

A STUDY COURSE IN NUTRITION

By Forrest Shaklee Sr., DC, DD

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PROLOGUE

In remembrance of Dr. Forrest Shaklee, Sr.

This work is considered by many to have originated from Forrest Shaklee, D.C., D.D. It first appeared in the 1950's as the "Little Red Book" and has provided many students of nutrition with a practical discussion of the subject. Being a visionary pioneer in the field of Chiropractic nutrition and nutritional supplementation, Dr. Shaklee knew that his clinical observations would appeal to "every man" and establish a foundation for better understanding of nature's secrets. Even though the scientific content of this manual is a half-century-old, the style and content of the material is elegant and clinically sound. This work approaches nutrition with both the respect and personal philosophy of a brilliant scientist and physician. For the reason of practicality, this work is not referenced with the scientific literature of its day and need not be. Annotations are included to bring the reader up to date and emphasize the brilliance of Dr. Shaklee. I hope you will enjoy his warm wisdom and common-sense approach to the changing science of nutrition. Every person who desires to more fully understand the vastness of the field of nutrition must read this work. It has influenced my chiropractic practice and personal application of nutrition for over twenty-five years.

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PREFACE

The subject of nutrition is so vast and complex that no human mind has ever fathomed all its secrets. Many of them may never be unraveled, but the basic principles are known. This STUDY COURSE is based upon these principles, as they are known to me and to thousands of other scientists.

Nature is orderly and balanced. Man is the "boat-rocker". He often upsets Nature's balance with results that are catastrophic. It is our duty, yours and mine, to study the complex relationship that exists between natural nutrition and strong, healthy tissue cells.

No form of life stands entirely alone. Bacteria devour vegetation to enrich the soil - plants devour the enrichment of the soil - animals devour the plant. Thus, we see the completion of life's cycle. Knowingly, or not, man must follow the same rules that govern all other living things!

As you take your place among the thousands of others who are following the NUTRITION WAY TO HEALTH, I wish to extend to you a most cordial welcome. May the truths that are presented here sink deep within your consciousness and guide you into a most healthful, happy and prosperous life.

It is not my intention merely to entertain you. This is a STUDY COURSE, and it will require careful reading and re-reading. It is based partially upon the findings of the world's most learned scientists, but primarily upon the more personal revelations emerging from my own research endeavors in the field of nutrition.

While I would not forget the invaluable assistance of my associates during the past half-century, I wish, also, to acknowledge the inestimable value of the cooperation I have received from the thousands of individuals who have employed this, the NUTRITIONAL WAY TO HEALTH, through these many years. Without them this course could never have been written.

I have chosen the question-and-answer method of presenting these facts, as I feel it will better define each subject. Then, too, this method lends itself more readily to quick reference. The table of contents at the beginning of this course will give you instant directions to any question you may later wish to re-examine. I trust that you will have many years of profitable, healthful pleasure from your study of this course.

The nutritional facts I have recorded are, of necessity, a reflection of my own personal experiences. Such experiences stem both from the effects I have felt in my own body, and from the thousands of cases that have passed through my office during my long years in general practice. So personal and so valuable have been those experiences that, as the years roll by, I have come to consider the date of my "birth" as being that time when I first tasted the fruits of NATURAL, ORGANIC NUTRITION.

If you will pardon the digression, I should like to offer the reason WHY I consider the beginning of my life to be so interrelated to the beginning of my natural, organic nutritional experiences....

Indeed, I could hardly consider it otherwise, for I had been existing in a state of semi-death before that time. The verdict of the leading medical doctors had been--DEATH! Even when I was born, my parents were advised that "your baby cannot possibly live".

You see, I was what was termed "a consumptive baby". There was no known cure for such a condition. I must confess that, many times during my childhood, I considered the prognosis to be correct. In fact, there were times when the spark of hope grew dreadfully dim. Yet, always, deep within my Inner-Consciousness, there was a spark - a WILL TO LIVE. Years of suffering, years during which my LIFE FORCE seemed always hovering in preparation of flight, left a scar I shall never forget. But, at last, they came to an end -and I BEGAN TO LIVE.

My "life" began when my parents determined to put an end to the negative head shaking of the doctors. Their deep, abiding faith in things natural led them to move to an Iowa farm, where the fertile soil produced the quality of nutritional substances my body needed in its struggle against the ravages of tuberculosis. Here, too, I could enjoy the sunshine and breathe the pure air.

No, it was not a miraculous cure, but it was a sure one. All medication was discarded. It had proven ineffectual, anyhow. My food was taken directly from our own garden. And Nature went to work. Soon the manifestation of pure, natural, organic nutrition became clear. The Life Force within my pain-wracked body could express itself more freely -- and, as you will learn from the study of this course, the expression of one's Life Force is HEALTH.

It took years to rebuild such a depleted body structure as mine, of course, but I am happy to say that the rebuilding process was thorough and complete. I have enjoyed the finest of health for dozens of years now, thank you.

Yes, it was over sixty years ago that my Life Force gained freedom of expression in my body. They have been gloriously carefree years! I haven't taken a dose of medicine during that time, nor have I experienced a sick day. While the X-Ray clearly shows numerous tubercular scars in my lungs, they are only "signs of the past".

Proof that natural nutrition CAN restore a disease-ravaged body is amply attested to by the fact that I took part in strenuous sports during and after my college years. I participated in baseball, track (I ran the one and the five-mile), wrestling, boxing, and weightlifting. Although, today, I have reached what is commonly termed "an advanced age", I still possess unusual physical agility. My physical stamina allows me to take long hikes in the mountains at elevations that challenge the strength of younger men.

Yes, Friend -- I know from personal experience whereof I speak. Every statement made in this course is based upon over a half-century of study and research in the field of nutrition. I am not a food faddist, as you will soon see. I have, however, dedicated my life to the dispersion of information pointing to the NUTRITION WAY TO HEALTH. I trust that you will seriously and conscientiously study this course. If you will do that, I am sure that you, too, will be rewarded with better health, greater happiness, and a lasting sense of well being.

SECTION ONE

The growing number of books on the subject of nutrition attests to the interest felt by an ever-increasing number of health-seekers. But, I am not writing a book. Neither have I any pet theory to expound. The questions I have used in the following pages are those asked by health-seekers just like you. They are questions put to me from the audiences assembled to hear my many public lectures. I doubt that a question will come to your mind that you do not find answered in this course.

It is my intention to make this course the greatest source of information you have ever studied.

And, now. . . Let us enter into the discussion of THE NUTRITION WAY TO HEALTH. Read each answer carefully and weigh its substance on your own scale of experience. Naturally, the first question that comes to mind is:

What will the study of this course do for me?

If you will study this course carefully and sincerely, it is my firm opinion that it will "add years to your life, and life to your years". Of course, the number of years added will depend upon your present age. However, whether it be five or twenty-five additional years, I am sure that you will appreciate the extension.

As I have often stated, I am not so much concerned with how long I live, but while I'm alive, I WANT TO LIVE. Merely existing doesn't appeal to me. I am sure that you, too, prefer to make those "bonus years" the GOLDEN AUTUMN OF LIFE. You can, too, if you will apply the information I am giving you concerning nutrition. So, you see, this course will bring you better health, longer life, greater happiness and increased prosperity.

Can old age really be postponed?

It most assuredly can! The fallacy of old age seems to be the biggest bug-a-boo in the lives of our people. The big question in the lives of us all is not how many years we have lived, but HOW we have lived them.

Everyone is familiar with the short life of a poorly constructed building. It soon appears weather-beaten and old. The same thing applies to the body of man. The poor quality material used in the poorly constructed building simply failed to meet the rigors of time. Can you possibly expect your body to meet those same rigors of time if you carelessly provide poor quality material?

You can postpone old age, IF you will provide good building material. Can such material be found in processed, refined, chemicalized and over-cooked foods? The answer is obvious. This course will give you reasons why, and will point the way to better nutritional health.

Doesn't old age just naturally creep up on one?

Old age never creeps up on anyone. In spite of the fallacious ideas of those who are approaching the golden years of a productive life, old age is not lurking in the background. There is no use looking over your shoulder in fear of its approach. Old age is not

approaching you from the rear, anyhow - it is somewhere out there in the future. Neither is it a fixed quantity or entity which you can give the distinction of being. Old age is only a mythical state of being, arbitrarily invented by your own process of mind. Haven't you seen individuals who were old at forty, while others are young at eighty?

Old age, then, is a combination of mental attitude and physical wellbeing. Either one may be in the plus or in the minus column of your life's ledger. Regardless of the column in which it appears, you are responsible for its appearance there. And you CAN make new entries in that ledger regardless of your age. All you have to do is start living THE NUTRITIONAL WAY TO HEALTH.

Do you mean that I can offset the effects of old age?

At the risk of being accused of unnecessary roughness on those of advanced years, I must state that far too many of us who are basking in the glory of those golden years of our lives are using old age as an excuse. Before you condemn me for making such a statement, allow me to assure you that the date of my birth entitles me to speak from experience. I know that old age is on the horizon, but, as the traveler discovers, the horizon is only an imaginary line. For those who resolutely advance toward it, the horizon continues to recede until night closes in upon them.

Yes, the effect the years have upon you can easily be prevented. Man cannot live forever, of course, but he can live free from pain and discomfort - IF he will provide the natural nutritional substances necessary to keep his body in good repair.

Advance toward that horizon with open eyes and mind, see if it doesn't recede for you, too.

Doesn't old age slow down the body functions?

Yes, the years may slow your tread, but they need not mar your horizon. As long as you project your thoughts into the future and prepare for such a future, the discomforts of old age will remain out there beyond the horizon. It is only when you bow your head and limit your horizon that old age closes in upon you. However, the number of years you have lived has little to do with when you start limiting your view of the future.

With my history of ill-health, how can I expect an enjoyable old age?

Take note of yourself and those about you. When did the first sign of old age appear? Didn't it arrive at the time you or they turned your gaze from the horizon of the future and began looking back upon the discomforts of the past? You see, old age is lurking just beyond the horizon, so never turn your back upon it. FACE FRONT! Keep your eyes and thoughts upon the future. After all, the future is all you have left, so determine to live it to the full. Live each day as though it were the first day of your life -- enjoy every minute of it and plan for a happier day tomorrow.

What if your past HAS been marred with ill-health? You are now starting on THE NUTRITION WAY TO HEALTH. Look to that day in the future when your body will be supplied with Nature's life-giving substances.

Will proper food postpone the appearance of old age?

As I have pointed out, "YOU ARE WHAT YOU EAT", so why not eat the best foods obtainable? That is the sum and substance of this entire course of study. If you are not food-conscious now, you will be before you complete your studies.

Your body is constructed of natural nutritional elements. All inorganic, unnatural substances are just so much excess baggage. Such excess baggage may become the breeding ground of disease. Are you willing to risk such a calamitous adversity? If you want your Life Force to have youthful expression, provide your body with building material that will assure youthful vigor and strength in your tissue cells.

Is nutrition really that important to our state of health?

I will answer that question by quoting from the United States Department of Health, Education and Welfare booklet, 1955, on NUTRITION AND HEALTH GROWTH:

"Healthy growth depends more on good nutrition more than any other factor. From the beginning of growth in the prenatal period, to the time when the child attains his full size as an adult, the food that he eats and his ability to convert that food into energy and new body tissues will influence the state of his health not only as a child but throughout life."

There you have the answer to your question as stated under Government authority. Must I add more?

Will the proper food, then, assure me of a more healthful life?

Again, allow me to quote from another authoritative source. Bulletin 197, page 6, FOOD FOR HEALTHFUL LIVING, Agriculture Extension Service, Ohio State University:

"The food we eat has much to do with our health. Both the kind and the amount of food we eat will make a difference in the size and quality of our bones, muscles, nerves and other tissues of our body. It will make a difference in our strength, and what we can do. It will make a difference in our appearance. It will even make a difference in our disposition."

The differences mentioned in the above quote are the ones I wish to emphasize. Through the use of better nutrition, you can cause those differences to all be in your favor. In the following pages you will find detailed instructions in what foods to eat to bring about such favorable differences.

What about using food supplements?

Nutritional Researchers as well as Medical Researchers have found that supplementing your regular diet not only improves your general body efficiency, but also aids your body specifically in overcoming nutritional deficiency diseases. In other words, protein, vitamins and minerals provided in tablet form not only help you overcome nervousness, loss of energy, and the general rundown condition, but have specific values in eliminating certain health-destroying conditions.

It has been authoritatively demonstrated that, in spite of your "three square meals a day", you may be suffering from malnutrition. The addition of a natural nutritional supplement will certainly help you overcome your nutritional deficiency weaknesses.

Is it safe for me to use vitamins for self-treatment?

No. I do not think it advisable for anyone to assume the responsibility of self-treatment through the use of specific vitamins. Consider that the findings of autopsy surgeons verify death-certificate diagnoses in only about 50% of the cases. If you feel that you are a better diagnostician than the average doctor, then you might have a chance of exceeding this 50% mark. You might have some excuse for prescribing specific vitamins.

However, I am not in favor of even the doctor's doing so. I believe it much better to supply all of the nutritional elements necessary, and allow the intelligence of the cell to make its own choice of those it needs. Make sure that the food supplements you use supply all of the natural nutritional elements your body is known to need, then put your trust in Nature to build a stronger, healthier body.

Don't you believe in any form of treatment?

Yes, of course, I do. But I don't believe it necessary to allow the body to get into such a condition that treatments are required! Health is the opposite of disease. Why not do everything within your power to build health? Isn't that why you are studying this course? I truly believe that the information you will gain from your studies will, when applied, lead you into a more vigorous, healthful life. As with most other worthwhile accomplishments, it will require thoughtful consideration. But with your health, happiness and well-being at stake. . . well, it's worth it. And I assure you that you will be generously rewarded for your study efforts.

If one believes in treating disease, why bother with the diet?

Personally, I bother with my diet because I believe in treating my body fairly. You believe in the prevention of disease, I'm sure. Well, through the use of natural nutrition, you are certainly treating your body fairly. This is the opposite of abuse. Of course, there are many ways for you to abuse your body and cause disease, but, once you discover THE NUTRITION WAY TO HEALTH, I feel that you will discard the abuses.

One thing is certain -- treating disease is only necessary AFTER one has lost their health. Even then, the nutrition way to health will help him regain it.

Yes, I believe in both modalities. I believe in walking for health, but I don't condemn the use of an automobile or plane in covering long distances. Remember, a treatment, in itself, is not a cure. It is only an assist to Nature. "ONLY NATURE CURES".

Hasn't medical science eliminated many diseases?

I wouldn't use the word "eliminated", but medical science has accomplished a great deal. Its greatest triumph, though, has been in the field of sanitation. In this manner, the breeding ground of many diseases has been eliminated. The elimination of ALL disease, however, through the use of any form of treatment, seems beyond reason. Not all diseases are caused by bacteria or viruses.

Should we belittle the medical profession?

I NEVER "belittle the medical profession". Why should we do so? We are in two separate fields of endeavor. Their field is the treatment of disease, while yours and mine is the building of nutritional health. Disease and health are direct opposites! Let the doctors treat disease. They have been trained to do so. Our responsibility --yours and mine -- is to

treat our bodies fairly by providing the food elements with which to build strong, healthy bodies. Go to your doctor if you must, but you still have to pay your own grocery bill. Since you DO buy your own food (the doctor doesn't include this service in his bill!), then why not demand pure, health-building foods?

Do you suggest, then, that health is my personal responsibility?

I most assuredly do! You put the food in your mouth-- no one else does it. This food SHOULD be capable of helping your body construct strong, healthy cells. If you have allowed a perverted appetite to cause you to eat disease-causing foods, whose fault is it? Yes, health IS a personal responsibility. Why not acknowledge that responsibility and start giving your health the protection it deserves?

Regardless of what doctor you visit, regardless of what form of treatment he may use or prescribe, he cannot put health into your tissues. He must depend upon Nature's forces for that. Even the surgeon must depend upon Nature to heal the wound.

Can you tell me the cause of most of our ill-health?

I can do better than that. I can point to it. Go to a mirror, stand before it and open your mouth. There, through that gaping maw, passes the cause of most of your ill-health. Yes, Friend, the foods you eat either make you strong, or they leave you weak.

Food values are reflected in tissue values. There is no other way for your tissue cells to obtain their nourishment. They cannot live without food. Are the foods you are putting in your mouth cell-building foods? Do you just live to eat, or do you eat to live? If you eat to live, you will welcome the information on food you are receiving in this course of study. And you will put it to use.

Is it true, as the papers tell us, that we are the best-fed nation in the world?

It is true that we consume more food per capita than any other nation, but we fall far short of being the best nourished. This is quite obvious when we consult the mortality tables. The United States leads the world in deaths caused by degenerative diseases! The very name given to such diseases – DEGENERATIVE - indicates a nutritional deficiency. Yes, nutritional deficiency undermines the health of our nation.

Can't we depend upon our doctors to preserve our health?

When do you visit your doctor? While you are well, or after you are sick?

No, I don't blame you for waiting. Why go when you are well? He would simply tell you that he could find nothing wrong. You see, he cannot make a diagnosis until AFTER a disease develops. How could he prescribe any treatment if he could make no diagnosis? His business is to treat disease. He cannot sell you his services until after you have developed such a condition.

Allow me to state flatly that the above statements have been made to prove a point -- they are NOT intended as arguments against a periodic "checkup", which IS an intelligent preventative measure.

Now to continue my point... If you wish to wait until after you are suffering ill-health before you do anything about your health-building program, the doctor's office is a good place to go. But this seems to me very much like "locking the stable door after the horse has been stolen". And it makes just about as much sense.

Understand, I am not arguing against doctors, nor am I arguing against your doing just as you please. I merely present to you the FACTS about the health-building qualities of natural nutrition. You may choose either of the two methods for battling disease. But regardless of your choice, nutrition is the foundation upon which your health structure rests.

It always seemed strange to me to hear that old and shop worn phrase, "Protect your health by seeing your doctor". I have associated with doctors all my life, and I haven't found that they protect even their own health! Why is the mortality rate higher among doctors than in any other profession? Can it be that they depend too much on their own medicine?

This isn't an argument against drugs in the treatment of disease. But the nutritional value of foods and their efficiency in building nutritional health cannot be ignored.

I don't wish to knock the doctor. I only question the system of doing nothing till AFTER disease has developed. I believe in preventing that development, and I believe that prevention begins in the home at the dinner table. I have found the greatest means of prevention to be in NATURAL NUTRITION, with sanitation a close second.

Isn't the doctor well versed in health-building?

Not according to the leading Medical Authorities. Their training has been in a field foreign to health. For example, in the February 11, 1958, issue of U.S. NEWS & WORLD REPORT there appeared a statement by Edward J. Stieglie, M.D., noted medical authority with the Department of Health of the United States Government. Dr. Stieglie was quoted as saying:

"Unfortunately, there is as yet, no place in the world that I know of where a concentrated study is being made of health -- what it is and how to measure it."

Does that answer your question? It seems that our doctors are spending far too much time in seeking the means to destroy disease (the effect) and neglecting the means of building health. But, perhaps, the day of awakening is closer than you think. Millions of nutrition-conscious people are taking the matter into their own hands and creating a health-building program. You will soon take your place among them.

Do you mean that our doctors haven't studied the cause of health?

Dr. Stieglie answered that question, too. He is one of our leading authorities on the subject. I, myself, certainly know of no medical institution that includes the study of health in its curriculum. Considering the advancement civilization has made in all other fields, it is almost unbelievable that man remains so ignorant of the fundamentals of health.

Whose fault is it that the subject of health is so neglected?

This course of study is not for the purpose of faultfinding, but I suspect that commercialism has a great deal to do with it. I know that in my own practice I could have made a lot more money by selling treatments than I did through my health-building service. But – always -- I was inspired by the great truths of nutrition which had saved my life, and my Inner Consciousness drove me on to greater accomplishments. I can't explain why. I only know that deep within me is a driving force that propels me on in search of the truth. That same force is causing me to share my findings with you.

Can you tell me what health really is?

Health is not a tangible thing that can be held in the hand or dissected and viewed under a microscope. It is simply the normal expression of your Life Force. Anything which interferes with that expression produces DIS-EASE. Health is as natural as Nature, herself, but Nature is in a constant struggle to overcome the obstacles man places in her way. Man cannot take credit for building health, ever. HEALTH IS THE EXPRESSION OF LIFE, and man cannot create life.

When you have completed your study of this course and have regained your health, you will more readily appreciate your health-giving Life Force. But don't let this realization fatten your ego. The victory will belong to Nature. You will only have obeyed the Natural Laws, an obedience which was expected of you in the first place, when you were given dominion over all things pertaining to human existence. Once you have become fully aware of the "one-ness" of health and your Life Force, you will do everything in your power to preserve and help both. You will realize that your Life Force cannot be freely expressed through starving tissue cells.

What is the relationship between health and disease?

Absolutely none. There is NO relationship between health and disease. They are the two opposites in your life's struggle. Each is expressed in reverse ratio to the other. As man-made interference retards the expression of your Life Force (health) there is a corresponding increase in disease. When such interference reaches a point where there are not enough functioning cells to provide a dwelling place for your Life Force, Life departs from the body.

Health is natural -- disease is unnatural. Both may be fed by the food you eat! The choice of those foods is your responsibility. Eat foods that are rich in nutritional elements, and you will build strong, healthy cells. Eat altered, devitalized foods, and you will suffer from tissue cell starvation.

At my age, do you think it wise for me to make a radical change in my diet?

Don't you think you have played with fire long enough? If Nature has held your body and soul together this long, don't you think it's about time you started obeying her laws? Natural nutrition cannot possibly hurt you, so start giving your body a chance to live.

Why don't our doctors tell us about these things?

Some of them do. Many of our better doctors are beginning to realize the importance of nutrition. For instance, consider the action taken by the American Medical Association at its 1957 National Convention. The AMA presented its Distinguished Service Award and gold medal to Tom Spies, M.D. Was this man of science so honored for the development of some "wonder drug"? No! Dr. Spies is a nutritional researcher. He is universally recognized as an outstanding authority on the subject. No one accuses him of being "just another food crank". He speaks with authority backed by a lifetime spent in clinical and laboratory research. What did this learned scientist have to say in his talk at the convention? Among other things, he said:

"All diseases are caused by chemicals, and all diseases can be cured by chemicals. ALL CHEMICALS USED BY THE BODY -- except the oxygen which we breathe and the water which we drink -- ARE TAKEN IN THROUGH FOOD. If we only knew enough, ALL DISEASES COULD BE PREVENTED, AND COULD BE CURED, THROUGH PROPER NUTRITION." (Emphasis ours.)

Yes, indeed, some pretty big stars are joining the team! The irrefutable truths of Nature's Laws are gradually impressing themselves upon the minds of more men in ALL scientific fields.

Why don't all scientists admit the truth about nutrition?

Scientists are just ordinary human beings. Each has his specific field of endeavor and is usually completely engulfed in his work. He has neither the time nor the inclination to enter another specific field. As more and more medical scientists come out boldly for nutrition, as Dr. Spies did, other scientists will accept the truth.

Wouldn't it help us to gain a better understanding of nutrition, if we knew more about the human cell?

It certainly would. Although this is not a course in anatomy and physiology, I will, nevertheless, cover the life and function of the cell in such a manner as to give you a clear picture of what is going on in your body.

We must look upon each cell as an independent entity. It is endowed with a Life Force and an intelligence that gives it independent expression. There are billions upon billions of cells in your body, and each provides a dwelling place for YOUR Life Force -- your life. So, you see, your "life" is distributed among these billions of cells. The life span of each cell is from 1 to 120 days. Each is dependent upon the food you eat for its nourishment, and its length of life depends upon the quality of that food.

There are many different types of cells in the body. Each type forms into the different structures -- bone, teeth, muscles, brain, nerves, internal organs, etc., and each type of cell requires a different combination of nutrition. We might compare the various cell types to the various types of buildings, which require different types of construction material. There, however, the comparison ends. The body is an organic structure, and is endowed with life.

A cell takes in nourishment and throws off waste. It makes its own structural repairs and gives birth to new cells. In other words, it is a living, individual substance with an intelligence superior in many ways to man, for this intelligence is an endowment of the Universal Creative Intelligence.

What is the size of a cell?

They vary in size, but all are microscopic. A great number of human cells could be placed on the head of a pin.

Can you tell me what a cell looks like?

A cell may be segmented into a number of component parts, but the answer to "what a cell looks like" can be simple. Its nucleus (life center) is surrounded by a gelatinous protein substance. They may be round, long, or flat.

Can this cell move about?

