CERTIFIED COLON HEALTH ONLINE COURSE - SESSION 6:

- **NATURAL TREATMENTS: FASTING, FOOD COMBINING, SPECIAL DIETS**

With each session we will list books, charts, audiotapes, and other educational material that will be helpful. They can be purchased through JLS.

Additional Recommended Pamphlet, Chart, and Audio Tape for this session:

1. Creating a Magic Kitchen By Bernard Jensen
2. Food Healing For Man by Bernard Jensen
3. Foods That Heal by Bernard Jensen
4. Master Feeding Program by Bernard Jensen
5. Vibrant Health From Your Kitchen by Bernard Jensen
6. Dr. Jensen's Basic Food Laws Chart
7. Patient Nutrition Food Chart
8. Vitamin/Mineral Herb Chart

Fasting

Even when you are asleep and totally relaxed, the cells of many organs are hard at work spending energy. In fact, the work that you are aware of, that you do with your muscles during waking hours represents only about a third of the total energy you spend in a day. The rest is the metabolic work of the cells, for which they constantly require fuel.

The body's top priority is to meet these energy needs, and its normal way of doing so is by periodic refueling – that is, by eating. When food is withdrawn, the body must find other fuel sources in its own tissues. If people choose not to eat, we say they are fasting; if they have no choice (as in a famine), we say they are starving; but there is no metabolic difference between the two. In either case the body is forced to switch to a wasting metabolism, drawing on its reserves of carbohydrate and fat and, within a day or so, on its vital protein tissues as well.

Fuel must be delivered to every cell. As the fast begins, glucose from the liver's stored glycogen and fatty acids from the body's stored fat are both flowing into cells, breaking down to yield acetyl CoA, and delivering energy to power the cells' work. Several hours later, however, most of the glucose is used up, and the liver glycogen is being exhausted.
At this point, most of the cells are depending on fatty acids to continue providing their fuel. But the brain cells cannot; they still need glucose. (It is their major energy fuel, and even if other energy fuel is available, glucose has to be present to permit their energy-metabolizing machinery to work.) Normally the nervous system (brain and nerves) consumes about two-thirds of the total glucose used each day – about 400 to 600 kcalories' worth.

The brain's special requirement for glucose poses a problem for the fasting body. The body can use its stores of fat, which may be quite generous, to furnish most of its cells with energy, but for the brain and nerves it must supply energy in the form of glucose. This is why body protein tissues, such as muscle, always break down to some extent during fasting. Only those amino acids that yield 3-carbon pyruvate can be used to make glucose; and to obtain them, whole proteins must be broken down. The other amino acids, that cannot be used to make glucose, then have to be disposed of. This is an expensive way to gain glucose, but to extract a molecule of glycerol from a triglyceride obligates the body to dispose of some 50 or 60 carbons' worth of fatty acids, which is even more expensive. In the first few days of a fast, body protein provides about 90 percent of the needed glucose, and glycerol about 10 percent. If body protein loss were to continue at this rate, death would ensue within three weeks.

As the fast continues, the body adapts by producing an alternate energy source, ketones, by condensing together Acetyl-CoA fragments derived from fatty acids. Normally produced and used in only small quantities, ketones can serve as fuel for some brain cells. Ketone production rises until, at the end of several weeks, it is meeting about half or more of the nervous system's energy needs. Still, many areas of the brain rely exclusively on glucose, and body protein continues to be sacrificed to produce it.

Ketone (KEE-tone)

A ketone is a compound formed during the incomplete oxidation of fatty acids. Ketones contain a C=O group between other carbons; when they also contain a COOH (acid) group, they are called keto-acids. Small amounts of ketones are a normal part of the blood chemistry, but when their concentration rises, they spill into the urine. The combination of high blood ketones (ketonemia) and ketones in the urine (ketonuria) is termed ketosis.

Fasting
Living on (body) fat and (body) protein.

Fasting (early)
Protein is supplying glucose. Amino acids that can't generate glucose are degraded for energy.

Fasting (late)
Protein breakdown supplies some glucose for the brain. Ketone production helps to support brain function.

Low-Carbohydrate Diet
Living on (dietary and body) fat and protein almost exclusively.

Juice Fasting
Living on (dietary) carbohydrate and (body) fat.

Protein-Sparing Fast
Living on (dietary) protein, (body) fat, and (body) protein.

Caution:
During fasting, appetite is suppressed. It has been though that ketosis caused loss of appetite. The theory was that it would be an advantage to a person in a famine to have no appetite, because the search for food would be a waste of energy. When the person finds food and eats carbohydrate again, the body shifts out of ketosis, the hunger center gets the message that food is again available, and appetite returns. This hypothetical chain of events has served as justification for weight-loss routines, such as fasting and fad diets, that cause ketosis. However, it may be that any kind of food restriction, with or without ketosis, leads a person to adapt by losing appetite. An ordinal low-kcalorie diet can induce the same effect.

While the body is shifting to the use of ketones, it simultaneously reduces its energy output and conserves both its fat and lean tissue. As the lean (protein-containing) organ tissue shrinks in mass, it performs less metabolic work, reducing energy needs. As the muscles waste, they do less work, enhancing this effect. Because of the slowed metabolism, the loss of fat falls to a bare minimum – less, in fact, that the fat that would be lost on the low-kcalorie diet. Thus, although weight loss during fasting may be quite dramatic, fat loss may be less than when at least some food is supplied.

The adaptations just described – slowing of energy output and reduction in fat loss – occur in the starving child, the fasting religious person, and the malnourished hospital patient, and help to prolong their lives. The physical symptoms of marasmus include:

- Wasting
- Slowed metabolism
- Lowered body temperature
- Reduced resistance to disease

The body's adaptations to fasting are sufficient to maintain life for a long period. Mental alertness need not be diminished, and even physical energy may remain unimpaired for a surprisingly long time. Still, fasting is not without its hazards, as physician-supervised fasting has revealed. Among the multitude of changes that take place in the body are:

- Sodium and potassium depletion
- An increase in body uric acid
- A rise in blood cholesterol
- A decrease in thyroid hormone

The same alternations are seen in low-carbohydrate dieting. Renewed food intake, especially of carbohydrate, results in dramatic changes in the body's salt and water balance, accounting for most of the wide swings in body weight seen in people on fasts or low-carbohydrate diets.

