

**THE HEALTH BENEFITS OF "DETOXIFICATION THERAPY"
UPON THE ENDOCRINE SYSTEM**

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This system is most interesting to me. I feel it affects a wide range of physical and emotional disturbances which can affect other parts of the body. When this system is cleansed and toned, the "mental and physical" come back into harmony and the positive outlook on the life is once again restored.

The endocrine glands, which produce hormones and deliver them to the blood, constitute a system of their own. The endocrine organs individually perform separate and unique functions, but by interrelations they influence one another and thus cooperate in regulating the body's various physiological processes. The endocrine system includes various glands:

1. The Hypothalamus _ is found in the front side of the brain beneath the Thalamus.
2. The Pituitary _ is located under the center of the brain, and is the size of a small pea.
3. The Pineal _ is located in the middle of the brain.
4. The Thyroid _ is located on both sides of the trachea in the throat.
5. The Parathyroids _ are found on both sides of the thyroid.
6. The Thymus _ is found behind the upper sternum.
7. Adrenals _ found on top of each kidney.
8. Pancreas _ is located close to the stomach in the abdominal cavity.
9. Sex glands _ testes (males) ovaries (females) located in the lower part of abdomen, groin area. The Placenta is associated with the endocrine system during pregnancy.

The Hypothalamus, also known as the "Interbrain" is located near the center of the head, it is surrounded, except for the bottom of it, by the brain. The nerve cells contained in the hypothalamus are grouped to form automatic control centers for several of the body's functions. One of these is to regulate body temperature. This gland also affects the functions of the pituitary gland located underneath the hypothalamus.

The Hypothalamus also helps to coordinate and regulate the autonomic

nervous system, which regulates the functions of the body's organs, glands and vessels.

The hypothalamus also plays a role in certain parts of the brain which affect our emotions.

"Emotions are complex experiences which do not consist of discrete thoughts, but rather of attitudes which influence the thoughts."

Common examples of thoughts are fear, anger, love and happiness. The emotions influence one's conscious thinking, but do not need to control it. The cortex of the cerebrum, where conscious thinking takes place, can be used, if a person desires, to control the other parts of the nervous system. So, if a person who is "strong willed" and mature in attitudes can control his behavior in spite of his emotions.

The nerve cells of the Hypothalamus work automatically, they can take care of the actions of the heart, the lungs and the stomach. If we had to regulate these organs by conscious thought we'd hardly have time for any other thoughts.

The emotions are activated by the Hypothalamus, this explains why the functions of your organs are so easily influenced by your emotions.

When we experience the emotion of fear, the Hypothalamus declares an emergency and sends out nervous empulses to various organs in the body, under the stimulus of fear, the heart beats faster, the blood pressure rises, blood sugar increases, breathing becomes more rapid.

This process creates an extra supply of energy, food and oxygen to the muscles, digestion is retarded, the emotion of fear conditions your body to run or otherwise protect itself in case of danger, known as the "fight or flight" emotion.

Sometimes a person who has not learned to control his emotions and permits them to continue swayed for a long time becomes, he then creates a constant state of anxiety. The organs react, as best they can, to a prolonged emotional state just as they do in the case of a short-lived emergency, but when an emotional state continues day after day, the organs suffer the result of an emergency which has no end.

This is then termed a "Functional Disease", which refers to illnesses involving no structural change in the tissues of the body, the symptoms result from changes in the nervous control of certain organs.

Some of these illnesses are: nausea, vomiting, dizziness, headache, fatigue, emotional tension, colitis, diarrhea, constipation, insomnia, irritability, high blood pressure, heart attack, stroke, panic attacks, phobias, paralysis, this list could go on and on.

The Pituitary gland located in the center of the brain, is also known as the "master" gland and is divided into 2 lobes, the anterior and the posterior.

The anterior lobe produces 6 hormones:

1. Somatotropin _ a growth hormone, which increases protein production, reduces carbohydrate use and increases the use of fat for energy use.
2. Prolactin _ suppresses ovulation during lactation and stimulates mother's milk glands.
3. ACTH/Adrenocorticotrophic Hormone _ carried by the blood throughout the body, affects mostly the cells in the cortex portion of the adrenal glands, keeping them healthy and stimulating them to produce part of the cortisol/steroid hormones.
4. Thyroid _ stimulating hormone T.S.H _ stimulates thyroid gland, regulating the size of thyroid gland and controls amount of secretion from thyroid.
5. Luteinizing Hormone _ L.H. _ develops in the empty follicle of the ovary

after the egg cell has been expelled, it stimulates the ovary to produce estrogen which help to retain a woman's femininity. In males, this same hormone stimulates the interstitial cells of the testes to produce testosterone, which helps to maintain the male characteristics.

6. Follicle-stimulating hormone _ F. S. H. _ encourages the development, production and release of the eggs from the ovaries. In males, it stimulates the production of sperm.

The Posterior lobe stores two hormones secreted by the Hypothalamus.

1. Antidiuretic hormone _ A.D.H _ helps regulate and decrease the amount of water allowed to pass into the urine thru the kidneys.
2. Oxytocin Hormone _ has no effect in males, but in a woman it causes muscle contractions for labor/childbirth, and it stimulates the flow of milk after birth. This hormone is also triggered by stimulation of the nipples.

Diseases/illnesses of the pituitary can be Cushing's Disease, Dwarfism, Hypopituitarism, Diabetes Insipidus.

The Pineal Gland _ which is a small gland located towards the back of the brain, synthesises the hormone melatonin, which inhibits the effects of the ovaries and testes. If overactive can cause pre-pubertal tumors and delay sexual development, where as, reduced function can cause early puberty.

The Thyroid Gland _ located in the throat produces the hormone Thyroxine which regulates the rate of energy production of cells the rates of tissue growth and development and they regulate activity of the nervous system. Calcitonin which is produced by the Thyroid, lowers blood calcium levels. The thyroid is composed of thousands of small follicles, each consisting of a single layer of cells on the outside with a core of gelatinous substance on the inside, the core material serves a storage for excess hormones.

The thyroid controls metabolism, the rate at which oxidation in the body's cells occur, these hormones improve a person's ability to think. When they are in

short supply, thinking is retarded, sometimes extremely.

An overproduction may make a person irritable and restless.

An adequate amount of thyroid hormone is needed for normal growth and skeletal development in a child.

Parathyroid Glands are small and located on either side of the thyroid.