Yes, once it is separated from its tissue cluster. Under those conditions, it moves about in search of food and reproduces new cells in the normal fashion of a single-cell amoeba. However, most cells in the human body are immobile, being bound together in a cluster.

I thought the brain directed all cell action -- how can this separated cell move about on its own?

Every living cell is endowed with an intelligence of its own which is above and beyond that of man. With respect to its cooperative action with other cells in carrying on the activity of your body, it does take instructions from the brain, but its own intelligence directs its internal functions of existence.

How do the cells of the body get their food?

In exactly the same manner as do all other cells in creation. Water is the means of transportation. To give you a better understanding of that statement, suppose we turn to the smallest living animal known to science - the Amoeba, or Protozoan, a one-cell animal.

Let us go down to the sea and dip up some water. We place a drop of this water on a slide, insert it under a microscope, and what do we see? We see the Amoeba, a tiny object that is constantly changing shape. It is darting about in a search for food, darting so fast that we have a difficult time keeping it within the microscopic viewing area. It not only has the power to move about under its own propulsion, but it has the intelligence to search out, accept, or reject certain food elements. It excretes its waste, and the water washes that waste material from the surface of its structure.

There you have Nature's plan of nourishing all types of cells, be they animal or vegetable. That plan is incorporated in one of Nature's Laws, and never changes. Water is always used as the vehicle of transportation. The intelligence of the cell directs its selection of food. Can there be any doubt in your mind that the ocean water contained more food substance than was required by that tiny animal? Of course, there was. Yet it devoured only that which it needed. Now, if man would only show equal intelligence.

What is the difference between an animal cell and a vegetable cell?

There can be a great deal of difference in structure, but they have one distinctive thing in common -- the Intelligence Center. So similar are these nuclei that it is most difficult to distinguish any difference, even under a most powerful microscope. It seems that Nature provided its Life Force with identical places of abode, regardless of the type of cell.

Do you mean that a vegetable cell has life?

I certainly do. The Creative Intelligence is expressed in the vegetable cell fully as much as in the animal cell. Animals are not the only living things on this earth. The intelligence of man has never been able to fathom the mystery of vegetable life, either. Nor has he been able to produce the most simple vegetable structure in the laboratory. He can copy the shape and form, but he cannot give it life.

What is the source of human nutrition?

The primary source is the vegetable. Of course, man may eat the flesh of animals, but all animal bodies must depend upon the vegetable to manufacture the nutritional values necessary to sustain animal life.

Isn't the soil the source of all nutritional substances?

Animal and vegetable life are both dependent upon the soil, but the elements contained in the soil cannot be utilized by the animal, directly. They must first pass through vegetable metabolism. And, strange as it may seem, the vegetable cannot subsist on the soil, alone, either. Its nutritional values must first pass through animal metabolism. Nature has set up the two cycles, each complimenting the other.

I can understand why vegetable metabolism is essential to the animal, but can you explain why animal metabolism is necessary for vegetable growth?

Explaining why Nature has ruled it so is a little beyond the intelligence of man. However, how Nature PROCEEDS with her plan is well known.

It is easy to ascertain that there is abundant bacterial life in normal soil. This animal life devours all organic substances that find their way to the surface area. For instance, the vegetable cycle...

The plant, if not harvested, falls to the earth and the rains or moisture from other sources soften its structure. Whether the vegetation is plowed under or left on the surface, Nature provides the animals to devour it -- bacteria, for instance, and even the lowly angleworm. After passing through this animal metabolism, the substance is ready to be absorbed by the roots and nourishes a new plant.

This cycle is a must for healthy vegetable life. The element of soil bacteria is one of the most important phases of organic nutrition.

How does a plant extract its food substance from the soil?

Suppose we start with a seed. As long as this seed is preserved in a dry environment, there is no sign of life. That it does possess life, though, is determined by placing it in an environment conducive to plant growth. It not only expresses life, but it has the intelligence to proceed in just the right manner.

First -- there must be water to provide transportation of the food elements. As soon as the water soaks through the husk of the seed, its cells become active. For a short time this COULD be sterile water, for the seed carries its initial supply of food within itself. Normally, it develops its roots and sends them down into the soil. These roots may be likened to a suction hose. They suck up the water from the soil and, with it, the substances the plant needs for growth. Here, again, you see water transporting food to the cell. As these roots extend themselves into the soil, they are intelligently directed to the location of water and food substances. Intelligence? Of course! Haven't you seen roots seek out water?

As the water is sucked up into the plant, it bathes the walls of the cells and the cells pick up needed nutrition. After its precious cargo has been delivered, the water passes to the surface, or leaves, and evaporates into the air. The manufacturing process (digestive) takes place in the plant, and the finished products -- protein, vitamins, minerals, fats, and carbohydrates -- are stored in cellulose capsules. There it awaits liberation through the digestive process of the animal. This may explain why the vegetable is so often called the "plant factory".

Does man digest all of the vegetable?

No, for the cellulose capsule, itself, contains very little that man can use. It performs an important function in the digestive tract, however. It supplies the bulk which aids in removing the waste material from the bowel.

Does digestion actually begin in the mouth?

Yes. The saliva that is secreted by the glands in the mouth contains Ptyalin, an enzyme that converts starch into dextrin and maltose (a form of sugar). Of course, mastication (chewing) of the food is a very important contribution to the digestive effort. Most people fail to chew their food enough. The more finely the food is ground by the teeth, the easier it will be for the digestive juices to reach the nutritional values and prepare them for assimilation. Even soft foods should be chewed, for chewing stimulates the flow of saliva and aids in the thorough liquefaction of food.

Is the stomach the main organ of digestion?

Actually, most of the digestive process takes place in the small intestine, but the stomach performs a very important part in the digestive effort. When food is swallowed, it passes through an elongated tube called the esophagus and empties into the stomach. Once in the stomach, it is thoroughly churned and mixed with the digestive juices that are secreted by glands located in the wall of the stomach. It is estimated that there are some 35,000,000 of these glands. Their secretion is a strong acid that contains the enzymes of digestion. These enzymes split the amino acid of the protein. They also break up the fats and prepare them for further digestion in the small intestines.

How long does the food remain in the stomach?

The length of time varies greatly, depending upon the type of food, but the mechanism of the stomach is such that it does not pass the food on until it is thoroughly liquefied and mixed with the digestive juices. So, the time element may vary from only a few minutes to several hours.

Do the small intestines extract all of the nutritional elements from the roughage?

Seldom do the small intestines perform their function so perfectly that all of the nutritional elements are separated from the roughage. Usually, the food has not been masticated sufficiently to break up all of the cellulose capsules, nor has the acid of the stomach softened the cellulose structure sufficiently to liberate all of the nutritional elements. Much value is lost and eliminated.

How long does it take the undigestible portion of our food to pass through the digestive track?

While 18 to 24 hours may be considered normal, there are many sluggish bowel cases that retain the refuse much longer. However, anything over 24 hours is conducive to putrefaction and the absorption of harmful substances. The absorption of such toxic material presents a serious health problem to more cases than is commonly suspected.

How do the food values travel from the intestines to the tissue cells?

There are some twenty feet of small intestine in which the food is churned by what is called "peristaltic action". This is the squeezing action that moves the food along the canal. Innumerable glands are situated along the walls of the intestine. These glands secrete digestive juices which, along with the bile from the liver, complete the process of digestion.

From the intestinal walls protrude millions of thread-like suction tubes (called VILLI). These tubes perform much the same function as do the roots of the vegetable, as they suck up the water that is laden with nutritional values. Again, we see water acting as the vehicle of transportation. As water floats the nutritional values out from among the indigestible roughage, the tiny suction tubes pick it up and empty it into the blood stream. But, this is a specific section of the blood stream, NOT the general circulation.

This special section is what is known as the Portal Circulation. You see, the food substances taken from the intestine are not yet ready for assimilation. They are first emptied into the Portal Vein and carried to the Liver.

What does the liver have to do with digestion?

Let's say that the liver function is above digestion. Of course, the liver produces bile that is used in the regular process of digestion, but the liver holds the distinction of being "THE MASTER CHEMIST" of the body. It is here that the process of digestion is climaxed. I will not delve into the intricate functions of the liver, for to do so would require several large volumes by themselves. However, I will state that the chemical processes carried on in the liver baffles our most learned scientists, chemists included.

What is the function of the liver?

The liver acts as a chemical laboratory, manufacturing plant, and storage room. It is in the liver that poisonous waste is separated from the nutritional elements and manufactured into bile. ALL nutritional substances are filtered, altered, stored, and rationed out to meet the needs of the body. It is clearly seen that the liver is one of the most important organs having anything to do with our nutritional supply.

It is also the most abused organ in the body, for the careless diet of civilized man throws a tremendous load on the liver! Then, too, the chemicals that get into our vegetables -- due to chemical fertilizers, poisonous sprays and food additives -- have more than doubled its work. Should the workload become too heavy and beyond the ability of the liver to maintain purity of the food supply, such chemicals sneak through to affect the tissue cells. In that case, all types of degenerative diseases may develop. Various and many are the symptoms that may appear.

Is it any wonder that degenerative diseases are affecting so many people today? The load of chemicals carried to the liver of the average person is just too great to be handled. The liver is literally swamped. Isn't it about time we discarded all food additives and returned to the old-fashioned - but SAFE - methods of organic farming?

How do the food values get out of the liver?

From the liver, the nutritional elements enter the hepatic blood vessels and pass on to the heart. The heart sends this blood to the lungs. In the lungs it is aerated, then returns again to the heart. It is now ready to start its journey through the body to the tissue cells.

How do the food values get out of the blood vessels?

Blood is composed of red and white corpuscles and plasma. The plasma, or serum, as you may have already guessed, is the watery part of the blood. So, once again, we find that water acts as the vehicle of transportation. The muscular structure of the large arteries through which the blood flows does not allow the escape of any of the blood plasma.

However, the tiny terminal arteries are of different construction. Their longitudinal and circular fibers are so arranged as to form a screen. Whenever a certain group of cells is in need of nutrition, the nerve centers controlling the blood vessels in that area cause these screen-like walls to relax. The "screens" open just enough to allow the nutrition-laden plasma to escape, but not the blood cells. Thus, the vehicle of transportation, with its precious cargo of nutrition, is freed to bathe the walls of the tissue cells.

This is the EXACT method Nature used to supply nutrition to all cells, animal or vegetable. As the fluid seeps around and between the cells, each cell selects its food and its waste is washed away. It selects its nutrition, that is, IF the diet has supplied such values. If there isn't a sufficient supply of nutritional substances, those cells go hungry! Continued lack of supply means weakness or, perhaps, starvation. Of one thing you may be sure - those cells will receive ONLY the values you supply.

What happens to the fluid, or plasma, after it passes the cells?

Here, again, we find that Nature has provided tiny suction tubes, similar to the roots of the plant. These tiny tubes are the beginning of the lymphatic system, commonly termed the sewage system of the body. The lymphatic system does not have a pump, such as the heart and its forced circulation of the blood. Lymphatic circulation is dependent upon an ingenious arrangement of valves, allowing the contents of the lymphatic canals to flow only in one direction. The contractions of muscles squeeze the canals and force the liquids on its way -- but in one direction only, due to the valves. When muscles relax, the tubes spring back to normal size, causing a vacuum that sucks up the fluid from lower sections much like the action of a fountain pen in the process of being filled. In this way, the tissue cells are drained of their accumulated waste.

Nature has provided safeguards along the length of these canals to neutralize the toxic nature of the waste matter. These are known as the lymph glands. Their secretion neutralizes the fluid, rendering it harmless by the time it is emptied into the blood stream and passed on to the organs of elimination.

Is the process of digestion and assimilation really that complicated?

Well -- I thought I had simplified the processes as much as possible and still allow it to be informative. I'm afraid it would have been really complicated, if I had gone into all the intricate complexities. However, I trust that I have made it sufficiently clear to bring you to feel a closer relationship with your tissue cells. And I trust that you will realize the total dependence of those cells upon YOU! You, and you alone, can provide them with life-giving nutrition. You, alone, can keep them vigorous and strong!

If I have intensified your interest in the subject of nutrition and caused you to feel the closeness that exists between the Intelligent-You and the Intelligent-Life-Force being expressed in your cells, then your further study of this course will have been rendered more valuable by far. You will take a more personal interest in the study of nutrition.

Above all, I know you have now grasped the significance of the FIXED LAWS OF NATURE and her methods of supplying nutritional substances to cells. A good Nutritionist is a curious one. He wants to know what food is, and he wants to know WHY it is.

Can't I eat any of the "regular" foods?

Yes, of course, you can. The regular food won't hurt you. It is the IRREGULAR foods that do the damage -- those that have been altered, refined, processed, chemicalized, and over-cooked.

If you have studied the proceeding pages -- really STUDIED, not merely read them -- you have determined that self-discipline is a necessity if you are to regain and preserve your health. One of the things you have learned is that mental and physical activities should obey the internal laws of your body. What is to be gained by this? The prevention of nutritional deficiency diseases and the maintenance of good health and energy.

With such a reward awaiting us, it would seem that EVERYONE would conform to those laws. I am not going to tell you that it is an easy task. It isn't. But, I will say that the longer you practice conformity to those laws, the easier it becomes! A German Philosopher once said:

"Life is that power in the individual which can force external forces to obey an internal law."

That power -- your Life Force -- will aid you in enforcing self-discipline.

Must I always follow a diet?

The need of self-discipline is graphically illustrated in a statement made by D.T. Quigley, M.D., Chief Medical Research Officer of the University of Nebraska. Dr. Quigley states:

"999 out of every 1000 people lack proper nutrition. Only two persons out of 2,511 are receiving the vitamins, minerals, and protein they need."

Does that answer your question? I don't think you should call it following a diet, though. I think you should consider it just a common sense method of eating.

The next time you read an article in the commercial press, or hear anyone say, that the regular diet provides all of the vitamins, minerals, and proteins the body needs, just remember what Dr. Quigley said. You might also recall the words of that learned man of old -- "TO GREED, ALL NATURE IS INSUFFICIENT". It would seem that, to those who profit by altering our food, Nature is considered insufficient with a vengeance.

But, to the true Nutritionist, NATURE IS ALL-SUFFICIENT. It is time that man got back to Nature, that we alter NOT our foods but our food habits.

Is commercialism the cause of the poor quality of our food?

Yes, 90% of our people are dependent upon commercial interests for their food supply. The farmer is eager to grow two ears of corn in place of one, so he uses stimulation chemical "fertilizers". The effect of such chemicals may reduce the nutritional value of these two ears far below the value of one ear grown on organically fertilized soil, but the two ears bring a higher price. So it is with all food processors, almost without exception. Profit determines the method of preparation.

Whose fault is it that our foods are so altered?

The consumers'. Eye and taste-appeal have replaced value-consciousness. Let's consider bread. I can remember when a loaf of bread was made from the natural grain, but not so today. The altered, refined, and processed flour would never have become popular, IF the consumer hadn't demanded it. The flour millers simply catered to the buying

public. Of course, the flour became so worthless, nutritionally, that the United States Government stepped in and refused to allow the millers to sell it!

How was this altercation settled? The millers agreed to add five synthetic, man-made substances as replacement of the natural nutritional elements removed in the milling process. The result of such an insult to Nature was given the name of enrichment. Enrichment of what? It may be that they did enrich the worthless flour the Government wouldn't allow them to sell, but there certainly was no enrichment over the natural nutritional elements Nature put into the wheat -- nothing approaching it.

The Boston Nutritional Society, of Boston, Massachusetts, quotes Henry W. Trautmann, M.D.:

"So-called enrichments in foods are enrichments in comparison only with totally devitalized products -- not with original food substance... Every method of refinement, processing or preparation causes a loss of food values... How have the millers of flour become so wise as to remove all the vital elements from the wheat and then guarantee 'enrichment' by adding minute amounts of thiamine, riboflavin, niacin, calcium, and iron? Why these five factors only? There are about twenty trace elements essential for nutrition."

Must we obey the laws of nutrition in everything we eat?

We should -- although, it is not so much what we DON'T eat that robs us of the nutritional elements. Your body can eliminate worthless food, but it can't build tissue cells out of the foods you don't eat. The basic laws of nutrition are repeated again and again in Nature's plan. The nourishment of both animal and vegetable cells is dependent upon them. Better nourishment for the vegetable cell comes from richer soil, while better nutrition for the animal cell comes from richer vegetables.

Eating a portion of devitalized food is not going to kill you, but it may prevent you from eating enough of nourishing food. Are you willing to starve your tissue cells just for the pleasure of eating some pet food of yours?

I have given you the complete cycle of Nature's Nutritional Plan - from the earth, through the vegetable, through the animal and back to the earth -- "DUST TO DUST". Yes, even your physical body must return to dust. Of course, you can delay the date of that return, IF you obey Nature's Laws. And you can certainly make your stay here on earth more enjoyable by following THE NUTRITION WAY TO HEALTH.

Diet may build health, but I already have a disease -- what can I do now?

First, let me say that I don't care what the name of your disease may be. I am simply not interested -- to me, it is just a state of DIS-EASE in your body. In other words, a lack of ease. Furthermore, how do you know what CAUSED that disease?

"Well," you say, "my doctor made the diagnosis and said I needed treatment."

Yes, he made a diagnosis and gave your trouble a name. But what CAUSED the development of such trouble? Was it due to nutritional deficiency in whole or in part? Could it have been prevented through the use of natural nutrition? Was it wise or safe for you to have waited until AFTER the condition developed to a level making diagnosis possible? And now that the trouble DOES exist, who is going to "cure" you? The doctor?

NO -- IF A "CURE IS GOING TO OCCUR, IT WILL BE NATURE WHICH DOES IT! The doctor will help Nature. YOU can help, too. You can supplement the doctor's efforts and services by providing Nature with the material she needs to make necessary repairs, and this will be in

the form of nutrition. Drugs or treatments of any kind CANNOT provide the health-building nutritional material.

The doctor said my resistance was very low, how can I build it up?

There is but one answer to that question -- NUTRITION. I have previously stated that most diseases are man-made, brought on by the forces of civilization. It's a fact. Civilization has forced man to live an unnatural life, eat unnatural food, and, in many cases, has contaminated his food through chemicalization. Some of these chemicals have been condemned by our Government as being cancer-causing agents. Note the campaign waged by the Federal Food and Drug Administration to remove certain foods from the market which had been sprayed with a chemical KNOWN to produce cancer in laboratory animals.

Yes, the crimes of civilization are many. Yet man continues to eat many foods in blissful ignorance of the damage he is doing to his health. He doesn't know -- but ignorance of the law is no excuse in the courts of justice. This is true in Nature's court, too.

There is strong hope for you. Of one thing you may be sure -- Nature intended that you be well and strong with sufficient resistance to ward off diseases. NATURE WORKS FOR YOU, NEVER AGAINST YOU! But you must allow her to do so.

Must I always fight against disease?

We are all constantly fighting a battle against disease, whether we realize it or not. It is the most important battle you have ever been in. Determine -- NOW -- to nourish your body properly and increase your strength and vitality, to raise your resistance against disease and prevent weakened cells from strangling the expression of your Life Force -- which is HEALTH.

Of course, you want to enjoy good health, but are you willing to pay the price? You can't even enjoy a movie without paying the price, so why aren't you willing to pay the price of good health. It takes time -- yes -- but the time spent in building health is not nearly as great as the time spent in illness.

Good nutrition doesn't cost nearly as much as hospital and doctor bills! We all know it takes a strong body to fight off the onslaught of disease.

I don't mean muscular strength. Size of body only determines the number of cells necessary to fill out the skin. A person weighing only 100 pounds may be in a far healthier state than one weighing 200 pounds, and with far more "strength" It all depends upon the vitality of each individual cell.

Does good nutrition always build strong, healthy cells?

Unfortunately, no. During my many years in practice and during my study of clinical and laboratory tests, I have found many people "starving to death on a full stomach". They were eating enough good nutritious food to maintain themselves in a strong, vigorous state of health, BUT they were also stuffing their systems with certain altered, devitalized foods, and, in some instances, over-eating certain other injurious foods.

Most of these cases were suffering from "tissue constipation"! That is an accumulation of toxic body waste among the tissue cells which provided a breeding ground for disease. Even the good nutritional values they were following were so contaminated by this toxic waste that it was unfit for cell consumption!

How am I going to free my body of such accumulated waste?

Perhaps, before answering that question, I should point out to you that health-building is not an overnight proposition. How long has it been since your tissue cells have had a square meal, free of toxic contamination? Has it been months? Perhaps years? Certainly, during that time, there has been quite an accumulation of waste matter.

I remember -- when I was a young fellow on the farm -- we wouldn't ask even a hog to feed at a filth-filled trough. Do you have as much respect for your tissue cells as a farmer has for his hogs? Well, then, STOP EATING.

Yes, if you are to free your body of accumulated waste, you must stop feeding waste in. A few pages back, I asked you to stand before a mirror, open your mouth, gaze into that gaping maw through which both health and disease pass. I ask you now -- have you decided which it will be?

If you have decided to travel THE NUTRITION WAY TO HEALTH, it will be better for you to first drain the filth-traps that have been multiplying through the years. When the farmer clears the filth from the hog trough, he flushes it out with water. I know you don't like having me compare your filth-traps to a hog trough, but I am using this somewhat repulsive comparison in the hope that I will jar you out of your complacency. This is not an ego-tickling job I've undertaken. YOUR LIFE is at stake, and I intend to do everything within my power to awaken you to the seriousness of the situation!

When I said STOP EATING, I meant just that. Stop eating and start flushing your digestive system, liver, blood, and tissue cells with water. Drink as much water as you can hold. Then drink some more.

As one person told me, "I drank water till it ran out my ears." Drink at least one glass -- two, if you can -- every hour during the first day. Take a low enema that evening, or use an herbal laxative that is mild, to help free the bowel. And DON'T worry about the terrible stench that comes from your bowel movement. Just remember that some of that filth was drained from your tissue cells, and be GLAD that you can flush it down the sewer.

How long must I stay on a water diet?

Referring back to my explanation of how water washes the waste from the walls of the tissue cells, you will appreciate the importance of this cleansing period. It will not be a pleasant task. You cannot clean house without "raising a dust". This is precisely what you are doing -- your body is "cleaning house", and the "dust" may cause some discomfort.

How long should the housecleaning take? It all depends upon the amount of accumulated waste there is to remove. You may do the cleaning on weekends, if you prefer. Of course, it will take longer to do the job, but it may be more convenient that way.

Ordinarily, I suggest a three-day cleansing period. The first day on water only -- the last two days on fruit and vegetable juices. It is best to alternate between the latter two; a glass of fruit juice, then, two hours later, a glass of vegetable juice. Make sure that the juices you drink are fresh, raw juice. If you have been a coffee drinker, you may find it necessary to drink a cup of coffee to ease the headache -- but, then, this may also be a good time to break the coffee-habit.

If you are a "week-ender" -- by that I mean setting aside just one day a week for the job -- you can choose either water, fruit juice, or vegetable juice. During the days between, you might also establish the habit of drinking fruit and vegetable juices. They are wonderful tissue-cleansers, and should be a part of everyone's diet, regularly.

Is such a radical cleansing period actually necessary?

I suppose not -- for "they all of one began to make excuses". You may have been a "walking cesspool" for years, so I suppose your body can stand it for awhile longer. It seems to me, though, that we have been talking about the preparation for health-BUILDING -- but, if you prefer to live with those filth-traps it is your privilege to do so. Live for awhile, that is.

But must I drink so much water and fruit juices?

Water, fruit juice and vegetable juice are natural cleansers, but you are confronted with a huge task. You wouldn't attempt to scrub a dirty floor with a pint of water, would you? Well, then, if you are going to do a tissue cleansing job, use enough cleanser to do the job right. You see, this matter of health-building is just the application of common sense. Nature will do a good house-cleaning job, if you will stop stuffing the digestive tract with food and supply the water to flush the tissue waste away.

I can't go all day without food. I get a headache. What'll I do then?

Drink plenty of water to wash the headache-causing toxic waste out of the bloodstream. The more you need the cleansing, the more discomfort you may be called upon to endure. Don't bemoan your fate -- be thankful that you are freeing your body of that disease-breeding waste. You may say you "can't go all day without food". But how many times in the past have you gone all day without food when you were too sick to eat? I know that once you have experienced the joyous freedom of a clean tissue-cell structure, you will NEVER return to your old careless eating habits.

However, let me call your attention to one thing. Building a strong, healthy body is not a human victory. It is Nature's triumph over man's perverted appetite. Don't offer the excuse that "it is just human nature to eat too much", for everything man does is human nature. Human action is directed by human intelligence -- or the lack of it -- and it may direct him into criminal violence as well as malnutrition suicide. The results you obtain from the study of this course will depend upon what your intelligence directs you to do with the information you receive.

