Men and women are rushing hither and thither in the blind search for happiness and cannot find it; they never will until they recognize that happiness is already within them and round about them, filling the universe, and that they, in their selfish searching, are shutting themselves out from it.

●

There are many causes of failure but the one that "leads the pack" is to be afraid of failing.

"In the Beginning"

Whatever of chemistry or physics, or of the so called exact sciences, is now known, was evolved by the human mind and was, in the beginning, but a thought, an observation, an idea, an intangible and an invisible thing. The thought lead to experimenting; experimenting lead to discovery, but in it all, nothing was ever created. It was but a change created from those things which did exist and have existed throughout time.

We laid it down as a principle that nothing could be destroyed, therefore, we lay it down as a principle that nothing new can be created, and we come back to a perfect circle of logic to "All things are Present."

The modern mind, however, is now engaged principally in the study of material things, and in an endeavor to reduce the thoughts, ideas and theories to an exact science. These things relate almost solely to physical—mechanical, and tangible things.

In the ages gone by there have been many high orders of civilization. Throughout the world excavations have disclosed the records and the writings upon stone or parchment of some of these past civilizations.

It is evident that in past ages there was a great study of mankind. About fifteen hundred years B. C. Amenhotep III, Pharoah of Egypt, is known to have written certain philosophies, and deductions with respect to natural laws. Subsequent to this time there seemed to have been a decline in

civilization, the power to read and to record was nearly lost, and the few who could read were a class apart and preserved to us whatever of these philosophies and discoveries in the human realm we have.

There was a society known as the Essenes, two centuries B. C., which was a secret order, only those who could read or comprehend and hand down any learning or secrets were permitted to be members. The order of the Essenes kept secret within their own circle whatever of learning had been handed down to them. They adopted boys at about the age of twelve. If an adult desired to become a member, they were given three years of training and observation.

Jesus at the age of twelve was adopted by the order and therein He learned principles, philosophies, and the secrets of the order of the Essenes. He became so enthused with the teachings, and saw in them such possibilities for the human race that he became possessed with the urge to give to the world this understanding, and began his ministry at the age of thirty.

The people of that time were an agrarian or agricultural people who lacked the understanding of the principles of the universe. They were the subject people of rulers who gave them their thoughts with respect to life as they decided them to have it, and always from the selfish viewpoint of keeping them subject.

Jesus was not able to contain himself, and was

unwilling that whatever had been preserved should be within a small select, or secret order.

He could not go forth among that kind and class of people with their viewpoint and education as it was, and merely lay down principles and philosophies and logical deductions, so He had to evolve a process of teaching by parables, illustrating a principle by a story. His illustrations had to be along the line of agriculture so that they could understand, and so that it would be in terms, language and form familiar to that people in that time. This is so in spite of the misinterpretation by some of Mark IV-11 and 12 and Luke VIII-10.

There could be no question but that the 104th Psalm of the Bible was taken almost literally from the writings of this Pharoah 1500 years B. C.

Often in the Bible did Jesus claim his divinity by saying that he was one with the Father, and the whole context of the Bible and the teachings of Jesus are that he was claiming this divinity for all mankind and calling upon man to come to the realization of that unity.

What Jesus was trying to teach was that the life spark, the spirit, the soul, or whatever it is within man that is permanent, the **you,** was a part of the universal.

There is much of virtue in all fraternal organizations. They teach lessons of friendship and fellowship, charity, bravery, benevolence, caution, constancy, and other positive virtues.

By their rituals, acted out by earnest and sincere individuals, they impress a few simple lessons indelibly upon the mind of the member, and there the matter of study ends—By associations one with another and living the principles taught, there is continuing good, and many benefits. The order of the Essenes is one devoted to continuing study.

It is a foundation for the study of man—the search for truth. It can be likened to a chemical laboratory, or a research laboratory in the field of the so called exact sciences. Our study is to search out life principles, the causes of health, happiness, achievement, advancement and success, and to learn how to practically apply these principles in our daily affairs and demonstrate truth.

No one will deny that the Buddhist, Mohammedan, the Confucianist have their grasp of truth. Even the primitive idolater has some faint gleam of it. All religions are but aspects of the one truth.

Any one, in any country, in any Epoch and of any creed or no creed can demonstrate the truth.

Perhaps our age will, in the future ages, be best known for its inventions and discoveries, for its genius with **things.** Things are effects.

Likewise the difficulties, the trials and tribulations of the multitude, and the present day unrest, may be due to too great attention to the material,—to effects, and too little to causes, to the searching out of the facts of life, which relate to man himself, and his connections, ties, and rela-

tions to the universal, the infinite, the omnipresent.

In this order there may arise an impatience, a desire to short cut to the understanding of these relationships, to quickly contact the omnipotent and the omniscient.

Great athletes do not become so in a day, a week, a month or even a year,—nor are mental giants the result of miracle.