The Low-Carbohydrate Diet
An economy similar to that of fasting prevails if a low-carbohydrate diet is consumed. Advocates of the low-carbohydrate diet would have you believe there is something magical about ketosis, something that promotes faster weight loss than a regular low-kcalorie diet. In fact, the low-carbohydrate diet presents the same problem as a fast. Once the body's available glycogen reserves are spent; the only significant remaining source of energy in the form of glucose is protein. The low-carbohydrate diet provides a little protein from food, but some must still be taken from body tissue. The onset of ketosis is the signal that this wasting process has begun.

In a diet that provides fewer than about 900 kcalories (for the average-sized adult), it is pointless to supply any protein at all, because the protein will only be used to provide energy, as carbohydrate would be used. Body protein is lost at the same rate in adults on such a diet whether or not they are given any food protein.

Caution:
One conclusion to draw from this is that a person who diets at the level of 900 kcalories a day might as well eat carbohydrate without protein, to spare body protein and allow efficient use of body fat. Carbohydrate-containing foods are less expensive than protein-rich foods, and both will serve the same purpose – supplying glucose. This is the choice made by the person on a juice fast, for the only energy nutrient juices contain is carbohydrate. But a wise conclusion is that such a diet is unnecessarily low in kcalories, even dangerously so. The person who wishes to lose body fat will select a balanced diet of 1,200 or more kcalories, one containing carbohydrate, fat, and protein. At this level, body protein will be spared, ketosis need not occur, vital lean tissues (including both muscle and brain) will not starve, and only the unwanted fat will be lost.

People are attracted to the low-carbohydrate diet because of the dramatic weight loss it brings about within the first few days. They would be disillusioned if they realized that much of this weight loss is a loss of glycogen and protein, and with them, quantities of water and important minerals. A dieter who boasts of losing seven pounds in two days on a low-carbohydrate diet must be unaware that at best, a pound or two is fat and five or six pounds are lean tissue, water, and minerals. Once "off" the diet, the dieter's body will avidly devour and retain these needed materials, and the weight will zoom back to within a few pounds of the starting point.

A warning is suggested by these facts. Beware of those who promote quick-weight-loss schemes. Learn to distinguish between loss of fat and loss of weight.

The Protein-Sparing Fast

A variant on fasting is the technique of ingesting only protein. The hope is that the protein will spare lean tissue and that the person will break down his own body fat at a maximal rate to meet his other energy needs. The protein, together with the body's lean tissues, are used to provide glucose. The idea sounded good when it was first suggested for use with very obese people, but it has met with mixed results. It seems effective only after considerable lean tissue has already been lost, at which time the body may be conserving itself quite efficiently anyway, and the fast has not been shown more effective than a mixture of protein and carbohydrate. Furthermore, it doesn't seem to "stick" very well; most people regain the lost weight.

Thus the protein sparing fast has to be judged at best a very moderate success and at worst a failure, for the ultimate criterion of success in any weight-loss program is maintenance of the new low weight.

The idea of a protein sparing fast originated with some responsible physicians who experimented carefully with it, using whole foods naturally rich in protein, such as fish and lean beef. Unfortunately, the idea was then seized upon and misused with the publication of a popular book, The Last Chance Diet, in 1977. Fad dieters, usually without any medical supervision, drank liquid protein potions prepared from low-quality sources, and lost dramatic amounts of weight – including, of course, lean tissue, water, and vital minerals. These "predigested" liquid proteins are of "notably lower quality" than food proteins, and cause dangerous alterations in heart rhythm. Within the year, 11 deaths had been ascribed to the fat, and the FDA had issued a stringent warning about liquid protein preparations. Since then, many more have died on the fast, due to sudden stopping of the heart caused probably by mineral losses.

The term protein sparing has also been used in another connection. Malnourished hospital patients also lose body protein, and this is especially likely, and especially dangerous, if they are simultaneously fighting infection. Physicians make every effort to prevent the loss of vital lean tissue by supplying amino acids as well as glucose in some form – through a vein if the patient can't eat. The effort to provide protein-sparing therapy in these circumstances should not be confused with the profiteering of faddists who promote the protein sparing fast.

Moderate Weight Loss

The body's cells and the enzymes within them make it their task to convert the energy nutrients you eat into those you need. They are extraordinarily versatile. They relieve you of having to compute exactly how much carbohydrate, fat, and protein to eat at each meal. As you have seen, they can convert either carbohydrate (glucose) or protein to fat. To some extent, they can convert protein to glucose. To a very limited extent, they can even convert fat (the glycerol portion) to glucose. But a grossly unbalanced diet or one that is severely limited in kcalories imposes hardships on the body. If kcalorie intake is too low or if carbohydrate and protein kcalories are undersupplied, the body is forced to degrade its own lean tissue to meet its glucose need.

Someone who wants to lose body fat must reconcile himself to the hard fact that there is a limit to the rate at which this tissue will break down. The maximum rate, except for a very large, very active person, is one to two pounds a week. To achieve weight loss that actually reflects body-fat loss, the most effective means is to adopt a balanced, low-kcalorie diet supplying all three energy nutrients in reasonable amounts while increasing energy expenditure by getting more exercise. In effect, this means adjusting the energy budget so that intake is 500 to 1,000 kcalories per day less than output. A person who wants to gain weight needs to make the opposite adjustment.

It might seem that the effort to lose or gain weight would involve tedious counting of kcalories, but this is not the case. The next two sections show how kcalorie input and kcalorie output can be estimated and balanced to achieve weight loss, gain, or maintenance.

Low-Kcalorie Diet
Living on food and body fat

1 Pound = 3,500 kcalories
A pound of body fat (adipose tissue) is actually composed of a mixture of fat, protein, and water and yields 3,500 kcalories on oxidation. A pound of pure fat (454 grams) would yield 4,086 kcalories at 9 kcalories per gram.

