

PART III

ESSENTIAL ANTI-AGING REQUIREMENTS

Section 6 Supernutrition: Just 7 Simple Steps

Section 7 Basic Supplementation

Section 8 The Benefits of Basic Physical Activity

Section 9 Ideal Weight Control Principles

Section 10 Distress: Know Thy Enemy

Section 11 Smoking, Alcohol and Recreational Drugs

SECTION 6

SUPERNUTRITION: JUST 7 SIMPLE STEPS

- 1. Do you know your daily caloric maintenance level (DCML) in support of counting calories?**
- 2. Do you eat at least three quality meals per day?**
- 3. Have you reduced your overall fat and sugar intake? Do you eat sufficient amounts of essential fats (i.e., plant and fish oils)?**
- 4. Do you eat lots of complex carbohydrates (high-fiber foods) preferably as Mother Nature made them and untouched (unprocessed) by human hands or machinery?**
- 5. Do you eat some lean or non-fat protein in every meal?**
- 6. Do you include at least some organically grown foods in your diet?**
- 7. Have you purchased high-quality drinking water or attached a carbon-filtering system to your water faucet?**

If you answered “yes” to all of the above questions, congratulations! You may skip this section and move on to the next section. If you answered “no” to any of the above questions, help is on its way.

Your Body's Engine: The Krebs Cycle

The following illustration will help you understand the role of nutritional requirements as it relates to digestion and metabolism.

The engine in your car runs smoothly if the correct ratio of air and gasoline - mixed in the carburetor - is fed into the combustion chambers and the cylinders. Compare carbohydrates to air and gasoline to fats. If there is not enough air or too much gasoline, the engine will run rough, sputter and smoke.

If inadequate amounts of carbohydrates or excess fat is fed into the Krebs Cycle (the metabolic engine in your body), the burning of food to yield energy will also be incomplete. Your body then goes into "ketosis" and fat is incompletely burned. You can actually smell the "fumes" on a person's breath. The smell is very distinct -- it smells a little bit like acetone or fingernail polish remover. This puts stress on the liver, and you feel dragged down and sluggish.

For the best possible combustion, there should be large amounts of complex carbohydrates and small amounts of fat in your overall diet. This, of course, eventually enters into the Krebs Cycle. If you have an excess of carbohydrates, some may be stored in the liver and muscle mass in the form of "glycogen." Any excess - especially refined carbohydrates (sugars that quickly go into the blood stream) - are converted to fat. However, the reverse is not that easy. The best way to burn fat is to (1) dip below the daily caloric maintenance level (DCML) in terms of total caloric intake; (2) to have sufficient amounts of complex carbohydrates, and (3) to eat almost no fat. This

way, the Krebs Cycle will draw the fat it needs from the deposited body fat.

1. Do you know your daily caloric maintenance level (DCML) in support of counting calories? This is the amount of calories which you neither gain nor lose weight. Naturally, to lose weight, you will need to dip below this level. Look up the caloric content of foods so that you come to a point where –after reviewing your daily food intake– you can tell if you are doing well or not. It’s important not to obsess about it. If there are occasions when a feast presents itself, splurge a little, and then cut down on the calories the next day. Remember, 3,600 calories equals one pound of body fat.

2. Do you eat at least three quality meals per day? Eat like a king for breakfast, a prince for lunch and a pauper at dinner time. Snack on mini-meals between meals. From athletes to body builders or simple fitness enthusiasts, men and women who are concerned about maintaining lean body mass should eat at least five small meals per day.

3. Have you reduced your overall fat (animal fats, margarine) and sugar intake? The average American diet derives about 43% of total calories from fat. The ideal range is considered to be around 25% to 30%. Make sure that your diet includes “good fats” in the form of plant (olive) and fish oils. For most people, this will require a serious effort. Refined sugars are worthless calories that play havoc with blood sugar levels. Keep them to a minimum.

