Alternative Medicine: What you need to know John W. Golden, M.D., Medical Director, Genesis Integrative Wellness Center

What is Alternative Medicine?

Alternative Medicine is a term that is applied to all "unconventional" therapies that are not taught in a "traditional" Medical School. Personally, I do not like this term for two reasons. First, it implies that there are two different types of medicine, and, secondly, it suggests that there might be a right and a wrong way to provide healthcare, and that the two are incompatible.

Having said that, I prefer the term "Complementary Medicine," because it suggests that although there are different schools of thought, there is benefit from combining them for the betterment of the patient.

My favorite term, however, is "Integrative Medicine," because it says that all forms of therapy have value, and that the best needs of the patient are served by a skillful blending of the best of Conventional Medicine and Complementary Therapies.

Currently, there are several training programs throughout the United States that are training physicians in this new and exciting specialty. Many people believe that this is the Medicine of the future because it offers a wider variety of options for the clinician, beyond the traditional paradigm of medications and surgery.

Integrative Medicine has four basic principles:

First, Integrative Medicine emphasizes healing, not curing. The conventional medical model, with its emphasis on technology, focuses on curing. Curing is the absence of disease. Healing is a concept which implies a return to holism, a sense of peace and acceptance of what is. Curing is not always possible, but healing always is. Furthermore, Integrative Medicine recognizes that the body, if given the proper conditions, possesses everything it needs to heal. Our role, as physicians, is to enhance the body's natural ability to heal.

Secondly, Integrative Medicine treats the patient as an equal partner in the healing relationship. I, as the physician, bring my expertise in various disease states to the relationship. Correspondingly, the patient brings his/her expertise in their own individual expression of disease. Together, we put together a unique therapeutic plan for that individual. Integrative Medicine is not one-size-fits-all medicine.

Thirdly, Integrative Medicine looks at the patient from a holistic perspective. You see, each of us is a multidimensional person. We are physical, emotional, mental, and spiritual beings. In order to evaluate the patient fully, we have to consider not only each of these dimensions individually, but, also, how each affects the others.

Fourthly, Integrative Medicine views all disease as a process, not an event. Whenever we look at a disease, we need to consider where on the continuum the disease state is. From that understanding, it is much easier to plan a treatment course.

Finally, within this framework, Integrative Medicine employs the various conventional and complementary therapies in cooperation with the patient to create the unique clinical course for that patient.

Having done a two year Fellowship in Integrative Medicine at the University of Arizona, I have brought these skills to my practice, and have found that many of my patients are already seeing a variety of Complementary providers, such as Chiropractors, Massage Therapists, Acupuncturists and Oriental Medicine practitioners. For the most part, however, there is no communication between the providers. The ability to understand the language and terminology of these other disciplines allows me to serve as a coordinator of care for my patients, as well as answer some of their questions. In order to help you understand this discipline, I will share with you some of the most common questions I am asked by patients.

What are the most common Alternative, er, I mean, Complementary Therapies?

There are multitudes of Complementary and Alternative Medicine (CAM) options available to the curious patient. Some have established themselves due to their cultural and traditional use. Others are of more recent origin, but have been researched and shown to have merit. The criterion that I use in considering a therapy is that it must have evidence of both safety and effectiveness. How I choose one or the other is based on the patient, the problem, and the goals we set together. Here is a list of how they are frequently classified:

Traditional or Cultural Systems

Ayurveda – traditional Indian Medicine Oriental Medicine Native American Medicine

Manual Medicine Osteopathic Manipulation Chiropractic Massage Therapy

Lifestyle Interventions Diet Exercise Nutritional Supplements

Mind-Body Therapies Hypnosis Biofeedback Guided Imagery Spirituality **Botanical Medicine** Herbs

Energy Medicine

Homeopathy Reiki Healing Touch Acupuncture

In the interest of space, and because some of these are addressed elsewhere, I will not discuss all of these therapies, but will focus on the ones I am asked about the most.

I have a friend that sees a Chiropractor. What do they do?

Chiropractic is based on the principle that health and disease are related to structure and function of the spinal column. The amount of health one experiences is proportional to the degree that the spinal column is aligned and to which there is limitation of inflammation.

According to Chiropractic philosophy, the body has an innate ability to heal itself. That ability is compromised by local injury at the spinal segmental levels. The nature of such injury may be traumatic, degenerative, or compressive. It has also been described in stress, or other emotional circumstances. The injury, in turn, creates segmental derangement, or subluxation, a term used to define the disruption at the local spinal level. A cascade of inflammation ensues which causes swelling, limitation of movement, and spinal nerve irritation. As the problem becomes more chronic, the derangement may affect the tissues innervated by the spinal nerve that originates at that segment. This, in turn, explains the persistence of symptoms that occurs even after the acute inflammation has diminished.

Chiropractic therapy consists of a large variety of techniques, using specialized tables and instruments, and featuring much individualization between practitioners. Spinal Manipulative Therapy is the term used to encompass all types of techniques used by Chiropractors. Mobilization is a slow, passive movement within the normal range of motion. Manipulation, or adjustment, as it is commonly called, is a mechanical movement of a joint in a particular range and direction, usually by hand, that often produces the "pop" that patients experience. Both mobilization and manipulation are used to realign segmental derangement, and, thus, to facilitate joint motion.

Medical referrals to Chiropractors have been limited in the past because of a perception that it was an unscientific form of therapy. However, a large body of literature has demonstrated the benefits of chiropractic treatment, especially in low back pain, neck pain, and headaches. More and more, the gap between the two disciplines is shrinking and there is the beginning of a collegial relationship.

Does Acupuncture Work?

Acupuncture is only one part of a larger healing system, Oriental Medicine, which also includes diet therapy, herbal therapy, exercise techniques (Tai Chi and Qi Gong), medical massage (Tui Na), and meditation. Acupuncture uses a series of precisely placed needle into defined energy channels, called Meridians. There are 14 principal meridians with 361 documented basic acupuncture points on the surface of the body, each with its own name and function.