Calorimetry (cal-o-RIM-uh-tree)
A calorimetry is the measurement of energy as heat.
Calor = heat
Metron = measure

- 1 gram carbohydrate = 4 kcalories
- 1 gram fat = 9 kcalories
- 1 gram protein = 4 kcalories
- 1 gram alcohol = 7 kcalories

Direct Calorimetry
When an organic substance such as food is burned, the energy in the chemical bonds that held its carbons and hydrogens together is released in the form of heat. The amount of heat released can be measured; this direct measure of the amount of energy that was stored in the food's chemical bonds is termed direct calorimetry.

Indirect Calorimetry
As the chemical bonds in food are broken the carbons © and hydrogens (H) combine with oxygen (O) to form carbon dioxide (CO2) and water (H_2O). Measuring the amount of oxygen consumed in the process gives an indirect measure of the amount of energy released termed indirect calorimetry.

Estimating kCalorie Intake from Food
To find out how many kcalories are in food, a laboratory scientist can burn the food in a bomb calorimeter. This device can reveal kcalorie values in two ways. Either it directly measures the heat given off (and kcalories are units of energy defined in terms of heat) or it measures the amount of oxygen consumed in the burning, an indirect measure of the kcalories produced.

The number of kcalories in a food as determined by direct calorimetry, however, is higher than the number of kcalories that same food would give to the human body. This apparent discrepancy is explained by the fact that the body does not metabolize all the food all the way to carbon dioxide and water as the calorimeter does. When the calorimeter-derived values are corrected for this discrepancy, they state accurately the number of kcalories a food provides to the body, thus permitting researchers to make useful tables presenting the energy values of foods.

Another way to arrive at food energy values is to compute them from the amounts of protein, fat, and carbohydrate (and alcohol, if present) found in them.

But looking up every food in kcalorie charts is boring and inconvenient, and only the most motivated will persist at it for long. For the rest of us who may want to keep track of kcalories, some acquaintance with and exchange system, provides a simpler method. With some practice, you can look at any plate of food and "see" the number of kcalories on it. Only seven values need to be learned as a start towards gaining this new skill.

Food kCalorie Values

1 c skim milk (for whole milk, add 2 fat)	80 kcal
½ c vegetable	25 kcal
1 portion fruit	40 kcal
1 portion bread or starchy vegetable	70 kcal
1 oz lean meat (for medium-fat meat add ½ fat) (for high-fat meat add 1 fat)	55 kcal
1 fat (1 tsp. fat or oil)	45 kcal
1 tsp. sugar	20 kcal

Caution:
Before leaving the subject of the energy in food it is only fair to mention another way of thinking about energy in relation to food. We normally ask, "How many kcalories are in that food?" Dr. Jean Mayer, formerly professor of nutrition at Harvard School of Public Health, has pointed out that the average consumer in the United States uses three times as much energy to bring food to the table as the average citizen of developing countries uses for all purposes. It's a complicated thought, because more than just electric or gas heat in your kitchen goes into the production of a food. Foods that cost little energy in your kitchen may cost incredible amounts of energy in the field or in processing.

Along the same lines, the nutrition educator Dr. Isobel Contento suggests that we should be teaching people to understand the "energy costs, ecological consequences, and moral implications of their food choices; to analyze the impact of the food system on society as a whole; and to act self-reliantly in providing nourishing meals for themselves and others." In view of the contrast between a third world in which starvation is rampant, and the domestic scene in which the aluminum container for a 1-kcalorie diet soda costs 400 kcalories to produce, perhaps our awareness does indeed need to be raised.

Estimating kCalorie Output by the Body

Counting the kcalories in your food tells you your energy income, but to balance your budget you also need to know your expenditure. How can you count the kcalories you expend in a day? One way is to assume you are a "typical citizen" of the United States or Canada, and to use the numbers their governments use as standards for population studies.

Government Recommendations

The U.S. Committee on RDA and the Canadian Ministry of Health and Welfare have published recommended energy intakes for various age-sex groups in their populations. These are useful for population studies, but the range of energy needs for any one group is so broad that it is impossible even to guess an individual's need from them without knowing something about the person's lifestyle. The U.S. recommendation for a woman, for example, assumes she is 20 years old, 5 feet 4 inches tall, weighs about 120 pounds, and typically engages in light activity. A woman who fits all these descriptors is said to need between 1,700 and 2,500 kcalories a day to maintain her weight. The man used, as a reference figure is 20 years old, 5 feet 10 inches tall, weighs 154 pounds, engages in light activity, and need 2,500 to 3,300 kcalories a day. Taller people need proportionately more and shorter people proportionately fewer, kcalories to balance their energy budgets. Older people generally need fewer kcalories, with the number diminishing about 5 percent per decade beyond 30. Light activity, for both women and men, means sleeping or lying down for eight hours a day, sitting for seven hours, standing for five, walking for two, and spending two hours a day in light physical activity.

Although very few people fit these descriptions exactly, most fall close to the mean. The total span of needs is broad. For adults it is believed that an 800-kcalorie range covers most individuals, but some have energy needs outside this range. Clearly, it is impossible to pinpoint any person's energy need within such a wide range without knowing more.