4. Do you eat lots of complex carbohydrates (high-fiber foods) preferably as Mother Nature made them and untouched

(unprocessed) by human hands or machinery? Complex carbohydrates are vegetables, whole grain products (breads, pasta, etc.) and fruits. Eat at least some of them raw. Give special attention to the cabbage family of vegetables which include broccoli, cauliflower, kale, brussels sprouts and all cabbages.

5. Do you eat some lean or non-fat protein in every meal? Snack on small amounts of low-fat protein foods between meals and right before going to bed. Low-fat proteins include deep sea fish, lean meats, low-fat or non-fat milk products (cheese, yogurt) and vegetable protein such as beans, tofu and potatoes.

6. Do you include at least some organically grown foods in your diet? “Organic” farming or gardening does not use toxic chemicals such as pesticides or fertilizers that contain synthetic chemicals. These foods usually cost a little bit more but your health is worth it.

7. Have you purchased high-quality drinking water or attached a carbon-filtering system to your water faucet? Reduce beverages that contain sugar or simply dilute them with a good mineral water. Since health concerns have been raised about the safety of aspartame (sold under such names as “Nutra-Sweet” and “Equal,” and contained in most diet drinks), make sure you don’t consume excessive quantities or again, dilute with mineral water. Coffee and tea appear safe within reasonable limits (around four cups per day), but herbal teas are definitely healthier. Green tea has recently been shown to have a whopping 60% cancer-protection effect.

Why Are These 7 Simple Steps Important?

1. Knowing your daily caloric maintenance level is important for weight-control and maintaining desired body composition.
2. People who skip meals eat more calories in two meals than others eat in three meals. Fewer than three meals per day increases the risk of weight gain and reduces protein availability. There are two reasons to eat at least three meals per day – supplemented with mini-meals and/or quality protein snacks between meals and before going to bed:

a.) **BLOOD SUGAR HOMEOSTASIS:** Maintaining normal sugar levels is important for normal biochemical reactions in your body to hunger control and maintaining a good body shape. Frequent small meals, high in complex carbohydrates and low in fats, support blood sugar homeostasis. Refined sugars, especially when consumed in large amounts and/or on an empty stomach, are the biggest risk factors for throwing blood sugar homeostasis into imbalance.

b) **PREVENTION OF LEAN BODY MASS (MUSCLE) LOSS:** Your body can store lots of fat and limited amounts of carbohydrates (in the form of glycogen which is stored in the liver and muscle), but not protein (amino acids). The body's only "protein storage" is in the form of lean muscle mass. About 2 _ hours after you consumed your last meal, all protein is digested, fed into the blood as amino acids, and utilized for any reaction that needs amino acids. The excess amino acids are deaminated in the liver. From that point on,

there are no amino acids available in the blood. If your body needs any amino acids at this point, the only way to get them is to tear down what you are working so hard to maintain - - lean muscle mass. The actual loss of lean muscle mass caused by this is very small, but over time, adds up.

To avoid this loss of lean muscle eat a very small amount of protein - - 1 teaspoon of non-fat cottage cheese, 1 small piece of any meat, some low-fat cheese, one-third of a protein bar or other small amount of protein - - between meals.

Preventing muscle loss is most important for long-term health. Look at old people who appear to be weak and incapable of doing anything. This is due to the fact that they have lost their muscle mass. Also, a healthy body shape is simply due to having an adequate amount of body mass. Women: Remember, cellulite is nothing but a combined effect of muscle loss and fat gain.

The following illustration shows how foods are utilized in your body. We'll discuss it in more detail in the Weight Control Principles section.

3. Too much fat in the diet creates risk factors for both cancer and heart disease. When your doctor measures your blood sugar, the normal values are around 80 to 100 mg/dl. That means there are 4 to 5 grams of glucose (a simple sugar, the basic fuel for your body) in your entire blood supply.

Whenever you eat or drink something high in sugar (candy bar, ice cream, soft drink or equivalent), this puts 30 to 50 grams of pure

sugar (10 times the entire amount in your blood) right into your blood stream. Blood sugar will shoot up dramatically and in response, the pancreas will release insulin into the blood stream to bring blood sugar down. Where does it go? Small increases can be handled by putting some of the sugar into storage in the liver and muscle mass in the form of glycogen.