The basis of Acupuncture is that life force energy, Qi (pronounced CHI), circulates throughout the body in Meridians. These meridians, in turn, interact with internal organs deep inside the body. Health or disease is defined by whether the meridians are open or blocked, and whether Qi is stagnant, deficient, or in excess. Qi is defined as different from blood, lymph, or other bodily fluids defined in Western medicine. Currently, there are no techniques in Western Medicine to measure this energy.

Acupuncture has been practiced in Asia for thousands of years. It came to the West in the 1970s due to a reporter's experience. While traveling with President Nixon in China, the reporter developed appendicitis and had acupuncture for pain relief. He was so dazzled by his experience that he reported it on the front page of the Washington Post, and America's fascination with Acupuncture was born.

There are multiple schools of Acupuncture, some of which only focus on one part of the body, like the ear or hand. In addition, there are different ways to stimulate the acupuncture points, including needles, electric current, acupressure (rubbing or pressing on the point), pellets, or laser.

Although in Chinese Medicine there are countless conditions treated with Acupuncture, the World Health Organization describes over 40 conditions in which Acupuncture's usefulness has been supported by scientific evidence. These include pain syndromes, arthritis, and a variety of other conditions. Some studies have shown the pain relieving properties of acupuncture in conditions like arthritis surpass the pain relieving effects of some pain medications.

Many people are intimidated by the concept of having needles placed in their body. I can assure you from personal experience that the needles are so fine that they go in without any discomfort. If you have a painful condition, I would recommend you give acupuncture a try.

What are the benefits of Massage Therapy?

Massage therapy is one of the oldest forms of therapy known to man. As long as we have been interactive, there has been healing attached to the placement of hands and the massaging of muscles. Some of the oldest recorded medical writings have included narratives on the healing power of massage. Massage Therapy heals by assessing the soft tissues and, using scientifically based techniques of local movement and pressure, thus normalizing them. The techniques are useful for all the body systems, especially the musculoskeletal, circulatory, lymphatic, and nervous system. Through massage, the muscles are relaxed, toxins contained in the muscles are mobilized, and circulation and lymphatic drainage of those toxins is accomplished.

As mentioned, touch is the most therapeutic part of massage. However, the art of massage is the ways in which that touch is applied. Sensitive touch allows the detection of a great deal of information, including areas of inflammation, muscle tension, and stress. Touch also conveys caring, which is an essential ingredient of the healing process.

There are many different methods of massage which differ in the placement of the hands and the degree of pressure applied. Over centuries, the science of massage therapy has described the right ways to massage, but also has demonstrated that there are wrong or toxic methods of massage.

There are over 100 forms of Massage Therapy, and about 75% are less than 20 years old. As technology evolves and our ability to measure the outcomes of new techniques increases, newer styles are developing all the time. In general, Massage Therapy schools arise from one of five categories:

Traditional European: Probably the best known form of Massage Therapy. Based on Conventional concepts of Anatomy and Physiology, and incorporating five basic techniques Effleurage (gliding strokes), Petrissage (kneading), Friction (rubbing), Tapotement (percussion), and Vibration. An example would be Swedish massage.

Contemporary Western: Based on more modern understandings of human functioning, and using a wide variety of manipulative techniques. Many include mind body work as well. Examples include Neuromuscular Massage, Manual Lymph Drainage, Sports massage, and Myofascial release.

Structural, Functional, and Movement Integration: Using gravity and other positional relationships to correct inappropriate patterns of movement, as well as balancing the nervous system through new patterns of movement. An example would be Rolfing.

Oriental: Based on Traditional Oriental Medical principles of treating the energetic flow within the body. The trained use of pressure and manipulation along the energy channels allows for the balancing of energy flow and healing. Examples include Shiatsu, Acupressure, and Tui Na.

Energetics: Based on the belief that the body consists of and is surrounded by an energetic field. Disruptions or imbalances in this field can affect health. The practitioner uses touch in and through this energetic field to balance and correct energy derangements. Examples include Therapeutic Touch, Healing Touch, and Reiki.

Massage Therapy has been studied and found to be safe in all age groups - from the prenatal period through old age. Many conditions have been shown to be helped by this discipline. Some conditions in which to avoid Massage however, include active infection or acute inflammation where the massage might enhance spread. Cancer is a controversial area for massage because of the possibility of enhancing lymphatic spread of tumor cells. There is a great deal of discussion about whether that is a theoretical or distinct possibility. Frankly, I have mixed feelings about the controversy. I respect the possibility of tumor spread, but also value the therapeutic aspects of touch. As a result, I currently recommend only gentle superficial massage, if at all, for areas surrounding, and prefer a more energetic massage such as Reiki or Healing Touch in these patients.

One other point that needs to be made involves the confusion between Massage parlors and Massage Therapy. Many people have heard about this more sordid and sensual aspect of massage parlors and equate that with Massage Therapy. Nothing could be farther from the truth. Again, I want to emphasize that Massage therapy is a scientifically based healing discipline, and a Certified Massage Therapist is a valuable member of the healing team.

My neighbor has a child with recurrent ear infections and has used Homeopathy to help. Is there anything to that?

Homeopathy is a practical system of healing developed by Samuel Hahnemann in the early 1800s after years of personal research. It is based on the presumption that each individual possesses a self-healing ability, or vital force. Homeopathy works by activating this intrinsic ability. The self-healing ability allows the individual to return to balance, but also creates limitations. Homeopathy is only able to work within the limits of the individual's self-healing ability.

While working as a translator of medical texts in 1790, Hahnemann was intrigued with a theory about the use of cinchona bark as a treatment of malaria. To test his theory, he took cinchona bark himself and recorded his symptoms. To his amazement, he developed a group of symptoms very similar to malaria. He remembered how Hippocrates, the father of modern medicine had described "The Law of Similars" in which he proposed that drugs that produce symptoms in healthy people will treat similar symptoms in sick people. Hahnemann went on to test, or "prove" other substances, the results of which he carefully chronicled and later published.