530 Kcalorie Meal

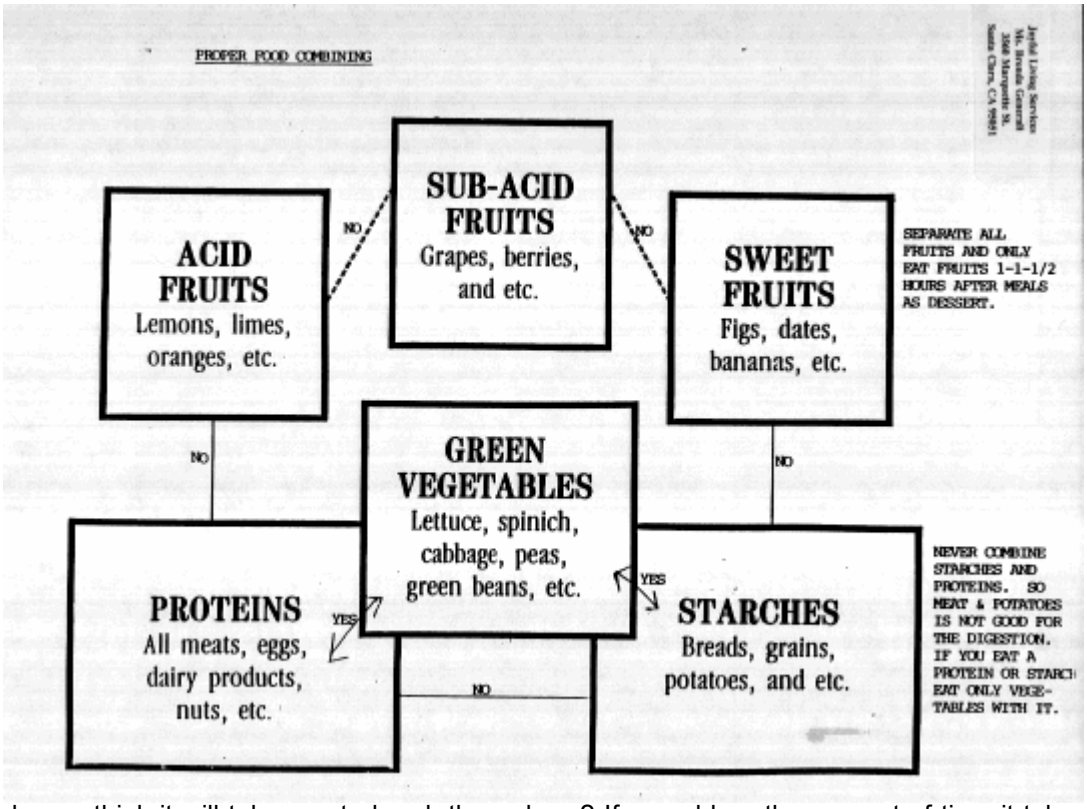
1 c milk (80) plus 2 fat (90)	170 kcal
½ c beans	25
1 small potato (1 starchy vegetable)	70
1 pat butter (1 fat)	45
4 oz fish (4 lean meat, assuming no fat is added), at 55 kcal/oz	220
Lemon wedge	0
TOTAL KCAL:	**530 kcal**

Diet Record Method

To obtain an individualized estimate of your energy needs, the best means would be to monitor your food intake and body weight over a period of time in which your activities are typical of your lifestyle. If you keep a strictly accurate record of all the food and beverages you consume for a week or two, and if your weight does not change during that time, you can assume that your energy budget is balanced. Records have to be kept for at least a week, however, because intakes fluctuate from day to day. (On about half the days you eat less, on the other half more, kcalories than the average.) If during a week you gain a pound of fat, you can deduce that you expended 3,500 kcalories less than you consumed, or an average of 500 kcalories per day for the seven days.

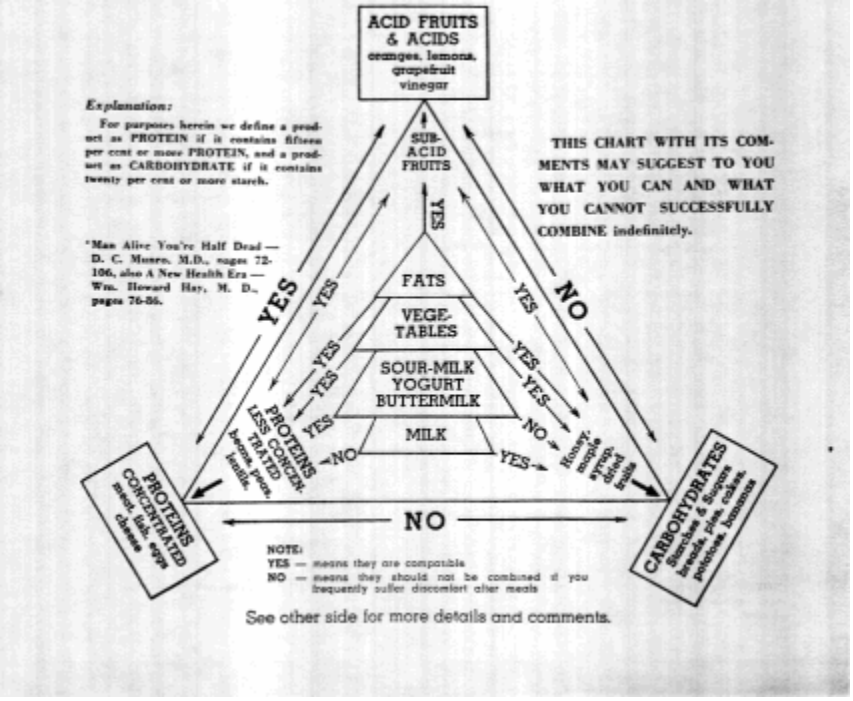
Food Combining

Do you have digestive trouble? In other words, do you belch after a heavy meal or feel full? Does it seem like food stays in your stomach for hours and hours? Do you still taste the food you ate 4 hours later? It typically takes 4 hours to break down fats and proteins (meat, eggs, dairy), 2 hours to break down starches (rice, potatoes, pasta), 1 hour to break down vegetables (salad, cooked or raw vegetables), and 1/2 hour to break down fruit.



Think about This

If you eat all the above types of foods together at one meal like most people do, how long do you think it will take you to break them down? If we add up the amount of time it takes to break each one of these food types down it would take approximately 7-1/2 hours for these foods to be broken down and leave your stomach to be absorbed in the small intestines. That's a very long time. Most people don't wait 7-1/2 hours between meals. Most people eat breakfast around 7 or 8 am, lunch around 12 or 1, and dinner around 5 or 6. That means that the last meal you ate is still in your stomach when you begin the next meal. And you're wondering why you're so tired and listless? Probably because your body is constantly trying to break down the food you're eating and all your energy is going to that task.



How Can You Avoid This?

Simply by following proper food combining rules and by supplementing your digestion with a product that will help you break down your foods easily. Food Combining is a process that we suggest for eating each meal in which you only combine foods that can be broken down together. This allows a much quicker transit time. I've included a Food Combining Chart for you to follow. Let me know if you have any questions about it.

Why Use Digestive Aids?

Even if you follow the food-combining chart that I've suggested above, you still might be low in your store of food enzymes and hydrochloric acid. These enzymes are created and stored by the liver and pancreas. If you constantly eat junk food and other foods that are devitalized of their nutrients your body will have to use its store of digestive aids. Once they're depleted you have to depend on the foods you're eating to stimulate the production of these enzymes and HCL.