They produce parathormone which regulates the amounts of calcium and phosphate which circulate in the blood. This hormone maintains a proper level of calcium in the blood even though this calcium may have to be derived from the bones.

The Thymus produces Thymic hormones/thymosins, that activate the immune system by promoting the production of T cells, a major type of white blood cells. It used to be believed that the Thymus atrophied with age, it is now known that stress and vitamin A deficiency causes the gland to shrink, resulting in a reduced defense system.

The Adrenal Glands lie on top of the kidneys and consist of two parts. The medulla, which is the central portion and the Cortex, which is the outer part.

The Medulla is under the control of the nervous system which produces hormones in response to nervous impulses recieved from the brain, also, the hormones produced here have the same effect throughout the body as do the nerves of the sympathetic division of the autonomic nervous system.

The medulla is part of the body's alarm system and performs, along with parts of the nervous system, to prepare the body to meet an emergency. It does this by releasing it's hormone, adrenaline directly to the blood and goes out to all tissues of the body.

These hormones increase the force and rate of the heart beat, constrict

blood vessels to the skin and gastro-intestinal tract, inhibits peristalsis, contracts the bladder, dilates blood vessels of the heart and skeletal muscles, dilates bronchioles, increasing air supply of lungs and increases blood sugar levels, causing increased energy.

The medulla also creates another hormone Noradrenaline, this hormone has similar actions to adrenaline, but with a few differences as in that it causes a generalized restriction of blood vessels which raise both the systolic and diastolic blood pressure. Adrenaline causes the systolic pressure to raise but not the diastolic pressure.

Adrenaline creates a fight or flight situation, whereas noradrenaline helps control normal blood circulation and blood pressure.

The Cortex, the outer part of the adrenal gland, produces Aldosterone which works on the kidneys to help with elimination of potassium and the retention of sodium.

The Cortex also produces cortisol, also called steroids or adrenal corticoids.

Cortisol speeds up the movement of amino acids from skeletal muscle to the liver, it increases production of glucose from amino acids broken down by the liver, it increases mobilisation of fatty acids from fat deposits, it's required to deal with stress, and has anti-inflammatory and anti-allergic abilities.

Three diseases associated with the Adrenal Gland are: Hyperfunction _ reduction _ Addison's Disease, Hypoglycemia _ low blood sugar, whereas sodium and chloride are excreted and potassium is retained.

Hyperfunction _ excess _ loss of potassium in urine and depletes potassium levels in plasma, this could be because of a tumour of the adrenal cortex, which can be corrected by surgical removal.

Cushing's Disease _ excess _ of adrenal cortex hormones with the abnormal

production of Androgens, which are produced by the interstitial cells, which lie in clumps between the tubules which produce the male sex cells.

The Pancreas Gland is located in the abdominal cavity, close to the stomach and duodenum. The pancreas has two functions: Exocrine and Endocrine. The exocrine function is to secrete digestive enzymes. The endocrine function produces Insulin and glucagon in special cells called "Islets of Langerhorns". These two kinds of cells have no connection with the system of ducts which carries the pancreatic juice to the duodenum. These two hormones have an opposite effect in regulating the use of blood sugar by the various tissues of the body, these two hormones counterbalance each other. The hormone insulin lowers blood glucose, while glucagon increases blood sugar. If there is an increase or excess of glucose in the blood the result might be Hyperglycemia, whereas the excess is secreted in the urine, and there is an insufficient supply of Insulin, which can lead to diabetes. If too much Insulin is produced and glucose levels are too low, this can result in Hypoglycemia, which, after a long continual state can lead to disease as well.

The last set of Glands are the Sex Glands: The Testes located in the groin of man produce spermatozoa, the male reproductive cells, and testosterone, which creates the normal sexual behavior and male characteristics, deepening voice, hair on chest and face, and the development of the male organs. Testosterone, also promotes growth and the conversion and utilization of protein.

The Ovaries located in the groin of woman produce estrogen and progesterone. Estrogen promotes the growth and sex characteristics at puberty, it aids in the regeneration of the endometrium (mucous membrane lining of uterus) following menstruation and promotes development of breasts in young adolescent women and in pregnancy. Too low of estrogen production can cause irregular menses and under-developed breasts and uterus.

Progesterone, from the corpus luteum, helps prepare the endometrium for implantation of a fertilized egg, and it also promotes milk production.

Placenta, cord from mom to baby during pregnancy in uterus secretes chorionic gonadotropin, a hormone, capable of stimulating the growth and function of the gonads, as well as estrogen and progesterone.

Hormones help regulate everything from energy flow, to inflammation, to a woman's monthly cycle, to a man's hair growth.

Natural therapy "focus" for hormone balance should be to gently stimulate body regulatory functions, after trauma, stress or serious illness; rather than to regulate hormone levels by injection. This allows the body to make its own balance at the deepest level of the body processes.

Biologically, once a young female has become shapely and attractive, pregnancy is the next step. Their bodies need to insure that there is a large enough store to keep mother and baby healthy through the nine months of pregnancy and on into a year or so of breast feeding.

When women are sexually active, their metabolism encourages a little extra fat deposition. Although, frequent sex and a heightened emotional state can speed up the metabolism. At some point the body may over-compensate once desire is fulfilled, and as sexual exercise decreases, fat may accumulate. And then, if your emotional life is stressful, you may turn to food for comfort.

Another function of fat is that of toxin storage. Many of the substances in our environment are poisonous, and the majority of these are fat-soluble. If our body is unable to metabolize and remove these materials, they tend to become stored away in the fatty tissue. The body may also manufacture fat especially for storage of dangerous substances.

Because of the relatively low metabolism of fatty tissue, once toxins are stored here they are likely to remain undisturbed, and the body becomes very reluctant to have them circulate again. The fat becomes persistent and further fat tends to accumulate in these places because the metabolism has "learned" to do this with a wide range of substances it doesn't like.

If your weight problem is fat retention to protect against toxins, it will begin to experience some of the symptoms of detoxification, such as a "furry" tongue, headaches, fever, rash and tiredness. The only way you will successfully shed fat, especially if you are carrying a lot of it, is by attending to the pollution levels around you and carrying out a periodic, gentle detoxification regime, (one day a week, a week-end every month, a week every six months) which you can return to a more healthful eating plan.

Medications and drugs can play a large part in some people

retaining/making fat harder to lose, either because of a tendency to encourage fluid retention, or by interfering with metabolism.