For you—there are untold possibilities. You have the endowment,—to what degree will you raise it?

We must first ground ourselves, lay a foundation for understanding, must know something of this Earth and the things of the Earth. We must learn that the things we see and know are effects, and we must comprehend something of the cause, —recognize cause,—and soon must learn to deal with causes—and then will follow the realization of our longings, our hearts desires.

Great geologists read the earth like a book, its pages are filled with past history, its mysteries, and its complexities.

Five ages have passed since the world emerged from chaos, before that, scientists declare we were travelling through space, formed only of gases, thrown off from the sun, wandering aeons through the ether, seeking that specific center of gravity that keeps us suspended, a small world, amid a trillion other worlds, an atom among the millions of the great milky way.

Untold ages ago, a near collision occurred between our sun and another much larger sun. As a result, colossal tides of gaseous matter having a temperature of forty five million degrees Fahrenheit were set up on each sun; and finally a filament of gas, millions of miles long, protruded from our sun. Upon being removed from the intense heat of the sun, the filament began to condense into drops, which now constitute the earth and the planets. At first, the new-born planets described highly complicated orbits under the gravitational attraction of the two suns; but finally the larger sun receded and left the planets revolving around our sun.

The first geologic age shows a world without vestige of life, Archaeozoic, intolerable heat fusing the rocks from the gases now trailing idly, where heretofore they had been speeding through space at millions of miles per hour.

The earth's book shows a change, not the heated rock accumulation, but rocks known to geologists as Proterozoic.

This Age, according to the United States Geological Survey, lasted perhaps 1,335,000,000 years, and it is in this era that the first life has left a distinct record (Crustaceans, and algae).

Following this came what is known as the Paleozoic Age, which according to the National Research Council, by reason of estimates of Professor Charles Schuchert, is said to have lasted 317,000,

000 years, and it was during this Age that life began to multiply.

In the Cambrian period of this Age, lasting 92,000,000 years, we find Trilobites, brachiopods and other sea shells, and abundant seaweed, but during the Cambrian period we find no trace of land animals.

The next period of this Age was the Ordovician, lasting some 57,000,000 years, in which is found shell-forming sea animals, and the first trace of insect life.

The next priod of this Age was the Silurian, lasting 22,000,000 years, and which marked the rise of fishes and of reef-building corals.

The next epoch of this Age was the Devonian, lasting 39,000,000 years, and known as the "Age of fishes," and the rise of amphibians and land plants. This epoch was followed by the Carboniferous epoch, estimated to have lasted 109,000,000 years, which is the "Age of amphibians." It was during this Age that we note the dominance of tree ferns and huge mosses, primitive flowering plants, and the earliest cone-bearing trees, and it was the beginning of backboned land animals.

We then come to the Mesozoic Age, which is estimated to have lasted 105,000,000 years, and is divided into three epochs — the Triassic, the Jurassic, and the Cretaceous. In this Age we find life in abundance, foliage of forest and jungle denseness, and we find huge land reptiles (dino-

saurs), and the first appearance of birds and mammals; and palms and hardwood trees.

Then something happened! The pages of the book is blank. The huge beasts disappeared. Smaller animals supplanted them, the development of a brain to supplement instinct is evident, as the earth passed on to the Cenozoic Age, in which we are now living, having reached the end of the first quartenary.

This Age is known as the "Age of mammals," and the appearance of man is first noted in this Age, and it is marked by the rise and development of the highest orders of plants.

Great glaciers have passed over the land, inundations have taken place, but still life went on ever growing in intellect and advancement.

The ancient Greek mythologies treat of floods, the Bible described the flood of Noah's time, Plato tells of the great lost Atlantis, the earth is ever changing, man has come from this.

The rocks composing the earth's crust are grouped by geologists into three great classes—igneous, sedimentary, and metamorphic. The igneous rocks have solidified from molten state. Those that have solidified beneath the surface are known as intrusive rocks. Those that have flowed out over the surface are known as effusive rocks, extrusive rocks, or lavas.

The term volcanic rock includes not only lavas but bombs, pumice, tuff, volcanic ash and other

fragmental materials thrown out from volcanoes.

Sedimentary rocks are formed by the deposition of sediment in water (aqueous), or by the wind, (eolian).

The sediment may consist of rock fragments of particles of various sizes (conglomerate, sandstone, shale); of the remains or products of animals or plants (certain limestones and coal); of the product of chemical action or of evaporation (salt, gypsum, etc.); or of mixtures of these materials. A characteristic feature of sedimentary deposits is a layered structure known as bedding or stratification.

Metamorphic rocks are derivatives of igneous or sedimentary rocks produced through mechanical or chemical activities in the earth's crust.

The unaltered sedimentary rocks are commonly stratified, and it is from their order of succession and that of their contained fossils that the fundamental data of historical geology have been deduced.

We must study the extra-ordinary ingenuity of the life principle, in adapting itself to perpetually new conditions.