Unfortunately, when large increases occur, much of the sugar will immediately be converted to fat. When you eat refined carbohydrates, you wind up with an increase in body fat. Is that what you had in mind when you picked up the candy bar?

When your body needs to burn fat, the fat is first changed to its basic components, glycerol and fatty acids. They are put into the blood stream and transported to the sites where they are burned in the Krebs Cycle. .

When you eat refined carbohydrates, the blood sugar shoots up and the pancreas responds by releasing insulin. This opens the doors to the cells allowing some of the sugar to be stored, where most of it is converted to fat. However, the insulin will also block the hydrolysis of fats to fatty acid and glycerol, thus blocking the fat from getting burned.

4. Consuming complex carbohydrates (high-fiber foods) is recommended for several reasons. High-fiber foods have been shown to be highly protective against digestive tract cancer and, because they are low in fats, also protect against heart disease. The cabbage family of vegetables have a strong protective effect against several types of cancer including colo-rectal, stomach and respiratory cancers. Fruits

and vegetables high in vitamins A and C also have protective effects against several types of cancer.

What constitutes a serving? The U.S. Government's 1990 Dietary Guidelines suggest three to five servings of vegetables, two to four servings of fruit, as well as six to eleven servings of breads, rice, grains or pasta per day.

5. A regular supply of lean protein is important for maintaining lean muscle mass and preventing blood sugar imbalances. If you are following a strict exercise program and your aim is to maintain lean muscle mass, your protein requirements may increase to twice the RDA, or even more.

According to Peter W. Lemon, Ph.D., an authority on protein requirements for athletics, noted that several studies show a need of 225 grams of protein or 438% of the RDA for athletics. (*Muscle & Fitness*, June 1992.)

6. Many of the toxic chemicals in your body (see Section 5) come from food sources and from tap water. Growing foods on nutrient-depleted soil and using synthetic fertilizers, has greatly reduced food quality. Mass-producing eggs and meat products (i.e., chicken or beef utilizing methods where the animals never see daylight and "grow" in wire cages or boxes where they are fed foods laced with chemicals and hormones), has also greatly reduced food quality.

Organically grown foods are raised the old-fashioned way - without chemicals and pesticides - and also taste much better. Make sure to read labels, and don't be appeased by pretty "Mother Nature"

pictures on the foods. Is the juice you buy really a “nectar” or “punch” that contains tap water, lots of sugar, artificial flavors or a small percentage of real juice? Do the bakery products you frequently purchase proudly state they are made with “100% plant oils” while not emphasizing the fact, they contain palm oil or coconut oil which are high saturated, artery cloggers?

If you follow these guidelines and understand the connection between them, you will be several steps closer to better health and achieving the goal of anti-aging.

SECTION 7

BASIC SUPPLEMENTATION

Do you presently take any of the following daily supplements?

- 1) B-complex**
- 2) Antioxidants**
- 3) Multi-Minerals**
- 4) Vitamin C with flavonoids: 500 mg to 1 gram/day**
- 5) Vitamin E: 200 to 400 IU - at night**
- 6) Selenium: 100 to 200 mcg - at night**
- 7) Folic Acid: 400 to 800 mcg taken any time**

If you answered “yes” to all seven questions, consider skipping this section and move on to the next section.

Basic Supplementation for an Anti-Aging Lifestyle

When you begin an anti-aging approach to support your health, it is wise to consider the following vitamin and mineral supplements to adequately supplement your nutritional requirements and enhance your immune functions. You may feel comfortable with just taking a basic supplement or you may enjoy the benefits of all the supplements. Remember, please discuss any vitamin/mineral

supplemental program with your prevention-oriented doctor.