By eating a diet high in vegetables, fruits and fiber, and learning to work with your metabolism you can improve detoxification by a moderate increase in exercise, while those unable to exercise will find that "dry skin" brushing , or a weekly aromatherapy massage can help with toxin drainage via the lymphatic system.

Some people become convinced they can not lose weight when they are on a prescription drug. But, when a detox or a change to a much higher level of nutrient-dense food diet is started, they are able to lose unnecessary stored fat, the body will respond to this positive change. These people also will feel a re-energizing of the body and mind. This process is like a "Spring cleaning" for the body and especially the digestive tract, improving digestion and absorption, eliminating more waste, including the break-down products from the medications they are taking, and greater nourishment of the body with all nutrients, especially the macronutrients.

Another benefit of a Detox diet is that some of the health conditions requiring the drug medications are likely to improve considerably with nutritional healing and herbals, and as a result can be re-evaluated by your physician for reducing or eliminating the medications.

Another situation which can cause excess weight is an imbalance in the amount of estrogen and progesterone. We are hearing more and more in the press and on television that estrogens in the environment, from the break-down products of certain plastics and pesticides, are getting into our water and our food. There are many symptoms associated with "estrogen excess".

Estriol (an estrogen) naturally stimulates breast tissue, increases the proportion of body fat, causes salt and fluid retention, and interferes with thyroid hormone activity and affects blood sugar control, whereas natural progesterone generally has the opposite effects.

Since estrogen dominance can occur either because of excess estrogen, or because of a lowered progesterone, stimulating the body to balance estrogen and progesterone might help.

This can be achieved by consuming more foods containing these hormone-like materials, phytoestrogens, such as soy and sweet potatoes, fennel, celery, flaxseed oil, nuts, or obtaining plant/vegetable substances, as in dried herbal capsules. A specific of these is Wild yam.

Once toxic substances are eliminated from the body, we (herbalists) use astringents, mucilaginous and nutritive herbs to revitalize body systems by soothing, tightening and strengthening inflamed and flaccid tissues.

The purification and revitalizing process achieved by the use of herbs is aimed largely at the digestive system. Herbal therapies also affect the circulatory, urinary, respiratory, skeletal and nervous systems. Organs of the body such as the liver, kidneys, stomach, thyroid and heart are also targeted specifically by combinations of herbs.

Most herbs in common use are mild and require long term use to affect a change. Using herbs to obtain and maintain health embodies the concepts of preventative medicine, quality of life and increasing longevity, but in practice this means cleansing and revitalizing body systems.

Herbs are nutritional foundation nutrients, working through the glands, nourishing the body's deepest and most basic elements, such as the brain, glands and hormones. Results will seem to take much longer. But this fact only shows how herbs actually work, acting as support to control and reverse the cause of a problem, with a more permanent effect. Some improvement from herbal treatment can usually be felt in 3 to 6 days. Chronic or long standing degeneration will take longer. A traditional rule of thumb is one month of healing for every year of the problem. Herbal combinations are not addictive or habit-forming, but are a powerful nutritional agent.

When you begin a detox-fast diet program you can experience what herbalists call a "Healing Crisis" or the "law of cure", and this means that you can sometimes feel worse before you get better. The body frequently begins to eliminate toxic wastes quite heavily during the first stages of a system cleansing therapy. This may especially be true in the 3 to 4 day fast that many people use to begin a serious healing program. Herbal Therapy without a fast works more slowly and gently, although, there is still some discomfort and weakness as disease poisons are released into the blood stream to be flushed away strength and relief return when this process is over.

Most herbs are safe to take as foods, they have almost no side effects as natural medicines can. Although sometimes a mild allergy-type reaction may occur, same as any food allergy.

This might happen because the herb quality is poor, it may have been adulterated with chemicals in the growing/storing process, or in some instances, incompatible herbs were used together, or it may be just an individual allergic response to a certain plant.

The key here would be moderation, both in formulation and dosage. Anything taken in excess can cause negative side effects, normal common sense, care and intelligence are needed when using herbs either for food or medicine.

Blood sugar swings and metabolic fluctuations are examples of excess conditions of the glandular system. The hormone imbalances that disrupt the body's thermostat are also expressed as skin disorders.

Excess conditions in the glandular system are often marked by patterns of minor aches, pains and ailments including: backache, abdominal cramps, sore throat, itching skin, burning skin, burning urination, fear, anxiety, vertigo, fevers, thirst, dry skin, mouth sores, tinnitus, dry coughs.

If these symptoms are ignored, these ailments may develop into illness such as; hypoglycemia, hypothyroidism, hypertension, deafness, arthritis, autoimmune diseases, constipation, respiratory tract infections, dysmenorrhea, amenorrhea and menorrhagia.

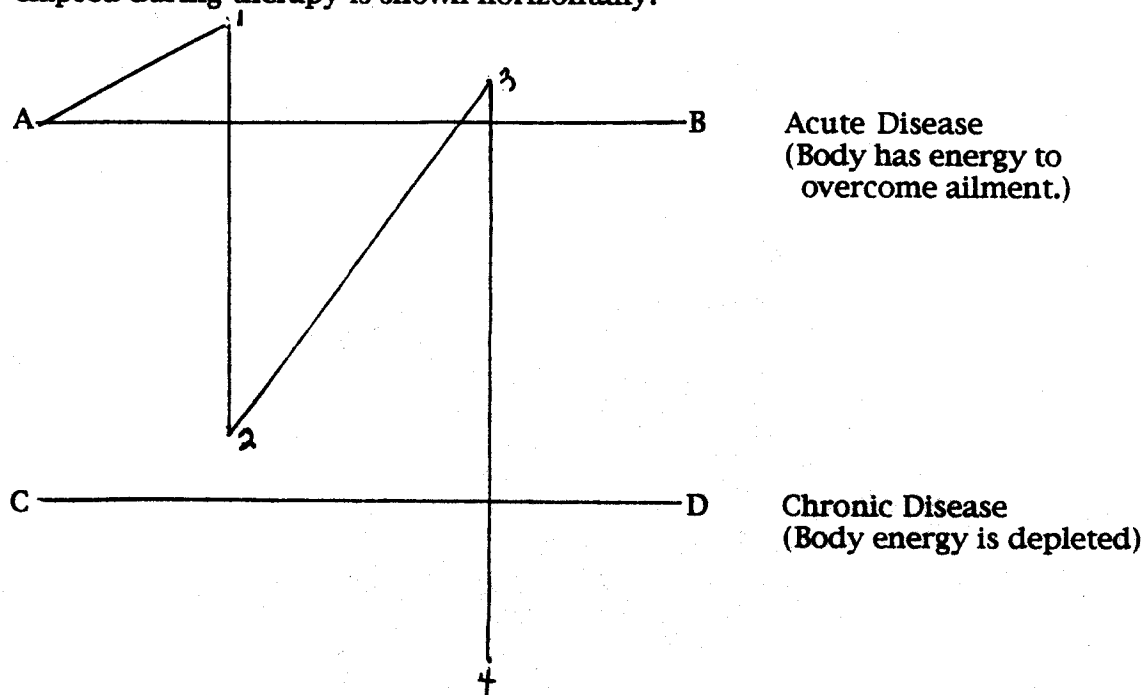
Weakness in the glandular system is characteristic of serious conditions such as diabetes and Addison's disease as are less serious and more common expressions of glandular deficiency such as hypothyroidism and obesity.

