

Herbal Medicine

Legalese and Disclaimer

There is absolutely no substitute for caution and common sense!

This booklet is written for general information and education only. It is not intended as a self-help manual, nor was it my intent to diagnose or prescribe for any ailment whatsoever. These are my personal notes to myself, collated and compiled into some sort of cohesive form to be shared with interested individuals. The last section, especially, represents what I would probably do for myself or my family in certain situations.

I am not a psychologist, a therapist, a doctor of any sort and I have no licensing or formal training in a university setting. My goal is, simply, to bring to your attention things that, when I became aware of them, seemed to make significant changes in the quality of life for myself and my family. It is not meant to be a training manual in medicine or therapy of any kind.

Subject to the provisions of this page - and the use of common sense - you are free to use anything that I have written here for yourself and others and to copy these pages for your personal use. You may even share copies with others freely so long as each copy you make contains my copyright information. I provide classes at a minimum cost to enable all who are interested to be able to attend and obtain the information for themselves. I feel strongly, however, that what you do with any information you receive is your personal choice and personal responsibility!

You are advised to apply the techniques and information along with the assistance of competent professionals.

The booklet is meant, not as a complete treatise on the subject of herbs and herbal remedies, but as a beginning point and a ready reference for general information and education. It is not intended as a self-help manual in the use of herbs. There are details in the safe use of any plant material that cannot be contained in any one book. I assume no responsibility for the use or misuse of any suggestions, remedies, procedures or preparations in this booklet.

All herbs, tinctures, methods and remedies described herein have been used traditionally and historically and are passed on to others for educational purposes only. Information in this booklet should never replace the services of a competent physician when required.

I hope you come to love and appreciate the wonders of God's plant kingdom as much as I do!

Index

Theme/The Medical Model/Basic Rules of Alternative Therapy/The Focus of Your Work

Chapter 1 Vitamins and Minerals

RDA's p1

Vitamin A p 2

B Vitamins. p 2

Vitamins C, D and E p 4

What Vitamins Need to Be Absorbed p 5

Will You Get Enough from Food p 6

Vitamin Bandits p 6

Drugs Disrupt Your Nutritional Balance. p 7

Sub-Clinical Malnutrition. p 7

Body Systems Charts p 9

Very Basic Chinese Body Systems p 19

Chapter 2 Herbs as Nutrition

Providing Vital Nutrients p 1

Basic Herbal Knowledge and Lore p 2

Chapter 3 Stimulant Herbs

Chapter 4 Tonic Herbs

Chapter 5 Lobelia - In a Class By Itself

Chapter 6 Diuretics

Chapter 7 Expectorant and Demulcent Herbs

Chapter 8 Nervine and Antispasmodic Herbs

Chapter 9 Astringent Herbs

Chapter 10 Alterative and Adaptogenic Herbs

Ginseng p 2

Chapter 11 Cathartic Herbal Agents

Chapter 12 Miscellaneous Categories

Anthelmintic or Vermifuge Herbs p 1

Emmenagogue Herbs p 1

Analgesic/Anthilitic and Lithotriptic/Carminative/Emetic.Febrifuge/Nephritic p 2

Pectorals/Reberfacient/Styptics/Vulnerary p 3

Chapter 13 Doing A Cleanse Right

Colon Chart. p 3

Alkaline and Acid Foods Chart. p 4

Chapter 14 Conclusion

Appendix I Nutritional Composition of Wild Food Plant

Theme

**Herbals are not meant to ‘cure’ disease, although that is what we often resort to using them for
They are meant to aid us in building healthy, resilient, well-balanced, drug-free bodies**

**Ours is a positive healing science;
not merely the practice of putting out ‘fires’ as they erupt in our lives**

I have been using herbs and herbal remedies for 30 years and for most of that have been considered quite knowledgeable in the field. I can honestly tell you, however, that I never really met with much success, comparatively, until I learned to think in ‘holistic’ terms. Holistic means, to me, that you look at the whole person and not just at the presenting symptoms or the disease. Treating just the presenting symptoms is a ‘band-aid’ approach, at best, and rarely solves a problem for very long. Man is a spiritual, emotional, mental being as well as a physical one and no true healing ever takes place without addressing them all. A good ‘healer’ will learn to use other modalities (bio-frequency ones such as homeopathic, essential oils, acupuncture, etc) in her quest for optimum health and vibrant life.

This part of the course is about Herbal Medicines and, as such, it will concern mostly the physical aspect of our bodies. Herbs do, however, have frequencies and life energy, but that will not be the major focus of this study. Here, we will address (a) how and why herbals work, (b) learn about the different categories and effects that herbs can have, and we will learn about (c) different methods of preparation and administration that are commonly employed. A true healer will, however, remember that in all that we do we are merely acting as an assistant to the body’s own Vital Force and Energy.

Herbal Medicines are just potential, corrective foods, and these only become active as they are selected from the blood stream, absorbed into the bioplasm are converted by the Spiritual within into vital life energy. (Dr. John H. Christopher)

The Medical Model

Below is a quote from the Reverend John Wesley (1703-1791) concerning the historical abandonment of herbs in medicine (and is the last thing I will include on the subject).

As theories increased, simple medicines were more and more disregarded and disused; till in a course of years the greater part of them were forgotten, at least in the more polished nations. In the room of these, abundance of new ones were introduced by reasoning, speculative men; and those more and more remote from common observation. Hence, rules for the application of them, and medical books, were immensely multiplied; till at length, Physic became an abstruse science, quite out of the reach of ordinary men. Physicians now began to be held in admiration, as persons who were something more than human. And profit attended their employ, as well as honor, so that they had now two weighty reasons for keeping the bulk of mankind at a distance, that they might not pry in to the mysteries of their profession. To this end they increased those difficulties by design, which were in a manner by accident previously. They filled their writing with abundance of technical terms utterly unintelligible to plain men.

What is the difference between natural healing and orthodox medicine? They are miles apart in both theory and practice. Orthodox medicine would have you believe that the cure of 'disease' lies in killing the offending 'germ' or by removing the damaged body part. The natural healer, on the other hand, recognizes that disease is the result of the violation, intentional or otherwise, of the laws of Nature and that germs cannot exist in harmful numbers for any length of time in or on healthy tissue. The only way to 'cure' disease is to aid Nature in the healing process by the elimination of poisons and toxins (through the body's natural channels) and the rebuilding of vitality and normal strength (through nutrition and the informed use of natural remedies). ***Disease is not cured by adding poisons to the body!*** Nothing should be added to the body in times of illness that cannot be used by the cells in their chemical balancing and healing processes.

Dr. John H. Christopher believed that much of what we call disease is simply the bodies own way of dealing with imbalances and deficiencies. In other words, the fever that is burning away and killing the invading germs is not the enemy; it may need watching and controlling but not eliminated altogether until it has done it's work. Another example might be diarrhea caused by eating bad food, or a food you are intolerant of. Your cure should aim at eliminating the foreign bacteria introduced by the food and strengthening the digestive system so that the food you are 'allergic' to is no longer a problem.

Many other diseases are merely the manifestation of nutritional deficiencies. The body often uses pain as a way of getting our attention. If we are failing to get our body the nutrition that it needs, it will surely find a way to let us know about it. This will be discussed more completely in Chapter 1 of this manual.

Basic Rules of Alternative Therapy: (we will have a few more of these rules elsewhere)

- 1) There are no incurable diseases - only incurable people!
Incurable people fall into the following categories:
 - a) those who will not follow the program outlined (and actually take the stuff on a regular basis) and those who are not interested in thinking and learning and taking responsibility for themselves
 - b) those whose illness feeds some emotional need or pattern or they are deriving some benefit from their illness. (The asthma that is getting the child out of P.E. at school or the Kidney that is constantly stressed because of unresolved fear or assertiveness issues)
 - c) those whose 'time has come' We are not supposed to live forever in this world, nor are we to be completely free of trials and troubles.
 - d) a person who is not patient with the process. Healing, like life, is a journey. It probably took years to get the body into this mess. It may take months, maybe even years, to get it back out. Meanwhile, the 'band-aid' approach can make life livable.

The Focus of Your Work

There are two ways to use herbal remedies - actually any remedy. 1) Focus on the immediate NOW! How do I make the pain and symptoms go away? 2) What is the root cause or causes and how do I fix that? The practice of Alternative Medicine has a whole different focus than mainstream Western Medicine. Our primary concern is not with each ailment and disease. We are trying to build healthy, disease and stress resistant systems. We will, of course, have to deal with what is happening in our lives right now. We do have to get up and function tomorrow, after all. But at the same time, the real goal here is to build a healthy, vibrant, happy person out of ourselves.

Vitamins and Minerals

Necessary for good health

I doubt that anyone would disagree with me when I say that Vitamins and Minerals (combined with the right kinds of fats) are absolutely essential to healthy bodies and minds. Study after study has confirmed the connection of vitamins and minerals to health - and the lack of certain vitamins and minerals to unhealthy (disease) states of the body. Vitamins are powerful substances. We need only microscopic amounts of some of them in our diets to stay healthy, but take away those tiny quantities and our bodies soon run into deep metabolic trouble.

The body responds, often very quickly, to improved nutrition. Nutritional deficiencies are preventable. Most of them occur because too many of us, doctors included, are unaware that they exist. You simply cannot afford to be - either unaware, or nutritionally deficient.

How much is enough

Most of us are familiar with the phrase "Recommended Dietary Allowance" (RDA) but what, exactly, does it mean? Most orthodox nutritionists believe that if you are getting all the recommended nutrients in the recommended amounts you are well on your way to being 'just fine'. A growing number of scientists, doctors, and informed laymen disagree.

The RDA's are defined as "the levels of intake of essential nutrients considered, in the judgement of the committee on Dietary Allowances of the Food and Nutrition Board on the basis of available scientific knowledge, to be adequate to meet the known nutritional needs of practically all healthy persons."

The RDA statement is a carefully worded statement which must be just as carefully interpreted.

Known nutritional needs? The 'facts' coming out of research into nutrition and its effect on health (and disease) changes daily. The RDA's certainly do not reflect this growing body of research.

Practically all? Some of us, for varying reasons, need more than others of certain nutrients, but the statement is based on the statistical probability that this amount will cover the needs of 97% of the people. Perhaps a 3% risk does not seem great, until you consider that you are taking the same risk with each of the 40 or so nutrients. A mathematician would tell you that, if you take in exactly the RDA for each essential nutrient, you have at least a 50-50 chance of becoming deficient in one or more nutrients.

Healthy persons? The committee clearly points out that 'these values do not take into account special needs for nutrients arising from such problems as . . . inherited metabolic disorders, infections, chronic disease, and the use of medications - which require special dietary and therapeutic measures.'

The case could certainly be made that in this day and age of pollution and pills, a healthy person is becoming an extinct species. *The committee has merely set minimal requirements for minimal health.*

The following lists are based on information found in the book The Complete Book of Vitamins compiled by the authors of Prevention Magazine and published by Rodale Press - leaders in books on Health, Nutrition and Alternative Medicine. They emphasize that no one can say what is your bodies exact requirements; but since we need some sort of guidelines, they have tried to provide us with some.

These amounts are provided in 3 increments and are designed as guidelines for supplementation - for adults, I may add. I find them interesting as a guide and I find it fascinating to muscle test how much of each one I am getting on average. Read the accompanying statements and determine which sounds the most like you. This is mainly an exercise in determining how deficient you really are.

Vitamin A

5,000 international units: Your diet regularly includes liver, carrots, broccoli, apricots, sweet potatoes and spinach. You are generally in excellent health, your resistance is very high and the environment in which you live is low in pollutants. You are not a smoker, never have been, nor are there any smokers in your household. There is nothing in your family history that makes you particularly concerned about cancer.

10,000 international units: You eat Vitamin A rich foods occasionally - but certainly not every day. Your health is better than average, but you are not invulnerable - when your resistance gets low you tend to become ill, often with upper respiratory symptoms. Skin problems are sort of routine for you. You are exposed to an average amount of pollution from various sources.

25,000 international units: Occasionally, you notice patches of dry, *bumpy* (not flaky-bumpy) skin on your legs or arms. You have recently had surgery, been involved in an accident, sustained an injury or burn, or any other problem that kept you indoors for more than a few days. Your vision, especially at dusk, is not what it could be. Foods such as liver, spinach or carrots rarely appear on your table.

Thiamine (Vitamin B1)

5 milligrams: You're practically famous for your perpetual good mood and unflagging energy. Your diet regularly includes brewer's yeast, wheat germ, whole grain products, nuts, liver and sunflower seeds.

10 milligrams: You generally have sufficient energy, even though you don't jump out of bed ready to conquer the world at the crack of dawn every day. There are times when you wish that your nerves were a little better and, though your diet is average, you keep promising yourself to eat better.

25 milligrams: Your nerves are definitely in a state, and you may be suffering from depression, loss of appetite or similar emotional and neurological problems. Your energy levels are, at best, undependable and your memory is not good. Possibly, you are in your retirement years, when absorption of thiamine - as well as other B vitamins - is very much reduced!

Riboflavin (Vitamin B2)

5 milligrams: You eat a lot of dairy foods such as milk, cheese and eggs. Almonds, asparagus, broccoli, liver, wheat germ and other riboflavin-rich foods appear in your daily meals. Your eyes are clear and bright and the skin around your mouth is perfectly smooth - except when you smile, which you do frequently.

10 milligrams: You don't care for milk and cheese, you never eat liver, and wild rice and asparagus are much too expensive for you. You do, however, eat whole grain breads and cereals. You are also advancing a bit in years.

Niacin

10 milligrams: Your diet regularly includes fish, beans, organ meats, peanuts, poultry, whole wheat products and brewer's yeast - or at least most of those foods. Your disposition is sunny; the only time you are irritable is when enemy tanks invade your neighborhood.

25 milligrams: Your diet is not that great - except that it's basically the 'great American diet'. You wonder if there is some reason why it's becoming so difficult for you to fall asleep or if your headaches have some peculiar origin.

50 milligrams: Your nerves - and your personality - are definitely not what they used to be and not what your friends or family would like them to be. You may have thought about visiting a psychologist or psychiatrist, and you would be grateful if something could be done about your insomnia.

Vitamin B6 (Pyridoxine)

5 milligrams: You radiate good health, and your positive, energetic attitude is reflected in your intelligently varied diet, which includes wheat germ, brown rice, salmon, peanuts, liver, bananas and, of course, whole grains.

10 milligrams: You certainly aren't sick, but you sometimes wonder why your skin isn't better or why your nerves aren't calmer. You may tend to retain a lot of fluid before your menstrual periods.

50 milligrams: Your monthly periods cause you considerable distress, not only because of fluid retention, but because of emotional problems at that time - or perhaps all the time. Possibly, you are on birth control pills. Life is looking more and more like an ordeal.

Vitamin B12

5 micrograms: You are healthy, energetic, haven't yet reached retirement age, and you regularly eat animal foods such as meat, fish or chicken.

10 micrograms: You've passed your 60th birthday, and your ability to absorb this vitamin in a useful form may be on the wane.

25 micrograms: Lately, your energy level, and possibly your nerves, just haven't been what you'd like. Possibly, you've been ill or had surgery. You may be a strict vegan, one who avoids all animal-source foods. These symptoms may well be serious enough to suggest a thorough evaluation.

Folate (Folic Acid)

400 micrograms: You eat a lot of raw green vegetables such as broccoli, asparagus, leaf lettuce and spinach. You're a liver lover and you eat it with onions. You are full of energy and young enough that retirement is far in the future.

400 to 800 micrograms: You must remind yourself that you should eat raw green vegetables more frequently, and you wish you were able to work out a way to eat beans, broccoli, asparagus, wheat germ, and whole grain products more often than you do. Your health is about average.

800 to 2,000 micrograms: Lately, you feel as though you've been under considerable emotional stress, and you haven't been able to handle it as well as you should. Your nerves in general have been in such a state that you have given serious consideration to seeking some kind of help, whether medical, psychological or even nutritional. Perhaps, you are over 70 years of age and your absorption of folate, therefore, is likely to be impaired. Possibly, you have recently undergone surgery. Your doctor may have reason to believe you have folate deficiency anemia, which causes, among other things, inflammation of the tongue, digestive problems and diarrhea.. (When taking folate supplements, always take Vitamin B12 with them.)

Vitamin C

100 milligrams: You can hardly remember the last time you were ill. Your health is excellent, and your gums are clear, firm and never bleed. Your daily diet includes generous measures of such vitamin C-rich foods as broccoli, cabbage, melons, citrus fruits and green peppers.