Nothing defeated it—struggling from stage to stage—age to age, from the slime upward—each new danger was an incentive to conquer. Pursued on land it sought the air.

Whatever the source of the life principle—the whole geologic history shows it was a conquering principle. Had it been possible to exterminate it,

it would never have passed the age which saw the destruction of the great reptiles.

Before it worked up to man this amazing force met ruinous conditions with daring contrivances. For one kind of danger it develops a shell, for another a sting, for another a poison, for another a protective coloration.

To breathe in water it puts forth gills, and makes lungs for itself when stranded on land. In glacial cold it finds the means of growing fur. When heat and cold assail it in turn, it packs itself with feathers, when climates become temperate, it produces hair.

For creatures that keep to the water it webs the foot, for those which take to the trees it makes the toes prehensible, for the ones which learn to stand erect and run along the ground, it flattens the sole making it steady and supporting.

To resist—to survive—to win through—is the end to which the life principle sets itself with such singleness of aim as to unfold a wealth of understanding to him who wills to know.

This order does not deal in so called mysteries, it knows that to engage in, deceits and deceptions, and to resort to the methods of the charlatan and faker is a boulder in the road to success. We demonstrate success. Man has lived thousands of years,—but never has he succeeded in defeating the action of natural law.

One of the first principles to learn is that there

can be no effect produced, without there being a cause back of it.

The possibility of radio existed ten thousand years ago, as it does now,—but men did not know the law. The teachings of this order are not purely metaphysics, psychology or philosophy.

Philosophy and especially psychology stresses the effective functioning of thought as the decisive factor in living. They emphasize mind as the causative force—that mind encompasses man and his affairs, that a satisfactory and successful life will result from looking to the mind, but there seems to be an appaling lack of understanding that this mind power of thought power is many fold multiplied when there is a realization of the very real tie up or connection between mind as generally understood, and that universal intelligence and infinite power ever present and in all things being manifested.

You want success, — you want ability, — you want money,—you want influence,—you want culture, — your wants are many and varied, — they exist for you,—go with us in search of the law, and it is the law, as you grow, expand, succeed, so we grow, expand and succeed.

. . . THOUGHT GEMS . . .

Take the lantern in the hand and you will always have light enough for your next step, no matter how dark, for the light will move along with you. Do not try to see a long way ahead.

Section 2 Instruction 3

You have learned that to sustain life is largely a matter of air, water, food, and elimination.

We have given you suggestions upon the subject of drinking water, and correct breathing.

Now it is our purpose to give you suggestions upon eating.

It is not suggested that you give deep study to, nor endeavor to learn the names of the different parts of the anatomy of the gastro-intestinal system, nor the names of the different juices, digestive fluids and other scientific terms.

We go to some length, and into detail so you will understand the reason for the simple rule we lay down at the end.

The list of foods you can refer to at any time. We feel that to know in a general way the things in these instructions is a part of being well informed.

This set of instructions will be used as a reference at a later date.

For a number of years, so-called dieticians have gone about the land, and endeavored to acquaint the people with "dietetics," each promulgator having a different idea, as we heard once stated by a student, "One dietician tells me not to drink milk, then another tells me to drink milk, another says, Don't eat meat, while yet another says, Meat protein is necessary."

So the result is that the majority of the "Dear Public" are now confused, and really cannot prac-

tically apply the principles of SCIENTIFIC EATING to their daily routine.

This matter simplifies itself when we see that the mistake has been made is in the confusion of correct eating with dietetics. There is a decided difference between DIETETICS, and SCIENTIFIC EATING. Dietetics is the therapeutic use of foods to bring about elimination of morbid matters from the organism, or to supply therapeutically lacking elements, and thus to correct biological deficiencies. This study requires a thorough knowledge of both the physiological and chemical factors involved, and is so extensive and intricate that the average person has no time to devote to it—Yet we all want to KNOW HOW TO EAT CORRECTLY AND SCIENTIFICALLY.

That we may have a comprehensive knowledge of proper eating it will be well for us to briefly review the anatomy of the digestive system, as thus we will understand the structure of this wonderful laboratory, and thus be better enabled to appreciate the processes that take place therein.

The alimentary system, consists of the alimentary canal and the accessory organs, ie; the teeth, salivary glands, pancreas and liver. For an understanding of our subject it will be necessary at this time to consider the main apparatus—the alimentary canal.

THE ALIMENTARY CANAL

The alimentary canal is a tube extending from

the mouth to the anus. It is about six times the length of the body, and the greater part of it is coiled up in the cavity of the abdomen. Its diameter is by no means uniform, as it is dilated in certain parts of its course. It is composed of three coats, or layers, from the mouth to where it passes through the diaphragm, and of four coats in the abdominal cavity. These coats are: (1) The mucous, (2) The submucous, (3) The muscular, and (4) The serous. By the alternate contraction and relaxation of the muscular fibres the contents of the tube are propelled downwards. Into the interior of the alimentary canal are poured secretions from the glands of the mucous membrane with which it is lined, and also secretions from the accessory glands which lie outside the canal and are connected with its interior by ducts. The alimentary canal is divided into —

THE MOUTH

The mouth is the upper opening of the canal and provides the oral cavity for the ingestion of foods, it has a fixed roof and a movable floor and contains tongue, and the hard and soft palate.