1) Take an excellent basic vitamin mineral supplement. It should contain (in separate pills or capsules) the following nutrients:

B-Complex (50 to 100 mg range)
Multi-minerals
Antioxidants

These supplements are available at local health food stores and supermarkets. However, make sure to read the labels.

2) Take additional Vitamin C during the day and Vitamin E and selenium at night, right before bedtime.

Recommended amounts are listed on the packages or bottles for all types of supplements. In general, stay on the conservative side if you have never taken supplements or if you are a smaller framed, inactive individual. You can increase amounts later if this appears desirable. Larger, more active people can be more aggressive with supplements.

Taking Supplements

First, let's define what we're talking about! When I ask people if they take supplements, I find that those who do, take quite a variety of pills. This ranges from taking single vitamins such as vitamins E, C or A, to multi-vitamins, minerals (or both), amino acids, herbs and possibly any one of the available anti-aging drugs. For most people, there appears to be no system or logic behind whatever they are taking.

Let's define what the most basic supplements should contain. We have provided references from health and medical literature supporting what prevention-oriented doctors recommend for nutritional supplementation.

The Scientific Basis for Supplement Requirement

RDA versus ODR

Originally, there was the MDR (minimum daily requirements), a standard set by the government and many prevention-oriented doctors disagreed with the amounts. Minimum daily requirement for what? To keep you from dropping dead? Certainly, not for optimum health!

When scientific publications demonstrated overwhelmingly that the MDR was not sufficient, they raised it just by 50%. There was no scientific support for the 50% increase; this was a number taken straight out of the air. Actually, at that time, a 150% increase would have been closer to the data published in the scientific journals. Then researchers began publishing increasing numbers of publications that demonstrated that even a good diet doesn't supply the RDA of all vitamins and minerals.

Again and again, research demonstrated that the average person—even if he or she eats a cross-section of different healthy foods—doesn't receive the RDA of vitamins and minerals from food sources alone.

In one of our research projects, we determined the vitamin and mineral intake of patients who came to see their doctor because “they didn’t feel well with no specific disease,” and compared it to the vitamin/mineral intake of healthy controls. We found that, even though our healthy controls had an average vitamin and mineral intake quite a bit higher than the patients, neither group received their RDA from food alone. Many of the healthy controls were also taking supplements.

Numerous references of scientific publications supporting the above can be found in “Nutrition Against Disease,” by Professor Roger Williams (Texas University Medical School), “Psychodietetics” by Drs. Cheraskin and Ringsdorf (Alabama University Medical School), and my own book, “The Anti-Aging Weight Loss Diet.”

Optimum Daily Requirement (ODR)

A second group of research studies demonstrated that the vitamin intake for optimum functioning (lowest risk, maximum disease prevention) should be anywhere from four to eight times the RDA (in some instances even more). The RDAs for minerals were not fully established and they were too low for some minerals. Almost no one was getting the RDAs from food sources alone. Many prevention-oriented doctors therefore asked to establish an ODR, a vitamin and mineral intake level to reach optimum health. These data come from longevity studies on animals and nutritional evaluations on humans.

One of the key tools in studying human vitamin intakes for

optimum function was used by Professor E. Cheraskin at Alabama School of Medicine. It is called the Cornell Medical Index Questionnaire. This correlates the number of medical complaints a person has per month (a measure of the overall health of the person) to the intake of any one or more specific nutrients.

In Professor Cheraskin's studies (*Int J Vit & Nutr Res*, Vol. 46, Dec. 1976), a group of 1,500 health professionals and their families were studied and the average person had 15 medical complaints per month. When, by computer design, sub-groups with fewer and fewer medical complaints were selected and studied, it was found that as medical complaints decreased, intakes of vitamin A and niacin increased. For people who had no complaints (optimum health), the vitamin A and niacin intake had gone up to four to eight times the RDA

Many Diseases Respond to Nutritional Treatments

A key lecture at the 1990 meeting of the American College for Advancement of Medicine (ACAM) was given by Professor Melvyn Werbach of UCLA, School of Medicine. He and his colleagues showed evidence that many diseases responded to nutritional treatments, and that these nutritional treatments often were more successful than drug treatments. Dr. Werbach's book, "Nutritional Influences on Illness," (Third Line Press, 4751 Viviana Drive, Tarzana, CA) is an excellent reference on this topic.