500 milligrams: You feel that your resistance must be maintained at a high level in order to keep you feeling your best. There may be some chronic health problem or stress in your life. Your diet is not bad, but it does not supply the amount of vitamin C you feel you should get.

2,000 milligrams: You are definitely susceptible to stresses such as infection, pain or skin problems. Possibly, you are recovering from surgery, an injury or any other serious bout with illness. In the past, you have noticed that injury or surgical incisions seem to heal very slowly. Your diet could be better, but it is difficult for you to eat raw foods, high in vitamin C, because they tend to make your gums bleed or your mouth/throat itch. (You probably should not take 2,000 milligrams of Vit C when the health problem or crisis you are facing disappears.)

Vitamin D

0 to 200 international units: You live in an area where the sun shines strong and bright and you move around quite a bit outdoors, with sunlight striking your body. If you have a year-round tan, you probably don't need any supplemental vitamin D at all.

400 international units: You live in an area where a beautiful sunshiny day is a real event - or you simply do not go outdoors very often. Occasionally, you do eat fish containing vitamin D, such as herring, mackerel, salmon, sardines and tuna.

800 international units: You probably live in a climate where, except for a few weeks in the middle of the summer, intense sunshine may be rare. What's more, for one reason or another, you do not get very much exercise outdoors. Possibly you have had a problem with your bones, suffering a fracture or just pain.

Vitamin E

100 international units: You are relatively young, in fine health, and you live in an exceptionally clean area, where there is remarkably little pollution.

400 international units: You may have a health condition which may be prevented or improved with Vitamin E. Such as intermittent cramping of the calf on walking, or any one of a number of skin problems. The air you breathe, the water you drink and the food you eat contain the usual amount of pollutants found in our modern world. Your diet contains a substantial amount of polyunsaturated fats such as corn oil.

600 international units: You may be concerned about a circulation problem that has not responded readily to other types of nutritional adjustment.

What Vitamins Need in Order to be Absorbed (A Few Simple Concepts for 'Fuel Efficiency')

The following basic rules apply both to the nutrients in your food and any supplements you might chose to take.

- ▶ Some vitamins need fat to be absorbed. Vitamins A, D, E, and K are on this list. Without fat, Vitamin E is not absorbed at all. Fat-containing foods also prolong absorption - even in the water soluble vitamins like B-complex and C. In other words, you will not absorb all that you have eaten or taken immediately and then excrete it just as quickly. Slower absorption will result in increased levels of the nutrients in your blood over a longer period of time.

Every nutritional requirement that the human body has operates on a twenty-four hour cycle. Your cells do not go to sleep when you do, nor can they survive without continuous oxygen and nutrients.

Some nutrients just naturally go together:

- ▶ Iron from plant sources needs Vitamin C to be absorbed and it has to be taken at the same time (during the same meal!) Fortunately, many plants that contain iron also contain Vitamin C.
- ▶ Folic Acid containing compounds must be split by an enzyme before folate can be absorbed and this enzyme requires sufficient zinc., preferably from foods or meals that contain both zinc and folic acid
- ▶ Iron absorption can be seriously reduced by the presence of the common preservative EDTA. I wonder what havoc other preservatives are creating!
- ▶ The continued use of stimulants such as caffeine seriously and negatively affects the absorption capabilities of the digestive tract.
- ▶ A relaxed atmosphere during mealtime and a quiet period immediately after aid digestion. It does little good to put in good food and then prevent its digestion by stress.
- ▶ Exercise will give your digestive system the same benefits that it gives the rest of your body. If exercise is not a part of your day, your cells are probably not getting sufficient oxygen to perform their functions. Mild exercise that is aimed at using stomach and abdominal muscles can do particular good.
- ▶ **A high quality diet will substantially help you get the good things that you need!**
- ▶ Supplements, as a general rule, are best taken with other foods and minerals. This cannot be overemphasized. Taken on an empty stomach, most supplements pass right through your body with very little being absorbed. Primed by something as simple as a piece of fruit or a slice of whole wheat bread, digestive enzymes are ready to go to work on the supplements.

Will you get enough nutrition from food alone?

Most of the horror stories that you have heard about how cooking and processing breaks down nutrients are probably true. For example, Vitamin C is very sensitive to oxygen; once you remove the peel, Vitamin C immediately begins to escape. Milling whole grain products to produce white flour removes 70 to 80 percent of the valuable vitamins and minerals (and the argument can certainly be made that the 'vitamins' being put back are many times not biologically active and, therefore, of no apparent use to the body at all.) Baking soda and *chlorine* added to the water in which vegetables are cooked destroys most of the Thiamine (thiamine was the only nutrient tested for in this study). What this means, basically, is that government - or anybody's else's - nutritional tables may or may not reflect what you are getting of a particular nutrient. Just because a nutrient was originally there, doesn't necessarily mean that you got it all.

Personally, I believe that 'God is good' and there is more than enough to spare in his creations. But very little of this earth is as God made it and nutrition is very important. Our modern diet, with its refining and processing, often contains more sodium than we need and less potassium, zinc, selenium, chromium, silicon and nickel. We add too many extra calories (usually in the form of sugar and indigestible fats) in relation to minerals and vitamins. It might be a fun exercise to muscle test yourself from time to time - on an average day - and see if you did get enough of particular vitamins and minerals. I find this very educational - and, usually, quite alarming!

Vitamin Bandits or Vitamin Antagonists, as they are officially known.

There are so many of these that's it kind of foolish to believe that your body is getting all of the nutrients those tidy little charts promise.

- ▶ Life's ordinary circumstances - such as stress, advanced age, disease, illness (even a slight head cold), pregnancy, lack of sleep, increased physical activity - can all use up a significant amount of the body's reserves and require replenishing.
- ▶ Refined carbohydrates such as white sugar and flour have most of the B vitamins refined right out of them during the milling process. But because thiamine and others in the B complex are needed to make an enzyme used in the burning of carbohydrates, these vitamins have to be taken from the liver or other storage places in order for the carbs you have just eaten to be properly metabolized. Refined carbohydrates not only contain no nutrients, but they actually rob the body of nutrients that would be better utilized doing something besides metabolizing 'sweets'. *Natural carbohydrates come equipped with their own B vitamin supply, so they don't pilfer the body's store.*
- ▶ Black tea - the kind the Word of Wisdom warns against - contains Tannins that destroy or inactivate B vitamins. *Remember, B Vitamins are linked to nerve health and withstanding stress.*
- ▶ There are over 3,000 chemicals used in the production of our Nation's food supply. These chemicals affect your nutrition in several ways. 1) enhances the development of enzymes that destroy certain vitamins 2) cause excessive elimination of certain nutrients 3) impair your body's ability to absorb certain nutrients because, chemically, they are just similar enough to block the cell's receptor sites for a particular nutrient.
- ▶ Insecticide residues and pollutants in the air can interfere with our body's vitamin reserves and absorption.
- ▶ Even vitamins can sometimes act as antagonists. Large amounts of a single member of the B complex may increase your need for others in the B-complex because the excess of the one causes the body to excrete them all. You end up with too little of the ones you didn't take extra of.

Some of the Ways Drugs Disrupt Your Nutritional Balance

- ▶ Boric acid, for example, which is present in at least 400 home products such as mouth washes and toothpastes, etc. latches onto one of the proteins of riboflavin and then takes it out of the body in the urine. The missing Riboflavin upsets the balance of B-Vitamins and then the body begins to secrete the ones that it considers excessive, even though there may actually not be enough of them overall.
- ▶ Other drugs and artificial hormones follow the same procedure as that outlined above for Boric Acid. Tranquilizers and sleeping aids lower the amount of calcium in the blood by disrupting the metabolism of Vitamin D. Phenobarbital has been linked to cases of softening of the bone caused by lack of calcium. These little ‘nasties’ also increase the excretion of Vitamin C from the body.
- ▶ Glucocorticoids - the family of anti-inflammatory drugs most often prescribed to relieve the symptoms of arthritis - are listed as the ‘common’ cause of osteoporosis, a classic calcium deficiency disease. These drugs are also used on children in the treatment of Kidney disease and have been linked to potassium deficiency and low levels of Vitamin C.
- ▶ Digitalis increases the body’s need for thiamine.
- ▶ Hydralazine - for high blood pressure - can create a B vitamin deficiency.
- ▶ Diuretics used to counter high blood pressure can flush enough potassium out of the system to create a serious imbalance. The diuretic triamterene works without depleting potassium, but it interferes with the utilization of folic acid. Diuretics produce excessive excretion of calcium.
- ▶ Mineral oils used in laxatives block normal absorption in the digestive tract. Mineral oil dissolves carotene without allowing the body to utilize this A Vitamin. It also interferes with all of the fat-soluble vitamins - A, D, E and K.
- ▶ Even a small dose of aspirin can cause the excretion of Vitamin C to triple. Aspirin also disrupts the utilization of Folic Acid.
- ▶ Antihistamines destroy nearly 40% of the existing Vitamin A in the bloodstream.
- ▶ The Pill is an artificial hormone. It convinces a woman’s body that she is pregnant. It also depletes the body of Vitamin C and some of the B complex vitamins. Because of the shortage of B vitamins, depression is a frequent result. Lowered resistance to infection and less ability to handle stress are also frequent ‘side effects’.

Enough of this soap box!! As you can see, I could probably go on all day in this vein.

Sub-clinical Malnutrition

Studies done at the School of Gerontology, University of Southern California, indicate that if a person has a sub-clinical nutritional deficiency, he or she might appear perfectly normal - normal, that is, except for an increased susceptibility to disease, longer recovery time from surgery, adverse reactions to flu vaccines, extreme fatigue that interferes with normal functioning, depression, insomnia, irritability.

Richard Revlin, M.D. of the Sloan-Kettering Cancer institute says, “In the United States today, we rarely see cases of classical vitamin deficiency, such as scurvy and pellagra. But we are now beginning to recognize a vast new series of marginal deficiencies related to disease . . . Marginal deficiency, it now appears, may be a surprisingly common phenomenon.”

Effects of Sub-Clinical Malnutrition

To understand what happens in our bodies when we are deficient in a certain vitamin or mineral, we would need to first understand what role that vitamin or mineral plays in health. The education required of doctors, hospital dieticians, nurses, etc. seems to be woefully inadequate where nutrition is concerned, in my opinion. And certainly, the young women of today, who will be the Mother's of tomorrow, have very little in their High School or College Curriculum that will prepare them to adequately nourish their future families.

This is a complicated topic, and though I have read voraciously on the subject, I am certainly not an expert. I have learned enough to know, however, that nutrition is vitally important to our health, both physically and mentally.

Vitamin A

skin problems	less detox from poisonous chemicals	Glaucoma
lack of immune function with increased susceptibility to colds	excessive menstruation	Crohn's disease
dryness in the mucous membranes of respiratory and urinary area	male infertility	tooth decay in infant's & children
less stress resistant	middle ear infections	heart disease
slow healing of wounds	cyst-like masses in middle ear	high blood pressure
	night blindness or blurring	stroke
		peptic ulcer

B Vitamins - the teamwork vitamins

(Never supplement just one B vitamin at a time - always use in a balanced complex)

Thiamine

vague, general symptoms	heart muscle weakness	neurosis
lack of appetite	edema	a high percentage of cancer
craving for sweets and junk food	neuropathy & paralysis	patients test low for thiamine
indigestion	brain and nervous disorders	glaucoma & vision disturbances
nausea	difficulties with memory	
severe constipation	seizures	

Vitamin E

At the request of the New York Academy of Sciences, vitamin E experts from all over the world gathered together for three days to educate one another on their individual research projects. Some of their results are listed below.

Improves circulation, especially to the extremities	Increases oxygen in the bloodstream (and, to the placenta during pregnancy)
Eliminates pain in the calves when walking	Improves resistance to disease
Improves physical stamina and endurance	Relieves nighttime leg and foot muscle cramps
Stops the growth/possibly reverses cataracts	Protects cell membranes from destruction
Balances the clotting factor in the blood	Heals abrasions, cuts and scars
Protects the lungs from atmospheric pollutants	Cold sores
Raises low HDL levels	Helps the body manage stress
May increase resistance to disease	May help prevent breast cancer
Protects against heart disease	

System/Function	Diseases	Symptoms	Stressors	Vit/Mins/Foods	Herbs/Supplements
Circulatory heart (lungs) arteries veins <i>Carries nourishment to every cell of the body</i>	Anemia Bruising Palpitations Hemorrhoids Nosebleeds Raynaud's Stroke Varicose veins	chest pain fatigue on climbing anxiety swelling in lower legs and feet restlessness dizziness	unchecked virus stress caffeine all drugs sugar uric acid congested liver, colon or kidneys intestinal toxemia food allergies xanthine oxidase (present in homog milk - damaging to heart muscle)	potassium calcium (regulating of heartbeat and blood clotting) magnesium (particularly for irregular heartbeat) onions oats potatoes carrots barley olive oil	L-Carnitine digestive enzymes butchers broom gingko biloba hawthorn pleurisy root rosehips gentian cayenne garlic ginger dandelion root
Lymphatic tonsils appendix lymph nodes spleen <i>Carries nutrients & detoxifies the body. Lymph fluid goes deep into body tissues where blood cannot penetrate. If overburdened, waste gets stored in the connective tissue of organs and joints</i>	cancer tonsillitis allergies sinusitis arthritis colitis lupus skin disorders	fluid retention loss of energy constipation low back pain sluggish thinking Babies: acquired through infection & drugs prenatally - constant colds runny nose, earaches <i>All itching is lymph related</i>	removal of the tonsils environmental poisons drug residues subclinical malnutrition	<i>Exercise is vital</i> Vitamin A Vitamin C Vitamin D B-Complex vitamins lemons cabbage cloves parsley carrots honey mustard onions watercress	enzymes thyme ginger myrrh sage echinacea garlic rosemary calendula rehamania root elecampane

System/Function	Diseases	Symptoms	Stressors	Vit/Mins/Foods	Herbs/Supplements
Digestive stomach gall bladder sm intestine colon liver <i>absorbing nutrients</i> <i>It is estimated that 80% of ailments begin in a toxic & constipated colon.</i> <i>Poisons from the colon can stress the heart, lodge in joints, invade muscles, cause fatigue & weakness, cause skin problems, irritate the lungs and drastically overtax the liver</i>	anorexia bad breath dyspepsia gallstones gingivitis heartburn hiatus hernia motion sickness tooth decay ulcers candida colitis constipation diarrhea diverticulitis	Intestinal: aching muscles headaches indigestion belching excessive gas heartburn abdominal pain bloating nausea acid stomach Liver: fatigue loss of appetite waking (1-3 am) light colored stools	emotional stress antacids antibiotics tranquilizers sleep aids bloodssure medicines pepto-bismal pepcid & tagamet aspirin atropine (motion sick) anti-depressants laxatives can cause lazy bowel. They are habit forming & cause depletion of minerals such as potassium which can then lead to heart attacks	Whole grains vegetables fruits nuts & seed Liver: potassium	Intestinal/stomach Acidophilus Enzymes cascara sagrada slippery elm bark plantain papaya elecampane peppermint fennel catnip cramp bark Liver: rosemary calendula dandelion root yellow dock root burdock raw beet root

Liver: All drugs and pollutants damage and overstress the liver because of its very nature as the collection place for toxins, etc.

Cancer cannot develop in the body if the liver is functioning in an efficient & healthy manner

System/Function	Diseases	Symptoms	Stressors	Vits/Mins/Foods	Herbs/Supplements
Integumentary skin hair nails sweat glands <i>Health of the hair, nails & skin is an indication of the over-all health of the entire body.</i> Low thyroid function is often the cause of hair loss <i>What we put on the skin is absorbed into the body!!</i>	hair loss acne abscess abscess athlete's foot baldness burns corns/callouses cysts dandruff nail problems psoriasis warts wrinkles skin cancer fungal infections	varied according to what part of the system is affected white spots on nails indicate a lack of minerals or poor assimilation of nutrients ridges going lengthwise in nails can indicate anemia or anemia in the past or a lack of B-vitamins, calcium, silica, sulfur and/or protein. Brittle nails - lack of B-vitamins, iron or silica (<i>consider the homeopathic remedy Silicea for these symptoms</i>)	chemicals harsh detergents rich greasy fried foods sugar stress lack of sleep	Vitamin A is an effective treatment for most skin disorders B-complex Vitamin C Vitamin E The better the diet, the better will be the skin, hair & nails	Skin: all diaphoretic herbs (sweat producing) Hair: rosemary calendula nettles horsetail parsley Blond hair rinse: chamomile yarrow calendula mullein flowers Brown hair rinse: elderberries Dandruff: rinse with one or more of the above herbs (using the essential oil form is nice - but it only takes a drop of two!)

