

CHAPTER 27

CASE MANAGEMENT

Elimination

One of the greatest problems the invalid has to face is to get rid of the debris left over from the digestive procedure before germs are able to convert it into food material for their own prosperity while at the same time converting it into the very poisons that are making the person sick. The amount and condition of the debris will depend upon the thoroughness of the digestion process and this will depend upon how it was started in the first place. Therefore, thorough mastication of the food is required, and the time allowed for eating should be generous in proportion to the amount taken. The food intake, we have shown, must be the minimum amount and not the maximum as is the usual habit. When the work of the stomach and small intestine have been the best, the amount of debris to support bacteria will not be greater than the bowel can get rid of in good order. If under these circumstances there is hindrance to the elimination, one must find out what it is and correct it.

Worries, nervous tension, and the habit of not heeding the call of the bowels to evacuate, may set up a stubborn constipation. The obvious cure anyone can figure out. But to make sure, let us say that attention to the call must be practiced liberally even if a cathartic is needed to get things going again. The enema may be used to the best advantage here as is required until the habit is re-established, and to do this the scheduled trips to the toilet are required as were taken before the neglect was permitted. The enema must not displace the effort to move the bowels naturally, but should supplement it.

Intestinal spasms, especially at the several sphincter muscles, tend to block the onward progress of the bolus. At the same time a paralytic sort of relaxation of the musculature of the body of the viscus makes matters worse. Both features unite to constitute a reflex that is normally designed to keep the organ quiet so as to accommodate healing, as when our cancer cases with bowel involvement are undergoing healing. The situation is troublesome until the healing is finished, and the enema at this time may be a daily necessity for a while at least.

So when the patient blows up with gas after a meal, there is some reason for the bowel to relax. It may be the need for a rest to survive from too hard a task, that is, too much has been eaten day after day. It may be that an obstruction has made the bowel tired in trying to force the material through. It may be that the undigested food material is offering the germs the chance to produce so much toxic amines that these act on the muscle cells to paralyze them by blocking their oxidations as we described above. The sensible thing to do is give the bowel a rest, by a fast or by eating very lightly or just going on fresh vegetable or fruit juices for a few days and washing the bowel out with a mild soda solution. One must also look for an obstruction if the condition persists. It may be due to adhesions causing a kink, or due to a tumor. Sometimes an ulcer will cause the reflex to give the part a rest to accommodate healing. But when the bowels do not empty completely and the retained material accumulates until a cathartic must be taken, gluttony is the general cause for the constipation. A radiograph may show what is wrong and if the poison is coming from material retained in a diverticulosis or a kinked appendix.

The choice of a cathartic is a serious matter as is its use. When necessity demands it there is no sense in putting it off. But after the evacuation is obtained, the cause must be corrected. Milk of Magnesia is an easily available and good remedy, as is sodium citrate or sodium sulphate. In cases of heart disease, the magnesium ion may be a disadvantage and sodium citrate or the sulphate should be used. The amount taken should be large enough to do a thorough job of clearing out the debris and the cathartic as well. Castor oil of the olden days was as injurious as the taste threatened it must be. It blistered the bowel inside after it reached an alkaline intestinal medium where it was split into its blistering components. All the other irritant affairs like cascara, aloes, and senna act the same way. They ruin the bowel.

The enema taken with patience is the best procedure. The water should be warm as one has during a high fever, about 42° Centigrade or 108° Fahrenheit. This temperature relaxes the spasms that may otherwise make the entrance of the fluid difficult. The pressure must not be too high either as it can excite a reflex to expel it. Therefore, the position of the body, the height of the water bag, and the most favorable temperature need to be ascertained and adapted to each patient for the most comfortable and easy passage of the water into the colon and through it over into the caecum, where the worst putrefaction generally is found. To aid this process and provide more comfort and less spasm one may use a tampon about the tube that is inserted into the anus. This tampon should surround the tube about four centimeters below its tip so it can be pressed against the external sphincter in a way that prevents the loss of fluid. Thus, the muscle does not have to be contracted to retain the water, and the effect of this relaxation is felt throughout the whole bowel, and lessens the tendency to other spasms throughout its length. The tampon can be made from a cork. A hole is bored through it to accommodate the tube, and it can be rounded off so as to not prove painful. A solid small rubber ball could be used if one can secure a cork bore to cut the passage through it. Before inserting the tube into the anus, it should be lubricated with some oil as olive oil, or one of the vegetable fats used for cooking. Vaseline should not be used as mineral oil products are sometimes carcinogenic. This has even been demonstrated for mineral oil sold as a laxative.