Perhaps the following statistics will help you make up your mind. It is estimated that there are over 2,000,000 hospital beds in USE in the United States. Do you want to occupy one? The building of new hospitals has cost the taxpayers more than \$15,000,000,000 -- and, STILL, authorities estimate that there is a need for 7,000,000 more hospital beds! I could fill several pages with such figures, but I will call your attention to just one more item: medical and hospital bills, alone, cost the public over \$14,000,000,000 EACH YEAR -- and the costs are mounting.

Where should I start my rebuilding plan?

This question reveals what I consider to be the greatest mistake any budding-Nutritionist can make. To many are disease-conscious, therefore they think in terms of treating certain parts of the body. This is a sad mistake, for THE NUTRITION WAY TO HEALTH was never presented as a treatment of any specific organ. It is intended to benefit but one disorder -- tissue cell starvation. This, my Friend, includes the entire body. If your entire body is invigorated and revitalized, why worry about any one specific location?

Start your rebuilding plan exactly as previously outlined -- by adopting a cleansing program. Suppose you were going to reconstruct an old building. Would you simply add some extra braces here and there? No, I think you would start by cleaning out the

accumulated rubbish. Well, that is precisely what you should do with your body. You certainly don't want to cover up any of the disease-causing poisonous waste and allow it to contaminate your newly constructed cells, so your first effort should be directed toward your house-cleaning program. Practice weekly cleansing periods until you KNOW your system is clean.

What do you mean when you use the term 'disease-conscious'?

Disease-consciousness and health-consciousness are exact opposites. Health-consciousness is the positive approach to body care, while disease consciousness is the negative. It is utterly impossible to think of two separate conditions at one and the same time, so, while you are disease conscious, you cannot think about health-building. Health-consciousness, on the other hand, guides your thoughts to consider ways and means of building health.

If you center your thoughts on ways and means of treating disease, you lose the image of health. Do you remember the quote, "Lo, that which I feared most has come upon me."? Our thoughts act as a pattern through which our lives are given expression. NEVER allow your thoughts to dwell on anything you do not wish to happen.

Is health a result of health-consciousness?

I would consider health an EFFECT of health-consciousness, for, if you will keep health implanted deep within your Inner-Consciousness, your thoughts will be directed toward ways and means of improving your health. Nutrition, of course, will be your greatest means of bringing about such an improvement.

"WHAT YOU THINK, YOU DO."

I trust that your study of this course will cause you to become health conscious. It's the logical thing to do, for disease is the death of tissue cells, while health is their life. THE EXPRESSION OF YOUR LIFE FORCE IS HEALTH.

I seem always fearful of disease -- how can I overcome this?

We are living in a culture that is filled with vigorous tradition - philosophical, scientific, and political. But these cultural traditions are all based upon the past and the present. Your future depends upon your actions in the FUTURE! Of course, we can never entirely free our consciousness of thoughts of the past, but we can allow them to sleep in the cradle of that past most of the time. In fact, our very existence rests upon that foundation. Fearful thoughts of disease direct you away from Nature, while thoughts of health draw you closer to things natural.

Of one thing we may be sure -- man is not sufficient unto himself. NATURE MUST SUPPORT HIM. To the human being, Nature is unobtrusively essential every day of his life.

Isn't man somewhat dependent upon science?

Science has provided man with many things which are considered to be necessities of life, but necessity cannot be truthfully applied to any product of science. It is a necessity only for the maintenance of our standard of civilization.

Necessity, however, CAN be applied to our relationship with Nature. No necessity exists that propels you to possess the luxuries offered by civilization -- they are only conveniences.

But a necessity DOES exist that propels you -- in fact, COMPELS YOU -- to take unto yourself that which Nature provides for living - air, water, and food.

All things offered by our scientists are simply a matter of taste and desire. An inner desire for satisfaction is common to us all. The desire may vary in intensity, but the urge is much the same. So it is with the urge for a stronger, healthier body. It is the desire to pay the price that throws a lot of us. And when I speak of "price" in connection with health-building, I do not consider the dollar-and-cents price. I mean the price of EFFORT. Living THE NUTRITION WAY TO HEALTH requires lots of it, but I know of no other way to make the purchase.

I have now answered a great many of your questions, but there are many more to come. I trust, however, that you will REVIEW these answers before passing on to Section Two of this course. If you will acquaint yourself thoroughly with these truths, I feel sure that the foundation of your nutritional health will have been laid.

It has been said that the average individual is too busy with his dreams of medical aid and "wondrous miracles" to bring himself to think of things natural. And that his own ego stands in his way. Also, that he is much too dependent upon man's accomplishments.

Maybe so. Maybe the average man has come to take Nature for granted, to look upon the bounties of Nature as his God-given right. If he has, he is forgetting that Nature's Laws ALSO apply. He should study Nature's Laws and Nature's uniformities. If he will do this, he will find that they do not always conform to man-made rules -- but, ALWAYS NATURE'S LAWS ARE THE RULE! Man's past is in the past. He shall never see it again. Nature's past is with us in the present, and will continue to be with us in the future. Nature is the impossible paradox which IS!

All of the scientific knowledge compiled since the beginning of civilization has not given man an understanding of life. The secrets of Nature remain a mystery. Knowing this to be true, should we endeavor to substitute man-made substances for those of Nature in our quest for health?

"But," you say, "we know of the effect those man-made substances have upon disease."

Yes, you may know of their effect upon disease, but DO YOU KNOW OF THEIR EFFECT UPON THE EXPRESSION OF YOUR LIFE FORCE -- YOUR HEALTH?

Don't take my word for it. Read the clinical findings of medical scientists as recorded in many published articles. Read their condemnation of yesterday's "wonder drugs" AFTER they have been judged by their effect upon their hopeless victims in the years following treatment. Have you ever read any such condemnation of the effects of natural nutritional elements?

Science accepts the fact that all living things are physical objects, for they can analyze and tabulate the parts of those objects. But no scientist can put his finger on the difference between a living and a nonliving substance. That invisible force called "Life" has never been captured in the test tube. It is clear however, that the Creator of all things decreed that life exist ONLY in organic substances.

Why, then, should anyone alter the organic substances that the Creator decreed to be the food of man?

The right approach to complete knowledge of nutrition -- as with any other worthwhile endeavor -- requires careful study of the known facts. First, you must understand the needs of the body and the source of its natural nutrition. Of necessity, you will have to study this course

carefully and think seriously. We know this to be obvious -- we also know that the obvious is often the last thing we think, see, or do.

During the past half-century I have had the pleasure of presenting nutritional facts to thousands upon thousands of health-seekers and to members of the profession. While there has been a change for the better in our ability to understand the laws of Nature, NEVER has there been a change in those laws. And there never will be.

Your study of nutrition will throw new light upon the cause of degenerative diseases and how you can prevent them from becoming the miseries of premature old age. You will find a sensible and scientific plan that will enable you to build greater vitality and longer life. You will find that it is not the calendar which determines your age, but the nutritional values (or lack of them) that are in the foods you eat. Put this rejuvenation nutritional program to work for you. Free your body of the accumulated disease-breeding waste that may be clogging your tissue cells. Make life worth living.

When we hear and read that over 60% of our entire population is suffering from some type of chronic illness (nearly one hundred million people), we cannot help but question the present attitude toward our health problem. If such a report isn't enough to awaken us to our personal responsibility in matters of health, perhaps we should read and re-read the report that shocked the nation, the report of Kraus and Hirschland, Institute of Physical Medicine, Bellevue Medical Center. Their report states:

"Weakness and fatigue are not confined to the adult. The result of a muscular fitness test of American School children between the ages of 6 and 16 years revealed that 57.9% failed in a minimum muscular fitness test."

If over half of our children of that tender age failed to pass a MINIMUM physical fitness test, what will the percentage be when they have reached the age of 50? Many of our officials high in Government office, including our President, have voiced their concern over such a threat to our national security.

Officials of our Government have long known of this threat to our race -- the threat of malnutrition -- for in the United States Department of Agriculture Year-Book of 1939, page 104, we read.

"The chief fault of many American diets is that they provide too little of the essential minerals and vitamins. This fault is due in large measure to the fact that refined foods are consumed in such amounts that the intake of mineral and vitamin-rich natural foods is lower than it should be."

That warning was given in 1939. Have you done anything about it?

Our good friend, Dr. William Albrecht of the University of Missouri, gives us further cause for thought on the subject of nutrition. He states:

"The problem is rapidly reaching the size of a catastrophe and, if carried much further, could mean national suicide. Soil health is that important."

After reading such reports, can any of us afford to ignore the warnings given? There are hundreds of similar warnings from men in authoritative positions, but I haven't space to quote them all. Why hasn't something been done about the situation? Because there are still too many "experts" in high places who continue to dispute proven facts.

In spite of opposition, though, we have many men of science doing their utmost to educate the public to such facts. We have Dr. Tom Spies, Director of the Hillman Clinic in Birmingham, Alabama -- yes, he is the same Dr. Tom Spies whom the AMA honored with their Distinguished Service Award and gold medal. Dr. Spies made this statement:

"I expect to devote the rest of my years to trying to help older people. We don't want to just give them a longer life -- we want to preserve the prime of life for a longer time. As tissues become damaged they lack the chemicals of good nutrition. They tend to become old. They lack what I call "tissue integrity". There are people of 40 whose brains and arteries are senile. If you can help the tissues repair themselves by correcting nutritional deficiency, you can make old age wait."

So -- with the quotes from these learned men, I bring Section One of this course to a close. I invite you to carry over the truths I have revealed to you, as you start your study of the following section.

SECTION TWO

If you have carefully studied Section One of this course, you have laid the foundation upon which you can build nutritional health. That which is to follow will lead you deeper into the realm of things natural.

It will not be the make-believe of fiction -- IT IS FACT, based upon scientific findings. And in these facts you will find proof of the perfectibility of man.

Yes, I know, you will be called upon to live differently. But if your usual way of life has in any way undermined your health, how can you expect the continuation of such living habits to aid you in rebuilding your health? Far too many people believe that, as long as they fill their stomachs, they are well nourished. Nutritional deficiency is an intangible they choose to ignore, thinking that because they ignore it they deny its existence. How foolish! They haven't the slightest idea that their aches and pains may be due to the very thing they deny!

Section One was written to prepare your thought-pattern as a guide to the expression of your Life Force -- Health. It was necessary that you understand WHY nutrition is so essential to health-building. It is a personal problem we all face -- this search for health and happiness. We come to grips with it only when we fully realize its importance to us as individuals, when we understand that we can act to control or influence it.

You -- as an individual -- have the power of choice. No other living thing on earth has it. You can accept or reject at will, and the greatest obstacle in your path is of your own making, a product of your own thought pattern.

Are you honestly eager to free yourself of the fear of disease? Are you willing to consider natural, health-building facts?

It requires an OPEN MIND! But a disease-conscious mind is never open to health facts. How could it be? Its every thought is tainted with the shadow of disease. You must free your mind of such fear, and you can do it by BECOMING health-conscious.

In this section we are going to take a close look at the material used by the most intricate piece of mechanism known to science: the human body. This mechanism is the most studied -- and the least understood! -- of any subject you could name. We will, again, use the question and answer method, for I feel that such a method will allow us to get closer together.

The first question I have selected, from among the thousands I have been asked, strikes squarely at the heart of our health problem. If it weren't a valid, well-founded question, there would be no problem.

What is nutritional deficiency?

A nutritional deficiency exists within your body when any single group of cells, or the whole body, is not receiving sufficient nutritional material to keep it in a state of good repair. So, you see, the deficiency may be local or general. A local deficiency may be due to an interference with the blood supply to a certain group of cells, or to the lack of the nutritional elements in the blood stream necessary to nourish those cells.

It is a well-known fact that occupational hazards, posture, lack of exercise, manner of dress, and a number of other things, may interfere with normal blood circulation. And, as you already know, the blood stream is the transportation vehicle of our nutrition. Anything

that will prevent the blood from carrying the nutritional substances to the cell will cause a nutritional deficiency.

In addition, the blood may carry only a partial cargo of nutrition. If your diet fails to provide all of the necessary nutritional elements, the cells requiring those missing substances will suffer from nutritional deficiency. This may cause serious trouble. Of course, where there is a general lack of nutritional substances, there is general starvation of tissue cells. The whole body is weakened!

Does that account for the development of specific diseases?

Wherever there is a weakness in the body, that organ or location is low in resistance against disease. So, local nutritional deficiency may cause a specific nutritional deficiency disease of that organ or location, or it may be a contributing factor to that disease. Regardless of the type of disease, better nutrition will assist the body to overcome its effect. Tissue cells weakened from mal-nutrition are certainly more susceptible to infection. Your first line of defense is your nutrition supply.

As I have outlined in Section One, Nutritional Deficiency is not something you dare ignore. OH, you can ignore it, if you choose -- but, if you do, you must suffer the inevitable consequences.

Has neglect of my nutritional problem been due to just plain ignorance or to carelessness?

I'm afraid I will have to leave that question for you to answer. I am sure, however, that by now your interest in nutrition has been awakened and intensified. Such an awakening was vital. So was the whetting and piquing of your imagination and curiosity, for there must be a driving force behind intelligent planning. A health-seeker may be excused for his ignorance of nutrition, at least temporarily, but he cannot be excused for carelessness.

Is it necessary for me to know about the different nutritional elements?

I don't think we should consider it absolutely necessary. However, it is most convenient. If you have a wife or cook who knows about these nutritional elements and can plan your meals accordingly, it might eliminate the necessity of your being well-informed. Personally, I would feel sorry for that wife or cook, if she were called upon to provide proper nutrition to such a disinterested party.

How could you become health-conscious, if you were not interested enough to learn something about the very nutritional elements which support your health? Yes, I think you should spend a little time and effort to enlighten yourself regarding these vital facts of life and living.

As I've said before, this is a personal problem. All of us must face it!

If you were going to build a cement wall, you would first ascertain the exact amount of each ingredient needed. You would familiarize yourself with those ingredients, I am sure. Well, isn't the construction of your body of more importance than the building of a cement wall?

Thousands of others have already traveled THE NUTRITION WAY TO HEALTH. I urge you to profit by their example. These same questions were asked by those early travelers. Don't consider any of them as trivial -- anything pertaining to the health of the questioner is important, at least, to him.

In rebuilding my health, what is the first material I must consider?

PROTEIN -- for it is the basic food of all animals. Of course, protein is found in the cells of all vegetables, too. However, as 95% of your cell structure is protein, it requires a goodly supply to make repair and build new cells. Without protein, there would be no cells. Without protein, there would be no body.

I think every human being should be vitally interested in his supply of protein, for there are many ways to weaken and alter the protein content of your food. For this reason, you must not only consider the QUANTITY of protein you eat -- you must give careful consideration to its QUALITY. Protein that does not provide all of the amino acids may weaken your body structure by failing to do the complete job.

What are amino acids?

"THE BUILDING BLOCKS OF NATURE".

Yes, that is the name given to the amino acids of the protein. And building blocks they are. No wonder the ancient Greeks gave this substance the name "Protos", meaning "takes first place"! It really does take first place in the construction of body tissue. If you will turn to Webster's Dictionary, you will find this definition of protein:

"Any of the group of nitrogenous compounds of high molecular weight, synthesized by plants from simple substances, and undergoing hydrolysis by enzymes to yield amino acids, which in animal metabolism are required for life processes."

Researchers differ concerning the number of amino acids in the protein family. Some say 20, while others declare that there are at least 30. Medical scientists recognize only ten or a dozen as being essential nutritional elements, contending that all other aminos may be synthesized by the body from the aminos they recognize.

Be all this as it may -- I submit that, if Nature put them in our food, SHE recognized the need for them! The body may be able to synthesize certain other aminos from those science has recognized (there is ample proof that it can), but why throw that extra burden upon the metabolic system of a weakened body? Why not make sure that you supply a WHOLE protein?

The amino acids that have been recognized are Arginine, Cystine, Histidine, Lysine, Isoleucine, Leucine, Methionine, Threonine, Phenylalanine, Tryptophan, Valine, Tyrosine, Glycine, and Glutamic Acid.

Does each cell in my body require all the amino acids?

No, for the cells are of different types and require different types of building blocks. You can readily understand this when you consider the difference between a soft brain cell and the firmer muscular cell. The body, as a whole, needs all of the amino acids, but each type of cell selects the building blocks it needs to make repair and to build new cells. That is why it is SO IMPORTANT for us to supply them all.

As an example -- the cells of the brain have a heavy content of Glutamic Acid, much higher than that of muscle cells. It follows that the brain requires a greater supply of the amino known as Glutamic Acid. If the foods you eat do not supply the required amount of Glutamic Acid, some of your brain cells weaken and die. I am sure that you don't want that to happen to your brain cells. Or to any other of your tissue cells, for that matter.

What is the most important element in protein?

You are probably expecting me to say Glutamic Acid, since I mentioned it specifically in connection with the brain cells. Well, as important as Glutamic Acid may be to the brain, there is still another element that commands greater recognition -- THE ENZYME.

Unfortunately for health reasons, the average American's diet is one that appeals to the taste, rather than to the needed supply of natural, unaltered protein. Cooking, processing, and refining may improve the taste for some people, but the end result can be (and usually is) nutritionally detrimental. This fact is confirmed by Dr. Sherman of Columbia University, one of our country's greatest nutritional authorities. As Dr. Sherman states in his book, *Chemistry of Food and Nutrition*:

"...and the enzyme activity has repeatedly been found to depend upon keeping the protein intact, activity being lost when the enzyme solution is subjected to treatment with coagulates, hydrolyzes, or otherwise induces chemical changes in the protein matter."

Here, from this noted authority, we have confirmation of the basic reason why our foods should not be altered by processing, refining, chemicalization or over-cooking. Once they have been altered to the point which "coagulates, hydrolyzes, or otherwise induces chemical change in the protein matter", the enzymatic activity is lost!

We get the full impact of such a statement when we realize that the enzymatic activity is completely destroyed at a temperature of about 130 degrees, which is far below the boiling point. How much pure, unaltered, raw protein do you eat each day. THIS IS VITAL! You must remember that your protein food is dependent upon "hydrolysis by ENZYMES to yield amino acids, which in animal metabolism are required for life processes"! (Emphasis is ours.)

Why should you destroy the enzymes in all of your food, when you have PROOF that they are required for all life processes? I cannot emphasize this point too strongly. Your life depends upon enzymatic activity!

Can you give me a better understanding of enzymatic activity?

The enzyme is a delicate substance found in every living cell, whether it is animal or vegetable. Destroy the enzyme of a seed, and it will not sprout and grow. No new cells can be produced without the enzyme. In fact, THERE IS NOT A LIVING CELL IN THE UNIVERSE WITHOUT AN ENZYME.

Here's dramatic proof -- Take a handful of seeds and divide them in half. Place one-half of these seeds in boiling water for only one minute, then plant both halves in normal fashion. Use a carefully prepared and carefully cultured plot of earth. Care for them tenderly.

Which group of seeds will grow? Which seeds contain life? You, yourself, will soon see a phenomena of life's expression in one group. The other -- the group of seeds which were heated -- will exhibit only death and decay.

Enzymes are absolutely essential to life, and Nature put the protein enzymes in our food for a purpose. This purpose is easily recognized, but few people realize how easily they are destroyed by heat. Again quoting Dr. Sherman:

"Thus there is now abundant reason to accept the conclusion that the best-studied enzymes of the digestive tract are of protein or of protein-like nature, and that food protein furnishes amino acids to serve as material for body enzymes as well as body tissue in the more familiar sense."

If the activity of the enzyme is dependent upon keeping the protein intact, as Dr. Sherman so clearly states, what chance have enzymes of avoiding destruction through the methods used in food refining, heat-processing, and cooking? Obviously, none. They cannot withstand the high temperatures of such processes. Through the wide-spread use of such destructive methods, we alter the amino acids -- the Building Blocks of Nature -- and we lose the enzymatic activity so necessary in the process of digestion and in every other life process in the body.

In these days of refined and processed foods, where do I get enough enzymes to stay alive?

Fortunately, the average individual does eat SOME raw unaltered protein. He does eat some raw fruits and vegetables. And another fortunate arrangement is on our side, too. Nature uses such raw protein to manufacture enzymes in the body.

Remember, the enzyme is stated to be of protein-like substance. Consequently, these all-important enzymes can be manufactured out of such raw protein as you get in fruits and vegetables in their raw state. A steak, a pot of beans, a loaf of bread -- none of these or any other cooked food can be digested until your body has manufactured the enzymes of digestion with which to carry on the digestive processes. For this reason SOME raw food should be eaten daily. It is IMPERATIVE!

How much raw food should I eat?

I'm glad you asked that question, for I don't want you to fall into the same trap in which others have been caught. Some people (far too many) think they are supplying the daily quota of raw vegetables when they place a leaf of lettuce in their sandwich. Don't you agree that this is asking a bit too much of a thin leaf of lettuce? It does provide a tiny amount of raw protein, to be sure, but the rule of good nutrition demands a more equitable balance.

That equitable balance would be more like ONE-THIRD RAW FOOD EACH DAY. One-fourth may do, if you use a food-blender. The blender will so pulverize the fruit and vegetables that they will be more easily and completely digested.

Wouldn't it be better if one ate all his food raw?

Yes, BUT -- and it is a pretty BIG "but" -- most people cannot completely digest raw food. If such raw food is not properly digested, the body fails to receive its normal supply of nutrition.

Other animals live on raw foods --why can't I?

Man's digestive power has degenerated very materially since the caveman's age. He has used cooked foods too long, and has gotten into the habit of depending upon a soft diet. There are some individuals who get along very well on raw food -- especially if they use a blender or juicer -- and it would be healthier, certainly, if we could all do the same. However, at the beginning of this course, I told you that I am not a food faddist. I am not going to run the risk of being called one, by conceding to a raw-food regime.

Instead, I logically point out that heredity has taken its toll, and that it would be better for you to proceed slowly in any return to an exclusively raw food diet. I certainly have nothing against it, but this word of caution is necessary. Some may find their weakness in

digesting raw foods an obstacle on THE NUTRITION WAY TO HEALTH. I wouldn't expect or advise you to switch immediately to a diet containing as much raw food as I consume. To do so might upset the chemical balance of your body. It is always best not to make too radical a change in too short a time.

Which causes the most trouble -- infection, or devitalized food?

That is like asking which caused the man to drown -- the water, or the fact that he couldn't swim.

Infectious diseases kill a lot of people. This we know to be true. But let me ask you this question -- would these people have contracted those diseases if their food had provided proper nutrition with which to build RESISTANCE against infection?

We, the America, have a fantastic number of hospitals and similar institutions. WHY? This is a highly pertinent question. WHY?

Common sense tells us that something is wrong with prevailing methods of handling our health problems. Something is wrong -- terribly wrong! Consider this point of logic: If such methods brought about a cure, the doctors, drug companies, hospitals, etc., would soon cure themselves out of business. Read this sentence over at least three times. Reason it out for yourself.

But, no -- the health problem of our nation grows steadily worse. This leads us to question the foundation upon which the prevailing methods are based.

Is there any logical reason to assume that all diseases fall in the same infectious category?

In view of the fact that our national health is constantly deteriorating, isn't it logical to search for "causes" in OTHER AREAS?

And should anyone in his right mind object to the use of better nutrition for the purpose of building greater body resistance against disease in the meantime?

How can we change the process of treating disease?

Actually, that process is constantly being changed by the leaders in the medical field. And, in this course, we are NOT dealing with the treatment of disease. Our interest lies solely in the process of HEALTH.

Yes, we are dealing with health as ONE process -- which it is! A whole process combining all of the functions of Nature as they are directed by the Creative Intelligence. Foremost among proven facts are two:

In matters of life and health, NATURE KNOWS BEST.

In conditions of disease, ONLY NATURE CURES!

I do not condemn those who wish to rely upon man-made substances for the treatment of disease. Disease is an UNNATURAL Thing. Therefore, it is logical to suppose that unnatural substances may often be effective as an "assisting" treatment. But that need not prevent you from inaugurating a nutritional regime to assist in the process of health. By doing so, you will enter a new realm -- the world of BETTER HEALTH THROUGH BETTER NUTRITION.

Are the treatment of disease and the building of health two separate processes?

They most certainly are.

Leave the process of treating disease in the hands of your doctor, where it belongs -- but assert your God-given right to encourage the process of health!

Who wants to be a "health-rupt" millionaire? Your money may buy the finest medical service, but it will NOT buy health. Health is not for sale. IT MUST BE EARNED.