System/Function	Diseases	Symptoms	Stressors	Vits/Mins/Foods	Herbs/Supplements
<p>Nervous brain nerves</p> <p><i>The central nervous system is the spinal cord and brain. The peripheral nervous system is the nerves that extend out from the spinal cord and the base of the brain to other parts of the body. The autonomic nervous system regulates the internal organs.</i></p> <p><i>The central nervous system & the Immune System are closely related. The brain sends messages back & forth between the two systems.</i></p>	<p>Alzheimer's anorexia autism bulimia depression Down's Syndrome dyslexia epilepsy meningitis multiple sclerosis parkinson's senility shingles spina bifida</p>	<p>varied according to the area of the body affected. Can include mental illness and dementia</p> <p>Headaches hyperactivity insomnia memory loss vertigo</p>	<p>most sensitive organs react poorly to poor nutrition, lack of oxygen, prescription drugs, air pollution, poor food and water, stress, toxic metals</p> <p>problem drugs: Ativan (anxiety & tension drug) Bitolterol (asthma) Bromocriptine (prevention of lactation after birth) Cyclobenzaprine (muscle relaxant)</p>	<p>B-complex Vitamin C Calcium whole grains green leafy vegetables nuts seeds molasses</p>	<p>blue vervain cayenne damiana gotu kola dong quai lady's slipper motherwort passionflower hops black cohosh sculleap catnip chamomile peppermint hawthorn berries feverfew oats lavender pulsatilla St. Johnswort lemon balm ginseng lobelia valerian wood betony</p>

System/Function	Diseases	Symptoms	Stressors	Vits/Mins/Foods	Herbs/Sumplements
Respiratory nose throat trachea bronchials lungs <i>Lungs are one of the main channels of elimination in the body. They also provide oxygen to the blood so that it can be carried to all the cells. Metabolism in all body organs is stimulated with the intake of oxygen. Trouble in the respiratory tract can impair immune function</i>	allergies asthma bronchitis coughs chest pain colds croup emphysema flu hay fever laryngitis pleurisy pneumonia sinusitis tuberculosis	varied and many	pollutants such as lead, ozone, carbon monoxide congestion in the bowels and liver repressed emotions being 'smothered' by another person problem drugs: pindolol (high blood pressure) Hydralazine (hypertension) ketroprofen (anti-inflammatory)	Vitamin A Vitamin E B-complex all minerals salmon oil flaxseed oil lecithin	eucalyptus - especially the essential oil comfrey mullein marshmallow ephedra horehound wild cherry rosehips aloe vera
Structural bones muscles cartilage <i>When we have aches & pain of the bones, muscles & ligaments, the body is trying to warn us that something is wrong and needs our immediate attention. When we have dealt with the underlying causes, the pain will go away</i>	arthritis carpal tunnel bursitis fractures gout lumbago muscle cramps muscular dystrophy osteoporosis rheumatism scoliosis sprains swelling TMJ	Pain bruising inflammation injured ligaments	lack of nutrients in the diet caffeine, soda pop too much protein /meat sugar (leaches calcium & essential minerals) emotional stress problem drugs: Cortison like steroids (which strip potassium) can cause diseases where bone fragility is manifested and contribute to heart disease.	B-complex Silica Calcium Magnesium Vitamin D Minerals Vitamin A (teeth) sunlight	oats horsetail nettles comfrey mullein white oak bark

System/Function	Diseases	Symptoms	Stressors	Vits/Mins/Foods	Herbs/Supplements
Urinary kidneys bladder <i>Kidneys are the chief organs for cleansing the body's internal fluid. They keep the system in balance by controlling composition & volume of the blood. They maintain the electrolyte balance & manufacture hormones that regulate blood pressure, calcium metabolism and red blood cell production</i>	bedwetting Urinary tract infections cystitis kidney stones high blood pressure stroke heart attack glaucoma	Symptoms of early kidney problems are: pain pallor swelling in extremities headaches high blood pressure blood in urine burning & stinging	alcohol drugs (even prescription) infections surgery obesity	alcohol drugs (even prescription) infections surgery obesity	cornsilk cleavers plantain chamomile horesetail juniper parsley hydrangea goldenrod uva ursi buchu marshmallow
Immune <i>drugs that weaken: vaccinations (all come with built-in immune suppressant) antibiotic tranquilizers sleeping pills hypertension medication</i> The Immune is the body's defense system against viral and bacterial diseases. It also protects us from damage created by an out-of-balance system, to some extent	AIDS allergies cancer candida Epstein-Barr gastritis lupus (more than 50 medication list lupus as a side effect!) Toxic shock many others		See first column for drugs pesticides heavy metals toxins chlorine stress refined oils caffeine Dionxin (a widely used chlorine bleach, used in industries to whiten products such as toilet paper, paper towels, mil cartons, tea bags, paper plates & cups)	L-arginine L-Lysine Vitamin C B-complex bioflavonoids magnesium calcium	echinacea garlic golden seal oregon grape lemon balm St. Johnswort thyme hyssop rosemary nettles plantain bayberry calendula myrrh poke root

The Endocrine (or Glandular) System

When the glands do not receive the needed nutrients, they over-stimulate the digestive organs and demand more food because they are not nutritionally satisfied. This causes an unhealthy appetite, food cravings and over-secretion of hormones which finally results in exhaustion of the hormone producing glands.

The following drugs contribute to glandular problems on every level. I did not want to list them under just one organ or another so I am putting them here:

Corticosteroids used for eczema, hives, etc. **Tricyclic antidepressants** Prozac is a leader among this nasty group of drugs

Indomethacin ingredient in anti-inflammatories and topical analgesics (pain relief gels & creams)

Gland/Function	Diseases	Symptoms	Stressors	Vits/Mins/Foods	Herbs/Supplements
Adrenals <i>protect us from stress, improves digestion</i>	Addison's Cushing's Cystic Fibrosis Hyperthyroid Hypoglycemia Mononucleosis Pancreatitis Parathyroid	aching joints weakness lethargy dizziness headaches memory problems food craving allergies blood sugar disorders	cortisone therapy continual & prolonged stress poor nutritional habits smoking alcohol & drug abuse	balanced diet B-vitamins calcium magnesium potassium zinc	kelp devil's claw bilberry hawthorne safflowers licorice astragalus ginseng papaya avoid: golden seal
Thymus <i>Produces T-cells which destroy foreign microbes. Helps create a positive outlook.</i>	depression fatigue	crankiness lack of energy	vaccinations, pollution & drugs are particularly hard on the thymus. Large in children; small in adults Why???	Balanced diet Zinc sleep rest	kelp

Gland/Function	Diseases/Symptoms	Stressors	Vits/Mins/Foods	Herbs/Supplements
<p>Pineal <i>Nerve impulses from the pineal are fed to the hypothalamus and pituitary. Affects blood pressure, body temperature, motor function, reproduction, sleep patterns, collagen, enzymes, body cycles. Directly affects every other gland & the cardiovascular system.</i></p>	<p>Depression discontent feeling of self-doubt</p>	<p>The pineal gland needs light which triggers retinal nerve impulses which then travel to the pineal gland and on to the other glands in the system</p>	<p>minerals whole foods diet B Complex calcium magnesium</p>	<p>kelp nettle alfalfa ginseng</p>
<p>Pituitary <i>The pituitary is the 'master' gland which instructs all the others how much to produce and how to function, protects from fatigue due to mental stress</i></p>	<p>mental fatigue trembling</p>	<p>much the same as the adrenals and thymus</p>	<p>Vitamin E B-complex manganese selenium trace minerals amino acids</p>	<p>kelp ginseng nettles goto kola alfalfa</p>
<p>Pancreas <i>The pancreas is vital to digestion, maintenance of blood sugar levels & activating enzyme activity</i></p>	<p>All blood sugar related symptoms: headache blurred vision etc.</p>	<p>drugs mental & emotional stress</p>	<p>B-complex minerals chromium selenium manganese sodium amino acids</p>	<p>cedar berries licorice root uva ursi mullein bilberries blueberries alfalfa juniper berries uva ursi saw palmetto oregon grape</p>

Gland/Function	Diseases/Symptoms	Stressors	Vits/Mins/Foods	Herbs/Supplements
Thyroid <i>The thyroid regulates metabolism in the body and is considered another 'master' sort of gland because it send instructions to other glands and organs</i>	either excessive heat (hyper or hypothyroidism) physical & mental fatigue nervousness obesity sluggishness puffy face hair loss	over-work type A personality drugs lack of nutrition	B-complex minerals iodine potassium sodium amino tyrosine	kelp/dulse Irish moss black walnut white oak bark gentian nettles alfalfa
Hypothalamus <i>regulates the network of glands and the nervous system</i>	trouble in the hypothalamus causes imbalances in the entire glandular and hormonal systems with every nasty symptom of that imbalance	all of the above named things that have a negative impact on the other glands	over all good nutrition and vitamin supplementation	ginseng sarsaparilla gotu kola fo-ti saw palmetto nettles
Adrenals: controls water & mineral balance; resistance to stress; is vital to immune function; is vital to regulation of blood pressure				
Pituitary: produces hormones essential to fertility; induces ovulation and maintains pregnancy; controls lactation; produces estrogen for prevention of symptoms associated with menopause; stimulates the thyroid, adrenals; is essential for growth; maintains hair growth & health				
Thyroid: regulates oxygen in the blood; regulates burning of calories; controls growth & development of bones, nerves, muscles; controls rate of absorption of calcium & other minerals Thyroid tests can indicate falsely that the thyroid function is 'normal' because of the presence of shampoos & skin antiseptic compounds Symptoms of Thyroid deficiency: slow reaction time, acne, frequent colds, fatigue w/headaches, chronic boils, menstrual disorders w/o cysts, fear, panic, forgetfulness, depression that is worse in winter (thyroid must work harder in winter to step up metabolism to combat cold temperatures), poor equilibrium, muscle aches, weakness, some hearing & nervous system disorders leading to burning or prickly sensation, lack of concentration, anemia. Low Thyroid is directly related to heart attacks and lung disease. Treatment can prevent				
Hypothalamus: governs liver/heart/pituitary & is the reception of brain messages - then passes them along to organs such as the Thyroid; responsible for aging, regulates autonomic responses (no conscious effort, such as heartbeat & breathing, etc.); produces hormones, enzymes, fluid regulation; sleep patterns; heart contractions; temperature; Coordinates entire endocrine system.				
Parathyroid: regulation of calcium by promoting the release of calcium from bones. Malfunction produces osteoporosis; regulation of level of all nutrients but particularly minerals.				

Urinary: All 'itis' (including arthritis) is related to the kidneys - to correct it is essential to cleanse kidneys and liver and support the adrenals and spleen; all heart pathology related to the Kidney; blood pressure controlled by the kidneys and adrenals and indirectly by the Thyroid since it sends signals to the adrenals to produce the necessary precursors; ***the primary function of the Urinary System is to keep the system in balance by controlling composition and volume of the blood.***

Digestive:

Liver: performs over 500 functions; clogged liver is the cause of enzyme deficiencies - cleanse and support; secretes bile & stores nutrients until there is a need; draws off and stores toxins; bile breaks down fats and is necessary for the absorption of Vitamins & Calcium; promotes peristalsis - constipated?? Clean the liver!! - constipation, in turn, causes serious stress on the liver; acts as a detoxifier; liver malfunction is a cause of Hypothyroidism; liver is important in regulation of blood sugar; breaks down hormones like adrenalin, etc, when the need in the body is over - in other words, lets the body return to normal after a state of stress; any food that is high in potassium aids the liver - kelp, dulce, molasses, rice, wheat bran, raisins, bananas; causes of problems - 1) cumulative environmental poisons, 2) high carbohydrate/fat diet, 3) overeating, 4) drugs, 5) candida, 6) contraception, 7) caffeine

Small intestine: site of most nutrient absorption

Colon: nutrients are absorbed by the blood vessels in the walls then carried by the bloodstream to the liver and then dispersed throughout the body; Crud along the colon walls drastically reduces nutritional uptake;

There are places in the colon (rectal area, mostly) where absorption bypasses the liver, meaning that infected blood coming from the constipated rectum, which may even contain cancer cells, is able to reach all organs. Eliminating when the need first occurs, prevents much of this kind of absorption.

There is a reservoir in the colon designed to handle one meal at a time. As the next meal approaches, the current meal presses against a neural plexus call the Olsen Point, which activates a complex of muscles. Between meal snacks really fouls up this process and contributes to constipation.

Colon Health: choose food wisely, take time to chew, avoid between meal snacks, take time to visit the bathroom three times daily

Appendix: releases enzymes which cause a good fermentation process in the colon;

Very Basic Chinese Body Systems

The Chinese do not really think of the body as a series of organs - when they think 'liver', for example, they are thinking of the meridians that support this organ, the related lymph and vascular systems, etc. and the emotions and environmental factors that affect it.

Kidney reproduction, growth & regeneration; controls teeth, bones, marrow, brain, inner ear; pupil of eye, lumbar regions; Associated with fear, the will, sharp thinking and perception.

Heart Houses spirit; governs the mind by it's connection to past trauma and future hopes

Spleen Assimilation of foods, fluids and ideas

Problems - tension in the neck & shoulders; high blood pressure; headaches; cramping, moodiness; impulsive behavior

Lung Sets body rhythms; affords inspiration

Problems - tightness in chest, rashes, colds & flu; rigid thinking; melancholy

All illness results from a depletion or congestion of Chi

Depletion weakness; lethargy; frequent illness; poor digestion; inadequate blood flow

Congestion aches; tension; tenderness; pain; distended abdomen; irritability; swelling

Why a discussion of Nutrition and Vitamin Deficiency in what is supposed to be an Herb Manual?

Because - and I want you to write this somewhere prominent in your memories -

One reason herbs work for a particular problem is because the herb has provided one or more vital missing nutrients

90% of the herbs that I use fall - very definitely - into the nutritional category and I seriously wonder if the other 10% would be categorized there too if we understood them better! The longer that I work with the 'Narcotic' herbs (such as nervines, anti-depressants and the heavy-duty infection fighters) the more I wonder if they, too, work on nutritional principles.

Herbs are not witchcraft or magic wands - they are simple nutrition. Let's look at the very common herb, Marshmallow. On average, a cup of tea made from fresh herb (well-dried would be slightly behind) checks in with 249 mg of calcium, 12.7 mg of iron (that is very high), 2,190 IU's of Vitamin A. Used in tea or tincture form it is readily absorbed and available to the body. Nettle checks in with 6,500 IU's of Vitamin A, putting it right up there with the very best foods, and it contains a whooping amount of Vitamin C.

As we have demonstrated in the previous chapters, Vitamins and Minerals (or the lack of them) play a dynamic role in your health. But, because herbs work on nutritional principles, how quickly they work for you depends on a variety of factors:

- how nutritionally deficient you were in the first place
- your bodies ability to absorb and utilize the herbal nutrition you are giving it
- how much your life style and heredity demand from you nutritionally
- What 'vitamin bandits' are at work in your life (low grade infections, lots of sugar, too little sleep - the list goes on and on)
- the potency of the herbs you use (just like foods, herbs can lose their nutritional content by poor processing methods and storage)
- how well the eliminative organs (including your skin) are doing their job. A toxic colon or kidneys that do not filter properly can put a great amount of toxins back into the blood stream

I have seen demonstrated, time after time over the years, that herbs seem to work far better on people who have been 'doing' herbs for a while. At first I thought that this was due to people not being proficient in the use of herbs at first- so I would try to work more closely with the families for a while. Eventually, I realized that there were other factors coming into play. 1) It took quite some time for their bodies to eliminate the poisons (drugs, etc.) that were blocking much of the absorption of the herbal vitamins and minerals, 2) The colon and kidneys needed to be in good working order. As the overall nutrition of a body increases, dead and diseased tissue that is being replaced by healthy tissue sluffs off. It needs a clear channel of elimination. Otherwise, it re-enters the bloodstream and auto-intoxication develops. In other words, the little 'nasties' collect along the brain stem, form gallstones, etc. or simply return to the liver. 3) As toxins, drugs, etc. leave the body, they do so by combining with certain nutrients. This means, that in people beginning to use herbs, the extra nutrition is being used for a cleansing program, rather than a re-building program, until the 'housecleaning' has been accomplished. Most people actually feel worse for a while and you can't put enough herbs in to raise nutrition levels sufficiently to effect a cure.