Repetition of the Dose

In chronic disease where exhaustion or cachexia stand in the way of the work that must be done to absorb a malignant growth and restore the broken down tissues in general, one does not always have the data to know how big a load a patient can carry in his fight for recovery. In early cases this difficulty is not encountered, and one runs no chance of overloading the patient — that is within reason. But in patients, for example who cannot even handle a few blood transfusions, and are not able to destroy and digest the blood received and turn it into living blood, the exhaustion must be handled with expertness. One cannot give a bigger dose or repeat it beyond the ability of the patient to use it.

In most advanced cases of cancer, the reticulo-endothelial system is exhausted. It was so before the cancer took hold, in fact, when fibrogenesis started to fail. And it is more so as the disease advances. Likewise, the oxygen carrying power of the blood may be very poor. The hemoglobin may have been changed to a methemoglobin that is worthless and gives a false color index, that is, an index that does not tell the amount of oxygen carrying hemoglobin. The recovery depends

on the use of oxygen, so a limitation is imposed by blood injury of this type. Aspirin and other coal-tar drugs, and any situation that causes cyanosis will hinder. Thus, with a poor or deceptive blood count, there may be the greatest need for speed in changing the situation that exists, yet the supply of oxygen to the tissues may be restricted so one must go slowly. It takes material to build up the blood capillaries that absorb the growth. That means the metabolism of the food by all the important organs must be sufficient to meet the needs of the case. So many things must be considered before one can decide on how often a patient must be treated, and how big a dose to give. The dose is never repeated so long as improvement is observed.

Endocrine deficiency adds other difficulties. And in spite of medicinal support, a lowered metabolism rate, in more respects than the conventional meaning of the word, may hinder progress greatly in response to a boost. One must not overload. The homely analogy to the mule, that was overloaded and sunk to the ground and was never able to get up, may give the picture accurately. Hence, the doctor must never overdo his job. Since endocrine and general tissue cell deficiency results from radioactive materials, treatments and environment, food and water, these interferences must be removed. It is even necessary at times to take the patient to a different district. At any rate, all interferences must be gotten out of the way, and then all the aids given that are required. After that, an adequate dose is given, and the situation held favorable to its action. If this is done ideally, no repetition of the dose will be necessary. It often does happen so. But more often interferences within the patient, or coming from without, block the progress of recovery. We mention them under diet and management.

The correct dose of Benzoquinone is the one to a million solution, given in two cubic centimeters under the skin or in the muscle. The correct dose of the serial system of Carbonyl groups, cyclic or linear, is either, as for Benzoquinone, two micrograms in two cc. of water, or a dose of two millimicrograms in two cc. of water which, by the way, is the active dose for vitamin B12, or it should be just one thousandth as much, one part to a trillion of water. Higher dilutions are active but are as a rule not required to meet the state of depletion of any patient, though at times they may be needed. Repeat-doses are of higher dilution. It is our good fortune to have a blood test that tells much about the state of depletion. It is the crenation test, and is very simple, but must be done expertly and accurately.

The Crenation Test

If one makes up an accurate one percent solution of pure sodium chloride and keeps it well stoppered in stock and then draws off a small bottle for daily use, thus protecting the stock solution from being opened too often, he has all that is needed, plus a hemocytometer pipette, glass slide, cover slip and microscope. One draws the measuring tube one-half full or less than half full, of blood from a fresh cut on CLEAN, DRY skin, quickly drawing up the salt solution to fill the chamber, mix, and puts a drop of the mixture on the slide and makes an estimate of the cells that crenate (shrink up) within the first minute, the number that do not shrink, and those that not only stay round but swell up instead. Speed is essential, as in time, they may all crenate so by being slow one gets a false count. The theory is this: the red cell offers a semi-permeable membrane. The salt solution is correctly hypertonic for the test. When water is drawn into the cell it swells up. When it is drawn out by the 1% salt solution, it shrivels. Normally it should shrink as the 1 % salt solution is hypertonic to the 0.85% normal osmotic pressure of the blood

and inside of the red cell. Therefore, when the cell refuses to shrivel, and more so when it swells up, the osmotic pressure inside is too high. This means that the large protein molecules are split to many smaller molecules. It also means that food molecules are present that are not built up into the normal structures. The picture of the gross error is presented.