Nutrition is a keynote to health, and health is a keynote to happiness. You cannot produce a happy life-rhythm, then, without good nutrition. Decide NOW to make the most of YOURSELF each day of your life. How? By following THE NUTRITION WAY TO HEALTH.

Can we combine the two processes?

Yes, if you wish. In fact, many of our more advanced doctors are requesting that you do so.

First of all, you must consider this fact: A "dis-eased" condition is precisely that -- a state of DIS-ease, or lack of ease. But it is an effect not a cause. Something else CAUSES this condition of DIS-ease. To "whitewash" the effect with some powerful drug or treatment does nothing to remove the cause, if that cause were nutritional deficiency. To regain health under these conditions, we must remove the CAUSE of ill-health.

Your body cannot operate properly without a normal food supply. As a corollary example, I suggest that you try operating another chemical-conversion mechanism, your automobile, with a mixture of half gasoline and half water. You wouldn't dream of putting such a mixture in the gas tank of your expensive car, would you? Yet you may be mistreating your body in exactly the same manner!

You may be filling your stomach with half food and half trash! However, with respect to your car, you know that the motor was designed to operate best with a certain type of fuel, so you see to it that it gets what it needs for top production of power. Well, your body was created to operate best on a certain combination of "food-fuel". If you can keep your automobile out of the repair shop by supplying proper fuel, why don't you realize that you can keep your body out of the "repair shop" in the same way?

You see, the application of THE NUTRITION WAY TO HEALTH is just the application of "PLAIN, OLD COMMON-SENSE."

Can you tell me where disease stops and health begins?

Disease is merely the absence of health, therefore where health begins, disease stops.

Yes, I know that this is an ambiguous way to answer a question, but it's like having to answer to "Which way is up and which way is down?" It depends upon the point of reference. That reference is YOU. But one fact dominates the picture for you, and it is a fact which lies in your control -- the beginning of your health lies in your nutrition, so "where disease stops and health begins" for you is entirely in your hands.

Man is, by nature, a curious animal -- but fearful of facing facts. He refuses to look at himself as he really is. He prefers to cling to the theory that his body is a mysterious, unfathomable entity, understandably only by geniuses. He knows little about it, so he is AFRAID to consider it as "himself".

Often, self-love of his own ignorance prods him to ridicule the man of science -- and yet, painfully aware of his own shortcomings, he runs wailing to those very ones when disease strikes. Even then, he is afraid of the truth. He prefers to close his eyes to reality.

Well, we are going to open our eyes -- WISELY and WIDELY! We are going to look closely at many facts which have been overlooked by the average student of health matters and -- certainly, -- by virtually all students of disease. As we recognize health-truths

they will gradually take their places in the scheme of things, until the picture becomes whole.

In the process, you will see man revealed as CREATIVE, capable of creating health within his body. At first, some values may appear vague, but as time passes and these values stand the test, the whole truth will burst upon you, and you will have an entirely new outlook on life.

Do you mean that I can actually create my own health?

Yes. You not only CAN, but you DO -- whether you realize it or not, and whether you want to or not.

There is no other way by which you can enjoy good health. It is your Life Force, and the expression of that Life Force is HEALTH. Whether or not it can be freely expressed depends upon the strength and vitality of your tissue cells -- and the strength and vitality of those cells depends upon the nutritional substances YOU provide.

CREATIVE HEALTH is from within you. It will never fail you. Failure is of your own doing.

Most people recognize the value of business training. It assures them of greater profit. But few feel that it is necessary to train for living. Somehow, the expression of life is taken for granted.

WHAT FOLLY! Our most noted educators, scientists, giants of industry, and other great leaders in the business world are but infants in the department of living. That statement is borne out by the premature death of so many of our business leaders, EVEN BY SO MANY OF OUR DOCTORS.

You, of course, are not going to be among them. You are going to follow the LOGICAL route. Far too long have far too many been seeking the means of destroying disease (the EFFECT) and neglecting the means of building health.

Do I dare take the creation of health into my own hands?

What are you afraid of -- the possible ridicule of your friends or neighbors? Believe me, they won't ridicule your better state of health! It is only when you start trying to educate them that they rebel. They, too are afraid.

For over 50 years now, I have been expounding the truths arising out of the intensive application of THE NUTRITION WAY TO HEALTH, that disease can be prevented and that disease can be cured through the use of natural, nutritional substances. Through the years many clear-thinking scientists, doctors, and laymen have joined the team. And, today, still more interested spectators are being struck with the growing desire to make the varsity.

It wasn't always this way. In the early days of my research work, I was scoffed at, laughed at, subjected to ridicule, and considered a "food crank". I still am, for that matter, by some of the poorly-informed or by those with conflicting commercial interests. Yet, in spite of all this, the principles for which I and many others have fought so long and so hard are at last being recognized.

Yes, I think you "dare take the creation of health" into your own hands. That's where it lies, anyhow.

If the expression of our life force is health, what is life?

The answer to that question must be handled delicately, for fear of offending. It must be geared to what YOU call life. Are these bodies of ours alive, or are they merely a physical object through which life is expressed?

This has bothered a great many people. They have been told that the human body is just an operable machine in which they live. In a way, this is true -- the human body is a machine of sorts, but it is an automatic machine that far surpasses anything conceived by the mind of man!

It makes its own repairs and replaces its worn-out parts, and this is utterly beyond the comprehension or ability of man's mind. Why? BECAUSE NOTHING WHICH MAN HAS EVER MADE CONTAINED LIFE! Remember this fact!

Life is an endowment of the Creator who is resident within the tissue cells of your body. It continues to reside there AS LONG AS THOSE CELLS ARE A FIT PLACE OF ABODE. Their fitness depends upon the nutritional substances provided by YOU, which are used by the cells for repair and growth.

The Life Force within you, and me, and everybody else is A PART OF THE CREATIVE INTELLIGENCE, the intelligence which directs the Universe. If you provide the material with which to build and repair cell tissue -- and if there is no interference on your part sufficient to destroy the patterns of normal activity -- THE EXPRESSION OF THAT LIFE FORCE IS HEALTH.

Now -- read, re-read and STUDY the above paragraphs.

Is it the life force that directs our body energy?

Yes, and no. Yes -- as far as the expression of intra-body Life Force is concerned. No -- as far as extra-body activities are concerned.

The Life Force responds to and carries out the commands of human intelligence for action, but this is external action such as moving about, physically. The internal metabolic activities of your body are DIRECTLY influenced and handled by your Life Force, not by you. It produces and keeps in reserve the necessary energy to carry on the activities of the body, both internal and external. You can interfere, but you cannot direct. You can request, you cannot truly "command".

What do you mean by reserve energy?

I know that sometime in your life you have been tired and hungry. In fact, so hungry that you felt weak and faint. You will recall, then, how quickly your strength returned after you ate. Within minutes, you felt your strength building up. Such a revival of strength couldn't have been the effect of the food you ate, for it takes time to digest and assimilate food.

That increase of energy which you felt came from your supply of RESERVE energy.

Your body builds its energy from the food you eat. It also stores up energy for "a rainy day", and will release it in case of emergency. Being weak from hunger was not an emergency, really. Had you continued to fail to supply food, your reserve energy would have gone to keep your vital organs alive. Thus you see the intelligence of your Inner-Consciousness directing the physical for the preservation of your life over the mere preservation of your comfort.

Why did your strength return so soon after you put food in your mouth?

Again, we see the expression of intelligence by your Inner-Consciousness knew that it would soon have a supply of building material with which to produce energy. Such energy

could be used to replenish the "reserve", so some of the reserve could be released for the lesser purpose of keeping you comfortable. Within hours, the food you ate restored the reserve energy to full strength, and all was well. You knew nothing of such a procedure, but your Inner-Consciousness knew exactly what to do for the maximum protection of your life and health.

Can I always depend upon an intelligent expression by my life-force?

You most certainly can, IF there is no external interference. But civilization, itself, has placed a fantastic burden upon the physical structure of man, and this often does interfere with the normal expression of your Life Force.

Poisonous fumes from factories, automobiles, etc., have contaminated the air we breathe.

Chemical fertilizers have altered the nature of the soil in which our food is grown.

Refining, processing, chemicalization, storage, and overcooking have altered the protein, fat, vitamin, and mineral values in our foods. All of this makes it nearly impossible for your Life Force to gain free expression, and the resultant changes in body chemistry manifest themselves in a thousand ways, all of which are symptoms of "dis-ease".

What are the vitamin values in our food?

I can name only a few, for Nature still keeps much knowledge about other values locked in her secret vault.

There are, however, a number which man has understood. Unfortunately, medical science has rendered a great dis-service to mankind by recognizing as essential only those which chemists can produce synthetically in a laboratory. If it can't be produced synthetically, it simply isn't recognized as essential.

What a travesty of justice! I don't think Nature needs the advice of man regarding which vitamins are essential to the welfare of the human body, but such is the egotistical tendency of man, just the same.

At any rate, here are the known vitamins which have been given a name -Vitamins A, B1, B2, B6, B12, C, D, E, F, K, P, Niacin, Biotin, Folic Acid, Choline, and Inositol.

Vitamins are independent entities that have specific functions to perform, but are dependent upon enzymatic systems to augment their activity. Without the enzyme, they are of little value to the body. Vitamins are chemical by nature, and may be broken down and analyzed in the laboratory, within the power of man to analyze.

It is generally conceded by medical researchers that the correlation of vitamins to health is much more clearly defined than their relationship to disease. And well it should be, for Nature intended them as a supporting element to health. While such a situation presents a bit of a problem to the medically trained mind (which is disease-conscious), it presents no problem at all to us Nutritionists. We are HEALTH-conscious. We are interested in the NORMAL rather than the ab-normal. Our interest in vitamin values centers in their health building ability. To us, disease is the deterioration of health, a negative thing. We prefer to ignore it. We dwell instead, on the positive endeavor of building the strength of our expression of HEALTH.

When were vitamins first discovered?

By Nature -- at the beginning of time. By man -- only recently.

It was in 1912 that Casimir Funk coined the word "vitamine" to describe certain food factors found (apparently) essential to the maintenance of life. It was not until a number of years that the word was shortened to "vitamin" and came into general usage.

I can well remember those hectic days. Our medically-minded friends heaped ridicule upon all those who even so much as suggested that vitamins were of value. My, how times do change! I doubt that there is a doctor in our land, today, who has not prescribed vitamins for the welfare of his patients.

The obvious source of Dr. Funk's coinage of the word vitamine is interesting: VILAL and AMINE, or AMINO. It connotes a searching for classification of these elements -- and it points up the fact that man has only recently even begun to grasp the significance of Nature's food values. It makes even more understandable the fact that man still has a long way to go!

In my early days of nutritional research, I and many others recognized the fact that there were vital food factors in fresh, uncooked vegetables which were missing in refined foods or those kept in storage for any length of time. We were familiar with the mineral content of foods, so we assumed that these vital factors might in some way be associated with the essential minerals. As we know, now, of course, they were closely related.

Accordingly, I designated these food values as "Vitalized Minerals" in my own work. Countless old timers who knew me in those days will remember them by that name. However, as research progressed, it became clear that there was a definite division in existence. It was then that Dr. Funk's work became recognized, and vitamins took their rightful and important place in man's knowledge of nutrition. Today, they are recognized (some of them officially) as essential to life, with the absence of them resulting in deficiency diseases.

How far along the road to total knowledge we actually are is anybody's guess. But let us never make the mistake of assuming that we now know it all! Remember your school days, when you were taught that the smallest particle of matter was the atom? Were you stupid or brilliant to insist that all the facts were not yet known?

Have vitamins received general recognition?

Oh, yes! Their recognition has progressed to a point where nearly all doctors regularly prescribe vitamins in their battle against disease or, depending upon the type of doctors, in their fight to build health.

While the Nutritionist welcomes the acceptance of vitamins by the medical profession, it is difficult for him to understand WHY this group of learned gentlemen seek to confine their use to the treatment of disease only. Nature's pure nutritional substances were never intended as a treatment for any diseases -- they are BODY-BUILDERS and should be recognized as such!

Most doctors realize that any disease a vitamin will cure, it will also prevent. WHY, then, should anyone wait till after a disease has developed before he starts taking vitamins? It doesn't make sense, does it? But don't expect your doctor to do your thinking for you. It's YOUR body you're supposed to protect, so start thinking for yourself.

What are the most important vitamins?

To man or to Nature? I prefer to go along with Nature and the evidence she has placed before me -- so, I say ALL OF THEM!

Our tissue cells are not constructed in a manner as to allow one vitamin to hold precedence over another. It is true that some types of tissue cells require more of certain

vitamins than of others, but this only proves that a particular vitamin is more important to THAT particular type of cell. Some are also used more generally than others, but the body as a whole needs ALL of the nutritional elements Nature has provided.

This is why I firmly contend that people should not attempt to prescribe single vitamins. If you are going to protect your body against a vitamin deficiency, through the use of a Food Supplement, make sure that it contains all of the vitamins Nature supplies. Furthermore, make sure that they are in their natural state, just as Nature produced them.

Luckily for us, Nature's Natural Laws are still unaltered! Our Creative Health Force still operates within us. Why not cooperate with Nature? Isn't it about time we started giving attention to the health-building values of food?

How often have you heard the phrase, "We're digging our graves with our teeth"? Dentists tell us we're losing our teeth faster, because of devitalized food -- but no sooner do people lose their teeth than they have the dentist put in new "spades" with which to continue digging.

Let me put the "important" vitamin question to you this way -- only 60 or so years ago, man didn't consider ANY vitamins to be of importance. (As recently as 1947, he didn't consider vitamin B12 to be of any importance, officially.) Do we now claim to know everything there is to know about them?

Can you give me the names of certain vitamins and their specific uses in the body?

Yes, I can -- partially, of course. Regardless of the paucity of information about the nutritional values of our food, science has determined the functions of certain vitamins. We know that they retain their individuality and are built into our cell structure. WHY? Because the cell cannot function successfully without them. They become an intimate part of the cell, and are believed to be the activators of cell function, regulating those functions along with hormones.

It follows, then, that the presence or absence of vitamins means the difference between a strong, vital healthy cell structure and one that is weakened and susceptible to disease.

What a shame that every human being doesn't realize that fact fully! If there is one fact in this entire course of study which stands out with utter logic, the above-stated fact is that one! When you grasp its importance to YOU, your study of this course will have been a success. To fail to supply Nature's vitamins, thus robbing your tissue cells of their activators, is like failing to put spark plugs in the motor of your car. In addition, failing to supply one or two vitamins is like leaving one or two spark plugs out of that motor -- it may run, but without much power. So it will be with your body if certain vitamins are missing.

Certain tissue cells depend more upon specific types of vitamins than others, yet their needs are NEVER confined to just one single vitamin. Experiment after experiment has shown that the value of any vitamin in body metabolism is dependent upon the support it receives from other vitamins. For this reason, among others, it is extremely unwise to restrict usage to any single one.

Nature put them all in your normal, natural food. Make sure you supply them all to your body. Stop trying to tell your cells what they need. Give them an ample supply of everything, and let them make their own selection. It's safer that way.

The name given to a vitamin does not necessarily indicate that it is a single nutritional element. Such names were chosen by man for MAN'S convenience. For example -- Vitamin A. As Dr. Sherman states:

"It is convenient and scientifically admissible to continue to use the term 'Vitamin A' as a collective singular to cover those two substances functioning essentially as if they were one."

Yes, vitamins are often multiple in nature -- that is, more than one essential element grouped under one name.

What is the function of Vitamin A?

The discovery of Vitamin A in 1913 has been accredited to McCollum and Davis. It is considered as an anti-infective vitamin and is oil soluble, occurring abundantly in animal organisms. It is most commonly extracted from fish liver oil, usually in esterified form, and is also found in meats and vegetables, especially in their oils.

Vitamin A occurs in vegetable oils (lemon grass oil, carrot oil, etc.) as four distinct substances -- A-alpha, A-beta, Gamma-carotene, and Cryptoxanthin, all of which are known as precursors of Vitamin A. When these substances are provided in your diet, they pass through your liver processes and are there prepared for body use as true Vitamin A.

In addition to its being an anti-infective vitamin, Vitamin A has been generally accepted as a factor affecting growth and longevity. It is, therefore, most important that it be amply supplied to the young and the old and, I might add, to those who wish to live long enough to be considered "old".

The mere fact that Vitamin A is understood to strengthen tissue cells against infections should be of vital interest to us all. Certainly, we want to do everything possible to protect ourselves against any and all infectious diseases. While this anti-infective property indicates that Vitamin A is needed by all tissue cells, it is more profusely distributed in the lungs, kidneys, nerves, skin, mucous membranes, blood vessel walls, and throughout the muscular structure. 90% of the Vitamin A retained in the body is stored in the liver.

By itself, Vitamin A is seen to be a very important complex of vital substances, but it also seems to form a partnership with Vitamin C. To a great extent, the functions of these two vitamins seem to overlap, as in many of the above examples.

However, certain specific functions of Vitamin A, alone, are known by man. One of these is its effect upon the organs of sight. Night-blindness has long been recognized as due to a deficiency of Vitamin A. Loss of muscular tone throughout the body may also be due to a Vitamin A deficiency.

What is the function of Vitamin B1?

Vitamin B1 is a member of the B-Complex. It is generally conceded that there are more vitamin elements in this complex than those so far discovered. (A new growth factor vitamin, a member of the B-complex has just been announced). But the functions of Vitamin B1 have been pretty well established. It is water-soluble and, as with all other water soluble vitamins, is not stored in the body. A daily supply, therefore, is a necessity.

The greatest demand for Vitamin B1 centers in the tissue cells of the nerves, pancreas, heart, glands, organs of digestion, bone marrow, skin, bladder, and bowel. Deficiency of the vitamin may affect those tissue cells in many different ways, and give rise to symptoms which your doctor may diagnose as one or a dozen different diseases.

While B1 has been termed a "nerve vitamin", its functions are NOT confined to the nervous system, alone. ALL of the above-named tissues may be affected by a deficiency of Vitamin B1.

What is the function of Vitamin B2?

B2 is also a water-soluble vitamin and, of course, a member of the B-Complex. It is INVARIABLY found as a companion to B1. It is an active ingredient in many enzyme chains; essential to health and normal nutrition at any age; essential to growth, vitality, and longer prime of life. Thus it is that its role in body metabolism is spotlighted as VITAL.

Tissue cells in which Vitamin B2 is in greater demand are: gum structure about the teeth, organs of vision, nerves, hair follicles, digestive organs, and skin. A deficiency of Vitamin B2 in the diet may give rise to complications in any of these tissues. In fact, many of your aches and pains may be due to a deficiency of this sort.

What is the function of Vitamin B6?

As might be expected, this third member of the B-Complex group is water soluble and easily destroyed by heat. The easiest way to describe the function of B6 is to state that it is always a companion to Vitamins B1 and B2. It, too, is essential to the normal functions of the tissue cells named above.

What is the function of Vitamin B12?

Here is a recent "discovery" by man. As recently as 1948, this food element was acknowledged to be the "BLOOD-BUILDING MIRACLE" of the vitamin age.

Of course, it is a member of the B-Complex and appears to be one of the main catalytic agents in the building of blood cells. As though this tremendously important role were not enough, B12 also plays an intense cooperative function with all other B-Complex vitamins. This is no mere coincidence -- the B-Family is very closely united throughout Nature.

So closely are they associated that many of them will not function properly without the presence of the others, and, what is equally important, they must be in proper chemical balance. This is why I have repeatedly stated that your food supplements should be from NATURAL sources. Only in this way can you assure a complete and balanced nutritional supply.

What is the function of Vitamin C?

Vitamin C is a water-soluble vitamin, and is identified as an "anti-scorbutic" agent.

While the effect upon scurvy of fresh green vegetables and of citrus fruits was well known as early as 1870, it wasn't until 1912 that Holst and Froelich demonstrated the true nutritional factors responsible. Then in 1932, nutritional researchers discovered that citrus fruits contained a substance that, when extracted and fed to laboratory animals, would prevent scurvy. This substance was, of course, what we call Vitamin C.

Although the dread disease, scurvy, has been virtually eliminated through man's understanding of Vitamin C values in fresh fruits and vegetables, the average person fails to recognize the prime importance of this vitamin in his health-building program. Vitamin C deficiency is the major cause of much of our common aches and pains. The functions of ALL body cells are affected by this vitamin, yet it cannot be stored by the body - it must be supplied continuously and regularly throughout life, from infancy on.

This vital food element is often called an anti-infective vitamin along with Vitamin A. Its presence in the blood stream aids in preventing hemorrhage; aids in the proper metabolism of iron, calcium, phosphorus; strengthens the blood vessel walls; and performs innumerable additional functions which man is only beginning to comprehend.

As with many others, Vitamin C is actually a Complex. The loss of any one of its basic substances will weaken the whole. This is why I strongly contend that a synthetic, man-made substance can never take the place of the Vitamin C, which Nature produces.

Due to the fact that it is water-soluble, Vitamin C is extremely perishable. Soaking of vegetables in water will weaken their Vitamin C values in a very short time, so wash your vegetable quickly and NEVER allow them to remain in the water longer than is absolutely necessary.

Aside from its best-known role as an absolute MUST in the prevention and clearing of the common cold, Vitamin C also performs a most important function in general metabolism. It greatly influences the coagulation of blood in case of accident or surgery; strengthens the teeth and bones; aids in the production of what is known as "tissue cell cement" -- a substance that binds the tissue cells together.

All in all, we would be a pretty wobbly specimen of the animal family, if it were not for the effect Vitamin C has upon our tissue structure.

What is the function of Vitamin D?

Vitamin D is called the "sunshine vitamin", and is also known as an anti-rachitic agent.

Actually, there are two Vitamin D factors, both activated by sunshine - they are termed D2 and D3. Natural Vitamin D values as found in our foods are always accompanied by Vitamin A -- which gives even further support to the contention that natural vitamins are preferable to synthetic, man-made substances.

While the function of Vitamin D seems to center in its effect upon bones and teeth, its support to the assimilation of calcium and phosphorous in all parts of the body is beneficial throughout the life span. It is a vital growth factor in childhood, of course, but it affects body metabolism at all ages.

Vitamin D is oil-soluble, and is one vitamin which is not found to any great extent in vegetables. It seems to be more commonly produced by the exposure of the oils of the skin to direct sunlight. Then it is absorbed by the body. It is also produced, of course, by exposing fish liver oil or food yeast to the rays of the sun.

There are, however, significant amounts of Vitamin D in egg yolks, milk, butter, and cheese. In addition, it is important for you to remember that most natural foods DO contain some precursor of Vitamin D, and that exposure to the sun will promote the production of this vitamin in your body. Just how this process occurs is not known to man, but it is believed that the Vitamin D values are collected in the oil of the skin glands. As this oil exudes through the pores of the skin, the ultra-violet rays of the sun transforms these values into the pure, usable Vitamin D. It is then re-absorbed by your body skin.

What is the function of Vitamin E? (Tocopherol)

Vitamin E is oil-soluble, and has been commonly known as the "antisterility" vitamin. It is rapidly outgrowing that appellation, however, as many medical scientists throughout the world have convincingly demonstrated its value in the care of heart cases and other body weaknesses.

Here, again, we have a vitamin complex. The four known factors in the E-Complex are: Alpha-, Beta-, Gamma-, and Delta-tocopherol.

A deficiency of these Vitamin E factors is said to produce muscular weakness, lack of growth, weakness in the central nervous system, interference with heart action, and may disturb glandular function, too.

It was not until 1959 that the "powers that be" at last recognized the need of Vitamin E in human nutrition. However, the values in this Complex have been known to the Nutritionist for many years. As in many other cases, use and demand have at last forced the medical profession to give a nutritional element the recognition it deserves.

Vitamin E is known to be closely related to Vitamins A and C. Both of these latter vitamins are greatly weakened by the presence of oxygen, and Vitamin E protects them from oxidation. But its greatest nutritional value seems to be in the building of muscular tone and tissue cell vitality. Such a function affects the welfare of the entire body. From reports by Nutritional Researchers in clinics all over the world, it is obvious that Vitamin E may prove to be one of our most important vitamins. Only time will reveal to man its true worth in Nature's Nutritional Plan.

Actually, if Vitamin E had no more worth than that reported in connection with heart weakness, it would warrant deep and special attention. I cannot urge you too strongly to make Vitamin E a part of your daily diet! It is found in most unaltered vegetable oils, and is especially high in soy bean oil and wheat germ oil.

What is the function of Vitamin K?

Vitamin K is an oil-soluble vitamin. It is found in the green leaves of practically all fresh vegetables. This is one of the reasons why you are urged to include a salad of green leafy vegetables with your meals.