The fauces, is the aperture leading from the mouth into the pharynx or throat cavity. Lying on each side of the mouth are glands called the salivary glands. The secretion of these glands is called the saliva, and is one of the important digestive fluids which will receive consideration shortly.

THE PHARYNX

The pharynx or throat cavity is a structure shaped somewhat like a cone, with its broad end turned upwards and its narrow end downwards to end in the esophagus. There are apertures or openings which communicate with the nose, ears, mouth, and larynx. Only the opening into the pharynx is of interest in this study. We note that it enables the food to pass into the esophagus when the act of swallowing is about to be performed as the muscles draw the pharynx upwards and dilates it to receive the food—then they relax; the bag sinks, and other muscles contracting upon the food it is passed downwards and onwards into the esophagus.

THE ESOPHAGUS

The esophagus is a straight tube about nine inches long extending from the pharynx behind the trachea, and through the diaphragm to its termination in the cardiac end of the stomach.

THE STOMACH

The stomach is the most dilated portion of the alimentary canal. It is a sac, somewhat pear-shaped with two openings, the upper one called the cardiac aperture, which leads into the esophagus and the lower leading into the small intestines, the pylorus. The cardiac is somewhat free at the opening, but the pylorus is guarded by a kind of valve composed of circular muscular fibres which form

a constricting ring. By this means the food is kept in the stomach until it is ready for passage into the intestines. When there is any factor that causes the pylorus to contract unduly then we have a condition which is called "pyloric stenosis." This causes the food to be retained too long, fermentation sets in, gas forms, the stomach distends and presses against the heart with sometimes fatal results. Many cases of so-called acute indigestion and heart failure are thus induced. In the reverse condition when the muscles of the pylorus relax unduly, then the contents which are acid pour into the duodenum and there coming into contact with the bile and other secretions again set up a reaction; The acid of the gastric juice with the alkali of the bile, and gas is formed which again causes definite symptoms or symptom complexes, so we thus see that mechanical conditions as well as material can cause digestive disturbances.

THE SMALL INTESTINE

This part of the alimentary canal consists of a convoluted tube about twenty feet in length, and gradually diminishes in size until it joins the large intestine. It is divided anatomically into three portions, ie, the first twelve inches the duodenum, the next two fifths the jejunum, and the rest the ileum. These portions are saculated so that the onward course of the food particles are delayed by being caught in the hollows formed by these folds and thus being more thoroughly subjected to the action of the digestive juices, also affording a larger sur-

face for absorption. What an efficient arrangement of Nature! Again, the inner surface of the mucous membrane is composed of finger-like projections called ville. The function of these structures is to provide for absorption of the products of digestion.

THE LARGE INTESTINE

This structure is about five feet long, and consists of a sacculated tube that is divided into three portions called the caecum, the colon and the rectum. The caecum is a pouch at the commencement of the large intestine. It contains the veriform appendix of surgical fame, and we might remark right here that one of the greatest surgeons, Dr. Bell, of the Cancer Hospital in London, accidentally discovered that the secretion of the appendix, which he with the rest of his colleagues believed to be of no physiological value, was a very important fluid having the functions of a digestant, antiseptic and lubricant to the contents of the colon. From the caecum extends the ascending, then the transverse, and then the descending colon which ends in the Rectum.

THE RECTUM

The Rectum is from six to eight inches long and consists of muscular fibers that are very largely supplied with blood vessels called the haemorrhoidal veins. It contains two circular muscles which guard the end and opening or anus. These are called respectively, the internal and external sphinc-

ters. These are in close relation to the terminal nerves of both the spinal and sympathetic systems so they have a profound influence on the entire nervous and vasomotor systems, another reason for mechanical disturbances of the digestive processes.

THE ACCESSORY ORGANS

The accessory organs are the teeth, salivary glands, the pancreas and the liver.

The salivary glands have already beeen described but it will not be amiss to consider briefly those important structures, the teeth.