Deficient conditions of the glandular system are often associated with patterns of minor aches, pains and ailments including; dry eyes, anemia, scanty menstruation, nail problems, muscle inflammation, frustration, depression, anger,

fatigue, poor appetite, muscle spasms, obesity, inflammatory skin conditions, dry hair and insomnia.

Keeping the disease/illness/ailment under control is one of the main objectives to therapy. If excessive stimulation, detoxification or sweating are used, this will deplete the healing integrity of the body.

In this diagram, the energy level of a person is plotted vertically, while time elapsed during therapy is shown horizontally.



Line A to B is a given energy level of a patient, if, the person is over stimulated using large amounts of cayenne, ginseng, vitamins, sex, stimulating foods, high protein diet, spices, long-term or too intense detoxification methods, coffee or drugs, they will push the body synthetically up to point 1 where a temporary high and energy level is felt. But, because the body was stimulated excessively without adequately nourishing and relaxing of the system, the body will relapse into a fatigued state, down to point 2.

When overstimulation is produced, the body's alkaline reserves, vitamins

and nerve fats are being used. This is depleting, and the body must rest to restore these, and because the fatigue is felt, more stimulation is given by the inexperienced therapist. The body once again is synthetically pushed to point 3, but because of lack of reserves, it doesn't quite reach as high as level 1, but soon falls lower than level 2, down to level 4.

If this is continued, the body is too weak to detoxify properly and metabolic toxins are retained in the system, now making the condition worse instead of better. By making this mistake over a period of time, repeating synthetic stimulation, it actually is possible to turn a simple, acute problem (where the energy was present to cure the condition) into a chronic disease with an accompanying low energy level.

This type of problem results from taking excessive amounts of vitamins and herbs that might otherwise produce good results if applied properly and in moderation. Instead of resting, fasting and building, the individual is trying to synthetically produce energy. Recuperation through sleep, fasting and eating small amounts of natural, easily digestible foods will restore normality. It must be remembered that it takes large amounts of energy to digest food, so energy must be present before eating. You should never eat when tired, it is better in some cases to sleep your way back to health instead of trying to excessively eat your way back.

It is by understanding the use of these therapies and closely watching the changing course of the disease/illness/ailment with a corresponding change of energy level in the person being treated that one can easily guide a sick individual back to health and sometimes back to a healthier state than before.

The herbs that I have chosen which I feel have healing and balancing effects on the Endocrine System are:

Dandelion / Taraxacum Officinal: which is a green leafy plant which is a member of the sunflower family, like other vegetable greens they are a rich source of iron and calcium. The beta carotene (vitamin A) content of dandelion

greens exceeds that of carrots. Dandelion greens also provide Inulin, 30% mucilaginous compounds, which is a polysaccharide that is a polymer composed of the simple sugar fructose. Inulin is poorly digested, but once absorbed it is filtered by the glomerulus, the kidney structure that removes materials from the blood during urine formation.

Dandelion contains pectin, 12% mucilaginous compounds which is a water-soluble fiber. Dietary fiber represents the non-digested carbohydrate that strengthens plant cells and acts as an intercellular "cement".

The mucilage and inulin soothe the digestive tract, absorb toxins from ingested food and regulate the colonies of intestinal bacteria which produce toxins intended to kill other bacteria as a self preservation instinct, in other words they help friendly flora thrive and inhibit unfriendly bacteria.

One way the mucilage does this is by absorbing bacteria produced bactericides meant to kill other bacteria, allowing the body to heal itself indirectly by removing a source of body pollution.

Mucilaginous herbs often contain volatile and bitter principles. The principles stimulate (by irritation) particular organs to produce mucous which holds onto toxins and helps eliminate them from the organ involved.

Dandelion leaves contain taraxin, taraxcerin, ceryl alcohol, lacturcol, tannin and a hormone substance/estrogenic and bitter resin which stimulates bile production and helps the liver decommission hormones, clearing them from the blood stream so they don't build up in the body.

The leaf is a powerful diuretic from the bitter flavenoids, this helps relieve water retention. The root is a gentle but effective laxative which helps women who become constipated in the days before menstruation begins when constipated hormones that should be eliminated from your body can end up recirculating, which makes P.M.S. symptoms worse.

When a woman with P.M.S. improves the way the liver works, it helps to balance hormones, eliminates excess water, helps diminish blood sugar shifts and reduces cravings for starches and sweets.

The root contains Taraxacin, Taraxcerin, Inulin, essential oil, 0.5% and is used as a laxative, tonic and diuretic and also to treat various liver and spleen ailments. It is also used to treat heartburn, rheumatism, gout and eczema.

Dandelion is the principle herb of blood purifier formulas, kidney formulas and pancreas formulas, due to it's high sulphur content, and it also helps to eliminate urea and uric acid.

Flavonoids create the antispasmodic and diuretic action.

The essential oil is responsible for the bacteriostatic, fungistatic and diaphoretic action.

The benefits of viscous fiber is that it lowers bowel transit time, absorbs toxins from bowels, balances intestinal flora and has a demulcent action on the digestive tract.

Dandelion is also rich in minerals which help to balance the body and promote healing.