Vitamin K is used by the body as a controlling agent to prevent hemorrhages. Surgeons use it for the same purpose prior to an operation. Make sure that any Food Supplement you add to your diet contains this important vitamin.

What is the function of Niacin?

Niacin is a member of the B-Complex family and is water-soluble. It functions in a system of tissue enzymes, which are involved in the control of oxidation. Remember the other vitamin with such a function -- Vitamin E? Here is another indication of vitamins working as a team.

The full extent of man's need for Niacin was not officially recognized until 1958, although it has long been known as and called the "anti-pellagra" vitamin. It is now being considered as the "personality" vitamin, as well, due to its effect upon an individual's mental outlook on life.

Furthermore, since Niacin is involved in the formation of enzymes, it can be assumed to affect all tissue cells, with a deficiency of it reducing the power and activity of the enzymes associated with the digestion of carbohydrates. It is also a supporter of Vitamins B1 and B2, which, as you know, are most important to the welfare of the entire body.

Are there any other vitamins in our food?

Oh, yes -- MANY more! But they have not been officially recognized by man as essential in human nutrition. Most of them are understood only by Nature.

We can determine something about their functions, of course, but only a few have thus far been isolated in the laboratory. For instance, we do know something about Vitamin F and Vitamin P, as well as Biotin, Choline, Inositol, and a few other lesser-known substances.

What is the function of Vitamin F? (free fatty acids)

Free Fatty Acid is found in Lecithin and other vegetable oils. It is so named to indicate that it is unaltered. That is, it is not a saturated oil, such as the hardened oils commonly used as shortening for cooking. Oleomargarine and, in some instances, butter are hardened by rendering their oils into a saturated condition.

At the present time, there is much controversy over the values of Vitamin F. Some authorities present clinical proof that the Free Fatty Acids lower the cholesterol level of the blood, thus preventing its accumulation on the walls of the arteries and causing heart attacks, high blood pressure, and other circulatory disturbances. Others disclaim such effects. Only time will give us the true answer.

Nevertheless, regardless of claims and counterclaims, I believe in the use of things natural, SO -- I believe it to be just good old common sense to use only the UNsaturated oils. Why not play it safe? Then you don't care whose claims ultimately prove to be correct.

What is the function of Vitamin P?

Vitamin P values are not too well known, generally. It has not yet been officially recognized as a vitamin.

It is sometimes called a citrin-permeable vitamin. It seems perfectly logical to conclude that it has an effect upon the tone of the capillary walls, in view of the observed increase in capillary fragility caused by a deficiency of Vitamin P.

What are the functions of Vitamins L & M?

As with Vitamin P, the exact functions of Vitamins L and M have not been officially established.

Vitamin L is known to contain lactation factors necessary for the establishment of normal lactation (giving of milk), and is found in both liver and yeast filtrate. Other than that, very little is known about it.

Vitamin M (Folic Acid) is better known, but still not recognized as a true vitamin. It is a member of the B-Complex group, a nitrogenous acid which has been termed a growth-promoting vitamin. It appears in the tissue cells of all animals and in the leaves of all vegetables, so appears amply supplied in a normal diet.

If, as believed, Folic Acid constitutes a growth-vitamin, it would then be an important factor in the growth of new cell structure throughout our entire lives.

What is the function of Biotin?

Biotin is another B-Complex vitamin -- but only slightly soluble in water. It has been found to be essential in the metabolism of various nutritional factors, recognized as a co-enzyme, and is found in every living cell.

While it is recognized as an important nutritional factor, not much is known about its true function as yet. It does not lend itself to easy analysis, and it appears only in minute amounts in Nature.

What is the function of Choline?

This vitamin is also considered to be a member of the B-Complex, is soluble in water, and is used by the liver in the synthesis of fats. In this day and age, when so much saturated

fat is consumed, the assistance Choline gives to the liver would seem to be a highly important point in its favor. Not only is it important in the metabolism of fats, but it also plays a vital role in connection with cholesterol.

Choline has been known as a nutritional factor for years, but only lately has its true value been recognized. This has probably been due to the fact that it unites closely with other vitamins and food elements, causing researchers to overlook it. It is generally concentrated in the liver, as might be expected from its role in synthesizing fats.

What is the function of Inositol?

Inositol is a water-soluble vitamin, and a member of the B-Complex. Its presence in our foods has been known since the turn of the century but it was recognized as a member of the B-family only in 1940.

Evidence that Inositol plays an important part in the metabolism of energy-producing foods is presented by the fact that it is abundantly distributed in the muscles of the body, especially the heart. With such evidence before us, how can anyone question the need of Inositol to help maintain the heart in a strong, vigorous state of health?

Furthermore, the muscular walls of arteries are heavy users of this vitamin. Considerable research is currently in progress to determine the effect a deficiency of Inositol has upon hardening of the arteries, and the effect it has upon the cholesterol level of the blood. Conflicting reports are filtering in from various sources concerning the effectiveness of both Inositol and Choline. Perhaps, by the time you read this, the altercation will have been settled, and the true functions of both these important vitamins recognized officially.

Well, there you have the functions of all the known vitamins. I could have filled pages with the speculative possibilities of each vitamin, but this is not a speculative report. I prefer to bring you the facts that will help you in your quest for better nutritional health. I am sure that you will agree with me when I say that vitamins DO play tremendously important rolls in your health program.

Should I ask my doctor before taking vitamins?

I am sure that it WOULD be advisable to ask your doctor before "taking vitamins", IF those vitamins were of the drugstore type, high-potency, single class. As you remember, I have previously advised against the practice of self-diagnosis and self-prescription with single, high-potency vitamins. To attempt to do this might easily upset your body chemistry.

However, I DO strongly support the use of Food Supplements, IF they are natural and organic and IF they contain ALL of the vitamins provided by Nature. Under these conditions they are food and nothing more -- there is no more need to ask your doctor about eating such supplements than there is to ask him if you may drink a glass of orange juice for breakfast.

The average housewife visits the food market about twice a week to purchase the family supply of food. Do you think it necessary for her to ask her doctor before eating the vitamins in such food? Don't you feel that the average individual is intelligent enough to know that vitamins are a part of the nutrition Nature has provided for the welfare of the human body? Well, then, if the present day methods of processing, refining, chemicalization, over-cooking, and otherwise altering our food supply has robbed it of its

natural vitamin content, do you think it necessary to ask anyone whether it is wise to replace those values?

If the doctor feels it necessary to prescribe vitamins for the treatment of disease after it has developed, I can see no reason why you should not purchase your supply of vitamins as a part of your regular food supply. Why wait until AFTER a disease has developed, only to be told that it was due to a nutritional deficiency? You may have avoided all that suffering, loss of time, and expense!

Here is the flat fact of the matter-- vitamins and minerals have been recognized as essential to the health of your body, so purchase them as you would a head of lettuce or any other food.

Are minerals as important as vitamins?

Absolutely! This attested to by the fact that Nature put them right along side the vitamins in all vegetables. They appear in all living cells. They are vitally important in both vegetable and animal metabolism.

In the case of food supplements, should minerals and vitamins be tableted together?

Why anyone should ever question the advisability of this is more than I can understand. Those who raise such an erroneous argument should also inform Nature of HER mistake in doing so in all living cells. After all, Nature always insists on combining the two!

So -- If your food supplement is truly an all-natural substance, I don't see how one tablet can HELP but contain both vitamins and minerals.

Can you tell me the different diseases that vitamins and minerals will cure?

Perhaps I could add such a volume to this course of study, but I do not feel it advisable to do so. So far, I haven't given any consideration to disease, have I? Do you think this was an oversight? Not at all. My reason for omitting such information is that I am HEALTH-CONSCIOUS, and I sincerely hope that you are, too -- or that you soon will be!

We eat vitamin - and mineral - rich Food Supplements in order to enrich our bodies with the values so essential to good health, and we know that the PRESENCE of health means the ABSENCE of disease. We know that any disease a vitamin will cure, that vitamin will also prevent. Let the doctors prescribe vitamins and minerals for the treatment of disease. We who are health-conscious will study the cause of good health, and will continue to provide our bodies with all of the vitamins and minerals supplied by Nature for the building of health. We need concern ourselves with nothing more. NATURE KNOWS BEST!

The more you delve into the richness of Nature's Nutritional Plan, the more you must be convinced of that fact! Of course, scientific studies of disease have been interesting and informative. I agree that we should take pride in such expanding knowledge. It is only when man attempts to set his own judgment ahead of that of Nature that such scientific facts are misused. Someone has said:

"The function of science is to render more intelligible the world in which we live."

To that I also agree -- but I do not agree that we should all become guinea pigs for the advancement of scientific knowledge. Nature created food elements long before man's meager science was born. Let's stay with Nature's Plan, and be SURE!

What is the function of Iron?

The fact that protein, vitamins, and minerals are classified as separate and distinct nutritional groups often misleads people into thinking too much about individual elements. They may be so separated for classification purposes, but they are so interrelated as to be inseparable from the viewpoint of the Nutritionist.

For instance, Iron is considered the blood-building mineral -- but its function is in conjunction with protein in forming the blood cells. The hemoglobin of the blood cell is known as an oxygen-carrying agent. Without the oxygen transported by this protein-iron compound, the vitamin activators could have no effect upon cell tissue.

Now -- which is independently important over all else?

Compared to body weight, the Iron content of the human body is small, but its importance is legend. It is essential to the vital activity of ALL cells, and it acts as a regulator of oxidation in the muscles. It is also extremely important to the functions of body enzymes. However, it is estimated that fully 60% of the body Iron is in the blood.

In the fetus (unborn child), Iron is stored in the liver. This is necessary, because milk, which is the main nutritional supply of the young, contains no Iron. The liver rations out its Iron supply until the young child is able to obtain its own from regular food.

An Iron-poor -- and, thus, red-blood-cell-poor -- body is said to be "anemic". Of course, there are other contributing causes of anemia, but an Iron deficiency is one of the chief culprits. Since the life of a blood cell is from three to four months, it is easy to understand why a rich supply of Iron is essential, and why it must be constant throughout life.

Bear in mind that it is not only the number of red blood cells which is important -- it is their quality, their Iron-content, which assures the oxygen-carrying ability of the blood.

What is the function of Calcium?

99% of the calcium in the body is in the bones and teeth. The remaining 1% is distributed in the soft tissues and body fluids -- and it is this small but important amount which is so little understood by the average person.

Calcium tends to give "firmness" to the soft tissues, and is necessary to the coagulation of the blood. It is sometimes called a heart regulator, due to the effect it has upon the heart muscles. Nature always sees to it that the blood calcium remains at a constant level. If calcium is not supplied by your food intake, the blood will rob the bones and teeth. This is easily provable through X-Ray examination, although the most widely known example is the "robbing" observed during a pregnancy in which proper nutrition was lacking.

So, you see, you actually have a "calcium bank account", as it were. It is your duty to see to it that your "calcium bank deposits" are adequate to meet the demands of the future. You certainly don't want to be "overdrawn"!

A long life may be attributable to a good calcium supply, also. In fact, many Nutritional Researchers declare calcium to be of as much importance in longevity as is the influence of heredity.

What is the function of Phosphorus?

Phosphorus is often spoken of as the "sister" of calcium, since 90% of the body Phosphorus is found in the bones and teeth. It certainly is a co-worker of calcium.

Growth and physical development are also affected by nutritional Phosphorus. It is said to be essential to mental alertness and, as with calcium, is needed by the body throughout

the entire life span. Phosphorus is especially needed during the growing years, but its general effect upon body metabolism indicates continuous need.

A heavy concentration of Phosphorus is found in the brain cells, which account for the belief that a deficiency of this vital mineral will affect the mental state. This fact, no doubt, gave rise to the statement credited to an old German Scientist:

"No Phosphorus, no brain."

Phosphorus is essential to the general well-being of the body. Special attention should be given to the intake of both Phosphorus and calcium during pregnancy and lactation, for, as stated before, the calcium blood level must be maintained, even at the expense of the bones and teeth of the mother. And where ever calcium goes, there phosphorus goes, also.

In addition, since the digestive powers of the aged usually decline, the elderly should increase their intake of phosphorus to assure adequacy.

What is the function of Iodine?

Iodine is of extreme importance to the body, as it is used by the thyroid gland in the production of THYROXINE, an absolute essential to normal metabolism. The oxidation process in the cells of the body is directly connected with thyroxine, and those who eat an excessive amount of fat and carbohydrate foods demand a greater amount of thyroxine to assure proper oxidation of such foods. The daily intake of iodine must be sufficient for the manufacture in the thyroid gland of all the thyroxine required to support normal physiological activity, under the conditions YOU establish through your diet and environment.

Frankly, the minute quantity of iodine in the average diet gives rise to cancer. It would, therefore, be extremely wise for us to give special attention to foods that supply more iodine, or make sure by adding a supplement of high iodine content.

What is the function of Magnesium?

Magnesium is generously distributed throughout the body and, therefore, takes its place as an important element of nutrition. About 71% of body magnesium is found in the bones and teeth.

Muscle tissues contain considerably more magnesium than they do calcium, and this vital element is also found in blood cells.

It follows, therefore, that magnesium is essential to the welfare of bone, teeth, muscle structure, and blood cells.

What is the function of Potassium?

This mineral appears in the cell structure of the muscles and internal organs of the body, in blood vessel walls, and in blood cells -- this it is quite evident that it is absolutely necessary to keep a normal balance between calcium and potassium in the body.

The relationship of these two minerals is quite noticeable, especially when there is a deficiency of either one. Both sets of functions suffer.

Both are essential to the normal muscular rhythm of the heart.

What is the function of Sulphur?

Most of the sulfur found in the body is in conjunction with protein. Since protein constitutes 95% of the body tissue structure, when water and fat are disregarded, it is obvious that sulfur is widely distributed.

Many claims are made concerning the values of sulfur -- i.e., its value to the growth of hair and for the welfare of the skin -- but it is doubtful if those benefits are any greater than the value of sulfur to all other tissue cells found in the body.

The very fact that sulfur is so closely associated with protein lends sufficient and great importance to its regular supply in our diet.

I hear a lot about trace minerals -- what does it all mean?

The function of what are termed "trace minerals" are not completely understood -- it may be that they never will be -- but here is another instance in which we should put our trust in Nature. Although we know very little about their functions, the EFFECTS of certain trace minerals upon the tissue cells of the body have been amply demonstrated.

The major reason why accurate analysis of these actual functions has been extremely difficult is because trace minerals are retained in the tissues in such minute amounts. This is why they are called "trace" minerals. However, as experienced researchers well know, the amount of retention is not always an accurate yardstick of importance.

For instance, consider copper -- this mineral is known to act as a catalyst in the formation of hemoglobin in the blood cells. It must, therefore, be inseparable from iron and protein in the blood-building process, even though its retention is slight. For this reason, alone, copper is acknowledged by man to be a nutritionally essential element.

Zinc is attracting a great deal of attention these days, and is considered by some researchers as an indispensable ingredient in nutrition. Unfortunately, no one seems eager to attempt to catalog its specific values.

Cobalt is another trace mineral that is receiving considerable attention. It is known to be an essential constituent in Vitamin B12 -- a fact, alone, recommending it to the classification of "important". Anything which has to do with blood-building must fall in that category!

Yes, let's just say that trace minerals are elements in the food of man which man does not yet understand thoroughly.

What is Chlorophyll?

Chlorophyll is the green coloring material in all plants. It is referred to as the "essence of plant life", or it may be more accurately termed the "hemoglobin of the plant". This analogy is very descriptive for chemical analysis of chlorophyll is exceedingly similar to that of the actual hemoglobin of human blood cells.

The chloroplasts -- or chlorophyll bodies -- receive their stimulation from the light of the sun. Under such stimulus, they become active in the manufacture of plant food. This is the digestive, metabolic process of the plant in action.

Chlorophyll has been highly praised for its healing effect on animal tissue and for its blood-building values. It is also known as Nature's Deodorizer. Internal chlorophyll is the life builder of the animal body. That old phrase, "Have you had your chlorophyll today?" is worth remembering.

And so it goes.

Slowly, man is beginning to realize the importance of the former "unknowns" in human nutrition, but the fact that recognition of them is slow in coming does not lessen the importance of these elements to your body.

Neither does recognition increase their importance.

After all, it was only a dozen years ago that B12, the blood-building vitamin, was recognized officially. And only two years ago, Niacin was at last established as a "necessary" food element, with Vitamin E being officially acknowledged as "essential" only a few months ago, as this is being written.

The values of these food factors haven't changed -- they are no more and no less important today than they have been since the beginning of time. Only man's knowledge and understanding have changed!

When I look back to the "discovery" of the various vitamins through the years, it seems but a short time, and, actually, it IS a very short time! I have thoroughly enjoyed being with this babe as it has grown lustily, but I know that it will reach much greater stature in the years ahead. The Science of Nutrition has not yet reached maturity, but it need make no difference to you and your plans for health. Nature has never restricted her nutritional supply to conform to the limited knowledge of man!

REMEMBER -- ignorance can not be considered a valid excuse for failure to comply with Nature's Laws. Violation of these laws will INVARIABLY lead to a state of "dis-ease", both physically and mentally.

OBEY THE LAW.

You have now completed the second section of this course. I trust that you are about ready to put into practical use the truths you have learned from your study. That some of the facts presented may have disturbed one or two of your pet theories is to be expected, for you may have been drifting away from things natural. I am not finding fault with your understanding. Even scientific researchers, themselves, are divided into two groups. There are those of the medical field who, through training, are equipped to wrestle with the problem of disease and approach these facts from that angle. On the other hand there are those of the nutrition field who, through training, are health-conscious and equipped to consider these facts from the viewpoint of building health.

It is not my wish to deprecate the work of scientists in specific fields. They are all contributing to the welfare of man. But, because science has made such tremendous strides in NON-LIVING categories far too many people assume that this great realm of accomplishment extends to everything -- which it does NOT!

NO SCIENTIST, IN ANY FIELD HAS EVER BEEN ABLE TO CREATE A LIVING SUBSTANCE OR A SUBSTANCE WHICH WOULD SUSTAIN LIFE!

The creation of life is beyond the powers of man. He has only the substances created by Nature with which to work, and his own powers are limited to rearranging those materials WITHIN THE LIMITS OF THE NATURAL LAWS.

The vaunted power of Science -- so advanced in other fields -- is a total flop when it comes to life, itself.

ONLY NATURE CAN PRODUCE AND SUSTAIN LIFE!

As Nutritionists, we are not interested in the treatment of disease. We are health-conscious, body-building, Nature-loving people. We believe that the Life Force within our bodies is an endowment of the Creator of all things, and that the free expression of this Life Force is HEALTH.

We believe that everything in Creation must conform to the Natural Laws, that lack of conformity produces discord. For instance, that lack of conformity with Nature's Nutritional Laws will produce the discordant situation known as "dis-ease".

What should be done in this event? Should we bring about even further discord by stimulating the weakened cells with an unnatural, man-made substance? As an emergency measure, perhaps, but is this the way to HEALTH in those cells?

Wouldn't it be more logical for us to endeavor to conform to Nature's Laws and provide the body with the life-giving nutritional elements Nature created and needs for the restoration and maintenance of healthy cells?

THE UTTER LOGIC OF THE IMPERATIVE ANSWER MAKES ME WONDER WHY SO MANY PEOPLE MISS IT.

SECTION THREE

I know, of course, that some of my readers are going to be nutrition-conscious, long-time lovers of Nature. To those of you who fall in this category, the facts contained in this course will be readily understood and applied.

However, not all of you are so lucky, so advanced along the NUTRITION WAY TO HEALTH. Some are still groping blindly through the maze of weakness and ill-health. Others are a bit more fortunate, being somewhat advanced along the way to health.

Regardless of your degree of understanding concerning your nutritional health program, though, you will want to carefully READ AND STUDY every single question and answer set forth in this study course.

The SPARK which has ignited the light of knowledge for thousands upon thousands of others is begin offered for your enlightenment. It has reshaped the thought-patterns of those thousands before you, make no mistake about that. For this reason, I trust that you, too, will give serious thought to THE NUTRITION WAY TO HEALTH. My sole purpose in presenting these facts is to help YOU -- help you build stronger, more vital bodies with greater resistance against ALL nutritional-deficiency diseases and ALL infectious diseases and ALL degenerative diseases.

Your body is a wondrous and courageous organism. You don't have to worry about its power of self-healing. You only need to be concerned about its external influences and its food supply. Given reasonable protection against such adverse influences -- and given its proper nutritional supply -- your body will maintain its vitality and vigor to a ripe old age.

To give thorough and proper consideration to all organs and members of the body would fill thousands of pages. Your study here does not require such an extensive explanation. However, I do feel that a better understanding of one vital organ will help you to more easily grasp the over-all nutritional problems you face.

Can you tell me something about my heart?

The heart is not a large organ - only about the size of your fist - but you should be very thankful that Nature has made it the durable marvel of this scientific age!

I can't specifically say that your heart will work any better because of your understanding of it, but what I'm going to tell you may cause you to STOP INTERFERING with its functions.

Actually, your heart is just an automatic, muscular, pressure pump. Its sole duty is to pump the blood to all parts of the body. Of course, the cargo your blood is transporting -- oxygen, nutrition, and waste material IS of vital importance. The marvelous thing about this pressure-pump is that it never takes time off from its work. Simple though the mechanics of that work may be, the welfare of every tissue cell in the body is dependent upon a continuous blood supply. The heart NEVER alters its muscular activity. Its action is always the same. Only the speed varies.

If you were to watch it in action through a fluoroscope, you would see the regular contraction and relaxation occur over and over again. IT PERFORMS EXACTLY THESE SAME MOVEMENTS THROUGHOUT YOUR ENTIRE LIFE! Think about this for a moment. Then, listen to it through a stethoscope. Here is muscular rhythm personified, as it "lub-dub, lub-dub, lub-dubs" its way through every minute of every hour of every year of your life.

A simple, muscular organ -- but so important to your well-being! The task performed by your heart is almost beyond human understanding.

There are about 1 1/2 gallons of blood in the average human body, and the heart circulates that amount throughout the body every 60 seconds. This means that your heart pumps over 2000 gallons of blood every day of your life! Each of those "lub-dub" sounds heard through the stethoscope measures a period of work and a period of rest.

That you might fully realize the magnitude of the job and the stamina of your heart, let me say that simple mathematics prove that there are over 2 1/2 BILLION such periods during the average life-time. And all this work must be performed without a single minute lost in "closed down for repairs". Think of it. Your heart must rest AND make repairs during those short intervals between the "dub", when the valves close, and "lub" of the next contraction.

I am not going to explain the anatomy of the heart. I only wish to call your attention to the phenomenal expression of strength. I also want to call your attention to the fact that your heart is made up of those same tissue cells I've been telling you about! They too, must have their waste washed away by that self-same water content. YOU, and you ALONE, are responsible for the number of times your heart is going to have the strength to pump that life-giving blood of yours throughout your body.

The next time you seat yourself at the dinner table, just ask yourself this question:

"Does this food contain ALL of the nutritional elements necessary to keep my heart functioning in a normal manner?"

You might ask the exact same question concerning the nutritional elements necessary for the normal function of every single one of the other organs and glands and tissue structures. Their health, strength and vitality depend upon your judgment of food values, too.

Now, do you think it advisable to APPLY the knowledge you have gained concerning nutrition through your study of Section One and Section Two? The word "APPLY" is capitalized for good reason -- unless you put your knowledge to practical use, your time and labor have been wasted.

In this section, I will set forth a plan whereby you can make practical use of your newly-attained knowledge.

Whether you realize it or not, IN JUST THREE MONTHS YOU WILL HAVE A NEW BODY. You have no choice. You MUST build a new one, for the life expectancy of the cells you now have is only 90 days. They will be worn out in an average of 3 months. You don't have much choice, do you?

Oh, of course, you can shirk your duty to your tissue cells and supply them with second-class body building material. If you do, you will be living in a second-class body! A tissue cell can be no better than the material from which it is constructed. All those cells can do is to express a mass-protest in the form of aches and pains. They probably hope it will teach you a lesson, but it seldom does.

Sections of this course of study fall into different categories, but each answer given to the many questions play an important role in your health-building program. I believe that the answers as they are given can guide you on your voyage through the maze of half-truths and contradictions which have been thrown in your direction from all sides. I believe it is to your advantage to have these answers in the form of crisp, provable facts, with no "fillers". It is my firm

belief that one who studies this course can and WILL rebuild a stronger, healthier and more vigorous body.

What about the "battle of the bulge"?

You may have attained success in your chosen profession or business, but has your success gone to your -- no, not to your head, but in the other direction? Has it settled at, around and near your belt-line?