Lytic changes manifested by failure to crenate and their counterpart, the failure to build up the correct cell structure, point to a lack of energy production of the high efficiency type by the FCG. These changes mean that the FCG is blocked, and hence the Super FCG (the SSR) is needed to release it. This is a straight indication that either the Survival Super FCG (the SSR) administered has not finished its work to a safe point or that there is none working. One must decide between the two. If there is reason to believe the Synthetic Survival Reagent was blocked right at the start, the Treatment can be repeated right away three days to two weeks after the first dose. Also, after the third week reaction is passed, failure of an improvement in the crenation test and in other changes in the patient indicate the need to repeat the dose. If the curative chemistry is started it must be allowed to go as far as it can before the dose is repeated. It may even be good policy to give a second dose at the end of the second week as a routine if no heavy febrile reaction was had 24 hours, 36, 72 or 84 hours after the Treatment. Repeating on the 14th or 15th day is good policy even if the crenation test shows only slight change. In that length of time it will not be much and there is much room for more. This is a different matter from repeating the dose at the sixth week or later since the improvement in the crenation test may be definite, but not 100%. But it may be the maximum for the patient at the time. So repeating the dose would then overload him. Therefore, never repeat if the patient is improving.

Repeating the dose in the first few days or at the end of the second week is more like giving a double dose at the start. It is better than that, as in these two weeks interferences may have neutralized or destroyed a big part of the Remedy, and repeating at the end of the second week would restore the lost part so the second dose would have cleaner ground to work on. Nevertheless, one must balance up all the factors, the crenation test, the reduction in the size of the growth, the color change in the patient, that is, the loss of the hemolytic color, the gain in red cells and hemoglobin, improvement in the sedimentation test, etc. The appetite and gain in strength may be the best indicators as they speak for many specific changes such as those just mentioned. The quality of the pulse and respirations are also most valuable as is the ability to have a refreshing sleep. The improvements in taste, smell, and even in hearing, have the greatest significance. The old-fashioned doctor who knew how to observe his patient as a physiological complex knows what to look for. When such data is balanced with the crenation of the red cells, a correct decision on the need for dose-repetition can be reached. It is better to take one's time and think.

Diet, Medication, Hygienic Aids

Diet, medication and the environment are all factors that influence the success or failure of the Therapy; for any influence that will hinder the recovery reaction cycles or block them, can bring defeat. The following agencies must be considered. They have to do with the soil and the food that comes from it.

Radiological Hindrance

There are radiological influences of the soil in certain districts that are revealed by the Geiger Counter that should be watched. Some areas do not have enough irradiation to interfere seriously with the recovery program, or with the Survival chemistry. In such regions the death rate from cancer is less and here the recoveries from cancer are much more satisfactory in their course and percentages. Detroit and the shores of the Great Lakes have proved gratifying, while farther into Michigan as west of Ypsilanti, patients do not do so well and the Geiger Counter registers higher rates. The difference is perceptible to patients traveling from western Michigan to Detroit. So many have reported feeling better after they came east of Ypsilanti, that their reports had to be recorded. Those who leave the high irradiation districts to come to Detroit for care soon became homesick and had to return. At home they were retarded in their recoveries and even when food and water was shipped to them from Detroit, they still lost out. It seems that they are habituated to the irradiations much like a drug, alcohol and tobacco addiction. The evil effects of the irradiations are quite understandable when one considers the harm done by even slight exposures to the X-Ray or Radium. It is now the consensus of the experts that no amount of irradiation is too small to have a measurably bad effect on the individual's longevity, health, well-being and the development of their offspring. For this reason, frequent unnecessary radiographs are to be avoided and irradiation by Radium, X-Rays and Cobalt are scorned as overdone and extremely dangerous experiments. They have never shown a favorable record in true cancer, but on the contrary, they stimulate the neoplastic state and even give rise to new cancers deep below the lesion that is being treated. That the Survival chemistry is destroyed by irradiation is seen in the hereditary defects in the offspring of radiologists. This shows in 10,000 children of radiologists, twice the incidence of cancer, and more defects in eyes, heart and blood, than in children of physicians not exposed to irradiation. Eight to ten times more radiologists die of leukemia than general practitioners. (*Am. Roentgen Ray Soc. Trans.* 1954). Certainly this sacrifice of the radiologist in the conquest of cancer has never been appreciated in full.