THE TEETH

These structures are provided for the purpose of reducing the food particles into smaller portions so they can be brought into more intimate contract with the digestive juices and the process of digestion is thereby expedited. The mouth contains about thirty-two teeth, which according to their shape and use are described as the incisors, canines, bicuspids, and molars. The incisors as their name indicates, are for cutting the food. The canines are especially useful for tearing the food asunder. The bicuspids are called the false grinders, as the molars are the ones which are well fitted for crushing, bruising and grinding the food. The teeth are composed of three bone-like tissues, enamel, dentrine and cement; these substances are all harder than bone, enamel being the hardest tissue found in the body. They are developed from the epithelium in much the same way as the hairs,

and thus are closely related to the glandular system as well as being in intimate contact with the nervous system through the trifacial nerves. Thus any affection of the teeth will have a direct effect on the nervous system and reflexly the process of digestion. Furthermore, when through a lack of the proper building material, mainly calcium, the teeth degenerate, then foci of infections are set up, besides which the normal structures are lost and the proper mastication of the food portions hindered.

THE PANCREAS

These important glands play a large part in the digestive processes as its secretion, insulin, is necessary for the conversion of sugar into physical energy. When they become inactive, sugar is not all converted into energy and is then eliminated by the kidneys, producing the symptoms known as diabetes mellitus, or insipitus. Their secretion is called the pancreatic juice, and contains the important enzymes; trypsin, steapsin and amylopsin, besides insulin.

THE LIVER

This organ is the largest gland in the body, and is well named the liver, as most of the vital processes are dependent on its proper function. It is not only different from the other glands in size, but it has other striking peculiarities. First, it receives its supply of blood from two different sources, namely: arterial blood from the hepatic artery, and the venous blood from the stomach, spleen, pancreas

and intestines by means of the portal vein. Secondly, the different parts of the secretory apparatus, the cells, blood vessels, the ducts instead of being arranged as elsewhere in distinct tubes are closely united and massed together, these all combine in their work to manufacture the bile from the blood, whence it passes to the small intestine. They perform other important functions in that they change some of the substances brought to them in the blood from the digestive organs in such manner as to render these substances suitable for the nutrition of the body, notably the storing up of sugar in the form of glycogen, these two secretions playing their important part in the processes of digestion.

We have above briefly reviewed the wonderful STRUCTURE of the laboratory that nature has provided so we can convert the crude food materials into living flesh and bone. We will next briefly consider the PROCESSES that normally take place in this laboratory and thus obtain a clear idea of how these normal functions are maintained.

THE PROCESS OF DIGESTION

The processes of digestion is a means of transforming the food we take into our mouths into a condition of solution or emulsion suitable for absorption into the blood. This process is entirely dependant on the action of a class of substances known as enzymes or digestive ferments. They act largely as do the chemical agents called catalyzers as they can, by their presence, convert certain substances into other substances without being them-

selves affected in any way. The enzymes are usually the products of living organisms and are not found in inorganic matter. Now, keep clearly in mind the picture of a laboratory, its structure—and now, the processes conducted therein. Into this laboratory we place a number of grades of raw material, all chemicals, but of different composition.

THE THREE SOLID FOODSTUFFS

Analyzing our raw material, we find it composed of three main solids, but there are other factors which we will consider shortly. Looking at our raw material we find that it is composed of proteins, carbohydrates and fats. We will trace the course of these elements throughout the alimentary canal, and note carefully how each is transformed into a soluble condition suitable for absorption and final assimilation.

First, we wish to stress a few basic principles. All chemical action is largely a series of reactions between acids and alkalies. We know that an alkali will neutralize an acid, and thus make a substance of no effect. For instance, there is a prevelant practice of taking a "dose" of soda to neutralize an "acid stomach." Why? Because it is reasoned—if an alkali is taken the acid will be neutralized, which is sound chemical reasoning, if it is not, in this particular instance, sound physiological reasoning when we consider the various processes of digestion of our foods, and if this basic fact is kept in mind, a large number of your eating

problems will be solved. Now, to return to our "materials." We will first introduce proteins into our laboratory, and note the reactions as it passes through, and thus once for all get a real scientific knowledge of its normal digestion, so we can apply that knowledge daily.

PROTEINS

First, we take our portion of Protein and place it in the mouth. What is Protein? Well, meat of any kind is a protein, also eggs, cheese, nuts, etc., but we will for our present example take meat, a steak, a portion of it is placed in the mouth. Then the work of the teeth begins. It is cut and ground, being pushed between them and out again by the muscular contractions of the cheeks and the movements of the tongue until the whole is thoroughly crushed and ground down. During this process, which is called mastication, the salivary glands are excited and saliva pours into the mouth, and mixing with the food moistens it and reduces it to a soft pulpy condition. It is interesting to note that this process is largely under the control of the will, though the subconscious is co-operating by stimulating the secretions of the glands, and also preparing the entire digestive tract for the on-coming of the food materials. Psychological experiments have demonstrated that even the sight of certain foods will produce definite physiological effects, and most wonderful of all the subconscious will co-operate by bringing about the stimulation of the special gland whose secretions are needed, and

conversely inhibit the secretions of those not required.