Wild Yam / Dioscorea Villosa:

Wild yam comes from vine-like herb common to the eastern United States. The root material is very hard and woody. It used to be that the medicinal properties of the herb were extracted by soaking it in whiskey for up to a month. It is grown commercially in Mexico since the discovery that it contains steroidal compounds which can be processed into pharmaceutical steroids, but, these compounds must be digested, absorbed and processed by the body before becoming steroids or hormones. Eating foods such as wild yam provides the building blocks for many complex glandular manufacturing processes.

The popularity of Wild Yam has risen greatly due to Body Builders, these individuals try to enhance their performance by giving their bodies every chance to manufacture its own definition and strength by increasing steroids.

Wild Yam has steroid-like substances that are used in the process of making Birth Control pills. This is why Wild Yam is present in many gland balancing formulas. Wild Yam is a valuable anti-spasmodic and is used for abdominal cramps, miscarriage, bowl spasms and menstrual cramps. It is excellent in combination with other blood cleansers and aids in the process of removing wastes/toxins from the system, relieving stiff and sore joints.

The action of Wild Yam is based entirely on its steroidal glycosides, the mechanism of their action is usually different for each person that consumes it. The body manufactures a wide variety of compounds out of the building blocks provided by Wild Yam root. This possibly explains the balancing effect it has on the digestive and reproductive systems.

Wild Yam contains Diosgenin, a saponin, which is a cholesterol-like molecule that can mimic steroid hormones because they possess a similar molecule shape.

Wild Yam's hepatic action gives it the ability to strengthen Adrenal Exhaustion, which can aid in better health, better blood cleansing and to stabilize body weight and combat fatigue.

Barberry/Berberis Vulgaris:

Barberry can be a very useful herb in the detox process, as it contains bitter alkaloids that are responsible for its action. Berberine, the primary alkaloid, is a potent antibiotic, astringent and antifungal, in addition the alkaloids reduce fever, calm the nerves, constrict capillary blood flow, reduce muscle spasms and lower blood pressure.

The antimicrobial activity of Barberry is most pronounced in the colon since its alkaloids are 2-4 times as bactericidal in alkaline PH as in neutral environments.

Barberry is specific to the digestive system, it contains the same type of alkaloids as Goldenseal root and Oregon grape root, except that Barberry is much less expensive than these other two plants and bark is much more renewable environmentally than are roots.

Barberry is noted in folk medicine as a cure for nearly every gastrointestinal ailment, lymphatics, urinary tract and respiratory infection.

The berberine alkaloid is more potent as a fever reducer than is aspirin and it mobilizes the red blood cells of the immune system.

Barberry is successful in the treatment of most infectious conditions of the digestive, urinary and respiratory systems.

Barberry stimulates and tones the liver by increasing the flow of bile which helps in eliminating toxins from the liver, stomach and intestinal tract, it regulates the digestive system, stimulates the appetite, toning the spleen and thereby indirectly promoting health to the lymphatic system.

Therefore I see it also as a valuable herb in the detoxification and rebalancing of the Endocrine system.

Red Clover / Trifolium Pratense:

Red Clover is extensively grown on pasture land. The plant itself is a legume so it fixes nitrogen and prevents erosion. It is often compared to alfalfa, both for its nutritional value (high mineral content) and appearance. It is distinguished botanically and medicinally by its red flower.

The flowers were used in folk medicine as a cure for any lump or tumor, it is a powerful remedy for any cancerous growth, internally or externally.

Red Clover has a long history for curing cancers and purifying the blood, the bitter principles in the flowers are responsible for its action, its function as a blood purifier is easy to account for since an increase in urine and mucous output are relatively easy to measure.

Red Clover is often combined with chapparal a strong combination for cancer, and the blossoms purify the blood when infused and taken as a tea.

"Researchers from the National Cancer Institute (N.C.I) have found anti-tumor properties in the herb (Biochannin A) N.C.I. researchers felt compelled to investigate the plant after their own Jonathan Hartwell, Ph. D., published a monograph in The Journal of Natural Products in which he pointed out that 33 different cultures around the world use Red Clover to treat cancer. That amounts to a whole lot of people agreeing that the herb has anti-cancer action. And sure enough, N.C.I. researchers emerged from their laboratories with confirmation that Red Clover contains four anti-tumor compounds, including daidzein and genistein."

Red Clover also contains significant amounts of the antioxidant chemical Tocopherol, a form of vitamin E that has been shown to help prevent breast tumors.

Studies have shown that in large quantities Red Clover acts like the female sex hormone estrogen, which may help to relive some of the postmenopausal symptoms.

Estrogens are used to treat some prostate cancers but also may accelerate the growth of estrogen-dependant breast and ovarian tumors, estrogen also increases risk of thromboembolism (internal blood clots) and thrombophlebitis (inflammation of blood vessels). These people with a history of these disorders or heart disease or stroke should use Red Clover cautiously, if at all, although medical literature contains no reports of harm from Red Clover use.

Chickweed / Stellaria Media:

Chickweed is one of the most common weeds in the world, it blooms as early as March and continues blooming throughout the summer. It prefers a damp shady environment and can grow throughout the winter in some places.

The common name for Chickweed comes from the old custom of using the seeds as bird feed. It is a mild herb that is very nutritious, providing large amounts of protein and minerals. It is high in vitamin C, A and B and the minerals calcium, iron, potassium, sodium, phosphorus, zinc and copper. Copper and iron are particularly helpful in that the body requires a certain amount of copper to assimilate iron.

Chickweed is used as a poultice on external abscesses and rashes, where it removes the heat of infection and draws poisons and weakens infections.

The saponins in Chickweed are poorly absorbed through the intestinal, but apparently increase the permeability of the mucous membranes sufficiently to produce expectorant effects on the throat and increase the absorption of nutrients, especially minerals, from the digestive tract.

Externally, the saponins of Chickweed help solubilize toxins in abscesses and rashes and help increase the effectiveness of bactericides by increasing the permeability of bacterial cell walls.

Chickweed can be used as a food or a medicine. The young fresh tops are pleasant when boiled or used as greens in a salad.

Chickweed is specific to the blood, liver, lungs, kidneys and bladder, which helps for youthful appearance and healthy mental attitude with its nutrients to feed and nourish the pineal and pituitary glands, it is mild but a valuable herb to nourish and cleanse the system, it helps to dissolve plaque in the blood vessels and fatty tumors as well as an anti-cancer agent.

Chickweed helps to decrease appetite, (during detox therapy) and helps with water retention.