It must be recalled that the Survival chemistry operates in the outer electron shells of the atom, the field of physiological reactions and their pathological variations as provided by nature. The irradiations that operate on the nucleus of the atom produce a type of change the Survival Reagent is not built to combat. For the same reason, X-Rays and Radium and the isotopes have no chance to ever cure cancer.

The destructive action of irradiation can be concentrated to kill the superficial layers of a tissue, and for that reason the basal cell cancers of the skin that do not penetrate deeper than a few millimeters, can be destroyed by irradiation in a way that is comparable to the action of the Percy cautery with the hot iron or the escharotic actions of Zinc Chloride and other destructive chemicals. The destructive action is not limited to the superficial layer only, but extends deep enough to only partially kill the tissue underneath and thus conforms to *Warburg's Postulate* on carcinogenesis. The fibrosis set up is also a cause of anoxia that falls in line with Warburg's conclusions on the cause of cancer. The highly malignant cancers that spring up under the cancers being irradiated therapeutically are an example of this destructive effect. In like manner, strands of cancer cells that have penetrated deeply below the surface are stimulated to reproduce more vigorously and cause death earlier, in line with the statistics that are now being carefully assembled.

Highly Polar Double Bonds

Highly polar double bonds can add free radicals of the high efficiency oxidation process, especially those developed during the Survival oxidations, which block the recovery process before it even gets a good start. Illuminating gas, exhaust gases from combustion engines, chimney smoke from oil burners, paint solvents, floor wax solvents, various terpenoid substances, as those in the skins of citrus fruits, perfumes (natural or synthetic) and even too much carotene in the food are to be avoided. The cancer patient, for example, is somewhat night-blind, simply because he cannot oxidize carotene to vitamin A, as efficiently as he should. He should receive his vitamin A, in the form of fish liver oil, and not as the pre-vitamin sold as vitamin A.

Free Radicals

Chloroform, carbon tetrachloride and the oxides of nitrogen, all offer free radicals that can add to and inactivate the free radicals of the Survival oxidations. The most dangerous are those from nitrous oxide used as an anesthetic. If any surgery is to be done to a patient contemplating Treatment, it should be done first. All tooth extractions or repairs or other attentions should be anticipated, searched for and taken care of before the Treatment is given. In cases where a heavy, general anesthetic has been used, time should be given for its waste products to clear out of the system before the Treatment is given. Arsenic is also an antagonist under this heading. If, however, during the course of Treatment an emergency operation must be done, preferably cocaine or Novocain, as a local anesthetic, should be used if at all possible. Years of experience have proven this the best course.

Steric Hindrance

The steric setup of the normal cell is one thing. Addition of each different pathogen to the FCG system changes this set-up differently, in accord with the structure of the pathogen. Some pathogens cannot add to the cell because of steric hindrance, the cell is immune for this reason. The addition of an antibiotic and even of the toxic amines developed in the colon can so change the steric setup of a host-cell pathogen integrate that the Survival Remedy is hindered in its attack. It will be recalled that the Survival Reagent must attack perpendicularly to the plane of conjugation of the double bond and the carbon atom that carries the hydrogen atom to be removed. The additions of altering reagents are to be avoided. Hence, we give no antibiotics, we maintain a clean colon, and follow a careful diet with careful selection of medications during this Treatment.

Acrolein and the polymerized acrylic aldehydes produced in the frying pan or roasting ovens, interfere in every possible way. They offer highly polar double bonds and free radicals during their polymerizations. These not only inactivate the free radicals of the oxidation service, but also can add to the double bonds that activate the FCG. Fried or roasted foods where fats are used must be avoided.