The following is just a small sample of what has recently been published regarding the benefits of larger amounts of vitamins or minerals. For more details, especially regarding the effect of supplements on treatment or major disease prevention, read "The New

Supernutrition” by Dr. Richard Passwater (Pocket Books, New York).
An absolute must!

Nutrients Decrease Risk of Degenerative Diseases

High levels of high density lipoproteins (HDL) in the blood have been associated with heart disease protection. After supplementing patients’ diets with 600 mg of vitamin E per day for one month, Dr. W. Herman of the Memorial City General Hospital in Houston found that HDL levels increased by 50%.

As previously stated, exercise also increases HDL. In another study by Brian Livesley, Director of the Clinical Gerontology Unit at St. Francis Hospital in London, confirmed that one gram of vitamin C per day increases HDL levels in the blood. The ratio of HDL to LDL jumped by 54%.

Higher concentrations of vitamin A (also beta-carotene) in the blood serve as a shield against cancer. Researchers at Radcliffe Infirmary (Oxford, England) examined blood samples of 16,000 people for vitamin A content. High vitamin A levels corresponded to lower incidences of various types of cancer.

Longevity studies done in our own laboratory at Roosevelt University in Chicago, UCLA (Roy Walford) and at several other universities around the world, demonstrated that increases in life spans of animals can be achieved with antioxidant supplementation (vitamins A, C and E, and the trace mineral selenium).

According to Professor Gerhard Schrauzer (USC, La Jolla,

CA), the average American gets about 100 to 150 micrograms of selenium per day in the diet. Reduced rates of many types of cancer, including breast cancer in women, were observed in people who had a higher selenium intake. Animals studies confirm these findings.

As reported in *JAMA* and other medical publications, healthy young men and women who took one gram of calcium per day for twenty weeks had a significant reduction in blood pressure.

In postmenopausal women, the mineral, boron has been shown to increase calcium utilization and to increase natural estrogen production.

Vitamin E Boosts Immunity

Dr. A. Bendich, Hoffman-LaRoche, showed that the ability of T and B lymphocytes to multiply significantly increased when vitamin E was increased to 200 mg per kilogram of food.

Dr. J. Blumberg of Tufts University showed that older animals fed a diet that contained 17 times the normal amount of vitamin E showed immune function increases from 10 to 85%.

Dr. C. Chow, Kentucky College of Medicine, found that patients who had developed primary lung carcinoma showed much lower serum vitamin E levels than did the controls. What is the mechanism of action? Prostaglandin E2 inhibits immune functions and vitamin E blunts the effects of prostaglandin E2.

Vitamin B Complex is Important for Brain Functions

Numerous references and case histories on humans demonstrate the importance of the B vitamins in optimizing brain function. For details, read "Mental and Elemental Nutrients," by Carl Pfeiffer, M.D., Princeton's Brain Bio Center (Keats Publishing).

Vitamins E and C May Fight Parkinson's Disease

Fourteen people in the early stages of Parkinson's disease ingested high doses of vitamins E and C. The disease subsequently progressed more slowly than in other Parkinson's disease patients. According to Dr. Stanley Fann, Columbia University College of Physicians and Surgeons, New York, individuals taking the supplements were able to delay starting drug therapy for 2-1/2 years longer than individuals not taking the supplements.

Combined Vitamins E and C Prevent Cataracts

Researchers at the University of Western Ontario in London, Canada, paired 175 cataract patients with both age and sex matched 175 cataract-free adults. They found just one amazing difference: The people in the cataract-free group had taken at least 400 IU of vitamin E and 300 mg of vitamin C per day during the past years. (*Science News*, 1990 Vol. 102, p. 308.)