The Blood Purification Therapy:

Blood purification therapy is the therapy used to purify the blood and lymphatic system if acids and other poisons are causing disease, imbalances and irritations of glands, organs and body tissues.

Air pollution, chemical preservatives, food wastes, the body's natural cellular waste and stress can cause an accumulation of toxins in the body and result in disease at any organ, joint or tissue site.

In aiding blood and lymph cleansing, alterative herbs are used.

Short fasts using water and vegetable broths and some fruit juices will help to neutralize poisons in the blood stream and will stimulate the cleansing functions of the liver, bowel and kidneys. Deep breathing exercises will help aid in lung and skin elimination. Dry skin brushing and hydrotherapy help clean the blood and lymph and is very good for elderly people and weak individuals that cannot move around easily and be exposed to more energetic therapies.

Some blood cleansers are diuretics, others are hepatics, others will influence other organs.

The kidneys, lungs, liver, bowels and skin are the major eliminatory organs of the body. Herbs which aid elimination in these organs will help to purify the blood. Stimulating hot and cold alternating fomentations over the weak organs will stimulate cleansing of these body parts.

Blood purification therapy is especially indicated during gout, arthritis, rheumatism, skin diseases, all toxic conditions, during fasts and periodic cleansing and transition diets, acute and chronic illnesses, infections and low grade fevers.

Blood purification therapy is used to treat heat/excess, cold/deficient, internal and external problems.

In heat/excess, the toxins in the blood and lymphatic system have to be removed. toxins and poisons produce heat in the body.

During cold/deficient illness an individual is feeling cold because of the organs not functioning properly.

If there is heavy congestion in certain areas of the body, deobstruent therapy is indicated, but if the organs are receiving toxic, poor blood which is hindering the function of them, blood purification is the therapy to use.

Deobstruent Therapy is used when there are obstructions or accumulations in the body causing loss of energy and congestion. Overeating, too many dairy products and mucous-causing foods, not enough exercise and eating late at night can cause these problems.

Whether the condition is internal (chronic) or external (acute) the blood needs to be purified.

PART 4 Harmonizing the Endocrine System While Creating Ultimate Health

The Body-type diet is based on the most modern theories of the biochemical interaction of foods with the body. A diet should transform your body, not just change it in a superficial way. The transformation must come from within, for only a healthy, balanced body can maintain its ideal weight. "Overweight" itself indicates "imbalance" in the system.

One thing I have learned over the years, is that there is no one diet that works for everyone.

According to Dr. Elliott Abravanel, M.D., there are 4 very different body types / 4 different types of metabolisms. They are defined by the body's four major dominant glands.

1. The Gonads or Ovaries _ termed the G-type body. Located in the front lower part of the abdomen. These produce estrogen, progesterone and testosterone and regulate sexual characteristics and menstrations and pregnancy in women.
2. The Adrenal glands _ termed the A-type body. Located on top of each kidney produce adrenaline and corticosteroid, used in stress management, inflammation and infection.
3. The Thyroid gland _ termed the T-type body. Located on the throat/larynx produces thyroxine, which tells the body how fast to burn calories, regulates metabolism.
4. The Pituitary glands _ termed the P-type body. Located in the brain produces hormones to control the secretion of the other glands.

The Body-type Diet explains why you became fat and unbalanced in the first place, it identifies your food cravings, which you ate too much of in the past, which has brought you to this point. The Body-type Diet helps us to understand why we are over-fat in some areas and relatively slim in other parts. It determines which foods you must eliminate from your diet, even though other people can eat these same foods and lose weight, yet you will gain weight. It will

determine what foods you "must" eat while dieting in order to eliminate "cravings" and achieve metabolic and hormonal balance. The Body-type Diet even determines when you should eat, such as whether you will lose weight more easily by eating your biggest meal early, in the middle or late in the day.

Some people have the conception that by, "being slim", it automatically makes you healthy. Not so. That's why the focus should be on health first and the reward of also being slim, will follow. This is so because the body is rebuilding, rebalancing and reharmonizing itself.

Individuals process foods differently, we've seen how some people can eat what, and as much, as they want, and not gain weight, while others gain weight no matter what dietary changes they make. Some people need more protein or more carbohydrates or more fat, some people can't tolerate some foods that other people have no problem with. These facts are indications that: each person has his or her body-type based upon how food is metabolized in the body.

There are other ways for classifying people's bodies. One of the best known is probably the ectomorph (slim, slender type), Endomorph (rounder, plumper type), and the Mesomorph (thicker, muscular type). This system only describes the outer appearance of the body, it does not tell why a person is slim, round or muscular.

Dr. Henry Bieler, author of the book "Food is Your Best Medicine", developed the idea that there was more to body types than appearance. Maybe there was a hormonal or internal metabolic reason. He showed how it is possible to distinguish between individuals with a dominant thyroid and a dominant adrenal gland on the basis of fairly obvious physical characteristics.

Dr. Bieler's thyroid-type body is slender, fine-boned, long-limbed _ much like an ectomorph-type. His adrenal-type is squarer in shape, thicker and more solid resembling the mesomorph.

Dr. Bieler suspected a third type but was not certain of this and did not fully define this types characteristics.

Dr. Elliot Abravanel picked up Dr. Bieler's work and went on to determine what the pituitary-type would look like. These three types were sufficient to describe men, but found women had another body-type, the G or Gonadonal -type. He also carefully studied the relationship between food and the glands and was able to develop for each body-type, the precise diet which would enable people to lose weight while rebuilding the health and balancing the Endocrine System.

When you learn which body-type you are, you will also know what type metabolism you have, how slow or fast, efficient or ineffeciently your body processes food. You will know how your body reacts to each of the food groups: proteins, carbohydrates and fats. You will know which foods are most useful to your body-type metabolism and you will know the specific weaknesses of your own metabolism.

The approach of this diet is to restrict foods which are stimulating to the dominant gland of your body-type and to encourage foods which strengthen and support your less-active glands.

This diet takes into account the nutritional requirements for the body-types, Thyroid and Pituitary-types need a larger proportion of their calories from protein than from carbohydrates, while Adrenal and Gonadal-types need to draw more of their calories from carbohydrates. Pituitary-types draw little or no calories from dairy products, while Gonadal-types can obtain a high proportion of their protein requirement from this source. Thyroid and Adrenal-types fall somewhere between the two extremes.