Interferences With Oxygen Transport and Use

Amines gel the tissue colloids, prevent their flow and reduce their surface carrying power of oxygen and other materials. Salicylates and aspirin and their analogues change the hemoglobin so it does not carry oxygen. They produce cyanosis and asphyxia, and in a fight where molecular oxygen is the first consideration, one sees that all coal tar products are to be avoided. This includes the creosols and other bug-killers. The subject of insecticides is most important; and the selection of foods to avoid contamination by them is a critical problem. For example, the corn is sprayed and later is pressed to extract the oil. The resulting cake is fed to cattle. The cattle are killed and the people who eat the meat get sick and sometimes fatally. Spraying airplanes with the passengers aboard accomplishes nothing except to poison them uselessly. This custom must be stopped, for the insect can stand a far bigger dose than the passenger. Much of the lung cancer gets its boost that way. Aramite, a recently used insecticide, was found to be strongly carcinogenic even in the minutest traces. It was used in spraying fruits and vegetables, but is now stopped by recommendation of its manufacturers, the U.S. Rubber Co. Colorings and other agents used to beautify preserved foods have been proven carcinogenic by direct action on the cell. Nevertheless, they all act adversely in other ways, as in their effects on the blood forming organs and in their blocking the use of iron by the reticulo-endothelial system. Therefore, the protection of foods, which should be taken care of by the Food and Drug Administration, is not done efficiently!

There are some special poisons against which the public has no protection but are not added artificially, but are contributed by the soil itself. One of these is SELENIUM. It is picked out of the soil by corn, peas and lentils, and even by wheat. Corn is grown in the middle west where selenium carrying soil abounds, likewise peas are grown there, canned and shipped nation wide.

Canned peas made more than one of our patients fatally sick without any infection being present. Analysis showed it was the high content of selenium.

SELENIUM poisoning of cattle was first encountered in the western plains and was thought to be due to the high alkalinity of the water encountered in these regions. Of course, the surface water was poisoned by it. But later it was found that the vegetation carried toxic quantities — over 4 parts to a million. Some plants, notably the aspergillus thrives on it while others are killed by it. Farmers find that wheat grown on selenium-rich soils is toxic to their cattle and chickens, so they sell this wheat and buy grain grown on a healthy soil. Toxic effects are shown when the food contains four parts per million. There are two types, the chronic and the acute. The latter is quickly fatal and comes when the food carries 20 parts per million. The chronic effects are loss of hair, and hoofs or fingernails, a general malnutrition, impotency and infertility. Eggs do not hatch, or the chickens may not even lay eggs.

Tissue studies in the Warburg Chamber show that after being exposed to toxic amounts, the oxidations of glucose, succinate, lactate and citrate are all blocked, but the oxidation of para-phenylene diamine is not hindered. This holds for all tissue examined as muscle, brain, kidney, liver and tumor slices. Thus, from our standpoint, it seriously inhibits the recovery and it supports the pathogenesis of cancer and all other diseases for that matter.

The selenium exists in two forms: inorganic and within organic combination. The former is more easily eliminated from the system, but it is the amount that kills, not the particular form in which it is taken. Fortunately, it is known that selenium exists in heavy clay-like soils, while sandy and coral reef soils do not contain it. Therefore, foods like rye that are grown on sand are free from this poison. This is one reason rye should be eaten instead of wheat, which is grown mostly on the heavy soils where selenium abounds.

Sulfides, in the drinking water or produced in the intestine by putrefying bacteria, are also highly toxic. This is another reason for avoiding animal foods, for as we have explained, sulfides and sulfhydryl, in many forms, can add to the double bonds that activate the FCG and thus paralyze the tissue oxidations. Their action on the bowel wall is like that of the toxic amines. They paralyze the musculature and the secretion of ferments and of mucous causing diverticulosis and ultimately a gangrenous degeneration with prolonged exposure.