From his experiments, Hahnemann created a system of healing based on several laws:

The Law of Similars: In order for the "drug" to act homeopathically, the "proved" symptoms of the remedy must be exactly matched to the symptoms of the patient. This includes not only the general physical symptoms, but also the specifics, like location, mitigating factors, and other areas of the body involved. In addition, mental, emotional and any other concomitant symptoms must be included in the description of the process. Because of the specificity of remedy, The initial interview, or constitutional case-taking,

by a homeopathic practitioner often takes 1 to 2 hours.Hahnemann carefully cataloged his individual remedies into a large volume called the *Homeopathic Pharmocopeia*, which, at last printing, includes over 1000 substances. Classical Homeopathy uses substances individually. Although combination remedies are available today, Hahnemann always emphasized using one remedy at a time and discouraged the use of combination remedies.

Single Dose: Hahnemann taught that one dose would stimulate the body and create a change. It was important for the practitioner to be patient and observant, but most of all resist the temptation to repeat the treatment too soon. To do so could inactivate or interfere with the healing response.

Minimum dose: Another of the basic laws states that the lowest possible dose should be used to stimulate the healing response. Too high a dose or additional doses would render the remedy ineffective.

The Laws of Cure: This basic tenet holds that removal of symptoms is not enough; the objective of treatment is cure. In addition, disease moves in a particular direction as it progresses, and correspondingly, moves in the opposite direction as it is cured. It moves from the more vital organs to the less vital organs, from within to without, form above to below, and in the reverse order of appearance. This gives the practitioner markers to observe the effectiveness of the treatment.

The Law of Dilution and Succussion: This is one of the most difficult laws for the conventional practitioner to understand. Hahnemann was concerned that some of the substances used were poisonous, and tried to find the minimal dose required to be effective. He noted that not only did diluted remedies produce fewer side effects, but also maintained their medicinal properties. Hahnemann also discovered that by succussing (vigorously shaking or striking the dissolved remedy), an increase in healing power occurred. The more the medication is diluted and succussed, the stronger the remedy becomes. There are three categories of homeopathic potencies: X potencies (diluted 1 part per 10), C potencies (diluted 1 part per 100), and M (diluted 1 part per 1000). This is where the sticking point is for many conventional practitioners. Much of the controversy relates to how such a dilute concentration can have an effect. Much of the result has been ascribed by conventional practitioners to the Placebo effect, because with enough dilutions, there is literally none of the initial substance in the solution.

In truth, we do not know how Homeopathy works. Supporters attribute the mechanism of action to "Smart Water". According to this belief, every substance, when dissolved in a solvent, leaves a unique energetic imprint of itself within the solvent. The repetitive dilution and succussion enhances this vibrational imprint and strengthens its potency.

Whatever the mechanism, there have been double blinded studies which attest to the effectiveness of Homeopathy in various conditions. Homeopathy is safe, with no known side effects if the proper remedy is used. The common reasons that someone would choose Homeopathy include disliking conventional "drugs", wanting a "safer" remedy,

looking for a less costly alternative, wanting a more holistic approach, and a provider who spends more time. Assuming that the person has a strong enough vital force, Homeopathy may offer an effective alternative. There are nonclassical homeopathic preparations available at your local health food store or pharmacy. Assuming that a person has an acute, self limited disease, an introductory book on Homeopathy, or a nonclassical combination product may be adequate. However, anyone with a chronic disease is advised to seek care from a qualified professional.

Is Herbal Medicine safe?

Herbal Medicine is defined by the European Union as "medicinal products containing as active ingredients exclusively plant products and/or vegetable matter." In reality, herbal medicine is the oldest form of medicine on the planet. As long as humans have inhabited this planet, they have lived surrounded by plant life. Herbal remedies have developed through experimentation, cultural and family traditions, and anecdotal reports. As civilizations developed, their were designated "keepers" of the secrets – Medicine Men and Women who were charged to investigate and pass on these healing secrets to subsequent generations. In fact, Herbal remedies are the foundation of many of the cultural and traditional Medical systems, such as Oriental, Indian, and Native American healing traditions. According to the World Health Organization, 80% of the world's population has plant based therapies medicine as part of its "conventional "Medicine". What we consider "conventional Medicine" is Alternative Medicine for that large population!

At the beginning of the twentieth century, physicians commonly used herbal remedies as their major form of treatment. Gradually, however, as the use of pharmaceutical preparations became more prominent, the use of herbs became increasingly scarce. This has not been the case in Western Europe, where approximately 30-40% of people use herbs as their mainstay therapy. In fact, the governments of France and Germany, in particular, have devoted great resources to the investigation and validation of herbal preparations as part of the professional arsenal of their physicians. In this country, there has been resurgence in the interest in herbal remedies over the last twenty years. This interest has been fueled by several factors:

First, there is a belief that "Natural" is safer than pharmaceutical. While this is mostly true, natural remedies still should be used with discretion, and should always be disclosed to your persona healthcare provider.

Secondly, herbs are cheaper than meds. This is for the most part true, even when prescription co-pays and discounts are figured in. As the cost of health care continues to rise, people are looking for alternatives to control costs.

Thirdly, there is an ever increasing wealth of information available to the consumer on the internet promoting the value of herbs over medicines. The problem comes in filtering out the good from the bad information that is available. Fourth, there is a distrust in pharmaceuticals that has bee born out of the increasing "direct to consumer" advertising combined with the high profile withdrawal of medications, such as Vioxx. In other words, people are more familiar with the new medications that are prominently advertised. When some of those same medications get withdrawn, amidst the loud background of class action suits, people are becoming more suspicious of the development and approval of prescription medications.

In some of the large studies that have measured consumer preference, there have been significant increases in the public's favorable attitude and use of herbal remedies. This trend however, has not been accompanied by the same level of interest on the part of conventional physicians. In truth, there has been a backlash of articles questioning the validity of remedies that have been used for many generations.

The Pharmaceutical industry has little interest in researching plants as remedies because they cannot be patented. Therefore, the information gained cannot be used only by that company. Instead, they have focused on isolating active constituents, purifying them and acquiring a patent for them. According to several sources, as many as 40% of our known pharmaceuticals have been developed in this way.