How much more is this phenomena evident when the food is placed in the mouth! We have placed protein in the mouth—it has been cut and ground up, moistened and softened by the saliva, but has the enzyme found in the saliva had any effect on it? No! So far a "mechanical" effect has been produced on our "material" so we will pass it on. The tongue now collects it from every part of the mouth, brings it together upon its upper surface, and then presses it backwards through the fauces into the pharynx. The soft palate prevents its entrance into the nasal chambers while the epiglottis bars its entrance into the air passages. At last it is guided safely through the pharynx into the esophagus, a critical psychological point is now reached. From now on throughout the entire digestive tract our material, which don't forget is protein, is beyond the control of the will. Conscious volition has surrendered fully to the domination of the subjective mentality, which has been active, yes, as we saw, even before the Food was placed in the mouth. So, now, when the protein arrives in the stomach, what do we find? Everything has been prepared. The blood vessels have dilated, the glands have poured out an abundant secretion upon the mucous lining, and the different layers of the muscular coat are excited to a continuous action.

Do we find any chemical action taking place on the Protein now? By all means! Why? The pro-

tein is now in an acid medium, the gastric juice which contains two enzymes, pepsin and rennin, and in such a medium the enzyme ,pepsin has the power to decompose the protein and convert it into a soluble substance called peptones. Whatever the protein may be, whether albumin of eggs, gluten of flour, or myosin in flesh, the result is the same, pepsin, in conjunction with the acid at body temperature transforms them into peptones, then the peptones are resolved into amino acids which pass with ease through the body membrane by osmosis. They are probably absorbed as soon as formed by the blood vessels in the walls of the stomach, though some pass in the chyme through pylorus into the small intestine. Thus ends the first "chemical" action on our "material" protein.

We will next note what happens to the residue, which not being absorbed while in the stomach, passes on in the form called chyme into the beginning of the small intestine or duodenum. Here it contacts two digestive secretions, the bile, from the liver, and the pancreatic juice from the pancreas. Remember, the chyme is now an acid mixture while the above secretions are alkaline. So, first a neutralization of the acid takes place. Then the enzymes begin their action. The bile in this particular instance only helps supply the alkaline medium, as it has little or no effect on the protein only acting on the fats that may, and usually are associated with the protein in conjunction with the pancreatic juice it has the power of emulsifying them.

The bile also seems to act as an antiseptic agent retarding the formation of certain gasses through hindering putrefaction and fermentation, then it also has the peculiar property of assisting osmosis of fats as membranes wet with a bile solution will permit oils to pass through. If the bile does not effect our protein, what does? The pancreatic juice has the power to transform the proteins into peptones through the action of an enzyme called trypsin. The only difference being that trypsin has the power to affect this transformation in an alkaline medium instead of an acid, so the most of the protein that was not digested in the stomach here receives further digestion. Then it passes on down the small intestines and contacts the intestinal juices or "succus entericus," which also is of an alkaline reaction, but so far as known has no definite digestive function, only acting to retain the alkalinity, and thus assist the continued action of the enzymes of the bile and pancreatic juice.

Our protein now in the form of peptones and amino acids as it passes over the villi, is absorbed either into the lymphatics, or into the blood vessels in the intestinal walls. The undigested portion, if there is any, finally pass on to the large intestine. Again it contacts an acid medium, though so far as known the secretions of the intestinal walls themselves are alkaline. So this acid is produced as a result of acid fermentations that are taking place. These have been found to be due to certain microorganisms. The normal ones being the acidophilos

baccilli, and the baccilli bulgericus. When putrefaction is present the welch baccilli, colon baccilli, and others are found.

When the putrefactive processes predominate then the contents of the colon become of an alkaline reaction, and produce an obnoxious odor, and are the seat of a multitude of pathological reactions, an excessive protein intake being mainly responsible for such a condition, but when a moderate amount is ingested it is all reduced by the digestive enzymes and fully absorbed and utilized by each and every cell where needed. Th normal condition of the colon is maintained by the secretion from the appendix, as we mentioned above, it also has been called the succus entericus, and acts as a digestant especially to the proteins, and an antiseptic and a lubricant to the entire contents.

Thus we have traced the entire course that our protein has taken through the laboratory and noted carefully the processes it has undergone to promote its transformation into a suitable form for absorption and final assimilation by the cells so they can then utilize it to rebuild the tissues of the body, which are mainly protein.

To recapitulate: First, we note that the protein contacted a series of digestive secretions of different chemical reactions—acids and alkalies. (1) The saliva which contained the enzyme, ptyalin, it had no effect on the protein, but transforms starch to dexterine, and sugar. It is also alkaline. (2) The Gastric juice of acid reaction, which contained the

enzymes, rennin and pepsin. The rennin being a coagulating enzyme, and the pepsin acting in the gastric juice to change the proteins into peptones. (3) The Pancreatic juice of alkaline reaction, which contained the enzymes, trypsin, that also changed the protein to peptones. Steapsin, that emulsifies or saponifies fats, amylosin, that assists in converting the starch into sugars or dextrose, the important enzyme, which converts the sugars or dextroses to glycose, the famous insulin.