Our parathyroid experiments showed that the guanidine bases cause a gellation of the tissue colloids that hinder oxygen transport, even in the large veins. The other amines produced in the intestine by the bacteria that decarboxylate amino acids, have the same action. For this action, which is the vanguard of disease of all kinds, three factors are needed. First, the bacteria must be there. Second, the amino acids must be there in excess. And third, the reaction of the medium must be acid. The *Streptococcus fecalis*, for example, decarboxylates arginine to become agmatin, an amine that is oxidized by diamine oxidase only in dilute solution, but it inactivates diamine oxidase in more concentrated solution. The reaction of the medium where it is most active is from pH 3.5 to pH 5. In the same way, lysine is changed to cadaverine, histidine to histamine, ornithin to putrescine, tyrosine to tyramine, by such bacteria as *B. Cadaveris*, *E. Coli*, *Cl. Welchii*, *S. Fecalis*, etc. Some bacteria like *S. Fecalis* require an exogenous source of vitamin B₆ in order to form their decarboxylase. Lactic acid bacilli consume pyridoxal phosphate greedily and thus may prevent the *S. Fecalis* and the others that require this vitamin, from producing their enzymes. Only histidine decarboxylase appears to not require B₆ as a coenzyme. Thus, there are four ways of trying to control the production of the toxic amines in the colon. 1) keep the bowels moving. 2) do not eat an excess of protein foods; eat no animal foods to supply the B₆, for too much bacterial action keep the colon from being alkaline in reaction, as it should be NORMALLY. Lactic acid bacilli, however, create a favorable medium for amine production and this more than counterbalances their action in using up pyridoxal phosphate. The *S. Fecalis* even produces its own lactic acid to activate its decarboxylases, and make a sure job of it. 3) the food must be well chewed, not too much liquid taken at the meal, and as small a volume of food as is serviceable for nutrition. Thus the natural secretion of the intestinal wall, which is pH 8 or so, will have a chance to dominate the field. When the bolus is solid and supports germ action, the bolus is found to be alkaline on the outside only, and acid inside, where the toxins are being brewed. 4) the vegetarian diet tends to avoid this distribution and to hold the whole bolus alkaline, as it should be.

The other dangerous source of toxic amines is the antibiotic therapy, which of course, must be controlled by the physician to be safe.

Food Preparation

The food should be eaten raw as far as possible. The cooking should be gentle, and not overdone, and steaming in a well-covered kettle is best. The utensils should be stainless steel or Pyrex glass, so far as possible, and granite or porcelain maybe the best of all. Copper kettles are good for some uses, especially for preparing fruits for preservation. It has some antiseptic action. Aluminum has its advantages and disadvantages. Among the latter is its easy solubility in acids and alkalies and even in distilled water.

Some observers have classified Aluminum as a trace element essential to the body chemistry, but in such minute doses, that no worry need be had that the amount taken in, needs help from such sources as cooking utensils. The Government issued a comprehensive report on aluminum poisoning. This book gave a splendid review of laboratory and clinical fatality records caused by this metal when improperly used in the kitchen.

The fruits and vegetables must be cleaned before using. This is evident from what was said before. Soap and water and a brush to really clean what is to be eaten need little elaboration. The pits where the stems are placed and at the reverse end of the fruit should also be cut out to remove the insecticide that accumulates there. It may be healthier to buy wormy fruit than that which is so perfect, as the soil of orchards that have been long in use is so saturated with arsenic that the fruit, therefore, carries this poison too. It is one of the very worst. If copper would be used as an insecticide, we would all be better off. Arsenic, of course, is an uncoupler. It prevents the energy of oxidation being stored in high phosphate bonds from being usable. It is carcinogenic, too.

There should be no foods fried or baked with fat, because of the acrolein produced by dehydration of glycerin of the fat. This aids carcinogenesis and other diseases. The polymerizing acrylic aldehydes so produced boost carcinogenic action a million fold. I have seen the results in practice many times.

Spoiled foods should not be eaten. They should be ripe, however.

Food Quantity and Quality

Common sense here is all that is needed. Not too much bulk so as to not dilute the digestive juices too much, not too much weight to tire the intestinal muscles and permit easy passage of the refuse away from the body without any accumulations to form diverticulous sacs along the wall of the colon.

Dietary Recommendations

Tea and coffee are drugs and have no place on our diet. The Brazilian Mate is also excluded, because of its caffeine or theobromine content. Warm water and honey make a good healthy drink, and the readily available fruit and vegetable juices offer all one can desire. If orange or lemon juices are to be allowed, the skins should be trimmed off first and they should be washed before being crushed to extract the juices. This is to get rid of the terpenoid oils of the skin.