Herbal medicines, or phytomedicines, are made from plant materials, for the majority of which, the active ingredient is unknown. They may contain a single biologically active compound, or their effect may be due to a complex mixture of compounds whose combined effects produce the end result. The amount of active constituents may vary due to a host of factors, including soil type, sun exposure, rain amounts, timing of collection, temperature, maturity of the plant, associated surrounding plant life, and storage conditions. It is felt that the level of constituent chemicals is derived by these factors because they provide the plant with an advantage against other plants, as well as natural conditions like insects, sunlight, drought, etc. In general, the active constituents are present in lower concentrations than purified, single ingredient pharmaceuticals. This is one of the factors that contribute to lower risks than a single purified compound. Another is the fact that many of the compounds work to balance the effect of another compound in the same plant. For instance, amongst the many helpful ingredients in green tea is caffeine. As we all know, caffeine is a biologically active stimulant. Also present, however, is an amino acid, L-theanine, which has a calming, but non-sedating effect which balances the stimulant side effect of the caffeine.

Herbal medicines are available in many forms, and are made from whole plants, plant parts, or extracts or concentrates of active plant compounds. They are available as fresh plants, and in solid or liquid forms. Fresh plants are typically prepared as an infusion, in which boiling water is poured over the plant and allowed to steep, as in a tea. A decoction is a little different in that the plant is boiled in water and then the excess remaining material is strained off leaving the active compounds in the liquid. Other liquid forms include medicinal oils, medicinal spirits, plant juices, syrups and tinctures, and glycerites. Solid forms are available as powders –either whole plant or extracts, and concentrates, and can be administered as granules, coated or uncoated tablets, capsules, or lozenges. In addition, many herbal products are standardized, meaning they contain a percentage of an ingredient used either as a reference marker of quality, or as a measure of an active ingredient. They may be purchased either as a single ingredient product or as a combination product, where two or more herbs are combined for additive or synergistic effect. A recent survey by Information Resources, Inc. examined herbal sales in 2004. Table 1 is the ranking of the top twenty selling herbs and the dollars spent:

Rank/Herb	Dollar Sales
1. Garlic	\$27,013,420
2. Echinacea	\$23,782,640
3. Saw Palmetto	\$20,334,030
4. Ginkgo	\$19,334,010
5. Soy	\$17,419,530
6. Cranberry	\$13,445,670
7. Ginseng [†]	\$12,165,220
8. Black Cohosh	\$11,984,960
9. St. John's wort	\$9,087,829
10. Milk thistle	\$7,775,529
11. Evening primrose	\$6,088,103
12. Valerian	\$3,449,297
13. Green tea	\$2,794,783
14. Bilberry	\$2,341,301
15. Grape seed	\$2,330,281
16. Horny goat weed	\$2,203,555
17. Yohimbe	\$1,835,313
18. Horse Chestnut	\$1,564,550
19. Eleuthero	\$992,286
20. Ginger	\$814,789
Multi-Herbs [‡]	\$52,049,290
All other herbs	\$11,841,120
Total Herb Supplements	\$257,514,900

Table 1. Top Solling Horbol Distory Supplements in the Food Drug and Mass

* Data courtesy Information Resources, Inc., Chicago, IL. All data are based on sales in FDM channel for 52-week period ending Jan. 2, 2005. Data do not include sales from Wal-Mart stores, or sales from other market channels: health and natural food stores, mail order, MLM companies, health professionals, warehouse buying clubs, and convenience stores.

[†] Presumably includes Asian ginseng (*Panax ginseng*) and American ginseng (*P. quinquefolius*)

‡ Multi-herbs refers to combination formulations containing more than one herb.

There is a misconception amongst the consuming public that because herbal remedies are "natural" they are also harmless. And while it is true that there are fewer adverse reaction reports filed for herbals than pharmaceuticals, it would be erroneous to believe that they are free of side effects. Moreover, because their ingredients are chemicals, they are processed and removed from the body using the same metabolic pathways as medications. Therefore, there is the potential for drug-herb interactions, which could enhance side effects of the herb, the medication, or both. This point is especially important because a recent study suggested that as many as 60% of patients taking herbal therapies do not report them to their physician because they believe them to be of no concern.

There are several areas of concern related to the use of herbal medicine. First, under current FDA guidelines, herbs fall outside the regulatory guidelines of the FDA. Therefore, there is no guarantee of the purity, or potency of the product. In addition, because herbs are derived from plants, differences in growing conditions can lead to variability in the potency of the same herb between batches from the same manufacturer.

Secondly, the potency of the product is usually related to the part of the plant used, and some manufacturers do not include this important point on the labeling. Product mislabeling, adulterations, and misidentification have occurred. Furthermore, there is confusion between the use of the whole plant or standardized extract of the herb. In general, a "standardized extract" will contain a measured amount of an active ingredient which has been shown to correlate to activity.

Thirdly, the use of herbs in pregnancy, breastfeeding, in children, and in serious medical conditions should only be used under the direction of a trained professional, because of the potential for harmful side effects. In any case, any herbal medicine should be stopped if any side effects should occur.

Some of my favorite herbal remedies include Saw Palmetto for symptoms of enlarged prostate in men; Black Cohosh for post menopausal symptoms in women; Echinacea for viral infections; St. John's Wort for mild to moderate depression; Ginger for nausea, motion sickness, and its anti-inflammatory effect; and valerian root for insomnia. All of these should not be used without some personal research into side effects and

interactions. In addition, if you are taking medications, check with your physician for any interactions.

A listing of the most common herbal remedies and their indications can be found at the website of the American Botanical Council, <u>www.herbalgram.org</u>. Other resources include "The Healing Power of Herbs," and "The Encyclopedia of Natural Medicine," by Michael Murray, N.D.

Should I be taking Supplements? And, if so, which ones?

Supplements are just that, a supplement, or a part of a healthy lifestyle. Contrary to the claims of some, they, by themselves are not the answer to health problems. I will go so far as to say that a person will be healthier following a healthy lifestyle without supplements than taking supplements and following an unhealthy lifestyle. Having said that, I still recommend supplements to complement the rest of a person's health plan, but I think that any supplement plan should be goal directed. I have had people come into my office literally with two shopping bags full of supplements. When I ask them why they take them, the response is usually something like, "I read about them in a magazine," Or "I saw it on TV." Typically, most people have no recollection why they are taking most of the products they are.