(4) The bile of alkaline reaction, that contains bile salts, cholesterin, assists in saponification and emulsion of the fats, promotes absorption of the same and modifies putrefactive changes in the intestines.

(5) Intestinal Juice of alkaline reaction, which in the small intestine acts as a lubricant, dilutant and solvent to its contents.

(6) Succus Enterious, the secretion from the appendix that acts in the acid medium of the Colon, to retard putrefaction of the proteins and assist as a lubricant to its contents.

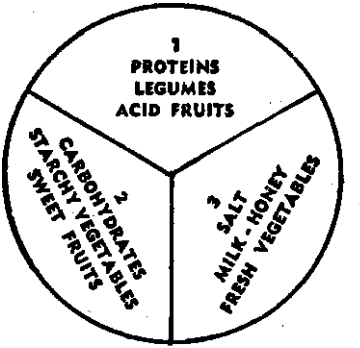
The main principle that we derive from this study is the **fact** that all proteins first must contact an acid medium with its enzyme before the process of its digestion can commence. Now, if any other food factor is introduced at the same time that contradicts this action the normal digestion is hindered. Let's see. We will briefly trace the passage of starch or carbohydrates through our laboratory.

A carbohydrate placed in the mouth, contacts the saliva. Immediately digestion of the starch by its enzyme-ptyalin begins converting it into dexterine. Meantime, instead of the subconscious increasing the gastric secretions, as it did with the protein, they are largely inhibited. Why? Because in an acid medium, starch would have a tendency to ferment. So, when the starch, after having been well masticated and mixed with the saliva and having the enzyme, ptyalin act on it, it passes through the oesophagus to the stomach. It is retained there for but a short time, in comparison to the protein, not much over an hour at the most, while the protein took from two to three hours at least. Then, our starch, after leaving the stomach passes to the duodenum, where it is further digested by the enzymes of the pancreatic juice, amylopsin, converting the dexterines into dextrose, and the insulin, converting the sugars into glucose, all this being conducted in an alkaline medium. The little acid that was conveyed from the stomach being neutralized by the alkaline bile. Thus our starch or carbohydrate is digested, and now is in a form that can be readily absorbed.

Now we can clearly see that if we introduce a protein and a starch into the alimentary tract, at the same time, then we are setting processes to acting that are diametrically opposed, so the result can only be detrimental to the process of digestion. This basic principle is the foundation on which is built the system of the scientific combination of Foods. Other principles are to be considered also,

such as the proper proportions of proteins, carbohydrates, fats, mineral salts, etc., and the basic elements that are indicated according to the particular type of individual, but always, basically, this principle of correct combination stands at the foundation of the whole structure of the system.

THE TRIUNE SYSTEM OF SCIENTIFIC EATING



This system of Scientific Eating, as stated, is based on the physiological principle of compatible combinations which take into consideration not only the incompatibility of the Foods themselves, but the counter action of the digestive juices also.

There are certain foods which together form a harmonious combination, and require the same digestive juices, while others in combination conflict, and the digestive enzymes are ineffective because in opposition. Making up a general list of these we find that there are two classifications, one that we can call positive, and the other negative, is:

The Positives—the protein and carbohydrate groups:

(1) The proteins, Legumes and other Nitrogenous foods, which can be combined with acid fruits, the hydrogen and mineral salt group.

(2) The carbohydrate group — composed of carbohydrates, starchy vegetables, and sweet fruits.

The Negatives—the Carbon and Mineral salt group:

(3) The negatives — Salt, Milk, Honey and Fresh vegetables. The mineral salt group.

BASIC PRINCIPLES

The Law of Polarity is operative throughout all Nature, as we have seen, and its cardinal rule is: Likes repel and unlikes attract. So we find that two positives conflict if combined, thus the rule is not to combine any of the Protein list with any items of the Carbohydrate list, either of them will combine with items of the Negative list.

Another Rule, is, not to combine Proteins with a concentrated oil or fat. Why? For a physiological

reason. A concentrated fat will inhibit the gastric secretions, and thus hinder the digestion of the proteins. We will remember that fats were not digested either in the mouth or stomach. It was only when they came into contact with the bile and pancreatic juice that digestion took place. The steapsin produces saponification and emulsification, while the bile promotes the absorption by osmosis. So, the presence of oil or concentrated fats is not advisable when taking proteins, nor even when taking carbohydrates, as it hinders the action of the enzymes, amylopsin and insulin, as well as ptyalin.

The simple way to understand this is to take the list of protein foods which will follow and call it group one (1), then, take the carbohydrates and mark it group two (2), and then, take the Neutrals and mark it group three (3).

Then remember you can combine in one meal 1 and 3, or 2 and 3, but avoid so far as possible combining foods in groups one and two.

Avoid too many soft foods that are simply swallowed without being chewed and are therefore improperly prepared for treatment in the digestive tract.