Most people by the time they reach 35 have approximately 1/2 the enzymes and HCL production they used to have. This is because the body begins to slow down. The metabolism decreases and the body doesn't need as much fuel (food) to keep it going. At the same time the body slows down the production of these digestive aids. But, you keep eating at the same pace and the same types of foods not paying attention to the signals your body is giving you. These signals include belching, intestinal gas, bloating, nausea, overfull stomach, pain in the stomach, and other symptoms related to the intestinal system such as diarrhea after a meal and formation of mucous after a meal relating to food allergies.

Take Responsibility for Your Health

If you have these symptoms and are tired of them, then food combining will be useful to you. You will be amazed at how good you will feel in just a few days of following this program. It's not easy at first. The first week is difficult because we are so accustomed to sitting down and eating a salad, a protein, a starch, a fruit and maybe even a dessert at the same meal within the same hour. If you follow this program you will be limited to eating only a vegetable and a protein or only a starch and a protein at the meal and using the fruits and desserts as your desserts. If you need to lose weight this is the easiest way to do it. This is definitely NOT a diet BUT a lot of people have lost weight because they have begun to take responsibility for what goes into their mouth and how they feel afterwards. This is the beginning of "listening" to your body and learning what IT LIKES rather than what YOU LIKE. What your brain likes is not necessarily what's good for you. Everyone would love to eat whatever they want but there are consequences to doing this. Why don't you start today and feel better by following food combining rules and using digestive aids to help you along the way.

The Ideal Diet

IDEAL DIET	EXCLUSIONS
1. Whole	1. White Flour
2. Natural	2. White Sugar
3. Pure	3. Processed Foods
4. Varied	4. Additives and Preservatives
	5. Fried Foods
	6. Fast Foods

TO INSURE THAT YOU ARE GETTING A PROPER BALANCE OF NUTRIENTS, YOU MUST EAT A WIDE VARIETY OF WHOLESOME, FRESH FOODS ALONG WITH YOUR NUTRITIONAL PROGRAM - EAT AT HOME TO STAY WELL!

Basic Daily Menu

(Always follow the Food Combining Chart and Remember, this is an example of a recommended menu only!)

Breakfast

Have 1 egg either soft or hard boiled or 1 cup of cooked or cold cereal or 1 slice of toast. (Never Skip This Meal!)

Lunch

Always have a salad with raw beets, carrots, tomatoes, parsley, lettuce, sprouts and celery. This meal should include a slice of bread and another starch such as a potato or rice. Otherwise have a protein such as tuna fish or chicken.

Dinner

Always have a salad with raw beets, carrots, tomatoes, parsley, lettuce, sprouts and celery. This meal should include a slice of bread and another starch such as a potato dinner or rice or other starch. Otherwise have a protein such as tuna, chicken, tofu or other protein. (A good example would be a dinner salad, steamed vegetables and a protein or a starch.)

Primary Food Groupings of a Healthy Diet

Vegetable

Rule of Thumb: The darker the color the more nutritious. Some exceptions would be cauliflower. Always preserve the nutrients in your vegetables by:

1. **Eat them raw as much as possible by grating, slicing and dicing them.**
2. **Steam them.**
3. **Bake them.**
4. **If you're not hungry but just want something, you can substitute a vegetable drink made by juicing your own vegetables at lunch or dinner as long as there is variety in the drink. (Example would be V8)**

Fruit

Rule of Thumb: When possible, buy organic, unwaxed and undyed fruits. Do the best and:

1. **Buy fresh fruits while they're in season only. Don't buy green fruit. Fruit does not ripen once it's picked off the vine, it only softens.**
2. **Buy unsulfered, unsweetened dried fruits such as prunes, apricots, apples, dates, etc. and soak them overnight in luke warm water before eating them to stimulate the enzymes so they are easier to digest. (Avoid eating them straight out of the bag!)**
3. **Buy vine ripened citrus fruit. Green citrus fruit is unhealthy.**

Milk and Dairy Products

Rule of Thumb: If dairy products are tolerated, purchase:

1. **Raw unsalted goat's milk and unsalted renetless goat cheese.**
2. **Raw cow milk, buttermilk and cream.**
3. **Yogurt and kifir with active cultures.**
4. **Raw cottage cheese.**
5. **Raw, unsalted butter.**
6. **Raw, renetless milk cheeses.**
7. **Soy milk, soy cheeses.**

Meat, Poultry, Fish, Eggs and Other Proteins

Rule of Thumb: Purchase only those raised on the free range without antibiotics and hormones. If you prefer to consume these products, do the following:

1. **Eat red meat sparingly (beef, lamb, venison).**
2. **Avoid pork and pork sausages.**
3. **Avoid raw sushi.**
4. **When possible, purchase organically raised meats, poultry and eggs.**
5. **Purchase the freshest fish possible.**
6. **Use tofu, eggplant and beans as meat substitutes.**

Seeds, Nuts, Whole Grains and Legumes

Rule of Thumb: Use pasta sparingly. Avoid eating seeds or nuts out of the bag. Use whole wheat only if tolerated by those individuals without respiratory or Candida difficulties.

1. **Eat sunflower, unhulled sesame, pumpkin seeds, etc. Sprouted mung, alfalfa, chia, etc. Soak them overnight in water and blend in blender to make a nut butter to stimulate the enzymes so they are easier to digest. (Avoid eating them straight out of the bag!)**
2. **Eat almonds, walnuts, peanuts, pine nuts, cashews, pecans, etc. Soak them overnight in water and blend in blender to make a nut butter to stimulate the enzymes so they are easier to digest. (Avoid eating them straight out of the bag!)**
3. **Purchase whole wheat, oats, millet, buckwheat, brown rice, whole cornmeal, rye and quinoa grains.**
4. **Purchase whole grain products such as whole grain pastas, crackers, breads and desserts. The healthiest store bought pasta would contain beet, spinach and durum wheat flours.**
5. **Purchase soy, kidney, black, pinto, navy, lima, lentil and split pea beans. Soak them overnight in water before cooking to stimulate the enzymes so they are easier to digest.**

Cold-Pressed Vegetable Oil

The only oil that is recommended is Virgin Olive Oil. This is because it is the only cold or heat processed oil that is not processed with the chemical Hexane.