In addition, when thinking about supplements, you need to think in terms of maintenance or therapeutic reasons. In other words, are you taking the supplement for day to day maintenance of function, or are you taking the supplement to accomplish some therapeutic endpoint.

With that prelude, here is the list of the basic supplements I recommend:

First, and foremost, as a maintenance supplement, I recommend a comprehensive multivitamin and Mineral preparation. For this purpose, I regularly discourage the typical one-tablet-a-day multi, unless, as I tell my patients it's as big as a golf ball. The reason for this is that most one-tablet-a-day multi vitamins are designed to be maintenance products. In other words, they assume that you are getting the vast majority of your nutrients from your diet; that your activity and stress levels are consistent; and that you have no pre-existing deficiencies of nutrients. As you can imagine, this description applies to very few individuals. For the majority, there is inconsistency in diet, activity, stress, and, in a large percentage of people, preexisting nutritional deficiencies. In my mind, it is better to take more nutrients than you body needs and let it decide what is important, than to find your body wanting for more than is delivered.

Secondly, I recommend fish oil. We live in a society that encourages inflammation. The typical American diet is rich in a type of polyunsaturated fat called Omega-6, which has pro-inflammatory effect, thickens the blood, and constricts blood vessels. While this type of reaction might be important in certain situations, such as infection, or bleeding, for most of us it increases our risk of inflammation. By contrast, there is another type of polyunsaturated fat called Omega-3, which has the exact opposite effect – anti-inflammatory, thins blood, and dilates blood vessels. This type of effect is important in

preventing inflammation. Both types of fat are essential for human health but must exist in balance. Medical historians tell us that in ancient times, when our ancestors were hunter/gatherers, these types of fats existed in a ratio of 1:1 to 4:1 (omega6:omega3). In the typical American diet, these ratios range from 20:1 to as much as 40:1. The primary sources of omega-6 are corn, soy, canola, safflower and sunflower oil; these oils are overabundant in the typical diet, which explains our excess omega-6 levels. Fish Oil is a natural, highly potent source of omega -3 oils. Good sources of omega 3 also include cold water fish, such as salmon, mackerel, tuna, sardines, as well as walnuts and flaxseed oil among others.

The choice between fish and fish oil is currently controversial. Many critics suggest avoiding fish because of the potential of contamination from heavy metals and environmental toxins. Pond raised fish would seem to be safer, but in actuality are not, due to feedings that are high in the same contaminants. Another disadvantage is that pond raised fish are not exposed to the cold temperature that occur at the depths these fish typically live at, and therefore contain lower levels of the essential fats. Although I recommend fish, I usually advise patients to question sellers about the origin of the fish.

Another supplement that may need to be supplemented is Calcium with Vitamin D for osteoporosis. Multiple factors in our society conspire to create calcium deficiencies. Much of our diet, rather than helping in this regards, actually conspires against us. Something as common as soda pop, which is high in phosphoric acid, actually may leech the calcium out of our bones. In addition a high fat diet and sedentary lifestyle contributes also to low calcium levels which must be corrected by our bones contributing calcium.

Vitamin D, essential for calcium absorption is processed in our skin, and requires sunlight to activate the process. The increase fear of skin cancers, plus the increased use of sunscreens, which inhibit this process, contribute to low vitamin D levels and thus increases the risk of osteoporosis.

Magnesium is another important mineral to supplement. Studies have shown that as many as 86% of our elderly population is deficient in magnesium. Magnesium is an important regulator of muscle activity in the body. Deficiency is associated with increased muscle spasms and cramping. More importantly, because the heart is a muscle, low levels of magnesium may contribute to irregularities of heart rhythm.

Another maintenance supplement that has generated a lot of controversy is the class of Antioxidants. This is a group of supplement which includes Vitamins A, C, E, and the mineral Selenium. This group has its benefits fro the neutralization of a group of chemicals called Free Radicals. Free Radicals are unstable compounds that arise through a variety of causes, including diet, sunlight, aging, vigorous aerobic exercise, as well as others. The theory says that these chemicals are unstable and pull electrons from cells and other chemicals causing cellular injury. Most people agree with this mechanism. Where the controversy ensues is how much antioxidant material do we need?

There have been two opposing views. The first has said that because we live in a society where free radicals are everywhere, we should be taking large doses of antioxidants to protect ourselves from cellular damage. The other, more recent viewpoint is that free radicals are a double edged sword. They not only can do the damage that the other school describes, but they are also part of our own defense mechanisms against things like various infections and cancer. According to this view, it is possible to take too many antioxidants, and thus weaken our own defenses.

As you can imagine this creates a great deal of confusion, especially since there have been some studies suggesting that the use of single antioxidants, i.e. Vitamin C or Betacarotene alone have increased the risk of Cancers. My recommendations are that you never take Antioxidants in isolation; always take a blend. In fact, some antioxidants are members of families which together provide more effect. Examples include mixed carotenoids instead of Beta Carotene, and Mixed Tocopherols instead of Vitamin E. In addition, at this time, I usually counsel against the use of mega-doses of Antioxidants because of the reasons mentioned above; but I recommend more than the Daily Value (DV) which is the amount needed to prevent deficiency. In your particular situation, I recommend that you check with a knowledgeable health care provider who is familiar with your personal health history.

Other supplements are used based on the person's therapeutic goals. There are a lot of supplements, but the buyer needs to beware that there are a lot of unscrupulous people touting supplements for which there is little scientific background. Some of my favorite supplements include Glucosamine sulfate for arthritis; Chromium for diabetes; Coenzyme Q10 for heart issues and statin related muscle pain; and Melatonin for sleep problems. I also like Calcium d-glucarate for enhancing detoxification and muramyl peptides for keeping our immune systems alert.

I go to the Health food store and there literally are walls of supplements. How do I choose?

If you are considering using dietary supplements, your best weapon is education. There are a lot of supplements but not all of them are good. First, you need to be clear about what you want to accomplish. You need to understand the risks and benefits of the supplements and how they fit in your particular health scenario. Thirdly, you should consult with your health provider about your choice. Gather as much information as possible about your choice, and ask for an open discussion.