The source of various nutrients differs in this Body-type diet. For example, the diet for the Adrenal-types take more of its protein from whole grains and dairy products, while the diet for the Pituitary-types more from animal proteins. Timing when you eat plays an important roll in this program. Each of the Body-types has a rhythm, a time of day when the dominant gland is most active and a time when it is least active, it is easy not to eat during the time of maximum activity of the dominant gland, whereas, it is hard to avoid snacking during the

least activity. The more efficient burning of fat takes place during the gland's active times.

For some Body-types a good breakfast is essential for dieting, while others it ruins the whole day.

Pituitary and Thyroid-types diet more easily and lose weight more quickly if they eat substantial breakfast with protein, whereas, Adrenal and Gonadal-types do best if they eat more lightly in the morning and more substantially later in the day.

Dr. Abravanel says, "There are many doctors who believe that medicine began with discovery of modern drugs, and overlook the older, less well-studied medications, such as herbs. I've tested herbs with my patients, and have found there is an herbal tea for each Body-type which provides invaluable help in promoting dieting effectiveness."

For the Pituitary-type use Fenugreek tea, it is an intestinal lubricant, it also relieves fevers, headaches and irritation of the mucous membranes and prevents fatty deposits in blood vessels.

For the Thyroid-type use Raspberry leaf tea, it is an antacid and helps with digestion. It is an excellent female tonic, soothing to mucous membranes and kidneys, calms nerves, helps with urinary problems and constipation, and helps maintain blood sugar levels.

Parsley tea is recommended for the Adrenal-type, it is nourishing to the stomach, helps indigestion and assimilation, helps in obstructions of the kidneys, liver and spleen, tones blood vessels, arteries and capillaries. Helps regulate low blood pressure, is a blood cleanser and also helps to balance pituitary and thyroid glands.

Red Clover tea is recommended for the Gonadal-Type, it is a good blood purifier, cleanser and tonic, it is beneficial in treating cancer, because of its effect

on protein assimilation, it helps with digestion, constipation, calms nervous energy, helps with vitality and urinary problems.

These teas are recommended especially when the dominating gland is most likely to be irritated or fatigued. [When the urge to snack is the greatest.]

The desire to snack is not a random occurrence, it is related to the rhythm of the dominant gland. Each of the four major glands has a time of day when it is at its lowest point, the energy is low and the craving for an "energy lift" is the hardest to resist. This is when you go looking for a food to stimulate your dominating gland. The actual snack that works, differs, according to your Body-Type.

Cravings are irresistible desires for food, it is the body's way of saying that it needs something that your body is not supplying. Unfortunately, our bodies cannot tell us what it needs. A craving, because it is a sign of deficiency, can never be satisfied until the actual nutritional deficiency is satisfied.

The explanation of why the four Body-Types have cravings for different classes of food lies in the biochemistry of how foods interact with different glands. There have been some studies done that indicate that different foods actually stimulate different glands to become more active and produce more of their particular chemicals, or hormones. In each of these four Body-Types, foods are craved which have a stimulating effect on the dominant gland.

In the Pituitary-Type, the craving is for dairy products. In the Thyroid-Type, cravings are for sweets and starches. The Adrenal-Type craves animal products and salty foods. The Gonadal-Type craves fats and spices which are stimulating to the sex glands.

Each body-type has a "natural" attraction to certain foods because we have learned which foods stimulate that gland which gives us the strongest "energy lift". We learn early which foods stimulate our dominant gland the most effectively, when we feel tired, stressed or run down physically.

We all are subject to stresses, physical, mental, psychological or a combination of these, and if we have any nutritional deficiencies in the diet, this in itself is stressful.

One of the ways most of us react to stress is by overeating those foods which appear to relieve our stress and increase our energy, in other words, those foods which stimulate our dominant gland. This stimulating quality may not be bad in itself, what is bad is the way we come to over use the stimulation and thus to over eat.

Dr. Abravanel's theory: "Which comes first the affinity for certain foods, or the body type? Does an infant who is fed thyrod-stimulating foods become a thyroid type, or does he or she have an inborn dominant thyroid gland which would become dominant no matter what he might be fed? The answer is that the body-type is inborn, and is probably genetically determined. All infants begin their lives with the same diet -milk- yet evidence of Body-type can be seen very early, before differing diets would have had a chance to "force" an individual into one or the other of the body-types.

I'd like to do an overview of the 4 body types, the dominant gland and the overstimulating effect of certain foods to that gland. This overview is contained on the following pages.

The P-Type Body

1. The Pituitary Gland: research and study has shown that there is a strong stimulating effect between dairy food and the Pituitary Gland activity. It appears that in infants, the pituitary hormone known as Prolactin, a milk stimulant hormone in the mother, is present in high concentrations in the baby's body and in the mother's milk which the baby drinks. Indications are that one function of milk is to stimulate pituitary activity in the baby and so promote brain development, since the hormone prolactin is critical in brain development and intellectual functioning. Studies have also shown that prolactin appears in higher-than-usual concentrations in the blood of adults who drink milk as well. Milk and milk products are thus clearly Pituitary Gland stimulators, and people with dominant pituitary glands develop a strong need for milk products very early.

When under stress of any kind, they reach for milk products for their "energy lift", and thus come to actually "crave" these foods and to "overeat" them.



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FIGURE 7: The P-type woman front view. Note childlike or "undeveloped" look, appearance of baby fat, small breasts, relatively large head.

FIGURE 8: The P-type woman in profile. Note rounded shoulders, small rear, pudgy knees, childlike "tummy."

T-Type Body

2. The Thyroid-type: The stimulation of the thyroid to starches has been "linked" in studies. Starches trigger a complicated series of events with two main results, one is that the thyroid is stimulated to produce more thyroid hormone, and the other is that the cells of the body, due to presence of sugar in the blood, become less responsive to the presence of the thyroid hormone. The brain over reacts to the sugar and secretes still more thyroid-stimulating hormone. The thyroid is actually being given a double dose of stimulation when starches are eaten, one from the sugar/starch food, the second, some hours later from the thyroid stimulating hormone.

For a thyroid-type, there seems to be no more effective energy lift than the one from sugars or starches. The danger of depending on these foods for stimulation, and thus overeating is very real.



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FIGURE 6: The T-type woman in profile. Note rounded, but not pronounced, rear end, round shoulders, tummy fat mostly below the navel.