Sweetening

Rule of Thumb: Most average people cannot tolerate any sweetening on foods as this can cause intestinal gas as well as slow down the digestion process. It is also contrary to proper food combining. If your body can tolerate some sweetening, purchase:

1. **Raw Honey.**
2. **Barley Malt.**
3. **Date Sugar.**
4. **Real Maple Syrup.**
5. **Sweet herbs such as Stevia, Cinnamon, Nutmeg and Ginger.**

Seasoning

Rule of Thumb: Stay away from Black Pepper as much as possible as this can irritate the stomach lining. White table salt contains both sodium chloride (chlorinated salt crystals) as well as sugar and is not advised. If your body can tolerate some seasoning, purchase:

1. **Garlic (fresh or powdered).**
2. **Herbs such as onion, basil, oregano, dill, parsley, cayenne/capsicum (red pepper), kelp (has a salty taste), rosemary, etc.**

Beverages, Desserts

Rule of Thumb: Use only if it is tolerated.

1. **Nut Milk/Protein Shakes using milk, seeds, cashews or almonds. Soak the seeds and/or nuts overnight to stimulate the enzymes and soften them. Blend them in a blender and add spices and flavorings.**
2. **Fruit Shakes and Natural Ice Cream using cut up and frozen fruit. Use water or milk in blender and blend to the desired consistency.**
3. **Purchase only unsulfered organic wines. You can tell if they have been treated with sulfites because the label will read "contains sulfites" and the bottle won't usually have a wooden cork. Do not purchase bottles with plastic corks.**

Candida Diet

What Is Candida Albicans?

Candida Albicans is a yeast growth present in all of us and is normally controlled by bacteria in the intestines. But when something destroys helpful bacteria, the yeast begins to invade and colonize the body tissues. These yeast colonies release powerful chemicals into the bloodstream, causing such varying symptoms as lethargy, chronic diarrhea, yeast vaginitis, bladder infections, muscle and joint pain, menstrual problems, constipation and severe depression. The medical term for this yeast overgrowth is candidiasis (can di di' a sis).

Candida overgrowth is not a new problem, but is usually thought of as a minor infection of the mucous membranes, skin and nails. But the increased and sometimes excessive use of antibiotics, birth control pills and steroids will allow candidiasis to become a chronic, systemic infection that causes tissue damage throughout the body. Chemicals produced by the candida attack the immune system and if the immune system weakens, the candida will spread out into various body tissues and colonize.

Causes of Candida

What causes this normally harmless yeast to grow out of control? Several factors can lead to an overgrowth of candida. One is the use of antibiotics for extended periods. Broad-spectrum antibiotics taken for respiratory, urinary or ear infections are especially harmful because they destroy the Candida-controlling bacteria, as well as disease-causing bacteria. Steroids such as Cortisone (Decadron or other cortisone-type drugs) suppress the immune system's ability to fight Candida growth. Any hormone imbalance caused by birth control pills or frequent pregnancies also favor Candida overgrowth. There are usually parasites as well somewhere in the body when there is high Candida. Another cause of Candida overgrowth can be from a low Acidophilus and Bifidus culture in the colon. It is imperative that there is enough of these two friendly bacteria in the system in order to control Candida overgrowth. Without these friendly bacteria Candida can and probably will become out of control.

Symptoms of Candida

Both men and women can have candidiasis. However it does occur more frequently in women (especially young women) with more severe effects. Candida symptoms fall into the following four main areas:

Gastrointestinal and Genitourinary Symptoms

These include constipation, diarrhea, gas, bloating, indigestion, heartburn, PMS, recurrent yeast vaginitis, vaginal burning and itching, vaginal discharge, loss of sexual feelings and prostitis.

Allergic Symptoms

(These symptoms occur with the passing of toxins into the bloodstream.) These symptoms include hayfever, earaches, bronchitis (recurrent), hives, headaches, sore throats, coughing, acne, nasal congestion, and chemical sensitivities to tobacco smoke, perfume and foods. The person just feels "sick all over".

Disfunctioning Glandular and Organ Symptoms

These include infertility, menstrual problems, ovarian failure and ACTH deficiency, hypothyroidism, chronic lymphocystic thyroiditis, diabetes mellitus, impotence and endometriosis.

Emotional and Mental Symptoms

These occur because of central nervous system involvement. These include poor memory, fatigue, drowsiness, feelings of unreality, uncoordination, tingling and numbness, joint pain, muscle weakness, muscle pain, irritability, inability to concentrate, confusion and severe depression.

Diagnosis of Candida

Candida Albicans is present everywhere, subsisting on the surface of all living things. Since candida germs live in every person's body, especially on the mucous membranes, vaginal and other smears and cultures for the presence of candida are useless. Therefore the diagnosis for candidiasis is made from a person's medical history, score on a candida questionnaire or their response to a kinesiology/muscle test for candidiasis. Finally the diagnosis is confirmed by the person's response to treatment for candida overgrowth.

Treatment of Candida

Treatment for candidiasis is simple and effective. The goal is to get the yeast out of the tissues and to build up the body's ability to keep it out. There are several elements used in the treatment of yeast overgrowth. They are based on each patient's history and response to treatment.

1. Use of an anti-fungal herb called Pau d'Arco or Taheebo tea. Pau d'Arco is highly effective against Candida because it can penetrate into body tissues and work on a cellular level. Many doctors prescribe the anti-fungal drug Nystatin, which is only effective in the digestive tract.

2. Use of an anti-parasitic herbal combination called Herbal Pumpkin. This combination contains pumpkin seeds, culvers root, cascara sagrada bark, violet leaves, chamomile flowers, mullein leaves, marshmallow root and slippery elm bark, which have been proven to help support the immune system, stimulate the elimination system and therefore allow the body to eliminate the parasites.

3. Replace the microflora in the intestinal tract by taking capsules of Lactobacillus Acidophilus. These bacteria have been found to be extremely successful in reducing candida in the intestinal tract. Are you a coffee drinker? Do you drink decaffeinated or caffeinated? The rumors of decaffeinated coffee being less harmful for the body than caffeinated has been disproven by the medical establishment. Caffeine can kill up to 75% of the friendly acidophilus flora in the colon per cup of coffee. The same goes for decaffeinated. It takes the body approximately five hours to replace that flora depending on the diet and balance of the body at the time.