Some Basic Herbal Knowledge and Lore:

- Herbs feed the body, much like food should, and aid in the natural healing process by providing essential nutrients.
- Herbs work without toxic side effects because they have been left in their natural state - unaltered. Herbs contain elements in the amounts that nature intended. Built right into the plant are the other elements (vitamins and minerals) needed to make the plant effective. Built in, also, are safe-guards. It is almost impossible to take enough Lobelia for the 'narcotic' principles to slow your heart because, built right into the plant, are elements that would cause you to vomit and throw off the excess.
- The so-called active constituents of many herbs have been isolated - many are the basis for modern drugs. Researchers have been dismayed to discover that in many instances the isolated constituent was less active biologically than the original crude herb. (Why are they dismayed? Perhaps, because there is no economic reward to the pharmaceutical firm who paid for the research!)
- There is no standardization program for herbal extracts - or, at least, not one that is being applied very widely. A company who makes tinctures or herbal capsules, for instance, does not always need to meet standards of potency or list potency on the label. (This is fine with me, because in order to do so they would have to isolate the compounds and then they would be drugs anyway.) What this means to you, though, is that everything you buy for the benefits of, say Mullein, may not have the important properties of mullein left at all. For this reason, making your own herbal medicines from plant materials that are still potent (they can make your nose tickle) is the only way to be sure of potency.
- Generally the action of herbs is gradual and subtle. Healing takes place at it's own pace. There are notable exceptions!! The body often responds quite readily to even a little improvement in overall nutrition.
- Herbs, like vegetables, are alkaline. Certain bacterias and disease states cannot thrive in an alkaline environment.
- ***Most herbs in use are extremely safe!*** In the 1970's, when herbs began their rise in popularity, numerous articles appearing in medical journals and magazine articles questioned the safety of herbal products. Since then, herb usage has increased dramatically, but toxicity reports have not. Actual research - not medical or pharmaceutical scare tactics - have consistently demonstrated the safety of herbal medicines. Investigative reporters continually conclude that there is total lack of substantial evidence that toxic reactions to herbal products are a major source of concern. (***Would that drugs had the same record!***) Ephedra has been much in the news lately, but you will notice that the reported deaths have occurred from some pretty refined and laboratory-altered products - so altered that, to my definition and way of using herbs, they are more drugs than herbs. I have used Ephedra wisely, and safely, for many years.
- Do not interpret the above statement to mean that all plants are 'safe' to use as medicines. There are extremely poisonous and toxic plants out there. If you are going to harvest your own, know what you are doing. Always buy your dried herbs from reliable sources - they need to know what they are doing, too.

Herbs, in books and study courses, are not divided according to the nutritional value. Rather they are classified by their predominant effect on the body. Unless you intend to study nutrition, health and disease in-depth and can find reliable information on the nutritive values of herbs (I've tried - unsuccessfully), classification by effect is probably the only viable method. Since it is the standard throughout the world - and will save you much confusion - that is the method I will use here.

There is, however, one drawback to this system of classification; an herb may have several different effects and work on several different body systems. It becomes difficult, actually impossible, to pick just one category for some herbs. Another herbal characteristic that makes classification difficult is the fact that herbs, unlike drugs, act as stabilizing agents. In other words, cayenne may be used to stop the flow of blood or to increase it and the same herbal combination will be used to lower high blood pressure and to raise low blood pressure. Not all herbs act in this capacity, but certainly, the majority do.

In contrast to drugs, herbs are natural and safe. They do not build up in the body producing horrendous side effects. Herbs, as with other foods, need to be used with wisdom and knowledge and a touch of common sense. The hype that you hear about herbs being unsafe is, almost without exception, the result of two phenomena:

- ▶ The herb was not in its whole form. Someone, somewhere, in a laboratory setting, broke the herb down into sub-compounds, leaving behind the constituents necessary to keep the herb safe. Lobelia, for example; it would be very difficult to take enough fresh lobelia, or even lobelia in a tea or tincture, to dangerously slow your heart because other constituents of lobelia would have you throwing up the excess. Yes, you could slow your heart, you could make yourself drowsy and tired for a few days, but you could not do yourself any permanent harm.
- ▶ The herb reacted with a prescription (or non-prescription medication). How can an herb react? The main factor here is that herbs tend to cleanse and dump poisons from the body. If you are taking blood pressure medication an herb might cause the liver to dump, temporarily placing too much of the medication in your blood stream and artificially dropping your blood pressure unacceptably low and then leaving you with not enough of the medication in your system later. You can see how this might be annoying - and dangerous - if you were relying on, say, your birth control pill or your blood pressure medication. The herb is behaving exactly as nature intended it to and it is treating the drug exactly like what it is - a poison!

Herbs can be of value for every system of the body. Nature has provided us with herbs which benefit the nervous system, immune system, respiratory system, and muscular systems. The properties of each plant target specific areas of the body and accomplish very specific tasks. Modern research has added much knowledge to the literature about the effectiveness of herbs. One area in which the literature is almost silent is the area of what herb to take to deal with the side effects of the use - and misuse - of the huge arsenal of modern drugs.

The next chapter will deal with each category of herbs. I will not attempt to provide an entire picture of each herb in the category, only a few highlights about a few of my favorites. You will have to buy - and study - a good herb book or two for that information.

The Healing Stimulant Herbs

Stimulant herbs help to increase - or stimulate - certain actions of the body. They bring up energy levels, increase circulation, increase the pressure and power of the pulse and, thereby, help to eliminate toxins from the body. There are over 200 herbs listed in this category, most of which are listed in other categories as well. A few of my favorites are: Capsicum (Cayenne), Ginger, Peppermint, Cloves, Horseradish, Damiana, Echinacea, Elder Flower, Elcampane, Ephedra, False Unicorn, Garlic, Gentian, Ginkgo Biloba, Sarsaparilla, Stinging Nettles, Valerian and Yarrow

Other valuable stimulant herbs are: blue cohosh, buchu, eucalyptus, ginseng, gravel root, juniper berries, lobelia (treated on it's own later), raspberry, garden sage, shepherd's purse, spikenard

Cayenne is the #1 Stimulant Herb - the purest and most powerful of all the medicinal herbs. As one herbalist said, "It makes the fire of life burn more brightly." Cayenne rebuilds - yes, rebuilds - your vein structures, removes plaque from them and then sends the blood rushing through carrying nutrients to every cell of the body. If I could only have one herb in my house, cayenne would be the one that I would choose!

Cayenne's action on the cardiovascular system is almost instantaneous. Cayenne will stop bleeding, even of hemorrhage proportions, and is the first thing that I would reach for at the onset of a stroke or heart attack.

Cayenne is an 'accentuator' and will increase the healing properties of the other herbs. By adding a touch of cayenne to a respiratory formula, for example, the respiratory herbs will reach the lungs and begin their healing action much more quickly. You will notice in the formulas section of this manual that cayenne, in small parts, is in nearly every formula.

Cayenne is high in Zinc, which is essential to the hormonal glands. Cayenne is also high in Vitamins A and C, rutin (strengthens arteries and veins), iron, calcium and potassium.

Ginger - my second favorite stimulant herb. Ginger is a 'carrier' to the abdominal area - much as cayenne is to the bloodstream- and, as such, acts on the stomach, spleen, liver, bladder and kidneys. It also stimulates the blood, but in a gentler manner. My favorite use for ginger is to place a little - tincture or powder - in the tub at the onset of any 'bug'. Soak for a few minutes, then wrap up warmly - being very careful not to get chilled in any way. Stay wrapped until a full sweat is underway, usually about 20 minutes. I have used this method for years to simulate and stimulate a fever; thereby, burning off any obnoxious little critters and stopping an illness - such as cold, sore throat, etc. - right in it's tracks. ***Ginger is high in potassium and contains manganese, silicon, Vitamins A, C, B-complex, magnesium, phosphorus, sodium, iron and zinc.***

Elder Flower is a particular favorite for use in acute afflictions such as colds, flu, and hay fever because it ***gently*** increases blood circulation and promotes sweating. Elder Flower is different from Cayenne and Ginger in that it aids in the detoxification of the body at the cellular level. Elder Flower is unique among herbs because it contains constituents known to act as sedatives and pain relievers but yet is an expectorant at the same time. Usually a sedative - herb or drug - reduces the body's ability to cough and expel mucous from the lungs, etc. Combined with Oregon Grape and Yarrow, it speeds healing; add Mullein and you have a tremendous healer for lung congestion and asthma.

Contains large amounts of Vitamin A, C and bioflavonoids which protect against germs and viruses

Peppermint is another commonly used stimulant herb. It is unique in that it also acts as a nervine in strengthening the heart and digestive systems and as an anti-spasmodic form of nervine in releasing nerve tension in muscles (including internal ones like the heart and those in the digestive system). Never boil or even over-heat the herb itself (as when making tea), as the medicinal principles are extremely volatile and evaporate easily.

Peppermint is one of the most B-Vitamin rich herbs, which is why it is so great for calming the nerves. It is interesting that Peppermint calms the nerves and yet is employed by truckers - especially in the oil form - to keep them awake while driving long-haul. Peppermint is also high in calcium, magnesium, phosphorus, potassium, sodium, iron, selenium, manganese, Vitamin C, silicon and zinc.

Echinacea roots, according to modern research, have been found to contain interferon-like properties. Interferon is produced naturally in the body to prevent viral infections and to combat strep and staph bacteria. This research bears out the use of this herb by Alternative Medicine practitioners for decades in fighting the spread of infectious diseases. Echinacea is on a par with Red Clover as a blood purifier - to be used in the treatment of chemical toxic poisoning, candida, fungal infections, ulcers and in clearing the lymph glands.

Echinacea contains a diverse range of active components which affect different aspects of immune function. The Healing Power of Herbs by Michael T. Murray gives an excellent scientific (layman's terms) treatise on the immune systems various functions and Echinacea's impact on them. I like to re-read it from time to time to remind me what a great herb this one is. Echinacea contains Vitamins A, C and E (this is somewhat unusual in herbs), Calcium, Iron, Iodine (making it a great Thyroid herb), potassium and sulfur. Some herbalists claim that *Angustifolia* is much better than *Purpurea* (which grows here). I try use them both in every formula that I make, and prefer them that way.

False Unicorn is considered a stimulating herb, although it's primary function seems to be in normalizing the ovaries and the estrogen levels in the body. This herb is commonly used in the prevention of miscarriage and in Female tonic formulas. False Unicorn contains the usual wide range of Vitamins and minerals; copper is an unusual component and aids in the uptake of iron.

Ginkgo Biloba seems to find it's greatest use in arterial circulation, improving electrical transmission in nerves and in supplying greater amounts of oxygen and nutrition to the brain cells. Ginkgo is one of the true 'food' herbs; it's healing effects are slow and steady. Because most people who buy it off the shelf do not understand how this type of herb works, they are disappointed when dramatic improvement does not happen overnight. They do not take it long enough or faithfully enough to reap it's benefits. Bio-flavonoids are the key to Ginkgo's usefulness because they protect against free radical damage, aid in enzyme regulation, protect blood vessels and capillaries against plaque buildup and protect the liver from toxic damage.

Stinging Nettle is rarely mentioned in herbal reference materials. It does not seem to have any outstanding 'medicinal' properties other than it's nutritional value. However, it was noted by a friend of mine several years ago that if you combine Nettle with Kelp and Alfalfa, you have most - if not all - of the Vitamins and Minerals that have been identified as useful to the human body. Nettle is so rich in iron and vitamin K that you can almost feel it thickening the blood. It contains almost none, or just negligible amounts of the usual vitamins found in herbs, but the Vitamin A is off the charts - right up there with huge servings of carrots eaten raw, etc. It even contains a very absorbable protein and some fats. A wonderful 'food' herb!!

Yarrow The herbs that I have included here in the Stimulant section were chosen because they are the ones that I use and am familiar with. Of course, any herb on the list at the end of this chapter would be of great benefit. In writing this, I have discovered that I have picked one stimulant herb to rely on for the different areas of the body and the abilities of the herbs to do certain things. Yarrow is certainly no exception to this. While definitely a stimulant herb, it also has some unique characteristics that set it apart from the rest of this class. Yarrow contain all the usual Vitamins and minerals found in plants used medicinally but it also contains Vitamin F, an essential fatty acid necessary for the good health of all body membranes, including those surrounding the brain and the brain itself. Because of the vitamin F content, Yarrow is considered an astringent herb(one of the best), which means that it contracts and tightens membranes making the retention of gallstones or kidney stones, etc. impossible. Yarrow can be used for any condition in which too much secretion (mucous, etc.) is a problem. Vitamin F is the basis for the production of the hormone like prostaglandins produced in the cells and is responsible for Yarrow's ability to seal and heal wounds. Placing the fresh leaves on a wound or deep cut will heal and seal the tissues together almost immediately and in an almost miraculous fashion.

Valerian is usually thought of as a sedative herb by most people, although I have never seen it listed under that heading in an herbal reference. Valerian's main order of business is on the nerves, brain, liver and heart. Because it heals and rebuilds in these areas, people do - generally - feel calmed, strengthened and uplifted by this herb. One of the best herbs in the world for helping people sleep or deal with large amounts of stress.

Valerian contains large amounts of calcium and comes with it's own supply of magnesium so the calcium is readily absorbed and made available to build bones, strengthen nerves and relax the smooth muscles.

Valerian is one of 3 - 4 herbs that I have seen people react negatively to. I suspect that the large amounts of calcium (which toxins love to hook to in order to leave the body) are responsible for this effect. In a few people, Valerian - rather fresh, dried or tinctured - produces exactly the opposite of the usual calming effect. In fact, for these people, Valerian is an irritating sort of stimulant, right up there with caffeine. They become nervous, irritable and restless until the herb is metabolized from their systems. Some herbal references tell you that this effect is more pronounced when using the dried form of the herb; for that reason I always wildcraft my own. Two people that I know personally, however, react to the fresh plant every time they get near it.

Ephedra is commonly known as Ma Huang; a milder version is the Utah plant known as Brigham Tea.. Ma Huang contains a constituent known as Ephedrine which has gotten a lot of bad press lately - and with great justification in many ways. It must be remembered, however, that herbs taken as teas or tinctured from whole plants do not behave in the same way that commercially prepared plants do. Ephedra - when dried and mashed into a powder and left exposed to light and air - loses some necessary components that have a stabilizing influence on the whole. (The bio-flavonoids, etc. that are in the whole plant and act as protectors of heart muscle are very fragile.) This is true of several other strong (considered narcotic) stimulant herbs such as Valerian (discussed above). I personally use Ma Huang after very debilitating illnesses such as pneumonia, etc. because it stimulates recovery and helps the body get over the weakness and fatigue. It is meant as a short-term stimulant and tonic and, as such, is perfectly safe. Because of the 'bad press' and the nervousness some people feel, I often use Brigham Tea, whose action is milder - and slower - but has, in 250 years of use in Utah, never been linked to any kind of toxicity or side effect.

The Tonic Herbs

Tonic herbs are used to increase tone, energy, vigor and strength by nourishing the body. There are tonic herbs for the liver, heart, nerves and every organ and system of the body. Most tonic herbs strengthen the digestive system in some way and the result is an increase in the assimilation of nutrients. Tonic herbs cleanse the organs of the heavy mucous which covers the membranes and clogs the channels of elimination and absorption. These herbs produce normal tension and tone to the fibers and tissues. They sharpen the appetite and gradually exert an influence in building up strength, energy and vitality. As a rule, tonic herbs are bitter. They are used primarily in convalescence from disease or illness, when the body is in a 'run-down' condition. Personally, this is me every spring and often during the rest of the year!

There are about 3000 herbs listed in the pharmacopoeias of the world; about 1000 of which are used by traditional herbalists (chosen because they are non-poisonous and completely safe). Of these 1000 approximately 350 are listed as 'tonic'. Develop your own 'pets'. It is not necessary, or even advisable, to try to understand them all. It is far better to use a few herbs, chosen for their effects in different areas, with confidence and acumen, than dabble in a whole range but using none of them effectively.