The foods—fruits and vegetables—nature offers have enough sodium and potassium without additions, for the best service, so salting need not be done for nutritional needs. Sometimes high potassium diets are helpful, and lists are available. Beans and peas are rich in potassium as well as all fruits and vegetables. They are superior to meats, therefore. Attention should be given to the special concoctions, the contents of which are not known, as the artificial ice creams and soft drinks. These should be avoided, as well as the poorly brewed beers and caffeinated soft drinks on sale. For our patients, however, no artificial drinks are to be used. Arsenic poisoning has been produced in mass by bad brews more than once. Since vinegar is a completed fermentation product, if it is made from clean apples, it is a valuable article in the diet. A little on the salad helps digestion, and offers ferments that are also very useful. On the other hand, lactic acid products are to be avoided as they give support to the decarboxylating germs in the colon. In this connection, the food could also be examined with reference to the amino acids they offer that might be good only in small quantity. Peanuts are such a food. They should be eaten raw only, as roasting produces acrolein. The rich supply of arginine they carry is easily changed in agmatin, the very toxic guanidine derivative, through decarboxylation by bacteria in the colon.

Iron in organic form, as contained in rye- the whole grain ground fine, or in wheat germ and not as a salt, should be used. Iodine is generally deficient and some potassium iodide or better still some kelp every day is a great help, in such communities where the soil is iodine deficient. The unsaturated fats and oils promote oxidation of themselves more than the saturated fats and should be selected. Olive oil is a healthy fat whereas lard is carcinogenic. Carefully kept peanut oil and other unsaturated oils require exclusion of air to be serviceable. Oxidation destroys their unsaturation and makes them rancid, unfit for use. But taken un-oxidized into the body, they promote oxidation within.

Cholesterol is produced from short chain un-oxidized fatty residues. These come from poorly combusted, saturated fatty acids. To prevent their presence one must not eat too much fat and select the fats that are unsaturated since, the double bond activates the hydrogen of the carbon atom alpha thereto, and aids its removal so oxygen can make its addition. This probably is a free radical affair as we have described before and results in cleavage into short chains of two carbon atoms each. Peroxide free radical formation by molecular oxygen addition to the free radical would result in cleavage with Carbonyl group terminals to the chains produced, and these would activate further dehydrogenations, and tend to continue the process. Thus, the unsaturated fatty acids promote their own oxidations and tend to induce the oxidation of the saturated fatty acids. This explanation is a chip off of our Postulate, and is beginning to be adopted now.

The snow-white fats bought in cans that never develop a bad taste by going rancid, have been reduced by nickel catalysts to become fully saturated and hence, they are the very fats that are difficult to burn and would tend to support the production of cholesterol. The conclusions are obvious. Fresh olive oil is best for all purposes, and can be used instead of butter on one's bread.

Natural foods, not prettified or poisoned by additives, should be chosen. Rye is the best grain. It can be bought whole and washed well and dried, ground at home by a small mill and cooked into a porridge or baked muffins or bread. The finer it is ground the better. One should know the soil on which his food is grown, but that is not practical, certainly not for most people. But if one

knows the soil is selenium free and without radioactivity, anything that grows on it should be good to eat in line with what was said previously.

The question then arises as to how to eat it? This is determined by the nature of the digestion process. The stomach does not churn the food like a cement mixer, as was taught for so long. The food arrives and forms in layers and as the pepsin and HCl are formed in the glands of the fundus and pre-pylorus, so proteins should be eaten first, carbohydrates last, but better still the meals should be either carbohydrate or protein, so the digestion will be done by one enzyme system at a time, though provision is made for a mixed digestion. These simple statements cover the choice of foods, the best fat, the best cereal, and the fruits and vegetables that supply the rest. How to eat it, —the mono-diet being best and to avoid overloading the digestive tract, the best way to eat is as nature provides. The baby, for example, does not want its three square meals a day for the convenience of the kitchen. Children fall into the habit of snacking. If one adds up the quantity taken in snacks, and compares what would be eaten on the three square meal system, the economy on the food and metabolism will readily become apparent and better digestion and sleep will soon be realized, too. It is far better to abolish the dining room table, and go on the “pick-a-bit” system to avoid heart lesions, big bellies, and big doctor bills. This is the solution to the cholesterol danger.