4. Take a combination of nutrient supplements that build-up the body's immunity and kill off the yeast or make it difficult for it to reproduce. An overgrowth of candida will interfere with the body's metabolism in ways that make normal amounts of nutrients ineffective, so there is an increased need for nutrition.

5. Eat a low carbohydrate diet with no more than 60-80 grams of carbohydrate per day. Because yeast feeds on sugar, wheat and dairy products they should be avoided. Yeasts, molds and fungi cross-react so yeast products should be avoided such as vinegar, mushrooms, cheeses, commercial breads and alcohol.

6. Avoid using antibiotics and steroids unless absolutely necessary since antibiotics promote the growth of the yeast germ in the body.

7. Stop using birth control pills and especially if there is discharge or headaches with periods. The progesterone of these pills causes changes in the vaginal mucus membrane, which makes it easier for candida to multiply.

8. Follow the Candida Control Diet. Fill out the Candida Albicans Questionnaire to find out if you need to do something about the amount of Candida present in your body.

9. Have yourself tested through Kinesiology to find out how much Candida is present in your body and what areas are affected by it.

Many clients notice a great improvement in as much as a few days and many within three weeks. Still it takes an average of six to twelve months to irradicate a candida overgrowth. The candida probably became well established before it was identified which is why treatment must be persistent. The major symptoms to improve are headaches, diarrhea, emotional and behavior problems, vaginitis and chemical sensitivities.

When fighting a Candida infection a person must be systematic and disciplined because the miseries of the problem do not cease immediately with treatment. Candida "die-off" can cause some very uncomfortable symptoms temporarily. These symptoms disappear soon after beginning the diet.

Summary

An overgrowth of Candida Albicans is a chronic, dangerous infection. If left unchecked it will continue to spread and break down the body's ability to fight off disease. Everyone including infants and children are susceptible to candidiasis. The goal when treating a candida infection is to remove yeast from the infected tissue and rebuild the immune system.

Candida Albicans Questionnaire

Candida Albicans symptoms are listed by category. As Candida is accumulative, this applies to the present and your entire past life. Score 1 if occasional, 2 if frequent, or 3 if severe.

DIGESTIVE SYSTEM

_____ Gas w/most foods, not just one food
_____ Intestine pain, colitis
_____ Bloating with or w/o gas
_____ Belching w/most foods
_____ Constipation, stool hard-difficult to move
_____ Diarrhea, stool watery over long period
_____ Heartburn, chronic
_____ Hiatal Hernia conditions
_____ Indigestion
_____ Mucus in stools
_____ Hemorrhoids
_____ Dry mouth
_____ Bad Breath
_____ Crave sugars
_____ Crave breads
_____ Crave alcoholic beverages
Total Score _____

NERVES AND STRESS

_____ Headaches, occasional but constant
_____ Migraine headaches
_____ Depression
_____ Lethargic
_____ Laziness, consistent
_____ Hyper-agitation
_____ Memory, loss or poor
_____ Concentration, noticeable less/loss
_____ Energy loss
_____ Schizophrenia
_____ Psychiatric drugs
_____ Shock treatment
_____ Dizziness, vertigo
_____ Insomnia
_____ Hyper-activity
_____ Fatigue
_____ Drained
_____ Spacy feeling
Total Score _____

GENITOURINARY

_____ Vaginal, yeast outbreak, discharge, burning
_____ Penis, Scrotum, yeast outbreak, fungi jock itch
_____ Mensuses, irregularities, cramping
_____ Premenstrual, anxiety, depression problems
_____ Impotence
_____ Urethritis
_____ Cystitis
_____ Urinary infection reoccurring low grade
_____ Bladder infection reoccurring low
_____ Endometriosis
_____ Prostatitis
_____ Loss of sexual desire
_____ Premenstrual tension
_____ Urinary frequency/urgency
_____ Urinary Burning
Total Score _____

ALLERGY-MUCUS SYMPTOMS

_____ Hayfever
_____ Ear, draining, aches, infections
_____ Hives
_____ Asthma
_____ Chemicals, sensitivity
_____ Food, sensitivity
_____ Odors, fragrances, sensitivity
_____ Heat/cool sensitivity
_____ Mucus, chronic body, nose, throat, etc.
_____ Five sense disturbances
_____ Tobacco smoke sensitivity
_____ Eyes burning/tearing
_____ Ear Pain
_____ Chest congestion
_____ Wheezing
_____ Headaches
_____ Head fullness, pressure above ears
_____ Itching, ears, nose, body
_____ Rashes, allergic
_____ Blister, rash in mouth
_____ Mucus congestion or nasal discharge
_____ Dry throat
_____ Cough
Total Score _____

GENERAL, POTENTIAL CONTRIBUTING CAUSES FOR

_____ Crohn's disease
_____ Anorexia Nervosa
_____ Systemic Lupus Erythematosis
_____ Sarcoidosis
_____ Myasthenia Gravis
_____ Alcoholism, especially wine & beer
_____ Drug addiction
_____ Multiple Sclerosis
_____ Hypoglycemia
_____ Hyperactivity
_____ Psychosomatic disorders
_____ Asthma
_____ Allergies
Total Score _____

GENERAL SYMPTOMS - ENVIRONMENTAL

_____ Fatigue
_____ Molds, exposure to, moldy house, close to ground
_____ Fungus conditions, between toes/fingers, under finger nails or in skin folds
_____ Infection, chronic reoccurring
_____ Eye matting, infection, mucus discharge
_____ Mouth infection/thrush
_____ Rashes, body/diaper
_____ Muscle aches
_____ Numbness, tingling, burning
_____ Muscle weakness, paralysis
_____ Joints, pain or swelling
_____ Spots in front of eyes
_____ Vision is erratic/failing
_____ Drowsiness
_____ Lack of coordination when needed
_____ Arthritis/joint swelling

Total Score _____

Antibiotics kill both good and bad bacteria in the body creating a bacterial imbalance and the increase of Candida. Birth control pills historically add to Candida emergency. Consequently, these drug uses are weighed heavily.