Some Tonic Herbs:

Alfalfa, Aloe Vera, Astragalus, Barley Greens and Green Algae are used to nourish the cells and tissues over a long period of time and can be taken every day. Other mild tonics included Chamomile, Gentian, Ginkgo (brain and nerves), Golden Seal and Oregon Grape (general), Hawthorn (heart and cardiovascular), Horsetail (Urinary Tract), Cohoshes and Vervains (reproductive), Cascara Sagrada (intestinal) Ginger and Peppermint (digestive)

Alfalfa has been in use as a 'miracle herb' for centuries; the Arabs call it the "Father of Herbs". Alfalfa contains the widest variety of vitamins and minerals of any other 'food' on earth. With high levels of chlorophyll, it is thought to be perfectly balanced for complete absorption in the body. One significant factor is Alfalfa's vitamin K content, which is the blood clotting vitamin and also linked to the prevention of osteoporosis. Another unique nutritional factor of vitamin K is that it is rich in protein and contains eight of the essential amino acids. An attempt to list all of the modern day studies and all of the things that alfalfa is traditionally used for would be ludicrously lengthy. Just remember this valuable, nutritious herb.

Hawthorne and other flavonoid compounds such as blueberries, bilberries and grapes are valued for several unique reasons. These herbs have very strong intracellular strengthening capabilities as well as significant collagen-stabilizing actions. Collagen is the abundant protein that makes up the cytoplasm of cells and maintains cellular integrity. It's weakness or destruction lies at the heart of many diseases and debilitating conditions such as arthritis. Hawthorne flavonoids also stabilize vitamin C, protecting it from destruction or oxidation and greatly decreases capillary permeability and fragility. Hawthorne has been clinically proven effective in reducing blood pressure, angina attacks, serum cholesterol levels and the deposits of cholesterol in artery walls. Hawthorne's ability to dilate coronary blood vessels, has been repeatedly demonstrated in clinical trials.

Oregon Grape The plants goldenseal, barberry and Oregon grape share similar indications and effects because of their high content of berberis alkaloids. **Goldenseal** has a great reputation throughout the herbal world, but according to spectrographic analysis, Oregon grape has every attribute of Goldenseal and has additional properties beneficial in the treatment of skin conditions. I have found through years of herbal use that local herbs work better for local people - I use very few Chinese herbs because there is usually something just as effective that grows here in our mountains and works even better for us. Oregon Grape is a shining example of this. I use it almost everywhere that I used to use Goldenseal, and with excellent results. It is much cheaper, free if you wildcraft it, and it has become a mainstay of my herbal repertory.

The following information has been taken from book called The Healing Power of Herbs by Michael T. Murray. This book is more scientific than anecdotal and provides a lot of good information about the clinically proven, medicinal properties of a few good herbs, including the berberine producing varieties. Everything said here applies equally to Goldenseal and Oregon Grape.

Perhaps the most exciting and most used effect of these herbs is their broad spectrum of antibiotic activity. Their action against a wide variety of pathogens is actually stronger than that of antibiotics commonly used in the medical world, but produce none of the side-effects of prescription anti-biotics (such as the overgrowth of yeast that is a common side effect of antibiotic use).

Another effect of berberine producing plants is their ability to inhibit the adherence of strep and staph bacterias to their host cells. In other words, the ‘critters’ that aren’t killed outright are flushed from the system because they are unable to cling to the cells of the body. This work is accomplished at very low doses and with *no side effects*. ***Don’t forget these two herbs in the treatment of Strep Throat and Staph infections and any infection of the eye.***

Other places where clinical trials are rapidly establishing a reputation for berberine plants is in the treatment of liver disorders and cancer and in the treatment of conditions involving depressed white blood cell counts, including those produced by the effects of chemotherapy treatments. Goldenseal and Oregon Grape are often used as a tonic to boost a sluggish glandular systems and to promote balanced hormonal activity.

Dosage: generally non-toxic but it should be remembered that low doses of these herbs are very effective. Higher doses are not recommended for pregnancy and may interfere with the metabolism of vitamin B. Higher doses are not more effective; more is not always better!

Horsetail (also known as Shavegrass) is most noted for its silicon content, which is very high. Recent studies in Europe have found that broken bones do not heal as well, even in the presence of high levels of calcium, if there is little or no silicon available in the blood. This interaction between calcium and silicon makes this herb valuable to strengthen hair and nails and to prevent the body from utilizing improperly absorbed calcium to form gallstones and kidney stones. There are many great diuretic herbs, but none with the other benefits of Horsetail. Horsetail is also high in Vitamin E and Selenium and is certainly much cheaper than taking a supplement.

Chamomile has become so well-known for its ability as a safe and mild sedative to induce sleep or relaxation that many of its other properties are frequently overlooked. The tonic and sedative properties (tryptophan) of Chamomile make it an excellent choice for ulcers and indigestion. This herb has a strong antihistaminic effect and is a gentle liver cleanse and hormone balancer. I particularly love this herb for babies and small children in the treatment of colic, upset tummy and nightmares. I blend it with catnip in a glycerine based tincture, making it mild enough for even the tiniest patient. Contains, among its many other blessings, a high level of silicon and selenium.

Cascara Sagrada was admitted to the *U.S. Pharmacopoeia* in 1877 and is still included as an official medicine. Cascara Sagrada is known throughout the world for its benefits to the muscular activity of the colon. Restores natural bowel function without cramping and is not habit-forming; it does not make the colon dependent as do many other laxatives. Cascara contains significant amounts of calcium, B-complex vitamins, potassium, phosphorus, selenium, vitamin A, sodium, chlorine (in the natural and usable state that the body requires a small amount of), magnesium, iron, niacin, and trace amounts of manganese, silicon and vitamin C.

Blessed Thistle is usually thought of in connection with nursing mothers and hormone balance, but it is a tonic herb that has great value in many other areas of the body. Blessed Thistle is very rich in Nutrients.

Myrrh has been recommended as a substitute for Goldenseal, but I can find nothing in its constituents that would indicate this as a good idea. I frequently add a little Myrrh to a formula because it contains a compound known as silymarin, which protects the liver from chemical toxins. Myrrh is a powerful antiseptic with a special affinity for the mucous membranes and gives vitality and strength to the digestive system. Myrrh aids in the balance of acid and alkaline in the blood.

False Unicorn is one of the best and most positive tonic and stimulative herbs for the reproductive systems of both male and female. Most people associate this herb with the prevention of miscarriage and, where the Corpus Luteum is slow to sluff off so implantation of the egg can take place, it works wonders. This herb is so mild that it is often well received by the stomach where everything else is being rejected. This herb is as good as any vermifuge (ridding the body of parasites) but is much milder. It is also becoming quite endangered and is ridiculously expensive.

Ginger and **Peppermint** are two of the best tonic herbs. They are discussed in some detail in the previous chapter, as is **Ginkgo Biloba**, so will not be discussed here.

Lobelia - In a Class by Itself

Lobelia is one of the greatest herbs that we have available to us. It was discovered by the great 19th century herbalist, Dr. Samuel Thompson, who was a contemporary of Joseph Smith and believed by him to be an inspired man. Dr. Thompson said

“there is no vegetable which the earth produces more harmless in its effect on the human system and none more powerful in removing disease and promoting health. . . It is calculated to remove the cause, and no more, as food removes hunger, and drink thirst. It clears all obstructions to the extremities, without regard to the names of disease, until it produces an equilibrium throughout the system, and will be felt in the fingers and toes, producing a prickling feeling like that caused by a knock on the elbow. This symptom is alarming to those unacquainted with its operation, but is always favorable, being certain indication of the turn of the disorder, and patients generally gain from that time. . . This plant is the most important article I make use of in my practice.”

In 1809, in the midst of much persecution of naturopathic practitioners by the allopathic doctors of the day, Dr. Thompson was brought to trial for the use of Lobelia. Much vituperative press accompanied this trial and has been re-quoted and quoted again over the years for many of the same reasons as the originals. Without going into great detail, let it be sufficient to say that Dr. Thompson was acquitted and the court record shows that no case could be made for the administration of Lobelia ‘sensibly’ as being a harmful agent. The very fact that so much continual mis-representation abounds concerning this herb indicates to me that it must be very valuable indeed in curing illness.

Lobelia is, as far as I know, the strongest relaxant and sedative herb known anywhere. As indicated, there are some who claim that it is a dangerous herb. I certainly would not describe it as dangerous in the sense of ‘life-threatening’, but it would be an easy herb to over-use and abuse. Lobelia is strongly emetic so, even though it probably could relax and sedate the respiratory system to the point of death, you would have a very difficult time keeping enough of it down to seriously harm or kill you! You would, however, feel like death would be a welcome relief from what you were suffering!!

Lobelia removes obstructions and congestions throughout the body and in the blood at a rapid and remarkable rate. An overdose produces vomiting and diarrhea as the body’s only sufficiently strong response; the eliminative organs simply cannot keep up with the ‘housecleaning’ that is going on. Add to that Lobelia’s ability as a vasodilator and a muscle relaxant and the sensations can be really alarming! But when all is said and done, the marvelous cleansing that has resulted leaves the person feeling wonderful - energetic and relaxed at the same time.

Lobelia has the unique characteristic of acting as a ‘carrier’ for other herbs. Lobelia added to any combination will deliver the herb more quickly and more efficiently to the area of distress. Moreover, it seems to be ‘selective’ in its course of action. Dr. Christopher often described in his talks and lectures the cases of two young men, similar in age but completely different in strength and constitution. Each young man had a boil forming on his neck. The same formula, with a bit of Lobelia added, was administered to both. The strong, robust young man with a good digestion and elimination system was healed by the boil disappearing into the body and the poisons being carried off by his system. The other young man, very weak and delicate, was healed by the boil continuing to encapsulate and grow on his neck until it could be safely removed; his system did not have the strength nor, because of the addition of Lobelia to the treatment, did it need to process the toxins internally. I have personally witnessed this aspect of Lobelia’s marvelous healing capacities on occasions so numerous that I have dubbed Lobelia as the ‘thinking’ herb.

Because Lobelia is such a strong relaxant I never give it, especially to small children, without a baseline pulse rate being established. This enables me to ascertain how much the pulse is slowing, if at all. This does not have to be an exact count, only a feel for what is going on. In sick children the pulse is usually racing and thready and the slowing brought on by the Lobelia is a desired effect.

If I am dealing with a child whose pulse is not racing or with a particularly debilitated adult, I will administer a stimulant such as cayenne or peppermint prior to, or along with, the Lobelia. This is not difficult since peppermint tea is probably indicated anyway and it takes only a mouthful or two.

Some basics about the use of Lobelia

In childbirth - Lobelia is often administered with Cayenne as a means of relaxing the pelvic muscles. I have found that this gently speeds labor along. The increased circulation produced by the lobelia and cayenne helps in producing a very pink, well-oxygenated child and in keeping the mother from tearing in any manner.

BBL - the recipe is given in the tinctures section - has so many uses that, try as I might, I will probably not get them all listed. In this formula, Lobelia is combined with Blue Vervain, Blue Cohosh and Black Cohosh and scullcap to produce an anti-spasmodic. What this means is that it will provide relief from anything that manifests with spasms or a pulsing quality. Examples might be coughing, muscle or abdominal cramping or any kind of pain that pulses - such as toothache, earache, certain types of stomach ache, pleurisy, boils, etc. Can be taken internally and, when possible, as in the case of a muscle cramp, applied topically. Topical application does not require the giving of a stimulant; in fact, when used as a 'relaxant' cayenne, goldenseal or peppermint should not be used. Ginger is often used here because of its diffusive qualities.

I put a few drops of BBL, along with mullein or garlic oil, in the ear for earache. The BBL acts as a pain reliever while carrying the medicinal properties of the oil deeper and more rapidly and increasing the anti-bacterial effects of the oil.

A couple of dropperfuls of BBL in a tub of warm water relieves cramps, including really nasty menstrual ones. Taking it by mouth at the same time helps also. Used as a liniment on the abdomen, or on any muscle that is cramping, it brings almost instant relief.

I smashed my index finger on my right hand thoroughly one day and the pain was excruciating. I put arnica oil - for the swelling - and BBL tincture into a small cup and put my finger in it. The pain was manageable that way and within a few hours most of the discoloration, swelling and pain were gone. I even managed to make a fist and go back to 'zoning' within a few days.

A few drops of BBL should always be considered for convulsions in children. Try to remember that, if you can. I have frequently forgotten.

BBL is also excellent for the treatment of asthma - both as a way of dealing with an attack and as part of a long-term, overall program. Lobelia, added to any respiratory formula, will facilitate the clearing of the passages.

I have used Elder Flower to which a bit of Lobelia has been added to reduce a fever.

***** Please note the number of times Lobelia, in small part, has been added to recipes for tinctures. *****

Dosage: Lobelia should be given in small doses for healing purposes and in larger doses when its emetic or cleansing properties are required. A stimulant, such as cayenne, peppermint or ginger should be administered unless extreme relaxation is required.

Diuretics

The duties of the kidneys are best described as filters for the blood. Your blood flows constantly through your kidneys to be purified or filtered. If the kidneys fail to accomplish their job, the result is depression, tiredness, restless sleep, pains in the back, headache, achy joints, memory loss and irritability.

The diuretic herbs are used to increase the flow of urine and to relieve the cells and tissues of excess water and uric acid. Diuretic usually denotes a simple dumping of liquid from the bladder, kidneys and tissues; it is almost always advisable to include the healing and strengthening of the Urinary System using herbs which are sometimes referred to as Nephritic, although many herbal references simply lump them together. These herbs are among the most important herbs you will ever learn to use. Many 'diseases' defined today by modern medicine have an underlying component of the kidneys inefficiently functioning, allowing uric acid crystals to form in the brain, or along the nerve endings, or just under the skin and along the long muscles. This buildup can cause excruciating pain and even death. Add to that the embarrassment of bedwetting or incontinence and there is considerable motivation to learn to use herbal diuretics well. It should be noted that both bedwetting and incontinence usually have underlying nerve problems that also need to be dealt with using mild herbal sedatives and anti-spasmodics.

There are over 450 known herbs which have diuretic properties. Listed among them are: **Alfalfa, Buchu, Corn Silk, Dandelion, Hawthorne, Horsetail, Juniper Berries, Marshmallow, Mullein, Nettle, Parsley** and **Uva Ursi**.

The specifics of each of these herbs are listed in any herbal reference book. I will give you here only a few examples and anecdotes about my favorites.

Horsetail, which was discussed in some detail in the previous chapter is probably my all time favorite basic diuretic. It grows profusely in this valley and is a 'strange' herb in that it has a 'male' and 'female' version; they always grow in proximity to each other and are both equally useful. I often use **Marshmallow** simply because no matter who calls from wherever they can usually go into their back yard or garden and find enough to accomplish the needed tasks. I have given this advice to many people who call me in pain with a little bit of gout in their toes. (I have used it myself!) I like to add **Mullein** to any Diuretic formula that is going to be used for more than a day or two because it is so healing and soothing (demulcent is the proper word) to the tissues. Diuretics can be a little caustic and drying and Mullein leaves you with all the healing properties and none of the drying effects on skin, hair, lips or internal tissues.

I would use **Alfalfa** where iron and overall nutrition was also needed. I would use Dandelion if a mild liver cleanse would be beneficial. **Uva Ursi** would be my herb of choice (I would probably use a whole formula containing most of the above) if a long-standing problem or kidney/bladder damage was suspected. **Parsley Root** should be avoided by nursing mothers as it is a very efficient way to dry up the milk supply. I have not found **Juniper Berries** to be effective when used alone, but they are excellent added to a formula.

The Healing Diaphoretic and Sudorific Herbs

Diaphoretic herbs are the herbs that produce heat and Sudorific herbs are the ones that produce perspiration (sweating, and lots of it). This heat and it's accompanying sweating destroys bacteria, etc. and aids the skin in eliminating the dead bacteria and other toxins from the body. A 'controlled' fever is one of the best ways to kill 'critters' and restore the body to health. Twenty-four to forty-eight hours of moderate fever (and resultant sweating) is usually sufficient to accomplish healing in most instances. It should be noted, further, that if a person has a cold or other illness and does not 'run a fever' you can be quite sure that the immune system is weakened and is not responding properly to the attack that has been made upon the body. In this case, you would do well to react quickly with a diaphoretic herb, and a stimulant as well, to get the body's own defenses up and running.