That bulge may be a signal of distress!

You have read about, or you have seen, the Royal Gorge in Colorado, but there may be a "royal gorge" much closer at home to you than that. In fact, if this is you I've been describing, then I'm sure of it.

But take courage. You can win "the battle of the bulge" if you will start living the NUTRITION WAY TO HEALTH. No, I'm not going to advocate the practice usually known as "dieting". A diet, in case you hadn't thought of it in this way, is usually associated with some type of disease. You go on a diet because pain and distress are fresh in your memory. You stay on it only as long as your memory lasts, then fall off the "wagon" at the first opportunity. This is the case-history of "The Diet".

Most people consider dieting as self-treatment, to be indulged in only after a disease has developed (remember, when I say disease, I mean "dis-ease"). THE NUTRITION WAY TO HEALTH is not "going on a diet". It is living a natural life. Nothing more, but nothing less, either. Just stop for a few moments and consider how much disease-breeding waste is confined within that "Nature's bathing suit" you're wearing. If you can stand the sight, stand before a mirror and LOOK at what your "food" has done to you. No wonder they tell us that our "food is in the mouth 30 seconds -- in the stomach one hour -- but on the hips forever!"

Over-eating, however, is not the only "killer" we must consider. Unfortunately, there are diet-conscious folk who are suffering from acute tissue-cell starvation. A health diet is NOT a starvation diet! A health diet is more satisfying than any "stuffing diet" every concocted. It is a sad fact, but true -- most people spend far more time and use better judgment in purchasing the food for their dog than they do for their family. Perhaps the dog-food commercials pack a wallop. I don't know. You may find what I have just pointed out hard to believe, but check your own actions the next time you enter the food market. If the health and will-being of your dog is worth more to you than the health and wellbeing of your family, that's your business. ALL I can do is urge you to STOP and THINK.

Above all, don't be a "health-food introvert"! I use this term to describe the fellow who sneaks in the back door of the Health Food Store for fear some of his friends will see him. Be health-food-conscious, yes -- but do NOT make excuses for eating certain types of food and refusing to eat others. It is the careless eater who should be making excuses, not you.

Nature DEMANDS that you supply the necessary nutritional material, and neither you nor Nature need make excuses!

How long will it take me to adjust myself to the nutritional way to health?

Most people find that it takes about three months -- and NOTE that three months is the average life of your old cells.

I do not mean that you can rebuild your health within that time, the time element varies, because of the state of vitality. You can, however, expect improvement in your health within one to three months. Keep in mind that it's the quality of your food that governs the results obtained. "A steak's a steak, and a carrot's a carrot" -- yes, but in name only. Quality may vary from 40 to 60%.

You have driven a car for -- say -- a period equaling half your age. I venture to say that you know more about what kind of fuel should go into ITS tank than you do about what kind of fuel to put in your stomach. It may shock you to learn the truth about some of the "stuff" you have been calling food and putting into your stomach.

I use mineral oil to make salad dressing -- is it a health food?

Mineral oil is NOT a health food. Not only does it lack nutritional values, but it adheres to the lining of the small intestines and actually PREVENTS the absorption of the values in other foods. Furthermore, it absorbs the oil-soluble vitamins and carries them out of the body. Arthur Brisbane was right when he said:

"Half of what we eat keeps us alive, and the other half kills us."

I want to start on the NUTRITION WAY TO HEALTH -- what should I do first?

If you were going to refurnish your home, what would you do first?

You would clean house and get rid of the trash. That is exactly what you should do before you start to "refurnish" your body.

A healthy tissue cell cannot exist in the midst of disease-laden waste. It is surprising to see the amount of waste material that may have accumulated in the sewage system of your body -- not only in the bowels, but in the lymphatic drainage system and in the blood stream, itself. ALL of this accumulated waste must be washed away FIRST for optimum results.

This common-sense approach to the job gives you the best opportunity to achieve rapid nutritional health of tissue cells.

What is the quickest way for me to free my body of waste?

In Section One of this study course, I told you about a method of thorough cleansing. Now, let me modify the suggestions just a trifle to account for the fact that you may be a rank beginner in this business of consciously building health. Let's move into this thing a little more slowly for the sake of your comfort.

First of all, you will do the job in the same manner as I have described before -- through the use of cleansing foods and liquids. But REMEMBER! -- "You can't clean house without raising a dust." When your body starts moving all that poisonous waste out of your tissue cells and their surroundings, it may cause quite a disturbance. This is why I recommend that you go about this initial "house-cleaning" in a moderate fashion.

Above all, welcome signs that the poison is being eliminated! There are four major processes of such elimination -- the bowel, the kidneys, the perspiration glands, and the breath! Any or all of these MAY show signs of being over-worked. They won't be, for they can handle a tremendous load, yet YOU may become alarmed if you aren't prepared for such possible signs. If they do arise, be happy about it. They are signs that the poison in your system is, at last, being thrown off! Any discomfort will only be temporary. Rest assured of that. When the cleansing is completed, the "dust" will subside.

Here is your moderate schedule....

First -- set aside one or two meals a day in which you eat no solid food. Let's say that those meals are your breakfast and lunch. For these meals you drink fruit and vegetable juices ONLY. After you have followed the breakfast-lunch cleansing method for 3 days, start flushing your system with water.

Each hour, drink at least one or two glasses of water. Continue to gorge yourself with water until 6 o'clock in the evening. Eat your light, solid-food dinner about 6:30 or 7:00 P.M. The reason I suggest that you discontinue the water-flush at 6 o'clock is the obvious one of elimination and the possible sleep disturbance.

Should a laxative be necessary, make sure that it is a MILD laxative, preferably herbal. The bowels, of course, MUST be kept free, but avoid a harsh laxative.

How long should I continue such a cleansing regime?

The time necessary for you to cleanse your body will depend upon how much accumulated waste you have in your system. These first few days of cleansing are only a start. I suggest that you follow the above plan to the letter.

Once you have experienced the benefit which comes from even this milder form of cleansing, you will make it a regular part of your nutritional program. After you have cleansed your system and started on a natural diet, you may not find it necessary to use such a cleansing method more than one day each month. You'll be happy to do so, though. Once you get the natural habit, you will want to keep the glorious sensation which comes with a clean body, inside and out.

Should I use cleansing foods with my regular meals?

Yes, of course. It is absolutely essential that your tissue cells be free of waste. You consider it necessary to bathe the outside of your body regularly. Why not make sure that your tissue cells are cleansed daily.

What are the cleansing foods?

Well, actually all fresh, raw vegetables and fruits may be considered cleansing foods. However, fruit and vegetable JUICES have a faster cleansing action. There is no reason why you cannot drink a glass of fruit or vegetable juice before each meal. Or between meals, if you prefer.

Which is best for me to use -- a juicer or a blender?

Both methods are good, as each separates the juice from the pulp. However, the blender does not remove the pulp. There is a great deal of nutritional value in the pulp, so some may prefer the blender. Personally, I use both. There are times when I prefer the blender. There are times when I prefer to drink my salad. One thing is sure -- a salad is easier and more completely digested when it has been run through a blender.

I believe that, once you have started on your NUTRITION WAY TO HEALTH, you will want to have both a juicer and a blender in your kitchen.

Wouldn't the cleansing be accomplished quicker, if one went on a complete water-fast?

No doubt about it -- a complete fast is the fastest way to cleanse the tissues -- but it is not always the best way.

There are many people who should NOT practice fasting. Certainly, a prolonged fast should be under the supervision of one who is experienced in such a radical method. On the other hand, I feel that virtually anyone could safely use the water fast for a one day

each week or one day each month. We must keep the body clean, but radical methods are not always advisable.

I have seen marvelous results from one, two or even three weeks' fasting, but I have also known many people who could NOT safely use such a cleansing method. Existing vitality and state of health have a great bearing upon such a matter.

What are the dangers of a water fast?

It is not a question of danger. It is more a question of the eliminative organs' ability to throw off the waste as fast as it is dumped into the blood stream. You can't clean house without raising a dust, and many people prefer not to raise too much at a time. It is often better to "make haste slowly". You can clean house one room at a time, as it were. You don't have to do it all at once.

Why do you advise the drinking of so much water?

I am sure that you remember the explanation given you in Section One - how the water washed the waste material from the surface of the cell, and how the water was then sucked into the lymphatic system and carried to the blood stream to be transported to the organs of elimination.

Did you ever try to take a bath in a quart of water?

That reminds me of a report a lady gave me one time concerning her visit to a noted doctor in England. Her doctors here in the United States had failed to give her any permanent relief, terming her condition a chronic case of arthritis. When she arrived in England and consulted with the Specialist, what treatment do you suppose he prescribed? This may surprise you -- A TEN DAY WATER FAST.

Rather a long way to travel for such a simple prescription, wasn't it?

But it was effective in her case. There can be no doubt that water is the best tissue cleansing agent. To do this job well, don't be skimpy with the supply. Do as this lady said she did. "That doctor poured water down me till I almost drowned."

Slightly exaggerated, perhaps, but it IS necessary to literally gorge yourself with water during a cleansing process.

How much water should I ordinarily drink?

That depends upon how much liquid food you consume, but the average person should drink at least six glasses of water each day.

If one drinks too much water, doesn't it water-log the tissues?

The body will not retain enough water to "water-log" the tissues. Any such indication will always be due to some cause other than the drinking of pure water. For instance, retention of excess water among the tissue cells is usually due to the excessive use of salt in the diet.

Don't you believe in the use of salt?

Salt adds to the flavor of certain food, and, in the case of excessive perspiration, salt is required to off-set the loss. As you know, perspiration (sweat) has a high-salt content. So, if

you don't replace the salt that is lost in excessive sweating, you may interfere with the acid-alkaline balance of the blood stream.

Such requirements, however, do NOT give license to overeat salty foods. Doing so may cause retention of too much water in the tissues. Doctors continuously caution against such over-use. They point to a long list of abnormal conditions which may be due to the use of too much salt.

So, to answer your question -- I believe in the JUDICIOUS use of salt.

Is pepper injurious?

Frankly, I don't consider pepper a nutritional element. It adds flavor to some foods. It seems to have a stimulating effect, which may or may not be beneficial in your specific case. Personally, I am not concerned about its having an injurious effect, but I can see no reason for masking the natural flavor of vegetables with such a spice.

What about all the other herbs used for flavoring our foods?

Most herbs lend flavor to our foods by stimulating our appetites, and we are told in Genesis 1:29:

"I have given you every herb bearing seed which is upon the face of all the earth, and every tree in which is the fruit of a tree yielding seed; to you it shall be for meat."

Yes, it would seem that natural herbs were intended as food for man.

How do you determine the acid and the alkaline forming foods?

Perhaps the best way to answer this question is to describe a thing with which you are familiar, and which is analogous to the action which occurs in the utilization of food in your body.

Suppose you have a fire in your stove or fireplace. Regardless of the material you burn, it is not all consumed. There is always some ash left. It would be a simple matter to analyze that ash and determine whether it was acid or alkaline. If it were alkaline, we would say that the material which had been consumed was an alkaline-forming substance.

So it is with foods consumed by the body. There, a chemical transformation also occurs. The ash which results determines whether the food was acid or alkaline. And, strangely enough, what seems to be a sensible guess is not always an accurate one. For instance, oranges contain an acid, yet they are an alkaline-producing food. Their ash has an alkaline reaction in the body. Reactions of other foods vary greatly, and we have acid foods, semi-acid foods and alkaline foods.

It is not what a food looks like on your plate nor what it tastes like in your mouth which determines its value to your tissue cells. The important points are the usable nutritional elements it contains and what effect the ash that is left has upon those cells of yours.

I have heard you speak of the miracle-healing-power of cabbage juice -- can you tell me more about it?

Yes, I have spoken many times of the values of cabbage juice, but the miracle power lies more in the fact that you drink it RAW. ALL RAW VEGETABLE JUICES SEEM TO HAVE A

SPECIAL CLEANSING AND HEALING POWER, AND WELL THEY MIGHT, FOR THEY HAVE NOT BEEN ALTERED IN ANY WAY.

About 30 years ago, when I was still in general practice, I put every stomach ulcer case on a mixture of cabbage juice and either celery, carrot, pineapple, or tomato juice. The only requirement was that cabbage constitute at least two thirds of the drink, and that the patient must drink two to three glasses per day. The results obtained may have seemed like miracles, but I assure you that it was only Nature at work.

About 10 years ago, Garnett Cheney, M.D., of the Department of Medicine, Stanford University, in California, jolted his fellow practitioners by writing an article for the Journal of the American Dietetic Association. In it, he reported the unusual results he had obtained on a group of ulcer cases with cabbage juice. He specifically prescribed two pints of the juice per day. As I read that article, I remember smiling. His prescription came awfully close to the exact amount I had always recommended. Dr. Cheney credits the cure of all those ulcer cases to a "factor" in the cabbage juice which he called Vitamin U.

Two of the valuable vitamin factors the doctor failed to mention in his article are Vitamin A and Vitamin C. Cabbage contains a rich supply of both these anti-infectives. In fact, it contains more Vitamin C than does an equal amount of any citrus fruit. Cabbage is also a good general source of the B-Complex Vitamins, as well as iron, calcium, and many of the trace minerals. It is, however, lacking in iodine.

Does the acerola cherry contain more Vitamin C than any other fruit?

Yes -- except rosehips. As a basis of comparison, we will take the Vitamin C values in oranges. Acerola cherries are more than 50 times richer in Vitamin C than oranges -- rosehips are close to 100 times richer. Of course, as a drink, acerola is more tasty and easier to consume.

What are the mineral and vitamin values in Alfalfa?

The nutritional values in alfalfa -- as in all other fruits and vegetables -- depend upon the richness of the soil in which it is grown. It also depends upon the treatment it has received since it was harvested, as many of the foods on your table contain less than 1-tenth of their original nutritional values.

Alfalfa contains about 5 times as much protein as milk. It is higher in protein values than meat, eggs, or whole grains. It is 5 to 20 times higher in calcium, and many times higher in iron. It is exceptionally rich in Vitamin A, being almost equal to liver. It contains a good supply of the B Vitamins and of Vitamin E.

However, the vitamin for which it is most noted is Vitamin K. It contains from 250 to 400 units of Vitamin K to every Gram.

What are the nutritional values of Almonds?

Raw almonds provide enzymes, are high in calories but low in carbohydrates. They have a protein content about equal to meat. Almonds contain a reasonable amount of the B vitamins and Vitamin C, have a rich supply of calcium, phosphorus, iron, and potassium, as well as most of the trace minerals.

Almonds are NOT difficult to digest, if you chew them well in order to completely pulverize their cellulose structure. This is true of all nuts. They should be eaten slowly and chewed well.

While there is some variance in the nutritional values of nuts, they may all be classed as a protein food with a high calorie count. In fact, nuts are about a dozen times more fattening than potatoes - about 5 times as fattening as bread.

In their natural, raw state, nuts may take the place of meats, and they do not lend themselves to the production of uric acid, as meats do.

What are the nutritional values of Brazil nuts?

Brazil Nuts are low in carbohydrate, of medium protein content, but very high in fat. They are high in potassium and phosphorus, medium in iron and calcium, and contain most of the trace minerals.

They contain a trace of Vitamin A, but their only other vitamin is a medium supply of Vitamin B1.

What are nutritional values of Cashew nuts?

Cashew Nuts have fairly high carbohydrate, protein, and fat content. Other than phosphorus, their mineral content is very low. They contain some of the B Vitamins.

What are the nutritional values of Coconuts?

Coconuts contain a medium amount of carbohydrate, low in protein, and high in fat. They are high in potassium, but low in all other minerals. They have only a fair supply of the B Vitamins.

What are the nutritional values of Hickory nuts?

Hickory Nuts are medium in carbohydrates, low in protein, and high in fat. They contain some phosphorus, but, other than that, are very low in minerals and vitamins.

What are the nutritional values of Peanuts?

Peanuts have a medium supply of carbohydrate, high in protein, and medium in fat. They are high in potassium, medium in all other minerals. They contain some B Vitamins, and the red paper-like covering contains Vitamin C.

What are the nutritional values of Pecans?

Pecans are low in carbohydrate and protein, but high in fat. They contain a medium supply of all minerals, except sodium. They have a medium supply of Vitamin A and the B Vitamins.

What are the nutritional values of Black Walnuts?

Black Walnuts have a medium supply of carbohydrate, high in protein and fat. They are high in potassium and iron, but low in all other minerals. They contain medium amount of Vitamin A and B Vitamins.

What are the nutritional values of English Walnuts?

English Walnuts are low in carbohydrate, medium in protein and high in fat. They have a good mineral content, with a medium supply of Vitamin A and the B Vitamins.

Before answering any of your questions on Vitamins, I wish to state that I will name the foods which have SIGNIFICANT amounts of the vitamin in question. In Nature, vitamins never occur alone. There are always certain other vitamins appearing in that food. Bear this in mind as you read the following lists. Foods containing only trace amounts of a given nutritional element will not be named.

What foods contain Vitamin A?

The amount of Vitamin A in each of the following foods is denoted in INTERNATIONAL UNITS OR MILLIGRAMS, and will be the average amount found in ONE OUNCE of the food named, or as otherwise stated.

Food Item _____	Milligrams	Food Item _____	Milligrams
Apricots (fresh) _____	1000	Liver (beef) _____	5000
Apricots (dry) _____	2000	Mustard Greens _____	1100
Asparagus (fresh) _____	750	Parsley _____	2000
Beans (green) _____	1400	Peach (one, fresh) _____	1250
Beet greens _____	3000	Peach (dried) _____	2250
Broccoli _____	800	Peas (green) _____	50
Butter _____	400	Peas (dry) _____	125
Cabbage _____	1000	Peppers (one, green) _____	1250
Cantaloupe _____	800	Peppers (one, rec.) _____	1000
Carrots (raw) _____	2000	Persimmons (one) _____	2500
Chard _____	700	Prunes _____	300
Cheese _____	500	Pumpkin _____	300
Cod-Liver Oil _____	22000	Spinach _____	3150
Cream _____	300	Squash (winter) _____	1750
Dandelion green _____	4000	Sweet Potato (one) _____	6500
Egg (one) _____	600	Tomato (one) _____	1000
Endive _____	5000	Turnip greens _____	3000
Kale _____	1000	Watercress _____	1500
Lettuce _____	3000		

What foods contain Vitamin B1?

Food Item _____	Milligrams
Almonds (ten) _____	.02
Asparagus (one stalk) _____	.015
Avocado (one) _____	.25
Bacon (one slice) _____	.03
Barley (1 oz.) _____	.065
Beans, green (1 oz.) _____	.08
Beef, lean (1 oz.) _____	.05
Beef Heart (1 oz.) _____	.25
Figs (one) _____	.02
Flour, rye (1 oz.) _____	.15
Flour, soy bean (1 oz.) _____	.25
Flour, wheat (1 oz.) _____	.15
Ham, lean (1 oz.) _____	.65
Lentils, dry (1 oz.) _____	.16
Liver (1 oz.) _____	.25
Oatmeal (1 oz.) _____	.30
Peanuts (1 oz.) _____	.20
Peas, dry (1 oz.) _____	.05

Food Item _____	Milligrams
Bread (whole wheat) slice ____	.08
Bread (rye) slice _____	.05
Brussels Sprouts _____	.03
Cashew Nuts (10) _____	.15
Cauliflower (1 oz.) _____	.08
Corn Meal (1 oz.) _____	.15
Dandelion greens (1 oz.) ____	.08
Eggs (one) _____	.06
Pecans (10) _____	.10
Plums, one _____	.08
Pork, lean (1 oz.) _____	.90
Rice, brown (1 oz.) _____	.10
Soy Bean (1 oz.) _____	.56
Veal (1 oz.) _____	.10
Walnuts, black (10) _____	.04
Walnuts, English <10) _____	.05
Wheat germ (1 oz.) _____	.30

What foods contain Vitamin B2?

Food Item _____	Milligrams
Beans, dry (1 oz.) _____	.08
Beet greens (1 oz.) _____	.10
Cheese (1 oz.) _____	.20
Collard greens (1 oz.) _____	.12
Crabmeat (1 oz.) _____	.10
Eggs (one) _____	.18
Liver (1 oz.) _____	1.50

Food Item _____	Milligrams
Milk (1 oz.) _____	.05
Mustard greens (1 oz.) _____	.09
Oysters (1 oz.) _____	.12
Peanuts (1 oz.) _____	.07
Peas, green (1 oz.) _____	.06
Peas, dry (1 oz.) _____	.09
Soy Beans (1 oz.) _____	.10

What foods contain Vitamin B6?

Vitamin B6 does not appear in sufficient quantities to allow for accurate, widespread measurement. Traces of the vitamin does appear in some green vegetables, but its main source of supply is the ferment of yeast.

What foods contain Vitamin B12?

Vitamin B12 is one of the B Complex Vitamins, but a list of foods rich in this substance is not feasible. We do know that it appears in yeast, and traces of it are found in green vegetables.

However, most of the B12 substances is found in meats. There is only one outstanding food which can be considered as a rich source of B12 -- LIVER. ALL doctors urge anemia cases to eat liver, since B12 is widely known as the Blood-building vitamin.

What foods contain Niacin?

Food Item _____	Milligrams	Food Item _____	Milligrams
Beef, lean (1 oz.) _____	.50	Mushrooms (1 oz.) _____	3.00
Chicken (1 oz.) _____	2.50	Peanuts (1 oz.) _____	4.00
Fish (1 oz.) _____	2.00	Pork, lean (1 oz.) _____	2.40
Flour, whole wheat (1 oz.) _____	1.50	Rich, brown (1 oz.) _____	1.90
Ham (1 oz.) _____	3.00	Turkey (1 oz.) _____	3.50
Heart, beef (1 oz.) _____	4.00	Veal (1 oz.) _____	2.80
Lentils, dry (1 oz.) _____	.80	Wheat germ (1 oz.) _____	.50
Liver (1 oz.) _____	15.00	Yeast (1 oz.) _____	4.00

What foods contain Choline?

Food Item _____	Milligrams	Food Item _____	Milligrams
Asparagus (1 oz.) _____	20.00	Oatmeal (1 oz.) _____	84.00
Barley (1 oz.) _____	25.99	Peanuts (1 oz.) _____	47.00
Beans, green (1 oz.) _____	82.00	Peas, dry (1 oz.) _____	51.00
Beef, lean (1 oz.) _____	15.00	Pecans (10) _____	5.00
Beets (1 oz.) _____	3.00	Pork, lean (1 oz.) _____	42.00
Cabbage (1 oz.) _____	125.00	Potatoes (1 oz.) _____	20.00
Carrots (1 oz.) _____	28.00	Potatoes, sweet (1 oz.) _____	8.00
Cheese (1 oz.) _____	20.00	Rice, brown (1 oz.) _____	41.00
Eggs one _____	260.00	Soy Bean (1 oz.) _____	175.00
Flour whole wheat (1 oz.) _____	8.00	Turnip greens (1 oz.) _____	46.00
Liver (1 oz.) _____	425.00	Spinach (1 oz.) _____	106.00
Milk (1 oz.) _____	3.00	Wheat germ (1 oz.) _____	31.00
Mustard greens (1 oz.) _____	52.00	Yeast (1 oz.) _____	350.00

What foods contain Pantothenic Acid?

Food Item _____ Milligrams	Food Item _____ Milligrams
Barley (1 oz.) _____ .15	Mushrooms (1 oz.) _____ .60
Beans, dry (1 oz.) _____ .28	Oatmeal (1 oz.) _____
Beef, lean (1 oz.) _____ .24	Oranges, one _____ .50
Broccoli (1 oz.) _____ .40	Oysters (1 oz.) _____ .20
Carrots (1 oz.) _____ .50	Peas, green (1 oz.) _____ .15
Cauliflower (1 oz.) _____ .44	Peanuts (1 oz.) _____ .60
Cheese (1 oz.) _____ .22	Potatoes (1 oz.) _____ .32
Chicken (1 oz.) _____ .18	Potatoes, sweet (1 oz.) _____ .45
Corn Meal (1 oz.) _____ .10	Rice, brown (1 oz.) _____ .10
Eggs (one) _____ 1.40	Pork, lean (1 oz.) _____ .75
Flour, whole wheat(1 oz.) _____ .60	Soy Beans (1 oz.) _____ .60
Kale (1 oz.) _____ .06	Wheat germ (1 oz.) _____ .20
Milk (1 oz.) _____ .16	Yeast (1 oz.) _____ 3.50

What foods contain Biotin?