Unfortunately, many health providers are not familiar with dietary supplements so the discussion may not go as planned. If your question is met with disdain or you are given an answer such as, "it's just expensive urine," you are probably dealing with someone unwilling to explore these options as a therapeutic partner. I would advise you to look elsewhere. All decisions should be made between you and a sympathetic care provider.

Having said that, there are several indicators of quality. First, look for the use of pharmaceutical grade ingredients. There are three grades of nutritional ingredients - food, veterinary, and pharmaceutical. Think of them as good, better, and best. They refer to the

quality and purity of the ingredients used. Correspondingly, as the quality increases, so does the cost. The best value is with pharmaceutical grade ingredients.

Secondly, the government has established regulations called Good Manufacturing Processes (GMP), which are standards for the manufacturing of dietary supplements. In general, they fall about midway between the standards for food manufacturing and the stringent FDA standards for pharmaceuticals. GMP on the label is one indicator of quality.

Thirdly, the US Pharmacopeia (USP) is a well known organization dedicated to producing quality control standards for the strength, quality, and purity of pharmaceuticals. In 1997, the USP began publishing standards for dietary supplements. These standards focus on the strength, quality, purity, packaging, and labeling of dietary supplements and are updated yearly. USP on the label is another good indicator of quality.

Lastly, you should look for a well known and reputable company. Larger companies have a national reputation to uphold and are more likely to follow high quality manufacturing practices. In addition, don't buy the least expensive supplements. Usually this means a lower quality ingredient or manufacturing. Remember, cheaper is not better!

Be an educated consumer! Here are a couple of more guidelines to consider when choosing supplements:

Try to avoid self diagnosis. This could lead you into the trap of trying everything you read about or see on TV. Avoid the "quick fix" often promised on TV infomercials; always check with your physician before you take out your credit card. Also, Remember, if something sounds too good to be true, it probably is. Always look for more information.

Remember that safety is your first concern. Before taking any supplements look into possible interactions with other supplements or medications you may be taking. Do not substitute a supplement for a medication without checking with your doctor first. And, it doesn't hurt to say it again – "Natural" doesn't always mean safe or free of side effects.

There are a lot of quality supplements with tremendous health benefits out there. Hopefully, these guidelines will help you not feel so intimidated when you walk into your local retailer.

What is Reiki?

Reiki is an easy to learn, natural, hands-on system of healing developed by Mikao Usui, a Physician and devout Zen Buddhist. After originating in Japan, Reiki teachings have been successively passed down from teacher to student for over one hundred years, and today, practitioners can be found all over the globe. It is a simple system, which once learned

can be practiced on your self, as well on others. In addition, with advanced training, you can learn to send Reiki to others anywhere in the world.

Ki is the Japanese term for the energy that flows through all things. Reiki is the term used for the healing modality that accesses and transmits this universal energy. This universal energy is transmitted through the trained practitioner, and can be used for healing. The Reiki practitioner acquires his ability to control the healing energy through a series of trainings and attunements, which, in effect, turn on the ability to use the Reiki energy.

Although Reiki is a spiritual healing system, it is independent and unrelated to any religious system, and is definitely not a religious doctrine on its own. Nevertheless, Reiki acknowledges the source of all healing as originating from a higher power. Therefore, it is important to recognize the responsibility that accompanies being a Reiki practitioner. As mentioned, Reiki is a holistic system that complements many other healing disciplines. Its focus is on relaxation and relieving suffering. It only requires the placement of hands on the recipient by the practitioner. The healing energy flows easily and effortlessly. In fact, the recipient does not have to believe in Reiki to gain benefit! It should also be noted that Reiki energy is intelligent energy, that is, it is provided to the recipient to be used for the highest good. Reiki can never be used for evil purposes, because that would be incongruent with the nature of the universal energy.

Reiki practitioners fall into three levels:

Reiki First Degree is the first level of Reiki training. In this attunement, the student is initiated and aligned with the Universal Energy. The student will often feel the energy pass through him, and may describe it as warmth, tingling, or a mild vibration.

Reiki Second Degree is the next level. Usually before attaining this level the First Degree Reiki practitioner must practice and refine the skills that were acquired for a period of time and must self treat with Reiki on a daily basis. The second Degree attunements strengthen the flow of Reiki and allow the practitioner to perform Reiki treatments from a distance. In addition, the practitioner learns three symbols which help to focus the energy for the healing purposes. The use of these symbols, combines with the strengthening of the flow of energy, allows the Second Degree practitioner to healing from a distance by visualizing the recipient and directing the energy to them.

Reiki Third Degree is considered the Master level. With increasing knowledge and strengthening of the Reiki practitioner comes more responsibility. At this level, the student has the opportunity for advanced training to rise to the level of teacher. With that comes the responsibility of passing on the Reiki lineage. There are additional symbols and attunements that accompany this level.

Reiki training is nothing more than a diploma unless there is intent for self development on the part of the student. Reiki is a healing art, but more than that, it is a path of awakening. The student is taught methods of self purification that allow them to pursue a life of meaning. When Dr. Usui developed Reiki, he had five principles he required his students to follow. Those principles, upon which Reiki is established, are still taught today. They are:

Just for today, do not anger

Just for today, do not worry

Honor your parents, teachers, and elders

Earn your living honestly

Show gratitude to every living thing

As you can see, these are principles which demand self awareness and self discovery. It is through the pursuit of these principles that the Reiki practitioner achieves enlightenment and fulfillment.

A typical Reiki session may last up to an hour. During it, the recipient stays dressed. Often, the lights are dimmed and soft music is played in the background. Prior to starting the practitioner will discuss with the recipient the goals and expectations of the session. When the treatment starts, there is usually no talking to allow the practitioner to focus on the passage of energy for the highest good of the client. The practitioner will then lay hands on the recipient in predetermined positions to cover the major organs of the body.

The client may experience several things during the treatment- a sense of calm, heat, tingling, vibration, or nothing at all. In addition the effects of a Reiki treatment may not be realized for several days, but will always show up when it is most needed. It is important to remember that Reiki treatments are not disease specific. For instance, a goal in a Reiki treatment session isn't to cure Cancer, but rather to afford the body the strength it needs to deal with its problems, the wisdom to use the energy for the best possible outcome, and to provide the courage, emotionally, mentally, and spiritually to endure the things to come.