The old herbal practitioners understood that because the capillaries of the skin are so numerous that it is possible for them to hold over half the blood contained by the whole body, they can be used effectively to eliminate toxic wastes and poisons. The inducing of a sweat treats the large skin surface as a very efficient eliminative organ. The increase of circulation to the capillaries also increases the healing effects of any herbal agents being used.

Among the herbs listed as diaphoretics are powerful agents in fighting everything from colds through pneumonia, and yet they are so harmless and gentle that they can be used with confidence on infants and elderly, infirm individuals alike.

Cayenne, while not usually listed in this category, must be considered and is often the first and only herb I reach for. Second to it is Ginger. These two herbs produce a great deal of heat and should always be considered if the person is abnormally cold or weak. My favorite way to induce a good sweat is to place the ill person in a bathtub to which has been added ginger - in any form from powder to tincture to essential oil. It is essential to wrap the person warmly upon leaving the tub, being very sure that they do not get chilled in any way. Leave them wrapped (and sweating!!) for at least 30 minutes.

Yarrow when given hot and in quantity will raise the heat of the body, stimulate circulation and produce perspiration. It opens the pores and regulates the function of the liver while toning the mucous membranes of the stomach and bowels and aiding the glandular system. I would be more likely to use Yarrow for stomach and intestinal upsets than for a head cold or bronchitis.

Yarrow contains Vitamins A, C, E, and F and some Vitamin K. It also contains manganese, copper, potassium, iodine and iron.

Chamomile's action as a diaphoretic is not as dramatic as that of Cayenne, Ginger or Yarrow. It has such a wonderful effect on the nervous stomach and nervous system in general, especially among children, that it should often be considered and used. The calming effects of Chamomile are, in part, due to the high content of calcium and magnesium found in this herb. It is important to note that Chamomile flowers should never be boiled, as the volatile oils which contain much of the therapeutic value would be destroyed.

Pleurisy Root, like Chamomile, is less dramatic as a heat producer but has specific action for the lungs and the pleural sac surrounding them. It assists expectoration from the lungs and bronchii, relieves inflammation and has a tonic effect on the whole respiratory system. I rarely use this one alone; rather I use it in combination with other herbs. Actually, for me, that is true of most herbs with the notable exception of Cayenne. This herb should not be used by itself when the skin is cold and the pulse is weak; a more stimulating diaphoretic would be more appropriate here. If the Pleurisy Root has been placed in a good combination, stimulant diaphoretics have already been added. Also, because of its strength and potency, its use for children should be very cautious and always accompanied by a stimulant herb of some sort - such as peppermint or cayenne.

Blessed Thistle should be briefly mentioned here because it can be used effectively with nursing mother's without reducing their milk supply as a side-effect of the fever and sweating.

Catnip is one of my favorites among this category, especially for infants, small children and any one of nervous disposition (or just restless in this particular instance or illness). This herb is especially useful for infants and children which have been prone in the past to convulsions when feverish; catnip prevents or halts the convulsions because of its soothing effects on the nerves and muscles. Mixed with Chamomile, catnip is excellent for colic in even the tiniest of babies. Catnip is especially noted for relieving the aches and pains that often accompany illness and fever.

Thyme and **Garden Sage** are two other excellent herbs in this category.

Expectorant and Demulcent Herbs

Expectorant herbs are those herbals which promotes the expulsion of mucus. Expectorants fit into two general categories; those that cause expulsion from the trachea, lungs or bronchii and those that cause expulsion from the stomach or intestines. Demulcent herbs are those which soothe and heal inflamed tissues. I will discuss Demulcent herbs here, in the same chapter as the expectorants, because so many of the good herbs cause the expelling of mucous and then heal and soothe at the same time.

The following is a short list of my favorites in this category and is certainly not an attempt to tell you all of the healing uses of any one of them. *These herbs are the great healers of the plant kingdom and each one merits an intense study of it's own!*

Comfrey To do comfrey justice would take pages and pages. I will quote a great herbalist, Dr. Shook, who said, "It does not seem to matter much which part of the body is broken or torn, either externally or internally, comfrey will heal it quickly. It is a great cell proliferant, or new cell grower; it grows new flesh and bone alike, stops hemorrhage, and is wonderful for coughs, soothing and healing the inflamed tissues in a most remarkable manner."

Mullein In reviewing my herbal notes to write this segment I found such references as 'Mullein has a particular affinity for the respiratory organs' and 'Mullein is of particular use in pulmonary complaints' and 'Mullein is particularly useful to the Urinary tract and the eliminative organs' and 'Mullein is particularly useful in calming and quieting inflamed and irritated nerves'. In other words, Mullein is useful in just about any circumstance. Mullein has the unique distinction of being both astringent (drying to tissues when drying is needed) and demulcent (healing and soothing) when this is needed). I personally add Mullein to a great many formulas, especially Kidney/Bladder ones, as a protective agent and to guarantee that accidental overuse will not result in further irritation and possible damage.

I particularly like **Marshmallow** because of it's availability in our area. There are many species of Marshmallow and none of them are toxic in the least and all are healing in a similar fashion and to similar degrees in nearly every system of the body and instance of distress or disease. It would be hard to find an herb that has so many listed uses or is found in so many formulas.

Slippery Elm is in a class by itself because of it's ability to neutralize stomach acids and aid digestion, particularly of the proteins in dairy products. Slippery Elm removes mucus faster and more gently than any of the other herbs that I have ever used.

Elecampane is often used in cough and respiratory formulas (rarely used alone) because it is a great expectorant and has great antiseptic properties. It is used around my house because of it's subsidiary benefits to the pancreas; elecampane is one of the richest sources of natural insulin.

Licorice is different from other herbs in this category; the list of vitamins and minerals that it contains are very different. It can definitely be classed as an Expectorant and a Demulcent because of its great healing properties but it works from a different 'point of view'. Licorice contains glycosides (rather than potassium chloride) as the expectorant agent and is a source of the female hormone estrogen. Licorice is a very stimulating herb, which makes it an excellent choice when recovering from a debilitating or lengthy illness, but it is ***contra-indicated for people with certain types of heart conditions***. Don't let the previous statement frighten you. The result of use with these people will be a rapid pulse (possibly erratic) which will subside very shortly. These symptoms should be used, however, as a signal to choose a different herb from this category for use next time.

An interesting note about expectorant herbs is that they **all** (except Licorice as noted above) contain potassium chloride. This seems to be the key to their expectorant properties as potassium chloride causes the mucous to become liquified and soluble while restoring the proper balance of Electrolytes and salts to the blood.

These herbs, while frequently taken internally with great effect, are also often applied as poultices. The combination of warmth and moisture that characterizes a poultice adds to their effectiveness.

Other herbs in this category include **Horehound, Flaxseed, Hops** and **Vervain** (to name just a few).

Healing Nervine and Antispasmodic Herbs

Before beginning a discussion of this class of herbs, a few things should be noted. First, the purpose of a 'nervine' herb is not to relieve pain, although that is often as not the result. Pain should be viewed as a friend because it is the body's way of alerting us to the fact that something is wrong and needs our attention. While you might often use a nervine or anti-spasmodic herb to relieve acute pain, the remedy should *always* be followed by an attempt to find and eliminate the underlying cause of the pain. This is true unless, of course, a nerve is the cause of the pain and the remedy was chosen to both deaden and promote healing. For example, you might successfully use BBL tincture to deaden the pain of a toothache or a headache, but unless you address the cavity or the lack of sleep the BBL is only a band-aid and the pain will, sooner or later, get away from you. On the other hand, the myelin sheath of the nerve is one of the first things to suffer in a nutritional deficiency, especially if the situation includes a lack of B Vitamins. The very herbs that deaden the pain also contain the missing nutrients to heal and rebuild. I think Nature is wonderful!! People take the remedy as though it were a medicine because it relieves the pain but, in reality, they are nourishing and strengthening themselves all the while!

Let's define these two classes of herbs. Nervines are herbal agents that feed, regulate, strengthen and rebuild the nerve cells of the body. Nervines fall into two categories; sedative ones which relax the nerves and dull pain, and ones with stimulating properties to improve mental and emotional stamina. Anti-spasmodics are herbs which prevent or relieve excessive spasms of both voluntary and involuntary muscles. These are treated together in most herbal texts because the distinction is often hard to draw. Many anti-spasmodics work because of their action on the nerves and most nervines are also anti-spasmodic.

The beauty of herbal nervines and anti-spasmodics is that they are **NOT** narcotic in any way. They do not cause addiction and they heal without harmful side effects and after effects. The body metabolizes them like any other food, leaving no ill effects or residues behind. It is a complete mystery to me why pain killers are so popular when the herbal world contains agents that are just as strong and effective but lacking in side effects and harmless to the liver!

I have chosen to give only a short sentence about each one, trying to highlight the differences in usage of each herb and list any safety data that might be helpful. In actuality (real life) I rarely use any Nervine herb by itself. They are much more effective and manageable in formulas, each formula 'tweaked' just a little to be particularly effective in certain circumstances or for certain people.

Chapter 5 contains a short treatise on the uses of **Lobelia**, by far the greatest of the herbs in this category, especially when used in conjunction with the Cohoshes and Vervain.

Another great herb in this category is **Scullcap**, which is used predominately for insomnia, hysteria, nervous headache, convulsions and any ailment that is accompanied by both restlessness and fever

Valerian is a very interesting herb. It is very distinctive growing in the wild because of the obnoxious odor of its roots and stems. It looks quite similar to many other members of the Umbrella family, but it certainly does not smell like them. The best way I can think to describe it is as a mixture of smelly sock and dead mouse!! Valerian is also interesting in that for most people it is gently stimulating and very soothing to the nervous system. For a few others, however, it is very stimulating or very sedative. I have seen reactions that included extreme nervousness (almost panic), heart palpitations, great irritability and annoyance and, on the other side of the scale, a deep and pervasive sleepiness and sedation. It is believed by many that the fresh plant (or a tincture made from the fresh plant) is less likely to produce this reaction. My experience does not bear this out, however. The worst reactions I have seen were in the wild with the fresh plant!

Valerian should, perhaps, be used cautiously the first time or two with each person. If no adverse reaction is experienced it should be a vital part of any herbal program. Valerian has a few very unique characteristics. One of these is that it influences the circulation by slowing the action of the heart while increasing its force. This makes it a leading component of remedies dealing with erratic heart beats and palpitations.

Valerian has a sedative effect upon the nervous system and can be used as a tranquilizer or sleep aid. Instead of leaving one feeling groggy or sluggish it produces a feeling of refreshment and vitality. Valerian is usually recommended for short-term use and caution is often advised with children. I would definitely agree with these recommendations if Valerian were being used by itself. Combined with the Cohoshes, Blue Vervain and Lobelia in Dr. Christopher's famous BBL (or B&B) tincture, it is a standard at my house, especially for children!! (See chapter 5)

Mistletoe is an herb that I use predominantly to stop excessive menstrual bleeding, bleeding after childbirth or bleeding associated with ovarian cysts. I find its mild sedative properties an added advantage at these times. I use it predominantly for a specific condition, rather than over the long-term, although the literature does not indicate this that I can find. I have, however, found that it lowers blood pressure too dramatically in some people for long-term use.

Lady Slipper is a leading herb in this category but has become almost extinct. It is extremely expensive and getting difficult to purchase. Constituent wise, the combining of the herbs Motherwort and Passion Flower make an excellent substitute for this wonderful herb.

Cramp Bark, Hops, Motherwort, Passion Flower, Peppermint*, Squawvine, St. John'sWort, Eucalyptus, Spearmint and Black Cohosh are a few of the other valuable herbs in this category.

***Peppermint is a relaxing herb in small doses usually taken warm; over done it can be highly stimulating, even irritating.** This is true of a great many of the calming herbs.

The Healing Astringent Herbs

First, let's attempt to define the meaning of the word 'Astringent' as it applies in herbal context. An astringent herb is generally defined as those remedies that contract the tissues and, thereby, arrest or limit discharges. These discharges may be from any organ or system - the intestinal area in cases such as diarrhea; blood hemorrhages from uterus, lungs, etc.; toning and drying the glands and tissues of the skin. This drying or contracting of the tissues is generally accomplished because of the tannic acid content of the herb. As the tannic acid content varies greatly from herb to herb, so varies the medicinal strength of the herb and the reaction produced in the body.

There are hundreds of herbs out there with varying degrees of this property and many of them work on more than one system of the body. I will mention only a few notable ones here.

Red Raspberry is frequently used by women of child-bearing age during pregnancy. The reason for this is, in part, it's mild astringent properties which tone (by gently contracting the tissues) the entire reproductive system. The hormones of pregnancy tend to loosen muscles structures which often results in the 'interesting' symptoms of pregnancy such as constipation (or, occasionally, diarrhea), frequent urination and bleeding gums. Red Raspberry, taken as a tea or tincture, greatly reduces these symptoms. Red Raspberry is often overlooked (I have certainly been guilty here) by herbalists when not dealing with the symptoms of pregnancy. Red Raspberry could be used with good benefit in most cases of diarrhea, constipation, stomach and intestinal upset and hemorrhoids. It should be considered by diabetics and used for sore mouth, sore throat and spongy gums. It is a main ingredient in formulas that are used in the eyes.

A wild form of Raspberry which is very effective, called Thimbleberry, grows everywhere in the mountains close around us here. I love to harvest this one because the leaves are huge and you can harvest so much in so little time!

White Oak is one of the most valuable astringent herbs because it is useful for both external and internal bleeding. It heals damaged and inflamed tissues of the skin, mucous membranes, stomach and intestines. *A tea of the bark makes an excellent wash for gum infection, a gargle for sore throats, and a corrective for diarrhea.*

White Oak is one of the few herbs I have even seen listed (and had any success with) as an antidote for drug reactions and chemotherapy side-effects.

Witch Hazel is a valuable and soothing astringent and is especially useful for the lungs, stomach, nose, rectum, uterus and kidneys. Applied externally it has a great influence on the veins and capillaries, making it excellent for varicose veins, bruises, insect bites, wounds and external bleeding.

Yarrow is an herb I would (and have) listed here and in several other sections. Yarrow helps to regulate the function of the liver and glandular system and tones the membranes of the stomach and bowels. It acts as a blood cleanser and opens the pores for the elimination of toxins and wastes bringing great relief to the kidneys. It's astringent action can be used to trigger the dumping of gallstones and kidney stones. The fresh plant placed on an open wound will cause almost coagulation of the blood and sealing of the tissues together.

Alterative and Adaptogenic Herbs

Alteratives are herbal agents that gradually alter and improve the body chemistry through purification of the blood. Alteratives accomplish gradual changes in metabolism and tissue function and can be used effectively in both acute and chronic conditions. Adaptogenic herbs are almost a sub-category of Alteratives in that they are the herbs in this category that improve and regulate immune function.

A few notes about some of these: **Plantain** is a great healer, both internally and externally. Used as a poultice or a soak it will remove and heal even advanced cases of infection in wounds, particularly in the extremities of the body. **Poke Root**, while used only sparingly internally because of its strength, is excellent for drawing infection, even when there is no open wound (such as in cases of breast infection, lung infection, inflamed bowel, etc.).

Golden Seal is, of course, a very renowned herb. Michael T. Murray, N.D., who has conducted vigorous laboratory trials of the constituents of herbs, claims that **Oregon Grape** has nearly the same constituents as Golden Seal but is missing a component that tends to make Golden Seal a little 'iffy' for use by people with Pancreatic problems (diabetics and those suffering from hypo or hyperglycemia). I have found, in the years that I have used herbs, that a plant that grows in one's own area (as opposed to one grown in, say, China) is more often more effective. For that reason (and because Oregon Grape is much cheaper or can be wildcrafted, I tend to use it in most formulas. I have been doing this for years and I have gotten the same excellent results that I used to obtain when using Golden Seal in the formulas.

Oregon Grape and **Goldenseal** both exhibit a broad spectrum of antibiotic activity because of their berberine content. These plants are also effective against bacteria, protozoa and fungi, including Staphylococcus and Streptomyces species. The action of these herbs is actually stronger than many of the pharmaceutical antibiotics, but does not allow the overgrowth of Candida that so often accompanies antibiotic use. In addition, berberine increases the blood supply to the spleen, thereby greatly enhancing immune system function.