Biotin is found in all beets and vegetables, and is seldom deficient in any diet. It may be deficient in the bodies of those who are in the habit of taking drugs, such as the Sulfa drugs.

Mineral oil is said to prevent the absorption of Biotin in the intestines. The white of an egg contains a substance called "avidin" which is said to destroy Biotin. Cooking the egg destroys the avidin and removes this enemy of Biotin.

What food contain Para-Aminobenzoic Acid?

Para-aminobenzoic Acid is one of the B-Complex Vitamins, and is used in the body in the manufacture of intestinal bacteria (friendly). It is also used in the production of Folic Acid. It is credited with the power of offsetting the effect of Sulfa drugs. Liver and yeast are rich in Para-aminobenzoic Acid, and it is found in Beef, pork, milk, eggs, rye, wheat, and wheat germ.

What foods contain Inositol?

Food Item _____	Milligrams
Apples, one _____	25.00
Bananas, one _____	35.00
Beans, dry (1 oz.) _____	60.00
Beef, lean (q oz.) _____	4.00
Beets (1 oz.) _____	8.00
Cabbage (1 oz.) _____	30.00
Cantaloupe (1 oz.) _____	65.00
Carrots (1 oz.) _____	14.00
Cauliflower (1 oz.) _____	8.00
Cheese, (1 oz.) _____	6.00
Chicken (1 oz.) _____	10.00
Eggs, one _____	16.00
Flour, whole wheat (1 oz.) _____	15.00
Grapefruit, one _____	800.00
Ham (1 oz.) _____	25.00
Heart, beef (1 oz.) _____	125.00
Lettuce (1 oz.) _____	50.00

Food Item _____	Milligrams
Liver, beef (1 oz.) _____	45.00
Milk (1 oz.) _____	5.00
Mushrooms (1 oz.) _____	4.00
Onions, one _____	42.00
Oranges, one _____	200.00
Peaches, one _____	200.00
Peas, green (1 oz.) _____	28.00
Peanuts (1 oz.) _____	30.00
Pork, lean (1 oz.) _____	26.00
Potatoes, one _____	30.00
Potatoes, sweet, one _____	65.00
Spinach (1 oz.) _____	10.00
Tomatoes, one _____	50.00
Turnips, (1 oz.) _____	16.00
Veal (1 oz.) _____	8.00
Wheat germ (1 oz.) _____	55.00
Yeast (1 oz.) _____	350.00

What foods contain Vitamin C?

Food Item _____	Milligrams
Beans, green (1 oz.) _____	16.00
Broccoli (1 oz.) _____	15.00
Brussels Sprouts (1 oz.) _____	40.00
Cabbage (1 oz.) _____	9.00
Cantaloupe (1 oz.) _____	14.00
Chard, Swiss (1 oz.) _____	12.00
Collards (1 oz.) _____	25.00
Dandelion greens (1 oz.) _____	25.00
Grapefruit, one _____	95.00
Grapefruit juice (1 oz.) _____	30.00
Kale (1 oz.) _____	35.00
Lemon Juice (1 oz.) _____	30.00
Lime Juice (1 oz.) _____	15.00
Liver (1 oz.) _____	25.00
Mustard greens (1 oz.) _____	40.00
Oranges, one _____	52.00

Food Item _____	Milligrams
Parsley (1 oz.) _____	75.00
Parsnips (1 oz.) _____	12.00
Peas, green (1 oz.) _____	5.00
Peppers, green, one _____	120.00
Pineapple juice (1 oz.) _____	7.00
Potatoes, one _____	22.00
Potatoes, sweet, one _____	26.00
Rose hips (1 oz.) _____	1500.00
Spinach (1 oz.) _____	8.00
Strawberries (1 oz.) _____	15.00
Tangerines, one _____	25.00
Tomatoes, one _____	24.00
Tomato Juice (1 oz.) _____	10.00
Turnips (1 oz.) _____	15.00
Turnip greens (1 oz.) _____	35.00
Watercress (1 oz.) _____	50.00

What foods contain Vitamin D?

Vitamin D is considered to be "the sunshine vitamin", but there are some foods which supply it. They are: butter, eggs, fish-liver oil, liver and milk. The content of these foods, however, varies with the season, thus I am unable to set forth any average amount.

What foods contain Vitamin E. (Tocopherols)

Food Item _____	Milligrams	Food Item _____	Milligrams
Beans, dry (1 oz.) _____	1.00	Cottonseed oil (1 oz.) _____	25.00
Butter (1 oz.) _____	.30	Eggs (one) _____	1.00
Coconut oil (1 oz.) _____	1.50	Liver (1 oz.) _____	1.00
Corn Meal (1 oz.) _____	.40	Oatmeal (1 oz.) _____	.70
Corn Oil (1 oz.) _____	25.00	Peanut oil (1 oz.) _____	4.00
Potatoes, sweet (one) _____	4.00	Turnip greens (1 oz.) _____	1.00
Rice, brown (1 oz.) _____	.40	Wheat germ oil (1 oz.) _____	7.00
Soy bean oil (1 oz.) _____	24.00		

What foods contain Vitamin K?

Vitamin K is chiefly supplied to the body through its manufacture in the intestines. Its precursors are the green leafy vegetables. However, as a vitamin, its highest sources are found to be cabbage, cauliflower, egg yolk, fish-liver oil, liver and soybean oil. Alfalfa is unusually rich in Vitamin K.

What foods contain Vitamin P? (Bioflavonoids)

Vitamin P is also known as Hesperidin, Citrin, Rutin and Vitamin C2. It is a companion element to Vitamin C, therefore is found in all foods rich in Vitamin C.

What are the percentages of the mineral elements in the body?

This may surprise you, but the elementary mineral composition of the human body closely approximates that of the earth's crust, ocean and atmosphere!

Again, we see the "dust thou art" phrase personified. And to maintain a normal body, this balance of Nature must be preserved. While analyses of the human body vary, as might be expected, the following figures are generally accepted as average:

Mineral Element ___	Percentage	Mineral Element ___	Percentage
Oxygen _____	65.0%	Phosphorus _____	0.0%
Chlorine _____	0.15%	Carbon _____	18.0%
Potassium _____	0.35%	Magnesium _____	0.05%
Nitrogen _____	3.0%	Sulfur _____	0.25%
Iron _____	0.004%	Calcium _____	2.0%
Sodium _____	0.15%		

The quantitative estimates of the rest of the mineral elements are very low. They are: Manganese, Copper, Iodine, Cobalt, Zinc, and Nickel -- plus a few other still in question.

In what foods do we find Calcium?

Calcium is found in all foods, but, here, I will list only those which have a significant amount.

Almonds	Collards	Okra	Shrimp
Apricots	Cream	Olives	Soy Beans
Barley	Currants	Oysters	Spinach
Beans	Dandelion greens	Parsley	Turnip greens
Beet greens	Egg Yolk	Peanuts	Watercress
Bread	Endive	Peas	Wheat
Broccoli	Figs	Pecans	
Cabbage (high)	Hazelnuts	Prunes	
Celery	Kale	Raisins	
Chard	Lettuce	Rice	
Cheese (high)	Milk	Rye	
Clams	Mustard greens	Sardines	

In what foods do we find Magnesium?

Magnesium is found in most foods, but is in ample supply in the following:

Almonds	Cashew nuts	Hazelnuts	Soy beans
Apricots	Chard	Oatmeal	Spinach
Barley	Clams	Peanuts	Walnuts
Beans	Coconuts	Peas	Wheat
Beet greens	Corn	Pecans	
Brazil nuts	Dates	Rice	
Bread	Figs	Shrimp	

In what foods do we find Potassium?

In practically all of them, and in fairly good supply. The following are above average:

Almonds	Chard	Horseradish	Pumpkin
Apricots	Cherries	Kale	Radishes
Avocado	Chestnuts	Lamb	Raisins
Bananas	Chicken	Lettuce	Rhubarb
Barley	Coconuts	Liver	Rice, brown
Beans	Codfish	Mackerel	Rye
Beef	Collards	Mushrooms	Salmon
Beet greens	Corn	Mustard greens	Sardines
Beets	Currants	Oatmeal	Shrimp
Brazil nuts	Dandelion greens	Parsley	Soy beans (high)
Bread	Dates	Parsnips	Spinach
Broccoli	Endive	Peanuts	Squash (winter)
Brussels sprouts	Figs	Peas	Tomatoes
Cabbage	Haddock	Pecans	Turnip greens
Carrots	Halibut	Pork	Veal
Cashew nuts	Hazelnuts	Potatoes	Walnuts
Cauliflower	Heart	Potatoes, sweet	Watercress
Celery	Herring	Prunes	Wheat

In what foods do we find Sodium?

Some in all foods, but these contain the higher content:

Dandelion green	Kale	Olives (high)	Sardines (high)
Egg	Kidney	Oysters	Shrimp
Flounder	Lamb	Peanuts	Spinach
Ham (high)	Liver	Pork	Turnips
Heart	Milk	Salmon	

In what foods do we find Phosphorus?

In all of them, but higher supply is found in:

Almonds	Cashew nuts	Eggs	Herring
Barley	Cheese (high)	Flounder	Kidney
Beans	Chicken	Haddock	Lamb
Beef	Coconut	Halibut	Liver
Bluefish	Codfish	Hazelnut (high)	Mackerel
Bread	Corn	Heart	

In what foods do we find Chlorine?

In nearly all foods, with these being the higher assays:

Bacon	Clams (high)	Heart	Olives (high)
Bananas	Coconuts	Herring	Oysters (high)
Bread	Codfish	Kale	Parsley
Butter	Eggs	Kidney	Sardines (high)
Cabbage	Flounder	Liver	Turkey
Celery	Ham	Milk	Watercress

In what foods do we find Sulphur?

Most of the sulfur found in the body is combined with protein, as mentioned before, therefore, like protein, sulfur is found in all foods. Those having a higher content are:

Almonds	Chicken	Kale	Pecans
Bacon	Clams	Kidney	Rice
Barley	Codfish	Lamb	Rye
Beans	Corn	Liver	Salmon
Beef	Eggs	Macaroni	Sardines
Bluefish	Flounder	Mackerel	Soy Beans
Brazil nuts	Haddock	Meats	Walnuts
Bread	Halibut	Oatmeal	Watercress
Butter	Ham	Oysters	Wheat
Cabbage	Hazelnut	Parsley	
Celery	Heart	Peanuts	
Cheese	Herring	Peas	

In what foods do we find Iron?

There is a small amount of iron in all food, but the following are considered rich in iron -- where the soil in which they were raised will permit:

Almonds	Brazil nuts	Corn	Ham
Apricots	Bread	Currants	Heart
Barley, whole	Cashew nuts	Dandelion, green	Kale
Beans, green	Chard	Dates	Lamb
Beef	Clams	Eggs	Liver (high)
Beet greens	Coconuts	Figs	Raisins
Sardines	Soy beans (high)	Turnip greens	Watercress
Shrimp	Turkey	Walnuts	Wheat

In what foods do we find Iodine?

There are traces of iodine in wheat and other grains, but about the only way we can be assured of an ample iodine supply is by eating sea vegetation and fish caught in the ocean.

Iodine is an essential mineral, but, unfortunately, is in short supply in the average diet.

Can you tell me the amount of each essential mineral in the average daily diet?

I am glad you said "average diet", for an average estimate is the best I can do. Numerous checks have been made by myself and other researchers throughout the country. Reports vary as much as does the mineral content of food raised on different types of soil -- as is to be expected. However, an average report would read as follows:

Essential Mineral _____	Grams	Essential Mineral _____	Grams
Calcium_____	0.73 grams	Chlorine _____	2.85 grams
Magnesium_____	0.35 grams	Sulfur _____	1.30 grams
Potassium _____	3.40 grams	Iron_____	0.017 gram
Sodium_____	2.00 grams	Iodine _____	0.000006
			(six one-millionth of gram)

One millionth part of a gram is called a microgram, so the average diet provides only 6 micrograms of iodine per day. Compare this figure with the MINIMUM Daily Requirements as set forth in the next answer.

It was found that about 40% of the cases tested across the nation were consuming less than one-third of the minerals considered necessary for good health. A very small percentage were consuming the optimum amounts.

It would seem that the average American is living within a de-mineralized body.

What is the minimum daily requirement of each of these essential minerals?

The Medical Council has established an M.D.R. (Minimum Daily Requirement) for 4 of the known minerals. This, however, is merely the LEAST amount of these elements necessary for body existence. Considerably above such amounts would be necessary for physical health and strength.

We might compare the M.D.R. of such foods to the minimum daily requirement of money which will allow you to buy the bare necessities of life. There would be nothing whatsoever left over for the things that give you pleasure, or for the things that you consider the "necessary" luxuries -- i.e., a car, TV set, radio, hot water, electric lights, etc., It would be a very dull existence, indeed! I'm afraid, however, that you may be forcing just such an existence on your Creative Health Force within your body.

Be that as it may, I suggest that you compare the MINIMUM Daily Requirements listed below with the content of the average diet shown in the proceeding answer.

MDR _____	MDR _____
Calcium_____ 0.75 grams	Iodine _____ 100 Micrograms
Phosphorus_____ 0.75 grams	Iron_____ 10 Milligrams

Minimum Daily Requirements of the other minerals have not yet been established, but the published findings of leading researchers verify that the average daily diet falls far short of the desired amounts. Whether man does or does not establish his own arbitrary "MDR" values is of no importance to Nature or to your body. I prefer to supply Nature with an ample supply of ALL minerals, and then let Nature choose what she needs.

Furthermore, here is another angle from which we must view the worth of this man-made "MDR" evaluation. .

Suppose we have two adults -- one weighs 130 lbs., the other tips the scales at 210. Are we to believe that the mineral and other nutrition requirements of each are identical? Poppycock! Man attempts to establish rules -NATURE IS THE RULE!

What foods are rich in Protein?

All foods contain some protein, but you must remember that they cannot all be considered as good protein sources. Some are rather low in content, However, here are the good sources -- those noted with an asterisk (*) are above average as protein sources:

Almonds	Duck	Lentil (dried)*	Shad
Beans (dried)*	Eggs	Lima beans (dried)*	Shrimp*
Beef	Flounder	Liver	Soy Beans*
Bluefish*	Flour(whole Wheat)	Lobster	Tuna*
Brazil nuts	Haddock	Oatmeal	Turkey*
Cashew Nuts	Halibut	Peanuts*	Veal
Cheese (cheddar)*	Ham	Peas (dry)*	Walnuts
Chicken*	Hazelnuts	Pork	Wheat
Clams	Heart	Rye	Yeast*
Codfish	Herring	Salmon	
Corn	Kidney	Sardines	
Cottage cheese	Lamb	Scallops	

What foods are rich in Fat?

The asterisk (*) denotes extra-high content:

Almonds*	Creams*	Margarine*	Sardines
Avocados	Duck	Mayonnaise*	Tuna
Bacon*	Egg Yolk	Salad Oils*	Turkey
Brazil nuts*	Ham	Olives ripe	Walnuts*
Butter*	Hazelnuts*	Peanuts*	
Cashew nuts*	Lamb	Pecans*	
Cheese (cheddar)	Lard*	Pork	

What foods are rich in Carbohydrates?

The asterisk (*) denotes extra-high content:

Almonds	Currants*	Milk (cond. or dry)*	Potatoes
Apples	Dates*	Molasses*	Potatoes (sweet)
Apricots	Figs*	Oatmeal*	Prunes*
Apricots (dry)*	Flour*	Parsnips	Raisins*
Bananas	Grapes	Peaches	Raspberries
Barley*	Guavas	Peanuts	Rice*
Beans (dry)	Hazelnuts	Pears	Rye*
Berries	Honey*	Pear Syrups*	Soy Beans
Brazil Nuts	Ice Cream*	Peas (dried)	Sugar(any form)*
Bread*	Jams & Jelly*	Pecans	Tapioca*
Cashew nuts	Lentils	Persimmons	Walnuts
Cherries	Lima beans (dry)	Pie*	Wheat*
Chestnuts*	Lima beans(fresh)	Pineapple	Yeast
Corn	Mayonnaise	Plums	

What foods are rich in Calories?

The asterisk (*) denotes extra-high content:

Almonds*	Cream*	Mayonnaise*	Rye*
Apricots	Dates*	Milk (dry or cond.)	Sardines*
Avocados*	Figs*	Molasses*	Soy Beans
Bacon*	Flour*	Oatmeal*	Sugar(any form)*
Barley*	Ham*	Oils (salad)*	Syrups*
Brazil nuts*	Hazelnuts*	Peanuts*	Tapioca*
Beans (dry)*	Honey*	Peas (dried)*	Tuna
Bread*	Ice Cream*	Pecans*	Turkey
Butter*	Lamb	Pie*	Walnuts*
Cashew nuts*	Lard*	Pork*	Wheat
Cheese (cheddar)	Lentils*	Prunes*	Yeast
Coconuts*	Lima beans (dry)*	Raisins*	
Corn*	Margarine*	Rice*	

Can I use the foods charted here as a reducing diet?

You CANNOT use any of the foods listed as rich in fat, carbohydrate, or calories as part of the reducing diet. By the same token you CAN use the foods NOT listed.

Can you give me a sensible reducing diet?

The word "sensible" is a mighty important one here. Anyone wishing to reduce should always remember it. A great deal of harm has been done in the past to the health of those who have insisted on a starvation diet.

I remember -- years ago -- a lady coming into my office. She was rather over-weight. In fact, she was FAT. Every movement of her body started a ripple which flowed from her chins to her toes. But she made a remark which from that time on served as a guide for me in dealing with fat folks.

I asked her pointblank about the foods she was eating.

She undulated a bit, then laughed. "I suppose you have found all fat ladies to be jolly good liars, haven't you?"

Well, now -- I have never accused fat folks of being liars, but I must admit that most of them do handle the truth adroitly, but carelessly.

The first thing a fat person will say to the doctor is: "I don't eat half as much as my husband, and he's thin as a rail."

In some instances, this may actually be true. It isn't how much you eat, but WHAT you eat that produces fat. A reducing diet, therefore, should consist of foods which have a low fat, carbohydrate, and calorie content. The average fat person will make the mistake of eliminating (?) fatty foods from her diet, but holding on for grim life to the sweets and starches! It is the sweets and starches which are adding the pounds to our supposed-to-be-dieting friends.

Now that I've insulted you thoroughly, I'll give you the answers. If you are in earnest about following a reducing diet, here's what to do:

A minus sign (--) after a food means that you should eat very little. An asterisk (*) means that you should eat a great deal. Foods marked with neither may be eaten in moderate amounts. Do NOT attempt to kid yourself. The bathroom scales will never be fooled.

Foods for Reducing

Apples (--)	Cucumbers (*)	Okra	Rutabagas
Asparagus	Eggs (boiled)	Onions	Sauerkraut
Beef (lean) roasted	Endive	Oranges	Soup (vegetable)
Broccoli	Grapes (--)	Peaches (--)	Spinach
Cabbage	Kale	Pears (--)	Squash
Cantaloupe	Lemons	Peas, green (--)	Strawberries (--)
Cauliflower	Lettuce (*)	Peppers, green	Tomatoes
Celery (*)	Liver	Pickles	Turnips, broiled
Chard Swiss	Milk (skim)	Plums (--)	Watercress
Chicken roasted or broiled (white meat)		Potatoes (--)	Watermelon

Eat NO grain products Eat NO food cooked in oil Eat NO butter or gravies.

Remember, it is not the potatoes which make you fat. They are permitted according to the list, you'll notice. It is the grease, butter or gravy that you add to them which causes the weight problem! It's also true that there are people who reduce on a banana-and-cottage-cheese diet, even though it does get monotonous, but a banana added to your regular diet will add a good number of calories and carbohydrates.

There are a lot of foods which you could add to this diet, but you'll slow down the loss of weight if you do. Or, perhaps, you'll fail to lose any weight at all. STOP tormenting yourself under the guise of a "reducing" diet which doesn't work. Eat ONLY those foods which will really allow you to reduce. Otherwise, forget it -- and live a "stuffer" but shorter life.

Once you have reached normal weight, it can be controlled from then on through the use of the above-listed foods in your regular diet, as your bathroom scales dictate. WATCH THOSE CALORIES!

Now that I have answered all of these direct questions concerning the nutritional values of food, I place the responsibility of your health on YOUR shoulders.

Everyone is quick, of course, to claim the credit for good health. "I watch my diet" is a common, boastful phrase. But what happens when ILL health strikes? Excuses! Blaming the weather.... Blaming the doctor.... Blaming SOMEONE else! It's all a bit silly, really. If a person gives the credit for good health to his diet, why refuse to accept the fact that poor health may also be due to the diet?

WE ARE NOT PUPPETS OF FATE! We can, if we wish, live a directed life. Our physical and mental well-being are in OUR hands. Chance enters into our well-being only when we use food as a simple, hunger-satisfying agent, and nothing more.

NATURAL FOODS BUILD NATURAL BODIES! This being true, is there any logical reason for us to doubt that UNNATURAL FOODS BUILD UNNATURAL BODIES?

Tamper with your food supply, and you tamper with your health. Harvey W. Wiley, M.D., the Father of our Pure Food Law, made that fact quite clear in his numerous articles and books on the subject.

What excuses are given for altering our food supply? To prevent it from spoiling -- ease of handling -- convenience of kitchen-preparation -- taste and eye appeal -- and, of course, the basic factor, PROFIT.

Nature has established a normal life cycle for all living things. "Dust thou art and to dust thou shall return." During that life cycle, our foods are NATURAL nutrition. Destroy Nature's natural activity in foods, and you destroy natural nutrition.

This fact was summed up quite nicely by Dr. McCullum, of John Hopkins, when he said:

"Eat nothing unless it will spoil or rot, but eat it before it does."

Yes, natural food will spoil, because Nature has decreed it so. Great scientific minds have analyzed this phenomenon of Nature. Why? Not to take advantage of it, but to pervert it, I'm sorry to say. Methods of such perversion have been inaugurated many times in our national food industries. What has happened to the nutritional values in our food as the result of such methods? A great deal has occurred -- but, when confronted with the proof, the food industries shrug it off with the statement that food could not be distributed to our ever-increasing population without the use of such methods.

It seems to me that truly great minds were at work back in my boyhood days. The mothers of that day preserved the family food supply quite nicely, with only a slight loss in nutritional values. They, too, resorted to the drying method, the freezing method, the vacuum-pack canning method. No poisonous chemicals were added, yet food was preserved from one harvest to the next. The drying method was a slow process, done in Nature's own evaporating oven -- in the open air, under the warm rays of the summer sun. The freezing method was used in the wintertime, but no coloring agents or acids were added. Fruits, vegetables and meats were vacuum-packed in glass. They reached the table in a good, wholesome, nutritious condition.

Yes, great minds were at work in those days. And great muscular, healthy frames performed the tasks directed by those minds, even though they occasionally grumbled about "women and their ideas!"

It is not my intention to discredit the efforts of science to preserve food values. If this were what is being done, we would all be much happier - and healthier, too. But don't make the mistake of confusing the "preservation of spoilage" with the true preservation of nutritional values! It is when the "preservation of spoilage" system destroys the very values which the food is supposed to deliver that I question the end results. Preservation should NOT be used or considered synonymous with devitalization. They are diametrically opposed when alteration of food occurs.

Moreover, it is well to remember that alteration of our food is recognized as permissible by man ONLY. Nature recognizes no such devitalizing methods, as has been proven time after time in test laboratories. I am sure that you will agree with me when I contend that the object of science should be the development of a better understanding of the processes of life, and the gaining of greater insight into such processes. Science SHOULD minister to our comfort, happiness and HEALTH -- and where could man gain greater comfort and happiness than through a well-nourished body?

During the writing of this course of study, I have attempted to keep in mind that my task is to simplify the great truths of Nature, to set them forth in clear, logical fashion so that they may be understood by all. The remainder of this course will be devoted to APPLYING the knowledge you have now gained.

I have told you in no uncertain terms that PROTEIN TAKES FIRST PLACE in your nutritional program. Suppose we now review briefly WHY protein is so essential. We know, for example, that the amino acids of protein are the "BUILDING BLOCKS OF NATURE", but there is another essential function credited to the aminos. It has been found that amino acids are the precursors of many of the body's catalysts. Such catalysts exert their influence upon the chemical reactions involved in digestion and nutrition-assimilation. This is in direct support of the very life processes. Therefore, all nutritional values are dependent upon the protein supply for their "usability" in the body.

We have also already discussed and emphasized the need of a COMPLETE protein. That is, a protein supply should provide ALL of the amino acids so essential to the body structure. I do not wish to use up space to reiterate those statements and logic, but I do insist that you should read and then re-read them until they are indelibly engraved upon your memory.