After the treatment, the practitioner will discuss the treatment with the recipient and what they experienced. In addition the practitioner may share impressions gained during the passage of hands over the body, a procedure called scanning, in which subtle energetic disturbances may be detected by the trained practitioner.

Now, I'm sure this explanation may be a bit unsatisfying for the curious, because it's hard to describe something like this without experiencing it. So, my advice to you is, if this has aroused a curiosity about Reiki, contact a Reiki practitioner and set up a treatment. I think you will find that it is an amazing complement to most any conventional therapy you may be receiving.

What are the benefits of Meditation?

We live in a stressful society. For millions of years man, as a species has had to deal with stress. Whether we were being chased by a saber-toothed tiger, or being cut off in traffic, we have lived with stress. Our bodies have developed a finely tuned way to deal with stress. Commonly called the "fight or flight response," it has served us well for millennia. In simple terms, when we are exposed to stress, our body prepares us to either fight or flee. It does this by increasing our heart rate and blood pressure; making us breath faster to get more oxygen; dilating the pupils in our eyes so we can see better; and shifting the blood flow from our guts to our muscles to give them a strong supply of oxygen and nutrients. All of this is done to give us an advantage if we encounter the predator on our walk in the woods. For, if that were to happen, we had three choices – fight, flee, or be lunch. You see, we do not have sharp claws or teeth. We have our brain and this adaptive response.

All of that served us well in the jungle when we could expend all the adrenalin and other stress hormones fighting or fleeing. Unfortunately, we don't have those options when someone cuts us off in traffic, or when our boss yells at us, or when the bills come in and there is more month than money. In those situations, we have no constructive way to dissipate the stress, and, without a release, it accumulates causing negative physiological effects. That is the disadvantage of this protective response in the twenty-first century.

Fortunately, our Creator gave us a balancing set or responses to restore ourselves to the resting state. Called the relaxation response, it reverses the effects described above- slows the heart rate, lowers blood pressure, slows down our breathing, and allows us overall to rest and recover. This response had previously been thought to be outside our conscious control. Like the stress response, it was thought to be involuntary.

Studies done by Dr. Herbert Benson, and detailed in his book, "The Relaxation Response" (1975), demonstrated that through Transcendental Meditation, and with practice, a person could voluntarily induce this response, and attain all the benefits. Since that time, there has been a considerable amount of research that has examined the physiologic as well as the psychological benefits of meditation.

Meditation and its benefits fall within a category of therapies called "Mind-Body Therapies." These therapies acknowledge the fact that our thoughts and feelings are inseparable from our physiology. I always tell patient that if they don't believe it, think about what happens when they are embarrassed. They blush, a physical reaction to an emotion.

For years, this relationship has been known in many religious traditions, and the focused attention of prayer or meditation has been a part of many religious ceremonies. But meditation is not just for such purposes. As a health care provider, it is important to recognize this therapy for its value in the twenty-first century stressful society in which we live.

There are two main branches of Meditation- concentration methods, in which the emphasis is on focused attention directed on a specific object, like a candle, or on

something rhythmic, like breathing; and mindfulness methods, in which the focus is on our sensations, our surroundings, or what we are doing at the time. Although they seem dissimilar, there is some overlap. Mindful meditation presupposes an ability to concentrate on one thing at a time.

Meditation, whether concentration focused or mindful has been shown to be beneficial in many conditions, including Heart disease, hypertension, anxiety disorder, chronic pain, substance abuse, cancer, as well as a host of others. The principle behind its use, is to provide a relaxation response, which, in turn, enhances healing, and contributes to lower levels of stress hormone, which as said previously, are destructive if left unchecked.

Meditation is not difficult to learn, and actually, the principles can be taught in a matter of minutes. As would be expected, one's proficiency and benefits increase with repeated practice. I would encourage you to give it a try. There are many guided meditation CDs available that can start you off on this track. In addition, one of my favorite books on mindful meditation is "Wherever you go, there you are," by Jon Kabat-Zinn. I practice both types of meditation. Frequently I will use the concentration meditation when unwinding at the end of the day, or to begin the day in a focused way. I practice the mindful meditation hen running, working in the yard, or doing household chores, like washing dishes. Great relaxation can be derived from attention to the simple details like how the water runs off the plate as you rinse it. Give it arty yourself, it might make those stressful days more bearable.

What can Yoga do for me?

Yoga is an ancient healing system that originated in India. It is founded on several core principles, including control of the body through correct posture and breathing, calming of the mind and emotions, and meditation and contemplation. As I said, it has been used for thousands of years, but came to this country in the late nineteenth century. After more than one hundred years, American practitioners have come to realize that with consistent practice, amazing personal transformation can happen on many levels. These changes include reduced stress enhanced feelings of well being, improved health and energy, and healing of diseases of the mind and body. While these claims sound excessive, many students, who start yoga to improve their flexibility find that over time, they find a greater understanding of their self, increased emotional growth, and spiritual enrichment.

There are many styles of yoga, and the discussion of each is beyond the scope of this publication. However, there are certain aspects that are common to each. First, are the postures, or asanas. There are more than 1000 asanas in Hatha yoga, the type of yoga most familiar to Americans. They are designed to simultaneously bring a bout flexibility, strength, and balance. In addition, they promote a sense of mental and physical wellbeing. They also bring about the efficient functioning of the internal organs, enhances clarity and focus of the mind, and brings the entire system into a state of balance.

The second aspect all forms of yoga have in common is breathing. Prana is the Sanskrit term for life energy. It is analogous to the term Ki, as defined above in the section on

Reiki. In yoga, the goal is to control the breath. By controlling the ebb and flow of the breathing, one gains control over the subtle energies of the body, and in so doing gains control over the mind.

The third aspect of yoga is meditation. As the practitioner assumes the various positions and controls the breath, a state of heightened awareness and focused concentration occurs. As described above, the individual becomes more peaceful; stress is reduced; and the body is able to relax at a cellular level.