Sarsaparilla is mentioned here primarily for two reasons. The first is because it has often been shown to be effective in the treatment of psoriasis. The second reason is because laboratory evidence support sarsaparilla as an endotoxin binder. Endotoxins are bacteria that are absorbed from the intestines. Normally, the liver filters these and other intestinally derived bacteria out of the blood before they reach general circulation. If the liver is not functioning properly or there is an overgrowth of bacteria in the intestines causing an excessive amount of absorption, the liver becomes overwhelmed and endotoxins spill into the blood. Endotoxins circulating in the blood are responsible for much of the inflammation and cell damage that occurs in such diseases as gout, arthritis and even psoriasis. When the endotoxins are bound to the constituents in sarsaparilla, they are passed harmlessly out of the body. Sarsaparilla is often added, usually in only a small quantity, to many anti-inflammatory and anti-infectious formulas.

Echinacea was discussed, briefly, in Chapter 3 on page 2. To really do this herb credit would take many pages. I highly recommend that you study this one in detail.

Dandelion increases the flow of bile which improves digestion and greatly enhances the absorption of vitamins and minerals. In addition, Dandelion, itself, contains many nutrients, including iron and a wide spectrum of B vitamins.

Red Clover is considered a mild alterative herb and is generally added to Alterative and Anti-infectious formulas, rather than being used by itself. Used in combination with Yarrow and Elder Flower it is very potent and a necessary ingredient in formulas such as the Children's Composition.

Elder Flower is considered one of the greatest and most versatile herbs because of its ability to cleanse the cells of the body from toxic waste. Among its many constituents are agents that act as sedatives, pain relievers, expectorants, anti-inflammatories as well as ones that reduce fevers and increase circulation.

Elder Flower and **peppermint** combine well to deal with fever, flu and cold symptoms. For infections combine with yarrow and Oregon grape. For lung and bronchial congestion it combines very well with Mullein.

I will close this section with a discussion of **Ginseng**. Ginseng, worldwide, is probably the most used and most widely studied herb of all. The information can be confusing - and a little misleading - until you have sufficient knowledge to sort the various species of Ginseng. Panax Ginseng, also known as Korean or Chinese Ginseng, is the most widely used and extensively studied. Four other closely related species are also often used. These are Panax quinquefolium (American Ginseng), Panax Japonicum, (Japanese Ginseng) Panax pseudoginseng (Himalayan Ginseng) and Panax Trifolium. Of these quinquefolium (or American Ginseng) is the closest in chemical composition. I have found it a very good substitute for the more expensive and more difficult to obtain Panax Ginseng. Another variety, Siberian Ginseng, (which is not a true Ginseng at all) will be discussed at the end of this Ginseng section.

Ginseng is processed in two forms: white and red ginseng. White is the dried root with the outer skin peeled off. Red is whole roots which have been steamed. Obviously, steaming and removing the outer layer both alter the final chemical composition of the end products.

There are many types and grades of ginseng depending on the source, age and parts used and on the methods of preparation. Old, wild roots are considered the most potent and the main or tap root is reputed to have the highest medicinal value. For economic reasons, much of the Ginseng on the market is of poor quality and often blended with adulterants. Good quality roots and products are available, however, with a little effort and persistence.

In Chinese Medical literature and lore, Ginseng is said to restore Yang qualities and is often used in Male tonics and medicines and to restore female functions that are the result of too much Yin. Translated (roughly) to Western thought, this means to balance the male and female hormones and is very effective in women who have too high levels of estrogen, putting them at higher risk for certain cancers and more likely to suffer ill effects at menopause.

The list of uses for this herb is very long in every book on herbal medicine. I will list a few of them here but will make no attempt to discuss them in detail. A deeper treatment of medicinal qualities and uses will be included in class discussions.

The most noted effects of Ginseng are in the slowing of the onset of both mental and physical fatigue when the body or mind is under great stress. These effects have been demonstrated in both animal studies and double-blind, clinical trials in humans.

Other noted, and well-studied, uses for Ginseng are: the treatment of Diabetes, reproductive system tonic and healer, anti-cancer properties, immunostimulant properties, strengthening of liver function, cardiovascular effects and protection of the cells against radiation.

A species of plant, *Eleutherococcus senticosus*, often referred to as **Siberian Ginseng** is a much used substitute for the other varieties discussed above. Not being of the *Panax* genus at all, Siberian Ginseng has a very different chemical composition; it contains no ginsenosides at all. However, it is a great Alterative and Adaptogenic herb in its own right. In many respects - in fact, in most respects - it is just as effective as the more expensive, and harder to obtain in good quality, *Panax* varieties. Siberian Ginseng has been shown to produce similar effects on mental and physical stamina, on the reduction of sugar levels and lipids in the bloodstream, in toning the adrenal glands and regulating blood pressure as *Panax* Ginseng and the other closely related varieties.

I find it very interesting that reliable clinical trials have shown conclusively that two such different plants could have such similar effects on the human body. It is a wonderful illustration of the fact that there is more than one way to accomplish 'cures' in the body, and leads me to speculate how much 'chemical constituency' accounts for herbal cures and how much more should be attributed to basic nutrition as discussed in the earlier chapter of this manual.

One notable difference in these two herbs: *Panax varieties have repeatedly been shown to be most effective when the body and mind are already showing adverse signs of reaction to stress.* Eleuthero, (*Siberian Ginseng*) *on the other hand, when given to healthy humans subjects in clinical trials who were then subjected to adverse physical and mental conditions, was shown to increase their ability to withstand the additional stress.* After giving this information considerable thought, I began using the two varieties together - acting on the assumption that most of us have some body systems that are already showing signs of debilitation from stress while other systems are still in good working order for the moment. This has been borne out by muscle testing. How I ask the question, and which body system I am asking about, affects the form of Ginseng I am instructed to use and, nearly always, both are requested when one or the other comes up. Some very interesting things to think about here, anyway.

Other Alterative/Adaptogenic herbs are: **Aloe Vera, Alfalfa, Burdock, Dandelion, Echinacea, Elder Flowers, Garlic, Ginseng, Golden Seal Root, Oregon Grape Root, Red Clover, Poke Root, Sarsaparilla Root and Oregon Grape.** **Chaparral** is also a great alterative but care should be used and it is not recommended for long term use as it is strong and very astringent.

Cathartic Herbal Agents

Cathartics are herbs that cleanse waste matter from the liver, gall ducts, and intestinal tract. They affect peristaltic action, the secretion of bile and the nerve impulses to these areas.

The class of herbs which stimulate the evacuation of the bowel must be divided in your mind between agents that cause moderate peristalsis without cramping and irritation and those which produce active or even violent peristalsis and are accompanied by intense cramping and purging. The herbs listed in books under this general distinction can range from laxative to mildly purgative to drastically cathartic.

In the category of moderate herbs are usually included **cascara sagrada** and **aloe vera** (typically used for the large intestine), **licorice** (benefits the entire intestinal tract) and **olive oil** (which has an affinity for the small intestine). Many fruits, as well as the drinking of large quantities of water, also have this effect. This category of evacuative herbs is generally recommended for infants, babies, the elderly or very weak people. Their action is usually mild and slow and are generally most effective when administered at night before going to bed.

The stronger purgative herbs usually accomplish evacuation in a time period of 8 - 12 hours and should be administered in the morning or between meals on an empty stomach. **Cape Aloes** (different from Aloe Vera), **senna** and **turkey rhubarb** are examples of this category and all work predominantly on the large intestine.

It should be emphasized that the purpose of herbal medicines is to bring about normal, healthy function in the body. Treating a condition such a chronic constipation by producing periods of diarrhea, which isn't healthy or normal either, does not accomplish this end. The gradual softening of the stool and establishment of normal peristalsis should be the goal. This may require a long-term change in dietary and living habits instead of the taking of and herbal remedy from time to time.

There are herbs available in the Wild Kingdom that have even more drastic action than the ones listed above. These are extremely irritating and can cause severe inflammation and destruction of delicate tissues. I can think of no valid reason to use these agents, but if you ever feel the need please be sure to use with and follow up by emollient and demulcent herbs (for a long period of time). Much harm has been done to too many people, in my opinion, by the overuse of purging and cleansing methods. I would personally put **Castor Oil** prominently on this list!! Anything that is strong enough to induce labor (which is what it is sometimes used for) by inducing violent cramping and evacuation of the bowel, is strong enough to think twice about using!

Other herbs (and fruits and some nuts) generally listed in this category are: **sweet almond, apples, apricots, asparagus, buckthorne, chickweed, chicory, fig, flaxseed, prune, red raspberry, safflower** and **black walnut**.

Among the herbs that stimulate the flow of bile are **aloe vera, dandelion, goldenseal, hops, licorice, Oregon grape root** and **Wild Yam**. Stimulating the flow of bile and, thereby, strengthening the digestive and eliminative organs in general is quite different from purging the bowels.

Herbs which strengthen liver function include **barberry bark, cascara sagrada, dandelion root, gentian, golden seal, gravel root, horseradish, olive oil, Oregon grape, parsley** and **Turkey Rhubarb**.

You will notice that some herbs appear on more than one list. How the herb works, exactly, depends a great deal on how it is used, when it is used and what herbs are taken in conjunction with it. Each herb should be studied in detail and thought given to how it combines with other herbs. A few notes on some of the herbs mentioned above are included here.

Cascara Sagrada is one of nature's best remedies. It improves the action and general tone of the bowel and does not cause 'reliance' or addiction. Some in the herbal world mistake the continued need for the nutrients provided by Cascara Sagrada as an unhealthy reliance on the herb, much like the reliance that is sometimes set up by non-herbal laxatives. As long as your diet is not supplying the nutrition needed for proper bowel function, there may be a need for Cascara. It has a great place in herbal medicine as a 'food' herb.

Please note that Cascara Sagrada is also listed as liver strengthening and stimulating to the gall-bladder. This is truly a great herb!

Senna is unusual in that it works very promptly - usually within 2 - 6 hours. The action of Senna is usually accompanied by cramping, gas and even nausea. These side effects can be greatly minimized by the taking of a little cloves, ginger, cinnamon, coriander or fennel.

Senna should **NOT** be used where there is bowel inflammation, hemorrhoids or intestinal bleeding of any sort. Test carefully. **THIS IS IMPORTANT!!** Large doses of Senna can cause severe vomiting and diarrhea and are generally not recommended. Dehydration and a renewed constipation are not usual with the taking of senna, probably because its action is so prompt and short-lived that it does not cause the dehydration of the bowel or the system in general.

The addition of **Licorice** to bowel formulas modifies (or makes milder) the action of the more drastic cathartic herbs. Licorice is of special benefits to bowel problems that are associated with circulation (hemorrhoids, for example).

Mandrake Root is not commonly used and I have not been prone to use it because its strength and potency make it easy to misuse. Mandrake should **NEVER** be given in overdose and should **NOT** be combined with quick (Senna) or brisk and violent cathartics. However, Mandrake has some special and unusual characteristics which make it valuable in certain circumstances and, when given in conjunction with mild herbs such as licorice or Cascara Sagrada, can be very beneficial. In small, well-managed doses, Mandrake's influence and action will continue for hours and sometimes days after use has been discontinued. It acts mainly on the duodenum (the connective tissue between the stomach and small intestine) and that quality alone makes it a very valuable herb. In chronic liver disease, there is probably no better herb any where on the planet.

Miscellaneous Categories

In this last chapter we will discuss, briefly, some of the other 'big' words that are often used in books on alternative therapies and list some of the herbs commonly used in these categories and situations.

Anthelmentic or Vermifuge Herbs

These herbs are the ones used for killing or expelling worms from the body. It should be noted right here at the beginning that the presence of worms in the body is often a sign of overall depletion, degeneration and ill health - although, occasionally the original infestation may have taken place at such a time in the person's life and a pocket still exists although general health has been greatly improved. Vermifuge herbs must ALWAYS be followed up by a comprehensive program of tonic herbs and excellent nutrition. Some herbs in this category are **Senna** (in large doses), **Wormwood** (sometimes called Absinthium), **Tansy**, **Pumpkin Seeds**, **Black Cohosh**, **False Unicorn** and **Hyssop**. Often a tea made with Hyssop is the only remedy needed and is much gentler to the system than some of the other alternatives. By their very nature, these herbs can be quite drastic in their effects and care should always be taken. That is not to say that they should not be used - of course there is sometimes a need for them - but they should be used cautiously and wisely. A renowned herbalist, Dr. John Christopher, was fond of saying that 'discomfort' (a polite way of saying downright misery, I might add) 'will be a sign of carelessness'. Small, frequently repeated doses are more likely to be effective and less likely to cause discomfort.

A note on Tansy which has a reputation for causing abortion. This may very well be so, but obtaining this undesirable effect during pregnancy would require extra large and most discomfoting doses and would almost certainly cause great irritation and destruction to the system in general!!

Emmenagogue Herbs

The definition of Emmenagogue is herbs that promote the normal flow of menstruation. There are presently over 150 herbs classed in this category and that doesn't begin to tell the whole story. The reasons for delayed or difficult menstruation are many and varied; from poor nutrition and general weakness to congestion resulting from a cold or fever (and many others). Any herb that clears the underlying condition could then be, and probably has been, listed as an emmenagogue. The best use, then, of an emmenagogue herb is in conjunction with an overall plan for the health and rebalancing of the entire body (mind and spirit, as well). A true emmenagogue herb is one that promotes contraction of the uterine muscles and stimulates bleeding. They should always be avoided during pregnancy.

The herbs I have chosen to list here are ones that have been shown to be of benefit to the female reproductive system in general. There are many others. **Motherwort**, **Chaste Tree**, **False Unicorn**, **Blue Cohosh**, **Blessed Thistle** and **Cramp Bark**. Herbs that strengthen the liver are also of great benefit here.

Analgesic

These herbs are used to relieve pain. Some herbs commonly used for this purpose are *Lobelia*, *Mullein*, *Pau D'arco*, *Scullcap*, *Catnip*, *Passion Flower*, *Wood Betony* and *White Willow Bark*. The herbs listed in the chapter on Nervines and Antispasmodics are often very effective here. Depending on the situation, pain relief herbs can be used either internally or externally (as a pack or liniment) or used both internally and externally at the same time. (See Pain Pack formula in the Herbal Tincture Recipes offered in this class)

Anthilitic and Lithotriptic

These herbs work to prevent the formation of gravel and stones in the gall bladder and kidneys. They also help to relieve those already formed. Some herbs used for this purpose are: **Buchu Leaves, Butcher's Broom, Cascara Sagrada, Cornsilk, Dandelion, Devil's Claw, Gravel Root, Horsetail, Hydrangea, Marshmallow, parsley, Uva Ursi Leaves and White Oak Bark.**

Carminative

By definition, these are herbs that eliminate and expel gas from the stomach and intestines. Some of the herbs commonly used are: **Angelica Root, Capsicum (Cayenne), Caraway Seeds, Cardamon Seeds, Catnip, Chamomile Flowers, Echinacea, Fennel, ginger, Hops, lemon Balm, Parsley Root, Peppermint, Saffron and Valerian.**

Emetic

Herbs which induce vomiting: **False Unicorn, Ipecac, Lobelia and Mustard Seed**

Febrifuge

Herbs which help reduce fevers. As discussed previously in the chapters on Stimulants and Diaphoretics, there are many ways to reduce a fever. The herbs listed here cover the entire range and should be studied each on their own. **Bilberry, Borage, brigham Tea, Catnip, Chamomile, Elder Flowers (my favorite), Fenugreek, Garlic, Gentian, Ginger, Hyssop, Pleurisy Root, Sarsaparilla and White Willow Bark.**

Nephritic

These are herbs used in healing the kidneys (as opposed to simply increasing urine output). Good herbal formulas for the urinary tract would contain some of both. The overuse of Diuretics without the addition of healing and demulcent herbs can actually create more problems that it solves. Some good herbs used in healing kidneys are: **Buchu Leaves, Golden Seal, Horsetail, Hydrangea, Juniper Berries, Marshmallow, Mullein and Oregon Grape Root.**

Pectorals

These are herbs that are healing to the broncho-pulmonary area, or heart and lungs in combination such as you would have in Congestive Heart Failure situations. *Horehound, Coltsfoot, Comfrey, Elder flowers & berries, Elecampane, Eucalyptus, Fennel, Flaxseed, Ginseng, Hyssop, Marshmallow, Mullein, Onion, Peppermint, Pleurisy Root, Slippery Elm, Spikenard, Spruce, Yarrow, Yerba Santa*

Ruberfacient

These herbs help to increase the flow of blood and nutrients to the surface of the skin to aid in healing in cases such as sprains and muscle soreness. Some herbs for this purpose include: **Camphor, Cayenne, Cloves, Eucalyptus, Garlic, Ginger, Horseradish, Mustard Seed, peppermint Oil, Pine Oil, Stinging Nettle** and **Thyme Oil**. There are, of course, many others.