FIGURE 5: The T-Type woman front view. Note heavy thighs, tapering legs, delicate feet, hands, and head. In spite of fat, waist remains distinct.

A-Type Body

3. The Adrenal Body Type: derives stimulation from their adrenal hormones in several ways. Cholesterol, the same as found in butter, meat and eggs is the core molecule of several adrenal hormones, such as cortisone and aldosterone. Eating cholesterol rich foods stimulates the adrenal glands to produce its hormones in greater quantities.

Cortisone gives a feeling of energy and euphoria, it also helps adrenal types burn up tremendous food energy, which is one reason why A-types have such good digestions.

Adrenal hormones also raise blood pressure, and there is a feeling of fullness and strength associated with a rise in blood pressure, a feeling which adrenal-types come to enjoy without really knowing what it is. High blood pressure is also associated with heart disease, to which adrenal-types are particularly prone. Salt also contributes to high blood pressure, adrenal-types using it as a stimulant, again with results which can be very damaging to the body.



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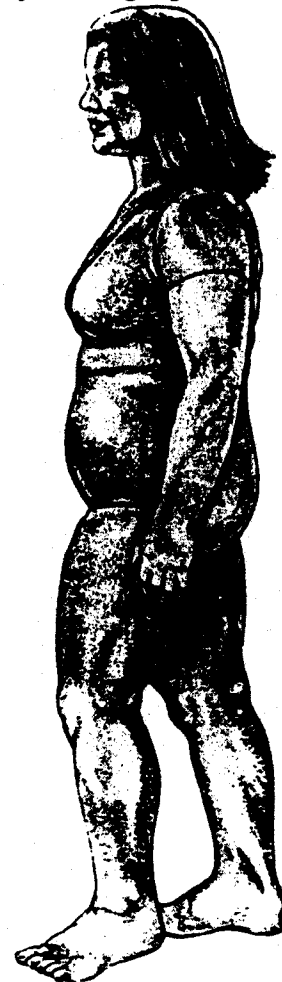


FIGURE 4: The A-type woman in profile. Note straight back, "tucked-under" rear end, pot belly, thickness in arms and legs all the way

FIGURE 3: The A-type woman front view. Note straight, sturdy line of body, squarish or round face, large breasts.

G-Type Body

4. The Gonadal Type: is affected by spices, fats and oils. They have an effect called vasodilation which affects the gonads or sex glands.

Vasodilation is the effect of dilating the blood vessels and producing a state of passive congestion. When a G-type woman eats spicy foods the blood flow to the pelvic organs (uterus, vagina, ovaries) as well as the lower bowel increases, resulting in stimulation of the function of these areas. The area becomes more active and sensitive and the production of hormones is increased. Eating fats also has an engorging effect on the pelvic organs; once again stimulating these glands.

G-type women are not necessarily "over sexed", sexual stimulation is a complex phenomenon and depends on many physical and psychological factors, not simply on the sex glands themselves. G-type women tend to reach for spicy or creamy foods as a way to revive their energy, with the result that overweight is common in this body type.

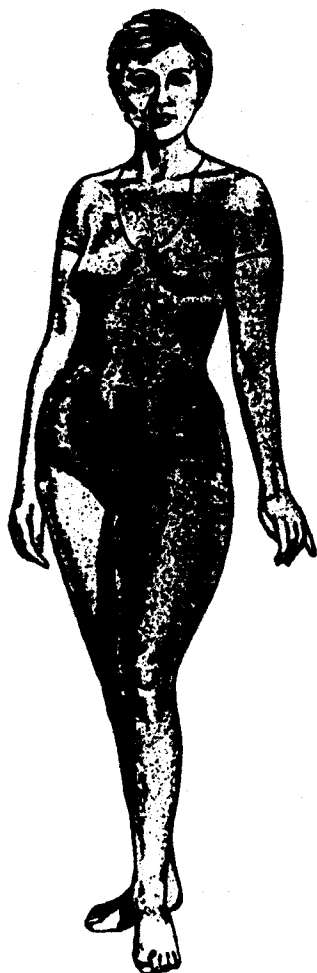


FIGURE 1: The G-type woman front view. Note difference in size between upper and lower body, small waist, "saddle bags" on outer thighs.

FIGURE 2: The G-type woman in profile. Note large rear end, relatively flat stomach, sway-back line of back.

FOOTNOTES

1. Dr. Elliott Abravanel, Body Type Diet and Lifetime Nutrition, Preface.
2. Dr. Elliott Abravanel, Body Type Diet and Lifetime Nutrition, p. 16
3. Mark Pedersen, Nutritional Healing, p. 139
4. Humbart Santillo, N.D, Natural Healing with Herbs (1984 Hohm Press), p. 55
5. Micheal Castleman, The Healing Herbs Guide (1991 Bantam Books), p.434

BIBLIOGRAPHY

- Santillo N.D., Humbart. Natural Healing with Herbs. Hohm Press, 1984
- Tenney M.H, Louise . Health Handbook. Woodland Books, 1987
- Pedersen, Mark. Nutritional Herbology. Whitman Co., 1987
- Montimore, Denise. Nutritional Healing. Element Book Hd., 1998
- Anderson Phillipson, Newell. Herbal Medicines. Pharmaceutical Press, 1996
- Ronzo PH.D C.N.S. F.A.I.C, Robert . The Encyclopedia of Nutrition and Good Health. Facts on File, Inc., 1997
- Harrar, Sari and O'donnell, Sara. Woman's Book of Healing Herbs. Rodale Books, 1998
- Bremnes, Lesley. Complete Book of Herbs/Growing and Using. Viking Studio Books, 1988
- Lust N.D D.B.M, John. The Herb Book. Bantam Books, 1974
- Castleman, Micheal. Healing Herbs The Ultimate Guide. Rodale Books, 1991
- Stuckey, Maggie. The Complete Herb Book. Berkley Books, 1994
- Papas, Rebecca. Women's Health A Natural Medicine Collective. Dell Books, 1995
- M. Haas M.D, Elson. The Detox Diet. Celestial Arts, 1996
- Abravanel M.D, Elliott. The Body-Type Diet. Bantam Books, 1983
- Editors of Prevention. Home Remedies for Women. Rodale Books, 1997
- Editors of Prevention. The Female Body. Rodale Books, 1996

A. Balch, Phyllis and F. Balch M.D, James. Prescription for Dietary Wellness. PAB
Publishing Inc., 1992