One should discuss the metabolism of fats to show how carefully these substances are broken down and then built up to suit the species architecture, and how cholesterol is really a by-product of value in certain directions and amounts. It, however, is no problem when the oxidations are efficient and the diet sensible. In all our observations high values drop soon after the FCG gets back to work in normal fashion, the disease in question makes no difference, and the erratic character of the curve plotted out from its estimates may be the worst, as is seen in cancer. Yet, it steadies to a good normal when the oxidations are re-established to normal — and one of the easiest ways to avoid over-eating is to develop the snack habit and stay away from the table. This paragraph covers the problem in a “nut-shell.”

Food need not be hot to be eaten. Better cool, in fact, though not cold so as to insult the stomach, and the snack conforms here, too. One thinks vegetables are supposed to be eaten hot. But this is not always true. A whole rye bread-lettuce-tomato, or bean sandwich, or asparagus or whatnot sandwich can be made and be found delicious even cold, and be very satisfying. A slice of melon, an apple, peach, or other fruit, and especially the banana, a raw vegetable, carrot, onion, or chunk of cabbage, makes a good snack, and so does a raw vegetable salad. There is no need to worry that there is nothing to eat on this system. Its value lies in the opportunity it offers to not eat too much. At the same time the tyranny of the kitchen is abolished, and there are very few dishes to wash.

Sufficiency in the meatless diet is readily understood when one observes what the cow can get out of grass. Most people would let themselves starve to death if marooned in a rich pasture, but not the cow. She would manufacture enough milk to supply herself, her calf and the neighborhood children with protein, fat and carbohydrates and all the tissue salts, having enough left over to make some cheese besides. The grass, like every other vegetable and fruit, has a perfect proportion of protein. Some as peas, lentils and beans, have too much. In the bean-eating countries like Brazil, the beans are mixed with rice and Mandioca powder to raise the

carbohydrate content. This is an adopted custom, not built on the chemical analysis of the bean, but on the survival analysis basis, and is found wise by trial in a natural instinctive way. A few analyses of foods will prove helpful.

Protein Food Selection

Let us compare the protein contents of meats and vegetables and fruits. One pound of raw boneless beef or 453 grams contains 84.5 grams of protein. Beef with bone offers 73.5 grams of protein, and beef ground into hamburger contains 73 grams. One cup of rye flour, 80 grams contains 7.5 grams of protein or about 43 grams per pound. This is about half the protein content of average meat. Nuts carry 9 to 10% protein, milk contains only 3.5%, liver 20% and dry lentils 25%. Lettuce and cabbage about 1.5%. One hundred grams of peanut butter has 26.1 grams of protein, breads run about 2% protein, Brussels sprouts about 4%, broccoli 4%, potatoes 2.4%, peas about 23%, and beans 21.4%.

Thus, since the daily requirements of an average sized man doing light work is only 0.3 grams per day per kilo body weight, or for 80 kilos (170 pounds), 24 grams per day, a good bowl of pea or bean soup and a slice or two of bread and a few greens cooked or in salad, would supply all he needs. But one also needs the salts, vitamins, the unsaturated fats, and carbohydrates. Bran or wheat offers: 12.4% protein, 3.4% fat, 4.2% carbohydrates, 7.8% ash, and for each 100 grams: 94 mgms Calcium, 1.312 mgms Phosphorous, 10.3 mgms Iron, 0.37 mgms Thiamine, 0.39 mgms Riboflavin and no Ascorbic Acid. Meat, likewise, has no Ascorbic Acid, but apples carry 5 mgms %, bananas 10 mgms %, and cabbage 50 mgms %. Thus a mixed diet, according to taste without any animal product, will give all the nutrition one cares for or needs, and some articles as beans, peas and nuts should be eaten sparingly, especially peanuts with its high arginine content. Yeasts, the richest sources of vitamins, are taboo because of their high diamine toxin content.

The practical meaning of the vegetarian diet is seen in the cases of the leukemia blood depletion where 50 blood transfusions could not keep the blood up to normal or even half of normal, but without even one transfusion, each of these cases gained a normal blood count only on the vegetables, fruits and cereals without any medications whatever. Their gain took a few months, but it was observable within one month after the Treatment was given and the diet put into action. Mr. J. K. gained two pounds a day for a month. Mrs. Mac A. did as well and so have countless others.

On this same diet, overweight patients have reduced to more appropriate proportions after the Treatment gave the oxidations their needed help. So diet and oxidation capacity determine tissue efficiency and health. Nature is always beautiful when unimpeded. It is joyous and rewards one for dietary care.