The trouble today is largely a matter of eating too much. Always stop when you feel you could eat more—never get stuffed, or have that full tight feeling.

We are not food fadists. The human system is marvelously adaptive, and if you have a variety of foods, and green vegetables, you will not have

great difficulty if you observe some very simple rules. Never eat when you are mentally disturbed and the negative emotions are aroused.

Do not eat rapidly. Thoroughly chew what you eat. Do not wash down food with your drinks. Have your food reduced to almost liquid form by the chewing process.

Immediately after eating do not engage in violent physical exercise.

. . . THOUGHT GEMS . . .

The day is approaching when we shall learn to estimate the importance of man, not by his income, but by his output.

●

If you would win in life's contest, you must direct a powerful brilliant beam of thought, backed by the dynamos and generators of your inner you, upon every goal. There must be no confusion of thought, no mistaking the power of vision, of faith and all the other inherent powers with which nature has endowed you and of which this course of instruction treats.

●

We are crippled by the old orthodox idea of man's inferiority. The only inferiority in us is what we put in ourselves. The YOU, with the life principle, is a part of the universal—perfect.

●

The whole world is a college where nature is trying to teach us, to give us the great secret.

●

Mark this distinction—exterior intelligence and inner intelligence—just as you mark the physical you and the commander you—the real you.

●

Places have their characteristic atmospheres which result from the mental vibrations of those who abide in them. Modern science is rediscovering this ancient truth.

LIST OF PROTEIN, CARBOHYDRATE AND NEUTRAL FOODS

FOOD CLASSES	FOODS	EFFECTS
PROTEINS Nitrogenous Foods.	Meat, fish, eggs, wheat, nuts, beans, peas, cheese, oats, fowl, rys, corn, lentils, legumes, mushrooms, milk.	Repair and Build tissues. Give strength, heat and energy. Acid reacting.
CARBOHYDRATES Carbon and Hydrogen Foods. — — — — Sweet Fruits	Sugars, starches, grains, honey, wheat, rice, corn meal, oats, potatoes, sweet potatoes, sorghum, maple syrup, prunes, raisins, dates, figs, bananas, other sweet fruits, stewed fruits, chestnuts, pumpkins, squashes, watermellon, beets, milk, maple sugar, glucose, candy, coconuts, barley, lima beans, macaroni, vermicelli, spaghetti, cereals, currants.	Produce energy. Fatten. Burn up waste materials. In wrong combination form acids and produce Acidosis.
HYDRO-CARBONS Hydrogen and Carbon Foods.	Vegetable and animal fats and oils, nuts, peanuts, wesson oil, olive oil, butter, cream, cheese, yolk of egg, coconuts, olives.	Produce heat, build bones, marrow, nerves, brain. Fatten. Acid reacting.
NEUTRALS Mineral salts, Oxygen and Hydrogen Foods. — — — — Fresh Vegetables. Acid Fruits	Milk, salt, honey, endive, lettuce, spinach, cabbage, green peppers, watercress, celery, onions, asparwatercress, celery, onions, asparagus, cauliflower, tomatoes, string beans, fresh peas, parsley, cucumbers, radishes, dandelion, beets, carrots, turnips, egg plant, kohlrabi, oyster plant, artichoke, leek, brussel sprouts, parsnips, pumpkins. Limes, oranges, lemons, pineapples, grapefruit, grapes, pears, peaches, raspberries, strawberries, blackberries, currants, cranberries, plums, apricots, cherries, huckleberries, blueberries, gooseberries, etc.	Produce Life and Energy. Increase secreting power of glands. Strengthen body through action on other foods. Enablers. Supply mineral salt deficiencies. Alkaline reacting.

You will find the same foods under different classifications. For instance, milk is in the Protein and Carbohydrates Groups (1 and 2), and in the Neutral Group (3). In that case, the combination is acceptable to the system.

We want you to particularly note that the Carbohydrates and the Hydrocarbons together comprise Group Two.

. . . JUST TALKING IT OVER . . .

In this third set of instructions there is much for your earnest consideration. We trust that if you have never studied geology that you will devote such time to this lesson as will give you a clear mental picture of the development of this earth. Nature has indelibly written the history in the earth's formations. There you can see the workings of the life principle over millions of years.

Read and re-read the first section because you want to definitely understand that nature is always working for perfection and this has been so from the beginning. The very nature of the earth will constitute proof to you of that fact. It should inspire faith and with that faith you will learn to dare and do.

In the second section you will find so much of physiology compressed into such a small space and so simply and clearly written, that you should give it careful study.

Along with the physiological structure picture, we are giving you a picture of the chemical action that takes place in that structure when food is taken into the system. The food charts and other matter given you in these instructions, you will want to refer to in the future.

A safe rule. Each meal a few simple foods. A variety in the different meals. Don't strive for great variety in a single meal.