DRUG	Used less than 1 month - Score 25	1 month or continued use - Score 50
Tetracyclines	_____	_____
Antibiotics	_____	_____
Prednisone or other cortisone type	_____	_____
Birth control pills	_____	_____
Drug Total	_____	_____
Combined Drug Total	_____	
Combined Category Total	_____	
Your Total	_____	

Candida can run from mildly irritating to severe, even life threatening. Even a low score then would require treatment if bothersome. A three in headache, yeast infection, etc., would invite corrective measures.

SCORES

1-30 would indicate Candida is in balance.
31-40 would indicate normal; however, Candida needs to be watched. Use mild Candida diet and treat irritating symptoms.
41-55 would indicate moderate Candida diet and treatment of Candida symptoms.
56+ would indicate severe Candida diet and full Candida treatment.

Candida Control Diet

DIET DO's
*** * * FOODS YOU CAN EAT * * ***

MEAT

Beef	Squirrel
Salmon	Rabbit
Chicken	Quail
Turkey	Duck
Lamb	Goose
Veal	Cornish Hen
Egg	Pheasant
Tuna	All game bird

BEVERAGES
Nature's Sunshine Vita-Lemon
Nature's Sunshine Herbal Beverage
Nature's Sunshine GlanDiet Shake
Water

FISH
All fresh fish
Clam
Lobster
Shrimp
Crab
Oysters

All meats & Eggs
No BACON, SAUSAGE, HAM
HOT DOGS, LUNCH MEATS

NUTS, SEEDS & OILS
(UNPROCESSED)
Almonds
Brazil
Cashews
Filberts
Pecans
Pumpkin Seeds

AVOID ALL FRUIT
FOR 2 WEEKS

Apple	Grapefruit
Avocado	Mango
Banana	Nectarine
Peach	Orange
Pear	Papaya
Apricot	Pineapple

EAT ALL FRUIT ALONE!

(OILS - COLD PRESSED)

Almonds	Apricot
Avocado	Corn
Linseed	Olive
Safflowers	Sesame
Butter	

ALL FRESH VEGETABLES

Asparagus	Lettuce
Beets	Onions
Broccoli	Parsley
Brussel Sprouts	Peas, Beans
Cabbage	Legumes
Carrots	Tomatoes (fresh)
Cauliflower	Summer Squash
Celery	Winter Squash
Cucumbers	Zucchini, Acorn
Eggplant	Red Potatoes
Green Peppers	Butter Squash
Greens	Radishes
Turnip	Okra
Spinach	Parsnip
Mustard	Corn
Beets	Collards
Kale	

WHOLE GRAINS

Barley	Corn
Millet	Oats
Rice	Wheat
Cereal grains	Break & Muffins

Containing no yeast, honey, or sugar
Avoid All Grains for 2 Weeks. Reintroduce 1 at a Time.

Candida Control Diet

DIET DONT's
*** * * FOODS YOU MUST AVOID * * ***

1. Fruit Juices: Either canned, bottled, or frozen. Exception: Freshly prepared juice.

2. Coffee & Tea: Regular coffee, instant coffee, decaffeinated coffee, and teas of all sorts including herb tea.

3. Exception: Traditional medicinal herb teas.

4. Melons: Watermelon, honeydew melon, and especially cantaloupe.

5. Edible Fungi: All types of mushrooms, morels, and truffles.

6. Cheeses: All types including cottage cheese and cream cheese. Prepared foods, Velveeta, macaroni and cheese, any other cheeses containing snacks. NO buttermilk, sour cream, any other sour milk products.

7. Yeast: Brewer's yeast, baker's yeast, vitamins, minerals, unless labeled "yeast free" and "sugar free".

8. Antibiotics: Specifically penicillin, streptomycin, ampicillin, amoxicillin, keflix, ceclor, septra, and bactrim.

9. Processed Foods: Packaged and processed foods containing yeast and refined sugar. Also avoid enriched flour products.

10. Nuts: Peanuts and pistachios usually contain mold, which in turn will feed yeast.

11. Sugar: All sugar containing foods and sweeteners.

12. Alcohol: Fermented liquors and liqueurs, and beverages such as cider and root beer.

13. Malt Products: Milk drinks, cereals, and candy.

14. Condiments, Sauces, and Vinegar-Containing Foods: Mustard, ketchup, Worcestershire, Accent (monosodium glutamate), steak, barbecue, chili, shrimp and soy sauces, pickles, pickled vegetables, relishes, green olives, sauerkraut, horseradish, mince meat, and tamari. Also avoid sprouts. Vinegar of all kinds and vinegar containing foods such as mayonnaise, and salad dressing. (Freshly squeezed lemon juice may be used as a substitute for vinegar in salad dressings prepared with unprocessed vegetable oil.)

15. Processed & Smoked Meats: Pickled and smoked meats, fish including sausages, hot dogs, corned beef, pastrami, and pickled tongue.

16. Dried & Candied Fruits: Raisins, apricots, dates, prunes, figs, and pineapple.

17. Leftovers: Molds grow in leftover food unless it's properly refrigerated. Freezing is better.

CERTIFIED COLON HEALTH ONLINE COURSE - SESSION 6 – QUESTION & ANSWER SESSION

NAME: _____

ADDRESS: _____

PHONE: _____

FAX: _____

E-MAIL: _____

Please be sure to fill out the information above, complete the test and e-mail or fax it back to us at iridology@netzero.net or 530-878-1119. We will grade your question & answer session and will let you know if we have any questions or concerns.

1. What foods boost the intake of omega-3 essential fatty acids?

2. True or False? Studies have shown that a diet containing fewer calories can increase health and extend life.

3. What Is Candida Albicans?

4. Increased allergies, dry hair and skin, brittle nails, acne, eczema, rashes, or tiny lumps on the backs of your arms are symptoms of what deficiency?

5. The only oil that is recommended in The Ideal Diet is Virgin Olive Oil. This is because:

6. An overgrowth of Candida Albicans is a _____ _____ _____. If left unchecked it will continue to spread and break down the body's ability to fight off disease. Everyone including _____ and _____ are susceptible to candidiasis. The goal when treating a candida infection is to _____ from the infected tissue and rebuild the immune system.

7. Do some research on your diet. Keep track of everything you put in your mouth over the next 7 days. Write a 1-page report on your findings pertaining to this session.