Styptics

Astringent to the blood vessels when applied to an external surface, thereby arresting local bleeding or hemorrhaging. **Bayberry, Comfrey, Cayenne, Plantain, Stinging Nettle, With Hazel**

Vulnerary

Herbs in this category help promote the healing of wounds, cuts and abrasions. Some useful herbs are: **Aloe Vera, Black Walnut, Burdock, Cayenne, Comfrey, Fenugreek, Flaxseed, Gentian, Golden Seal, Hops, Horsetail, Mullein, Oatstraw, Plantain, Poke Root, St. Johnswort, Spruce, Thyme** and **Yarrow**.

Comfrey, Plantain and **Yarrow** are so phenomenal in this area as to be almost miraculous.

Arnica Flowers must be mentioned for the healing of bruises but it must be noted that *Arnica in anything but homeopathic form must not be put on open wounds.*

Doing A Cleanse Right

A Cleanse done with proper supporting herbs should not cause feelings of discomfort at all. The trick here is to balance everything in the proper proportions. Can be done easily if one pays attention to the signals the body is sending. For example: a backache, depending on location, usually indicates a need for increased attention to the kidneys or liver. A headache, depending on type and location, indicates a need for increased emphasis on the liver. Allergy symptoms, rashes, etc. are almost always a need for more work on the colon. You should have none of these symptoms, or very moderate and of short duration ones, if you are doing it right. If you do get symptoms, simply adjust your program.

Toxin Soaks

To aid in the elimination of toxins, drugs, pollutants, etc. from the body, always make Toxin Soaks a big part of your routine. A whole body soak is the most common way but, personally, I prefer just a foot soak. A whole body soak can sometimes leave you feeling weak and wrung out - even sleepy - for a while.

Whole Body Toxin Soak Recipe: 1 cup Sea Salt or ½ cup Epsom Salts mixed with 1 full box of baking soda. (1/2 cup of Redmond Clay in place of the Epsom Salts also works well) Place in a tub of hot water and climb in. Soak for at least 20 minutes, keeping the water as hot as you can. Alternatively, place 2 - 3 T. of Redmond Clay in a large pan (big enough for your feet) of very hot water. Soak for about 20 minutes, keeping it hot by continually adding hot water as necessary. It is amazing how well pulling the toxins just through the feet works. It is just as effective as the whole body soak, much easier, and doesn't seem to make one feel tired or weak.

I like to routinely add a product called Miracle II Neutralizer to my bath each time along with whatever essential oils I want at the moment. In this way, I am continually working on the detoxing of my body, instead of going all out only on occasion.

Water

Drink!! Drink!! Drink!! (Good water, of course) This cannot be overemphasized!! Sufficient water will keep the eliminative channels open and prevent a host of discomforting symptoms.

The Cleanse

A good cleanse consists of 5 parts: 1)Kidneys, 2) Colon, 3) Liver, 4)Blood and 5)Brain It is best to do the first 4 together as the body systems are dependent on each other and are usually in trouble together. It is difficult to keep the Liver and Kidneys functioning well if the Colon is continually dumping poisons into the blood stream. I have made an herbal tincture or two in each of these categories. The recipes are in my Herbal Tinctures File that is available in this class. I would recommend the following: Kidney Bladder, Liver Cleanse, Red Clover Combination (a blood cleanser), and Colon/Digestive. Use the signals that the body sends (or Muscle testing) to adjust dosages according to personal need. Essential Oils can be of great benefit during a cleanse.

The Diet

A good diet of simple, nutritious - but fairly light - foods is essential at this time. Pay particular attention to PH balance. It is important to be alkaline at this time. Certain unwanted bacteria cannot exist in an alkaline environment and good balance in the colon can be established as part of the cleanse if you pay attention to diet. Many people recommend a juice fast as part of a cleanse. I have no fault to find with this except that most people do not like vegetable juices and soon are drinking mostly fruit juices which are too acidic. The result is out of balance PH which results in canker sores, scaly skin and sometimes a Candida situation.

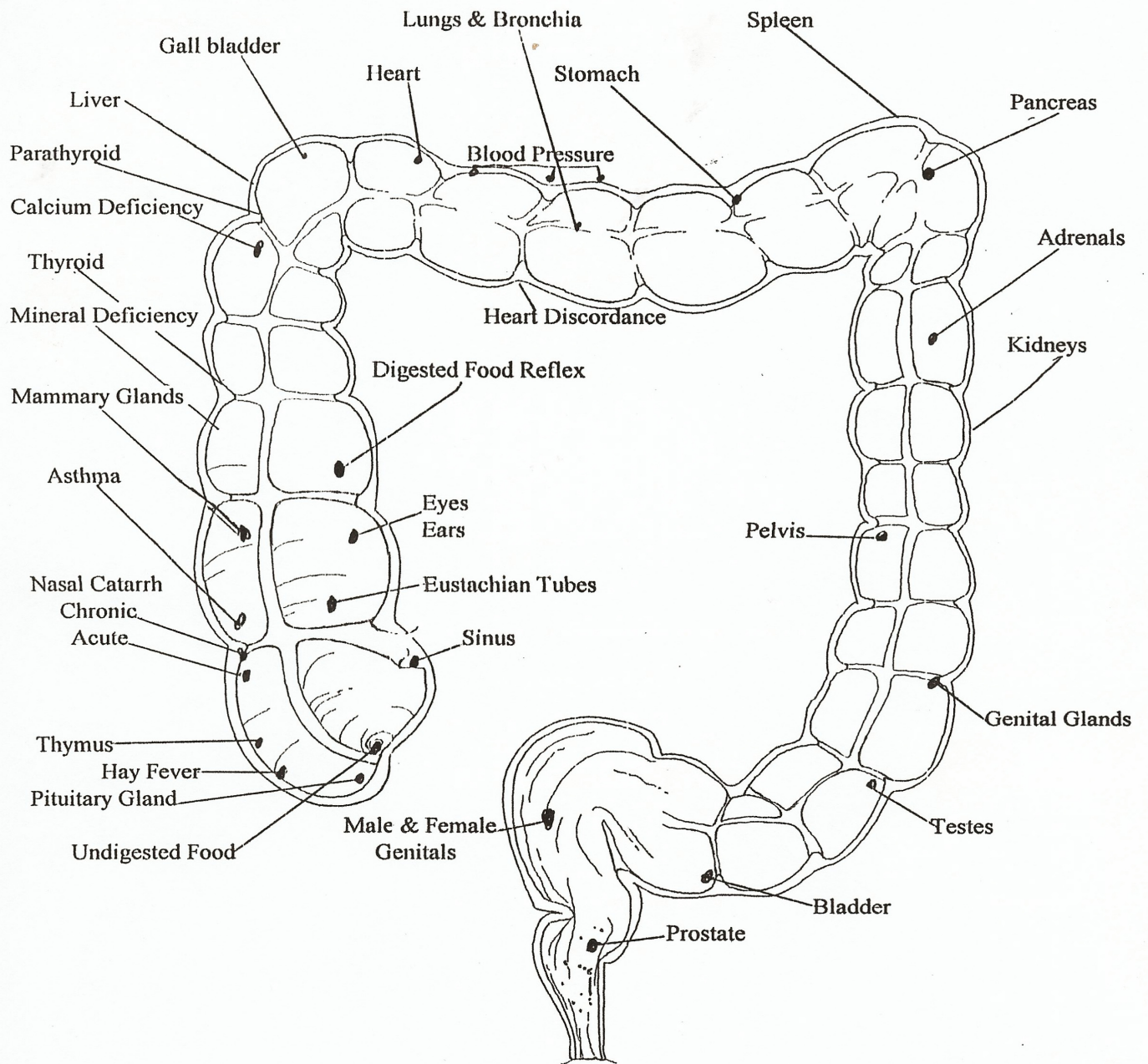
The Brain

The brain frequently stores toxic chemicals, preservatives and drug residues. This is particularly common if heavy colon cleanses have been conducted in the past when the kidneys and liver were not up to it or if one has been exposed to heavy metals (welding, etc) or pesticides, weed sprays and fertilizers. Toxins which were dumped into the blood stream simply took up residence somewhere else, typically along the brain stem, in the joints, under the muscles, along the nerve endings, or back into the liver. Homeopathic Metox - started very slowly and done with careful monitoring of the Kidneys, Liver, Colon, etc. as you go along and taking advantage of Toxin soaks will clear the brain stem very nicely. Essential Oils such as the blends IQ and Focus are also excellent here.

Rebuilding

Remember to rebuild and strengthen every system. This is a very important step. Do IT!! Some suggested things to use: Acidophilus, enzymes, vitamins, minerals, tonic herbs, etc.

High Mineral Tea Recipe: equal parts of alfalfa, red clover, dandelion, raspberry and nettles. I like to add comfrey, hawthorne, horsetail and oatstraw.



A diet which consists of 70 to 75% Alkaline foods will keep the eliminative and nervous systems strong. You will feel more energetic, with your entire body in harmony.

Acidic foods produce mucous in the body systems. We do need some mucous for the proper functioning of certain organs. However, if the body becomes too acidic it produces excessive mucous which can be a conducive medium for the growth of bacteria and viruses. Excessive mucous means congestion, which is the cause of so many illnesses. Colds, allergies, sinus problems, skin rashes and many other symptoms are the body's attempt to rid itself of the excessive mucous. (Note, these are not the real problem - they are only symptoms of the problem.)

Colds, infections and even chronic degenerative diseases will diminish as you move toward a more alkaline diet. Even if you are not sick, you will notice a beneficial change. Try it for even 2 weeks and see for yourself.

Alkaline		Acid	
<p>Fruits apples banannas citrus fruits dates grapes cherries peaches pears plums papaya mangoes pineapple raspberries elderberries boysenberries apricots olives coconut figs raisins melons</p> <p>Vegetables All veggies are alkaline including starchy ones like potatoes and squash</p>	<p>Grains millet buckwheat corn sSprouted grains oats, rye, wheat, barley & rice are acidic - but very nutritious and should not be avoided, only counted as acidic</p> <p>Nuts almonds brazil nuts</p> <p>Legumes soybeans limas great northern sprouted beans</p> <p>Sugars honey molasses</p> <p>Oils All oils except those listed as acidic</p>	<p>Fruits strawberries sour fruits</p> <p>Grains rice barley wheat oats rye breads</p> <p>Meats, Dairy all meats with fish & chicken being far less acidic than beef, port, seafood, etc</p> <p>eggs cheese milk yogurt butter</p> <p>Nuts cashews walnuts filberts peanuts pecans macadamias</p>	<p>Sugars brown sugar white sugar milk sugar cane syrup malt syrup</p> <p>Legumes lentils navy aduki kidney pintos</p> <p>Seeds pumpkin sesame sunflower flax</p> <p>Oils nut oils butter cream</p>

In working with this manual over the last several years, I have realized that in an attempt to present herbs in a left-brained and teachable way there is much about the subject I have left unsaid. ***Herbs cannot be wholly pressed into a rational, scientific box.*** Categorizing and labeling are foreign to any living thing. This is just as true of plants as it is of people. Every living thing has its own subtle beauty and inherent strengths.

I would like to briefly touch on some of these untouched areas.

First: My husband and I (he does this better than I do) look at the plants - every one, and perhaps the rocks and minerals, too - as personal messages from a loving Heavenly Father. Because he understood that we would not always ask for, or even recognize, his help in our lives, he endowed the various plants with his own healing capacities and invited us to partake of them to balance and heal our own lives. Plants affect us, not just on a physical (vitamin & molecular) level, but on a spiritual plane as well. It is impossible to use an herb to heal the physical body without partaking of its ability to bring light and wisdom, healing and peace into your life. The peace and wisdom will be multiplied many times over if you use the herbs with thanksgiving to the Creator and an acknowledgement of the role of the Atonement in the healing of both physical and emotional (spiritual) pain.

Secondly: Plants are living things. To feel the living spirit and intelligence of each plant is the true foundation of herbal medicine. Just as each plant can exemplify the attributes of our loving Father, so can the plants personify some lesson about the operation of the body and the soul. The possibilities for learning are endless. To think 'herbally' is to think differently; we must think as nature does - holistically. Nature emphasizes the whole, rather than the precise piece and nature has an inherent logic and wisdom. *In studying herbals, our goal is to see into the mysteries of a human soul, figure out how best to approach health problems and how to use medicinal herbs in a safe and successful manner.*

In order to understand a medicinal herb, it is helpful to understand its use in an historical context. Unfortunately, much herbal knowledge has been lost and this continuity is not always possible. It is interesting to note that rather the first use of an herb was by ancient folk doctors, allopathic medicine, homeopathic practitioners, etc. the medicinal properties of the herb are the same. The herbs properties do not change with time, methods of preparation or the philosophy of the user.

Herbs live in and adapt to environmental stresses which correspond to our own problems. The excesses of climate they experience are like the crucibles of life situations which we too must face. The triumphs of their life force over the adversities of Nature are etched into their genetic makeup, and these are mirrored by our own situations and the growth we experience through them. Herbs can be both our medicines and a reference point for understanding ourselves and the world around us. *Herbs, by their very nature, treat the imbalances within our systems, not the viruses and bacteria which settle into these imbalanced environments.*

Last and, to me, most important: I have found that herbs are many times more effective if used with gratitude, and especially gratitude to a loving Creator who established this world in such a way that the things we need for balance and health in every aspect of our lives are everywhere around us. This need for gratitude has been brought home to me in a myriad of ways over the years. I don't believe the God requires our gratitude for his glory. The commandment to be grateful is another example of God explaining to us what is best for our own souls. We will explore this idea of gratitude much further in a later class. For now, if you don't do it already, try doing all that you do in this 'alternative' medical world with a large measure of gratitude.

NUTRITIONAL COMPOSITION OF WILD FOOD PLANTS

(Based approximately 1 ounce of the fresh plant)

Name	Calories	Protein grams	Fat gr	Calcium mg	Phosphorus mg	Iron mg	Potassium mg	VitaminA I.U.	Thiamine mg	Riboflavin mg	Niacin mg	Vitamin C mg
Alfalfa <i>Medicago Satvia</i>	52	6.0	.4	12	5.1	5.4	-	3,410	.13	.14	.5	162
Amaranth <i>Amaranthas spp</i>	42	3.7	.8	313	74	5.6	411	1600	.05	.24	1.2	65
Blueberry <i>Vaccinium spp</i>	62	.7	.5	15	13	1.0	81	100	.03	.06	.5	14
Burdock <i>Arctium lappa</i>	89	2.5	.1	50	58	1.2	180	-	.25	.08	.03	2
Dandelion <i>Taraxacum off</i>	45	2.7	.7	187	66	3.1	397	14,000	.19	.26	-	35
Elderberry <i>Sambucus can</i>	72	2.6	.5	38	28	1.6	300	600	.07	.06	.5	36
Horestail <i>Equisetum arvense</i>	20	1.0	.2	58	93	4.4	-	180	-	.07	5.6	50
Mallow <i>Malva spp</i>	37	4.4	.5	249	69	12.7	-	2,190	.13	.29	1.0	35
Mint <i>Mentha spp</i>	32	3.0	.7	194	48	3.8	179	1,296	.13	1.16	.7	64
Nettle <i>Urtica dicica</i>	65	5.5	.7	-	-	-	-	6,500	-	-	-	75
Peppergrass <i>Lepidum spp</i>	32	2.6	.7	81	75	1.3	606	9,300	.08	.28	1.0	66
Raspberry <i>Rubus ideas</i>	73	1.5	1.4	30	22	.9	199	-	.03	.09	.9	18
Shepherds Purse <i>Capsella burse pastoris</i>	33	4.2	.5	208	86	4.8	394	1,554	.25	.14	.4	36
Violet <i>Viola spp</i>	-	-	-	-	-	-	-	8,200	-	-	-	210
Walnut, Black <i>Juglens nigra</i>	626	20.5	59.3	tr	570	6.0	450	300	.22	.1	.7	-
Watercress <i>Nasturtium off</i>	19	2.2	.3	151	54	1.7	202	4,900	.08	tr	.9	79
Yucca <i>Yucca sicifolia</i>	33	3.1	.2	47	73	.5	-	10	.14	.09	.5	-