In your studies, you were also told of the importance of vitamins. While the importance of vitamins in the diet may be grouped into one emphatic "YES!", the characteristics of each individual vitamin demanded separate study. Scientifically, they may be so studied, but in practical application their inter-dependence should be recognized. Carefully study, if you will, the tissue cells more specifically dependent upon a certain vitamin, and the foods in which that vitamin is supplied abundantly, but remember its interrelationships with other vitamins. ALL -- not just some -- but ALL vitamins are essential, so choose your foods wisely in order to provide them all.

While minerals have been given credit for their structure-building values, the practical importance of these elements has, somehow, been overlooked by the average individual. I urge you to give as much attention to the study of minerals as you do to the study of vitamins. They are ALL a part of Nature's Plan! As in the case of vitamins, minerals are also unevenly distributed. Foods that are nutritionally adequate in other respects may be decidedly inadequate in certain mineral content. Here, too, we find strong reason for VARYING OUR DIET.

You have been given lists of regular foods containing high amounts of Protein, high amounts of Vitamins and high amounts of Minerals -- but don't lose sight of the fact that these three classifications are intimately related to one another. In fact, they have been classified by MAN, not by Nature!

Perhaps it would be better to say that they are dependent upon one another, rather than related. Such a phrase would be more appropriate.

Let's start fitting them in.

How long have you been following your present eating habits? Is your health all that you might wish? Isn't it about time for you to make a change in habits that aren't working as they should?

Good! But, before you make that change, there is something you must do - start cleaning house. You must be the judge in selecting the method, but I cannot over-emphasize the fact that a good "house-cleaning" is the first order of the day! I have covered this subject thoroughly in prior pages, so I will simply advise setting aside one meal a day, or one day each week, for a few months. On the other hand, you can speed up the job by adopting a more strenuous program. Both have been outlined. It all depends upon how you feel about the matter.

Now that you have finished your house-cleaning and have your blood stream free of accumulated waste, suppose we start building stronger, healthier blood cells. Not that the strength of your blood cells is of any more importance than the strength of your brain cells, liver cells, etc. It isn't, but an interesting fact is that you cannot provide a good blood-building diet without also building stronger tissues throughout the body. Blood cells, like all others, are constructed mostly of protein. Even the blood serum is mostly protein, so, you see, your very first consideration should be the amino acid value of the protein you eat. You are not going to build strong, healthy blood cells until that content is good.

Most people think that blood cells are manufactured in the blood stream, but this is not so. The body has a special manufacturing plant for that specific purpose. The hollow bones of your body are the housing for such plants. Blood cells are manufactured in bone marrow. So, if you are to have good healthy blood cells, you must make sure that your diet provides good bone building material.

The spleen is said to be the birth-place of the white blood cells and the burying ground of the red ones. Certainly, it is a filtering plant for the blood. The liver, too, is a filtering plant. It is in the liver that most of the iron is stored. Iron, you know, is a priceless ingredient of the blood. When the body produces hemoglobin, it evolves a substance which is outstanding as a protein-iron compound. Its chief function is as a carrier of oxygen, and oxygen is the chief energy-producing element. Of course, red blood cells -- rich in hemoglobin, maintain the acid-base balance of the blood stream.

From what I have said here about building blood cells, I am sure you have begun to realize the interrelationship of all body tissue. This actual interrelationship and interdependency makes it easier to understand the references to interrelationships of nutritional elements, whether they are vitamin, minerals, proteins, fats, or carbohydrates.

A great deal has been written about the part which calcium and phosphorus play in the maintenance of healthy blood cells. It is true, they do play their part, but this part has mostly to do with the actual bone structure of your body. On the other hand, these two elements are required throughout the body. And while iron has long been considered the chief mineral component of the blood cell, other minerals, including the trace minerals, play an important role, too. In fact, protein, vitamins, minerals, fats and carbohydrates ALL enter the picture.

Perhaps you are wondering what part fats have in building a blood cell. When I speak of fats, I refer to the UNSATURATED, UNALTERED fats, such as lecithin. Did you know, for instance, that your blood cells have a protecting envelope around them, and that this envelope consists mostly of lecithin?

If it were not for the protection such an envelope provides, your blood cells would live but a short time -- a VERY short time. Of course, in your case, the danger has been lessened. You have cleansed your blood stream of poisonous waste. Or, at least, you're going to.

The enzyme, which is protein in nature, influences the catalytic action throughout the body. Truly, protein is an important nutritional element.

Has science been able to analyze the amino acids in protein?

Yes, science has broken down the component parts of protein and listed them according to their nutritional value. But we must realize the limitations of science. Scientific investigations have startled the world. We are told that the intricacies of the human body and its component parts have been tabulated. It is doubtful if the job is completed. Each problem solved opens up new fields of investigation and new problems!

Sometimes, the aspect of scientific revelations may be likened to the small boy who accomplished the complete dismantling of the family clock. He was able to take it apart and account for every piece, But.... Putting it back together again was an insurmountable task.

Let us consider a protein molecule.

Each contains some ten or more amino acids. A molecule of average size will contain from 500 to 1000 amino acid units, all arranged in a SPECIFIC PATTERN. A large protein molecule may contain 100,000 or more units of amino acids.

Here, however, is one of the secrets of life -- each molecule, according to its function, has its own specific geometric arrangement of its amino acids. Any alteration in this pattern, though slight, is of major importance. Alter just one amino acid, and you alter the function of the resultant molecule and, hence, the resultant cell. Even a SLIGHT alteration may cause a change from a normal, well-adjusted cell to one of abnormal function.

Science knows all these things. They have "taken the clock apart" and analyzed it piece-by-piece. They know a great deal about each amino acid, but they have never been able to put the "clock" back together again! While each amino acid continues to act true to form, science has never been able to get them to fall into proper arrangement and form a functioning protein molecule.

How small and insignificant is the intelligence of man when compared to the "intelligence" of a tissue cell! The cell can do this entire job of "arranging" in just 2 seconds!

That's right. When the blood stream carries an adequate supply of amino acids to the cell, that cell will synthesize the aminos and construct a protein molecule in as little as 2 seconds. How can the cell accomplish such a feat in so short a time? The intelligence of the cell follows a "blueprint" which is self-contained within itself. It follows the unalterable Plan of Nature, thus assuring "auto-reproduction".

Science is wonderful... It is able to tear down and analyze virtually anything. But it can't put a LIVING structure back together again. Nature, and Nature alone, can construct live cells and "live" nutrition for those cells!

Now, just as I have pointed out the effect of building stronger, healthier blood cells -- in relation to the body as a whole -- so must you gain a concept of the whole. As we concern ourselves with the nutritional reactions of any one organ, we must also consider the body as an organism. It IS just that. It is an organized, coordinated unit. The mere summation of its

parts cannot give you a true picture of its life process any more than the summation of the amino acids in a protein molecule will do. Each individual cell expresses a life of its own. That is true, but that expression COORDINATES with the expression of other cells. The combined processes make up your life.

However interesting it might be to trace specific nutritional substances into a particular body-organ and note the complicated inter-relations of the nutritional factors, I feel that to do so would become too engulfing. It would cause you to lose sight of your main purpose. That purpose of yours is to supply nutrition to the body as a WHOLE.

We can do that without being able to trace a single one of the intricate actions of body metabolism.

It is important that we understand the continuous expenditure of energy necessary to maintain our bodies in a normal functioning condition. Realize that the source of such energy lies in the food we eat, the water we drink, and the air we breathe. IT CANNOT COME FROM ANY OTHER SOURCE! If, for any reason, there is a deficiency of nutritional intake, your body substances are drawn upon to meet the emergency. This is "robbing Peter to pay Paul", but it is precisely what occurs in your body. Less essential cells must give of themselves in order that the more vital cells are maintained. In other words, your body will literally be living on itself.

How much of your cell structure is weakened, today, because you fail to supply the nutritional substances necessary to maintain your vital organs in workable condition?

Doesn't such a question make you want to turn back to the pages where the nutritional values of each food are set forth? If there is a weakness developing in your stomach, your heart or your liver, lungs or any other vital organ, I am sure that you want to know what foods contain the nutritional elements that organ needs. I am suggesting that you treat that organ fairly by supplying the proper nutrition its dying cells demand! What nutritional elements does that organ need?

Protein which contains all the amino acids -- an adequate amount of the necessary minerals -- a sufficient amount of each of the essential vitamins -- plus fats and carbohydrates. The organ will weaken and become diseased without these elements. Nutritional deficiency, then, is a serious thing! It must be avoided at all costs. The well-being of any living organism is dependent upon its nutritional supply.

Will you ever again be content with an altered, refined, processed, chemicalized, over-cooked food?

What is wrong with such a diet? It contains but a fraction of the life-giving nutritional elements your body demands. Regardless of your age, you are still learning to live. In fact, you may not live long, unless you learn HOW to live. One of the greatest accomplishments in life is the gaining of knowledge concerning the nutritional needs of your body and HOW to supply them. Does the diet you now follow do the job?

For some unaccountable reason, there seems to be a great deal of antagonism between those who want to cure disease through the use of drugs and similar treatment and those who feel that nutrition should be used to build body resistance against disease. I can understand the doctor's point of view. He lives on the ill-health of his patients. But how can anyone willfully neglect the nutritional supply demanded by his body and risk the effects of a nutritional deficiency disease?

You who are studying this Course need not ever take such a risk.

What are the blood-building nutritional elements?

Weakened blood cells -- or the lack of hemoglobin in the cells which are present in the blood stream -- may be due to a deficiency of iron, calcium, phosphorus, or the supporting trace minerals, copper, or cobalt, plus protein and vitamins.

Make sure that your diet contains an ample supply of protein foods and those providing the above-named minerals, plus a good supply of vitamins - especially B12, which plays a leading role.

It is very important that you maintain a good hemoglobin content in the blood cells. Hemoglobin is the oxygen-carrier, and tissue cells cannot live without oxygen. Clinical findings indicate that there are about 12 times as many women as men who are suffering from anemia. The reason for such a differential is due to the fact that women lose more blood, and is also due to the fact that women are more prone to the habit of eating refined foods, sweets, soft drinks, etc.

The need for blood-building food is clearly indicated when one considers that several billion red blood cells die every minute. They must be replaced! Construction of replacements is possible only when the food you eat provides the essential material. Of course, the iron content of a worn-out red cell is salvaged and used over and over again. The body doesn't waste iron -- its too precious.

Anemia is common among those who have a lack of hydrochloric acid in the stomach. This often happens as we grow older. You see, the complete utilization of iron requires an acid medium. Then, too, older people tend to eat less of the protein foods. Protein and Vitamin C are the star actors in the iron-reducing process. Iron in our foods enters our bodies, mostly, as a ferric iron and must be reduced to a ferrous iron. This reduction process is carried on through the combined efforts of hydrochloric acid and Vitamin C, plus the catalytic action that is produced from the amino acids of protein.

Vitamin B12 plays a leading role in blood-building, but it, too, is dependent upon certain digestive factors believed to be produced from protein.

A lot of interrelationship, isn't there? Perhaps, now, you understand a little better why I insist upon an all-around adequate diet. Single-food diets simply will NOT fill the bill!

What are the bone-building nutritional elements?

In considering a bone-building diet, we must give thought to the teeth and the cartilage. Cartilage, you know, is that flexible substance found in the joints. It is the material from which bones are produced.

Most people think of bones as being composed of minerals. They consider a mineral deficiency to be the cause of bone disorders. It's true a mineral deficiency does cause a great deal of disturbance, but a healthy bone structure is also dependent upon other factors.

Chief among these is Vitamin C. Vitamin C enters into the formation of "collagen", a substance which provides the elasticity and firmness of all connective tissue -- muscles, cartilage, bone, and even the blood vessel walls. All gelatin products are composed of collagen.

When people speak of bone disorders, they universally include disorders of the connective tissues that hold bones together. Most of the pains and aches are due to a disturbance of the joints, tendons, etc. While considering these disorders, we must not overlook the cartilaginous disks which are located between each of the vertebrae making up the spinal column. Regardless of where pains and aches develop, we should not depend entirely upon drugs and treatment to overcome the pain. It MAY be due to a

nutritional deficiency. As Nutritionists, we are specifically interested in PREVENTING such a deficiency.

Postmortem examinations of such conditions reveal a brittleness of the cartilage and a lack of the oily fluid known as "sinovial" fluid, a fluid that lubricates the joints. This most certainly PROVES a deficiency existed. Why is such a deficiency so terribly prevalent in these times of plenty?

Well, for the first 4 or 5 years of his life the child is forced to eat fruits or fruit juices which are rich in Vitamin C. Then comes "school days". Here, the child develops the candy, ice cream, pie, cake, cookie, and soft drink habit. All of these foods are destructive to Vitamin C. He may still get his glass of orange juice in the morning, but it will hardly offset the effects of such a harmful diet the rest of the day.

Such harmful eating habits continue into adult life. Some time along life's way, pains and aches develop in the joints of the spine, hands, and other parts of the body. A visit to the doctor is next in order. He may call it arthritis, bursitis, or any one of a number of other connective tissue disorders. The victim is usually condemned to a life of suffering with only temporary relief afforded him through treatments and pain-killing drugs.

With the prospect of such a future before us, can anyone afford to risk the effect a nutritional deficiency has upon the framework of his body? Why not determine, NOW, to eliminate sweets, soft drinks, alcohol, refined grain products and the like from your diet? Make sure that you eat only the natural foods that are rich in protein, bone-building minerals, vitamins -- especially Vitamin C -- and with plenty of Vitamins A and D. For a faster buildup, set aside two or three days each week in which your diet consists only of fruit and vegetable juices. Many sufferers from such conditions have restored the tissues to normal through a prolonged diet of fruit juices, vegetable juices and raw vegetables.

There is another nutritional element that enters into the bone-building process -- unsaturated fats. The saturated fats, those that have been hydrogenated, subjected to intense heat and so forth, should be eliminated. Only the natural UNSaturated fats, unprocessed vegetable oils, should be eaten.

Follow these rules, Your bone-building processes will be enhanced. Your health will grow.

What nutritional elements strengthen the muscular structure of the body?

There are two groups of muscles which must be considered -- the voluntary and the involuntary. Voluntary muscles are those whose actions you control, while involuntary muscles are controlled only by the Life Force within.

From the standpoint of nutrition, it makes little difference. Of course, ALL muscle structure must be properly nourished. The voluntary muscles are called upon for movement you consciously or unconsciously desire, while the involuntary muscles are called upon to carry on the numerous functions of the body.

One of the most important in the involuntary group is the heart. These muscles -- and those of the lungs, in the act of breathing -- perform ceaselessly, relaxing only at short intervals. It is during these periods of relaxation, as I have said before, that they are able to free themselves of poisonous waste and fatigue acids, as well as absorbing their nutrition. Don't make their job any more difficult than it already is!

The muscles making up the walls of the blood vessels must also work ceaselessly. This is likewise true of the muscles of the liver, spleen, kidneys, and other internal organs. So, when we give consideration to the nutritional elements that strengthen the muscular structure of the body, we must concern ourselves with the body as a whole.

First, come the amino acids of protein, with all of the inter-relationships to other nutritional elements and the metabolic processes. Protein furnishes the "building blocks" for the construction of your muscle cells (as it does for all cells). And don't forget that enzyme, the life center of each cell, is protein in nature. Minerals enter into the construction of the muscles, especially iron, calcium, and phosphorus. Clinical records prove that muscular cramps are often due to a deficiency of calcium.

Vitamins are also necessary for the normal function of muscle cells, and reproduction falls in the category of a normal function. The firmness and tone of these cells are dependent upon Vitamin C, as it enters into the formation of collagen, the cementing substance holding the cells together. Vitamin E is said to be a muscle cell invigorator. We know that it exerts its influence upon the utilization of oxygen in the muscular structure, and oxygen is the igniter of energy. During the past few years, Vitamin E has been given prominence as a strengthener of the heart muscles, but I do not believe that it has any more effect upon heart muscles than it does on all muscle cells of the body. Of course, it goes without saying that the importance of the heart muscles greatly influences our thinking and opinion of the values of Vitamin E!

Weaknesses which develop in the cellular structure due to nutritional deficiency are varied and many, but we are not interested in the names given to them. We are only interested in providing the foods which will prevent the deficiency. So, check the foods which are rich in protein, calcium, phosphorus, iron, and Vitamins C and E. After you have made sure that these major items are present in your diet, you may add other vitamin-and-mineral-rich foods.

What nutritional elements are required by the brain?

Contrary to the belief of some people, brain work DOES require a great deal of energy.

This is why oxygen is so essential to the thinker. Then, too, brain cells consume a great deal of the blood sugar. As with all other cells, they must be supplied with protein, vitamins, and minerals, PLUS an unsaturated fat LECITHIN. There is about 3 times as much lecithin found in brain cells as in any other type of cell in the body.

Of the vitamins, the B Vitamins seem to be the most essential. At least, we know that a B Vitamin deficiency leads to mental weariness, that a deficiency of Vitamin B1 slows down the ability to learn. We all know that a healthy brain will allow for greater development of personality and other traits which are to our advantage in the business and social world, for it is in the brain that the process of mind operates. Yes, the brain is just a physical organ through which the Life Process directs and controls the functions of the body. Being a physical organ, it must be nourished in the same manner as all other organs, so make sure you supply the necessary nutrition. Weakened, starving brain cells will give trouble to your mental processes, just as weakened, starving cells in your legs will give you trouble in walking.

In supplying your brain cells with protein, make sure that it is a WHOLE protein with all of the amino acids present. There is one amino acid found in brain cells in far greater amounts than in any other part of the body -GLUTAMIC ACID. This lends emphasis to the need of QUALITY protein that is complete.

There is one mineral that stands out among the requirements for brain cell nourishment - it isn't calcium, the star performer in all other tissues of the body. Calcium is, of course, necessary, but it is its companion mineral which takes the spotlight in brain tissue -- PHOSPHORUS.

In fact, the high content of phosphorus in brain cells led an old German scientist to remark long ago, "No phosphorus, no brain". A high phosphorus supply is a MUST for brain cells.

What nutritional elements are required by the nerves?

The nerves are considered as an extension of the brain, and require about the same nutritional supply. They do require even a little MORE lecithin, however. The nerve sheath -- the protective covering of the nerve trunks -- are composed mostly of lecithin. The exact amount is something on the order of 65%.

What nutritional elements are required by the liver?

The liver is known as the "Master Chemist" of the body. This alone suggests that it should be supplied with every nutritional element known to Nature!

When one considers the mountainous task confronting the liver, it is hard to believe that it could ever accomplish its purpose. Through this chemical plant passes every bit of nutrition your food supplies, PLUS all of the contaminating substances which have been added through the use of chemical fertilizers, poisonous sprays, chemical food additives, dyes, and chemical preservatives.

As though this were not enough -- this filtering out of injurious matter -- the liver is also called upon to separate good "live" nutrition from what is termed "dead" substances. The latter are nutritional substances that, due to storage and/or alteration, have undergone the natural spoilage process. All of this waste substance must be rendered harmless and then manufactured into bile and stored in the gall bladder.

Following the filtering processes, the liver subjects nutritional substances to metabolic chemical changes, such as the synthesis of fats, starch and sugar. The precursors of vitamin and protein elements must be developed by the liver into individual nutritional factors. Man has never been able to grasp such intricate chemical processes, but the liver works miracles of alteration and substitution where necessary.

Obviously, the "Master Chemist" should be given all the tools! But, if there are any SPECIAL nutritional requirements of the liver, I would consider them to be: whole protein, Vitamins A, C, and E, Iron, calcium, phosphorus, and potassium.

What nutritional elements are required by the endocrine glands?

Your liver may be considered as a member of the endocrine gland chain, and the nutritional requirements the same, except that emphasis in this case may be placed upon the mineral supply.

Due to its nutritional value to all glands of the body, one of the finest foods you can eat is liver. The endocrine glands also require liberal supplies of Vitamins A, B-Complex, C, and E.

What nutritional elements are required by the skin?

When we speak of skin, we usually think of the covering of the body. Actually, it is more than that.

Skin is the organ of breathing and an organ of elimination. Oxygen enters the body through the skin, and waste material passes out through the skin. The oil glands of the skin secrete an oily substance that absorbs the sun's rays and manufactures Vitamin D, which is

then reabsorbed by the skin and passed on to the body. Thus, the normal functioning of skin contributes to the general welfare of the body.

However, another important contribution of a healthy skin is that of loveliness. Nothing mars the beauty of face, hands or body more than an abnormal condition of the skin. A thing overlooked by many is the fact that the skin reflects one's state of health. So, if you want to be beautiful, make sure that your whole body is well nourished. Beauty may be only skin-deep, but the CAUSE of that beauty is deep within the body.

While the skin requires the usual supply of protein, vitamins, and minerals, there are three vitamins which seem to be in greater demand than others -- Vitamin A, B-Complex, and C. In spite of this, clinical reports from some of our leading Dermatologists indicate that multiple-vitamin therapy is more generally used and more productive of results. Another shred of proof that, if one essential nutritional element is missing, the health and well-being of the ENTIRE body is affected.

There is another factor we should consider when we are discussing nutritional needs of skin. Stand before a mirror and open your mouth. Note that the skin actually extends inside the mouth. True, it has a different color and texture, but the lining of all cavities and the covering of all organs in the body are, actually, an extension of the skin. For this reason, a nutritional beauty diet will affect all of the internal organs, too.

The nightmare of middle age -- especially in the case of our women, bless 'em -- has always been the fear of wrinkles. Here is new hope for you. Recent findings have encouraged the belief that wrinkles appear in the skin because of a protein deficiency. In view of this, it may be well for all those entering middle age to make sure of their protein supply.

This is redundant, of course. It is my firm belief that a whole, unaltered protein supply is essential at ANY age. We know full well that there must be new cells produced to take the place of the old from birth to the final day of life. Why, then, should we neglect to supply complete nutrition?

We shouldn't, and this has been my main point throughout this Study Course!

What plan do you follow to supply your body with complete nutrition?

That question has been asked of me hundreds upon hundreds of times. My answer has always been the same, for I have been following THE NUTRITION WAY TO HEALTH for over 60 years. It is not a difficult plan to follow: In fact, it's very simple.

I eat simple foods.

I eat much less than the average person, yet my weight is normal. I stand 5 feet 9 inches, and weight 164 pounds. That weight hasn't changed for at least 50 years.

I am not bound to the habit of three-meals-a-day, for I eat only when I'm hungry. And I leave the table with plenty of room in my stomach for more food -- if I wanted to stuff it down.

Never have I allowed my appetite to dictate the TYPE of food I eat, for I eat to live, not live to eat. I know that the food which I eat may not always contain all of the nutritional elements necessary for the welfare of my tissue cells, so I supplement my diet with natural and organic protein, vitamin, and mineral tablets. I travel a great deal, so it is not always possible to obtain the proper foods, but, whenever possible, I demand that my food be in its natural state.

This plan of mine for supplying complete nutrition has worked so well for me that I have been free of all aches and pains for over half a century. My hours of work each day are about twice that of the average person, yet I find time for exercise and recreation. It is my

belief that the average person fails to exercise enough to keep his body free of stagnating waste. And when I say "his", I mean "hers", too. If you want to get well and stay well, you MUST free your body of accumulated waste and provide the nutritional elements so necessary to strengthen your resistance against disease and to build vital, vigorous tissue cells. THERE IS NO OTHER WAY.

I practice what I preach. I avoid waste-producing foods as I would a plague. I set aside a regular time for tissue-cleansing -- one day each week, every week. During this day, I eat no solid foods, but drink plenty of water, fruit juices and raw vegetable juices. Even on the other days of the week, I see to it that I get plenty of these.

And, if I were suffering from any type of disease, I would STAY on a raw vegetable, fruit and vegetable juice diet until I was sure that all disease-breeding waste was cleared from my body.

I can't remember the day when I suffered from a headache. No, Friend, you do NOT have to suffer the distress caused by accumulated waste in your body. You can live -- and SHOULD live -- in a "house" that is clean! All foods may have some value, but that priceless body of yours demands the best.

Choose your foods carefully, as though your life depended on them - for it DOES! Cleanse your body regularly and thoroughly. Eat only when hunger demands it. Never over-eat. Avoid the saturated fats and all greasy foods. Eat very little starchy foods, such as breads, pies, cakes, candies, ice cream, cookies, soft drinks, etc. In fact, it is better to eliminate all refined sugar products. If you just MUST eat some sweets, enjoy the fine, natural sweet of fruit.

Do this, and you will live longer.

I know. I am thoroughly enjoying the "GOLDEN TWILIGHT YEARS OF LIFE". Join me, won't you?