Vitamin E Protects Against Heart Disease

Back in 1974, Dr. Richard Passwater conducted a study that suggested that vitamin E was very protective against heart disease (*Prevention*, 28(1):63-71 (Jan. 1976)). In 1992, two Harvard studies, presented by Drs. M. Stampfer and E. Rimm at that year's American Heart Association meeting in New Orleans, confirmed his findings.

The protective effect of vitamin E supplements (the amount of vitamin E in the diet is not sufficient to produce a significant protective effect) is greater than obtained by reducing dietary cholesterol, dietary fat, blood cholesterol and other popular approaches. The length of time of supplementation is also critical. At least two years of supplementation is required before substantial benefits can be measured.

SECTION 8

THE BENEFITS OF BASIC PHYSICAL ACTIVITY

- 8. Do you warm up before and cool down after you exercise?**
- 9. Do you exercise at least three times per week?**
- 10. Do you exercise at least 30 minutes–uninterrupted–each time?**
- 11. Do you know if your pulse rate is in the correct range when you are vigorously exercising?**
- 12. Do you include some muscle exercises in your exercise program?**

If you have answered “yes” to all of the above questions, pat yourself on the back and skip on to the next section. However, if you answered “no” to any of the above questions, continue reading and learn how to properly exercise for optimum results.

1. Do you warm up before and cool down after you exercise? It's imperative to warm up before and cool down after your exercise program. The warm-up may include five minutes or more on a stationary bike (low intensity), stair stepping device (low intensity), jogging (enjoyable pace), or any other activity where the intensity can be controlled.

2. Do you exercise at least three times per week? At a level of less than three times per week, positive statistical correlations to improve health or disease prevention become extremely small or insignificant.

3. Do you exercise at least 30 minutes—uninterrupted—each time? The actual number of minimum minutes is around 22 to 25 minutes. If you dip below this minimum, most of the statistically proven advantages disappear.

4. Do you know if your pulse rate is in the correct range when you are vigorously exercising? The exercise must be vigorous with your pulse rate in the correct range. To calculate your correct pulse rate, subtract your age from 220. Calculate 70% and then 80% of this number. That's the correct range for your pulse.

Example: For a 40- year old:

$$\begin{aligned}220 \text{ minus } 40 &= 180 \\70\% \text{ of } 180 &= 126 \\80\% \text{ of } 180 &= 144\end{aligned}$$

For a 40-year old person, the pulse rate should be in the range of 126 to 144 during a 30-minute exercise period.

5. Do you include some muscle exercises in your exercise program?

Statistics

The most impressive data regarding minimum activity for optimum results come from a very famous professor, J.N. Morris, M.D., England. Working with 50,000 government employees and an extensive computer system, he repeatedly found that physical activity below the above described minimum level is almost totally worthless. Yes, it burns a few calories and you may feel a little bit better, but no more. Only when you get to the minimum does heart disease protection suddenly jump to 1,000% or more. More recent data suggest that the same is true for diabetes.

In addition, when diseases such as atherosclerosis, diabetes, depression and eating disorders are treated with exercise, anything below the minimum is quite ineffective. But when minimum levels of exercise (or more) are done, treatment results become quite dramatic.

Prevent the Loss of Muscle Mass

Years ago, Professor E. Chebotarev of the Russian Institute of Gerontology demonstrated a simple fact of aging: “Brain and muscle age least if used most.” It still applies! Supplying frequent small amounts of protein and exercising muscle are the key points in preventing muscle loss due to aging.

Some women have an aversion to muscle exercises because they assume they may get muscular and take on a masculine physique (which is incorrect). A perfect female shape is due to well shaped lean muscle covered with a layer of fat tissue. The unattractive appearance of cellulite is due to the loss of underlying lean muscle.

Protein degradation (tearing down muscle) outpaces protein synthesis (building muscle) when protein is not supplied in the diet for 2-1/2 hours or longer. Consume some lean protein at such time intervals or more frequently. That is the key action in preventing muscle loss. It should be obvious that the approach that aims at muscle size/strength has the stronger anti-aging effect, and should be given serious consideration by women.