There are many studies that have looked at the benefits of yoga, and it is a good adjunctive therapy to be used with conventional therapies for heart disease, breathing disorders, digestive disorders, as well as tress related disorders. There are a lot of teachers available, as well as training programs for people with such interests. Yoga is a fun, healthful and beneficial practice. Be forewarned though - Yoga is physical activity and over enthusiasm can result in injury. However, if you work within your capabilities, and with a capable instructor, Yoga can be a wonderful addition to a health program. I recommend it wholeheartedly for people looking to add a new dimension to their health program. So, check with your physician to see if you might gain from some of the benefits of yoga.

I'd like to get off of some of my medicines. How can I do that?

This is a question I get asked all the time. Because people see me as a "Natural Physician," they presume that I use no pharmaceuticals in my practice. Nothing could be further from the truth. I believe, as I said earlier, that the best approach is the blending of Conventional and complementary therapies. Although, in most circumstances I will recommend lifestyle and non pharmacologic remedies first, there are great benefits in the use of pharmaceuticals, especially in acute situations. In actuality, I just see myself as having more tools in my toolbox.

When someone comes to me with this question, my first response is to ask them "why?" Many times the answer they give is related to side effects or cost. In those situations, it is not the idea of pharmaceuticals that is the issue, and I will work with them to find an alternative pharmaceutical that is either cheaper or has less side effects.

When, however, the question is raised by someone who has a philosophical reason for getting off medications, the discussion is different. At that point, I mention that they were put on the medication because something in their body is out of balance. Whether that is, for example, the insulin to sugar balance in diabetics, the balance of cholesterol fractions, or the balance of their systolic and diastolic blood pressure, I call attention to the fact that that imbalance will not go away just by stopping the medications. Nor will the risk of complications from that imbalance. Then, I ask them what they are willing to do to bring their physiology into balance.

If they are not willing to make changes in their life other than stopping their meds, I caution them against doing that, but tell them I cannot help them in this endeavor. If, however, they are willing participants, I discuss the fact that all disease is a process, not

an event, and that a process has fluidity to it, that is, we can move it back and forth on a continuum.

Our goal is to move them in the direction of less disease. We may do this through lifestyle interventions such as exercise and diet, herbal remedies, mind body therapies, or a host of other interventions. I do not however, stop their medicine until I am sure we are moving in the right direction. You see, there is a point on this continuum beyond which the process cannot be reversed by these methods alone. If, through our efforts, we find we are not able to get past that point, I remind them that all our interventions have been helpful, and may, in fact, slow down the disease and prevent further complications, but they still need the medications to control the situation.

There are those, however, that are so motivated that they are willing to do the things we decide together. For those people, this represents a chance to regain their health, as well as lower their health care costs, both now and in the future. I find this very rewarding as a physician- the opportunity to empower a patient to take charge of his/her own healthcare and future. It is one of the most gratifying things I do on a daily basis.

To understand this further, let me give you an example:

A 57 year old man comes to see me with a 15 year history of hypertension. He takes three blood pressure medications, has elevated cholesterol, borderline blood sugar, but has no known history of cardiac disease, having had a normal stress test 6 months ago. He is 40 pounds overweight for his height, has a high stress job as an executive, and does not get regular exercise. He does not smoke, but drinks three to four martinis at night to relax. He does not sleep well, and needs four cups of coffee each morning to awaken. He frequently skips breakfast, eats fast food at lunch, and whatever his wife fixes for dinner. He takes no supplements, because someone once told him it was a waste of time and only caused expensive urine. He comes to me tired of the medications, which have a negative effect on his sex life and his energy level. He would like to get off the medicines, if possible.

When I meet with him, he is truly motivated, because he does not like the way he feels. We discuss the fact that he may have to give up some of the things he currently relies on to get through his day, and he agrees. The plan we come up with together is as follows:

He will slowly wean himself from his caffeine and the martinis. He will purchase a pedometer and monitor the amount of steps he puts in per day. He will begin eating breakfast and will keep a diet diary to determine the type of intake he has. He will start on a comprehensive multivitamin and mineral product, as well as some fish oil and magnesium on a daily basis. From his diet diary, we will determine what sort of nutritional counseling he may need. He is instructed in some basic meditation techniques which he will do as part of his bedtime ritual, and will monitor the quantity and quality of his sleep. We may try some melatonin to help induce sleep if necessary.

The plan is explained to him, and then he decides which parts he can implement right away, choosing the dietary and sleep issues. He elects to try the melatonin, while he learns and practices the meditation techniques, and weans the caffeine and alcohol.

Two weeks later, his blood pressure is down twenty points and we drop one of his medications. He is seen every two weeks and makes great strides, growing in confidence and self-empowerment. After 6months, he has lost 15 pounds, is sleeping better, eating better, and is off two BP meds. He has more energy and is enjoying life more.

While this is not an actual patient story, it is representative of what can happen when a patient, who is motivated, takes control and responsibility for his health. If this approach makes sense to you, discuss it with your physician, and maybe together you can accomplish great things with your health.

How do I discuss some of these things with my Doctor?

The basis of any good physician-patient relationship is strong rapport and communication. Both parties must agree that they are working towards the same goals, and are partners in the therapeutic process. It is to your advantage to have a physician that you can go to for education when you have a question about your health.

Most physicians today are aware that there are different healing disciplines available to the consumer. It is mutually advantageous to you and your physician to know what your concerns are and what you, as a self motivated consumer would like to pursue. After all, you are partners. You must be comfortable approaching him about what you would like to investigate, why, and what you hope to gain. He, in turn, must be open minded enough to hear your concerns, give you honest and objective feedback, and to respect your choice. He must also be willing to educate himself about the area about which you have an interest.

This interaction should not be undersold for several reasons. First, if you feel belittled or discounted, there could be irreparable harm to your relationship. Second, if you do not tell him what you want to do, there could be potentially harmful interactions between what you are doing and what he is trying to do. If he is unaware, he cannot foresee these problems. Thirdly, there is tremendous benefit to be gained working as a team and accomplishing your goals – you are empowered, and he may gain some new information that can be useful to other patients.

Don't be afraid! It's your health we're talking about. Hopefully, through this brief overview of complementary therapies you may discover some new ideas which might benefit you, your health, or the health of someone you care about. I hope you will use these concepts in the spirit they were intended: Be well!