6A) **For women:** Consider taking a boron supplement. Physical well-being and healthy bone density (avoiding brittle bones) both depend very much on normal blood estrogen levels. This is the reason why post-menopausal women are given estrogen therapy and calcium supplements. Even though used extensively, this therapy is not very effective.

Recent research by Dr. Forrest Nielsen (Dept. Agric. Hum. Nutr. Res. Center, Grand Forks, ND) demonstrated that boron (taken as sodium borate or boric acid), 3 mg/day, reduced calcium losses in

women aged 43 to 80 by 50% and doubled blood estrogen (*FASEB*, Nov. 1987). Boron is found in fruits and leafy vegetables. A number of supplement companies have already added it to their products. Boric acid, used in eye washes, appears to be quite safe and is also extremely inexpensive. Fifty (50) grams in powder form costs about \$2.00 in any pharmacy. Any druggist can show you how to make a dilute solution that contains about 3 mg/teaspoon.

6B) **For Men:** Consider taking an herbal extract of nettles and oats if exercise is true hard labor for you or if your sexual drive needs a boost. For optimum health and disease prevention, you can do any sports or physical activity as long as it meets all of the above described minimum requirements. This may include weight-lifting, tennis, jogging or working out in a gym. If true body-shaping and an excellent physique is what you desire, you must follow more advanced training methods. This will be discussed in Section 18.

SECTION 9

IDEAL WEIGHT CONTROL PRINCIPLES

- 1. Do you struggle with your weight?**
- 2. Are you often thinking about losing those extra pounds?**
- 3. Are you often on a diet, but never really succeed?**

If you answered “yes” to any of the above questions, it is imperative that you read and fully understand this section on healthy weight loss principles.

Do you know someone who went on a strict weight-loss program, lost weight and then looked 10 years older, drawn and like death warmed over? The wrong weight-loss approach can definitely induce premature aging. You can avoid such pitfalls if you correctly follow sensible weight-loss principles.

Defining Overweight

Being overweight is one of the highest risk factors. It makes people less capable of doing things, increases disease risks and premature aging. Furthermore, gerontologists place a heavier emphasis on a having a normal weight. Your doctor may be lenient about a few extra pounds but researchers in gerontology are not!

How do we define “normal weight” or “overweight?”
Weight/height tables are not very precise. They only give average data. Measuring the percentage of body fat is better but, again, data clearly show that the same percentage of body fat can be “overweight” for one and “normal” for another.

Due to genetic reasons, some people have an unusual body fat distribution (love handles, upper body fat, high percentage of body fat in the derriere). It therefore becomes difficult even for the experts to define what is “normal.” The key is to combine any one of the weight definitions with a blood analysis. If any of the above definitions suggest that a person is overweight, and a blood analysis shows that variables are out of range but can be brought back to normal by losing weight, then we have a more precise definition.

Even if you are truly classified as “overweight,” and decide to stay this way, you can still do many things to slow down your aging process. However, please understand that every lost pound brings you closer to a leaner body and will increase the effectiveness of your anti-aging approach.

We suggest the following recommendations for losing weight:

1) Dip below your daily caloric maintenance level (DCML).
Remember, approximately 3,600 calories are equivalent to one pound of body fat. Dipping 500 calories below your DCML every day would give an approximate one-pound weight loss per week (7 times 500). Never dip below a total caloric intake of 1,200 (average size person) or 1,000 (small person) per day.

2) Cut down specifically on saturated fats and refined carbohydrates.

3) Eat regular small meals. Never skip a meal.

4) Exercise. Besides dipping below the DCML by cutting down on calories, one can also achieve this by burning more calories by exercising. Cutting down on calories (500 calories/day) and increasing exercise by 500 calories/day will result in an approximate 2 pound weight-loss per week.

To effectively achieve your anti-aging goals, you need a precise understanding of how your body's metabolism and energy production work. At this point make sure that you understand the key principles of Section 6 and the overview of the Krebs Cycle.

Much of your body's metabolism and weight loss can be explained by drawing parallels to your automobile. Filling up the gas tank is easy and done quickly. However, in order to burn all the calories you put in the tank, you have to drive quite a distance. In order for your automobile to burn the fuel efficiently without forming smoke and oxidation products that clog up the engine, fuel and air (mixed in the carburetor) must go into the engine in the correct ratio and amounts. Only when your car is supplemented with a well-tuned ignition system and with special oil additives will you get maximum performance and life span out of your engine. As previously discussed, your body has a similar engine known as the Krebs (energy) Cycle.

Basic Nutrient Groups

Protein: Protein is digested and changed to its basic building blocks known as amino acids. They are used by the body to make its own proteins. Except for a few amino acids that can float around in small compartments in special cells - known to the biochemist as “compartmentation” - the body has no capacity for protein storage. Amino acids are used to build and maintain muscle, but there are many other processes (from skin to immune functions) that also require amino acids. Excess amino acids are burned in the Krebs Cycle.

Carbohydrates: There are two types of carbohydrates: complex and refined. Complex carbohydrates (vegetables, fruits, grains—the good guys) take time to digest and then wind up in the blood as glucose, the body’s basic fuel. When your doctor measures your blood sugar, he actually checks the amount of glucose in the blood.

Refined carbohydrates (sugar, sweets—the bad guys) don’t need to be digested first. They wind up in the bloodstream quickly and play havoc with blood sugar levels. Excess carbohydrates (mainly the refined ones such as sugar and sweet processed foods) are changed to fat.

Fats: Fats are first digested to produce fatty acids and glycerol. They are either burned in the Krebs Cycle or stored as excess in the adipose (fat) tissue.

The Krebs Cycle, the calorie-burning engine in your body, runs effectively if the fuel ratio consists of high carbohydrates and low fat. The typical American diet is too high in fat and does not make this engine run at peak performance. It forms side-products that interfere with other bodily functions. This gets worse if a person only cuts down on calories without changing the carbohydrate to fat ratio to achieve weight loss. If mainly fat is burned, ketosis can occur and undesirable side-products (ketone bodies) will stress the body's normal functions.

Maximum Weight Loss

A caloric deficit is created by consuming fewer calories than what your body burns. If you consume a diet that consists mainly of complex carbohydrates with some lean protein in every meal and no extra fat in the diet, the body will burn efficiently. This way the Krebs Cycle will draw all the required fat from body fat, and the ratio of carbohydrates to fat will automatically be adjusted for best possible caloric burning.

When you follow an exercise program that includes utilizing exercise equipment, the following occurs:

- 1) You build lean muscle. This increases the basic metabolism and storage capacity of glucose (as glycogen) in the muscle. Because you now have more lean muscle, you will burn more calories even when you are not exercising.
- 2) All the fat that is burned in the Krebs Cycle is drawn from

body fat. Fat loss is faster. You can speed this process along by turning the flame up on weight loss with the use of thermogenic herbal extracts such as *yohimbine*, naringenin and *Camellia* which raise the metabolic rate of fat burning as well as increase your energy levels. These herbal extracts are the latest evolution and perhaps most important breakthroughs in weight loss. I strongly recommend them (with a qualified physician's supervision) but only in their extract form—not the whole herb.

3) No new body fat is formed.

4) Since there is no excess of carbohydrates in the form of refined carbohydrates, no carbohydrate-to-fat conversion takes place.

5) Muscle is built and not lost.

6) There is no need for the body to convert amino acids in muscle into glucose to help maintain blood sugar homeostasis.

For perfect functioning, the metabolism must be supported with proper supplements (vitamins, minerals and antioxidants) and safe and natural anabolic and protective substances.

Remember these simple principles. Knowing them will help you make important dietary adjustments and decisions when choosing from a variety of foods when eating at home or dining out.

Protein Requirement

While the body can store lots of fat and some carbohydrates (stored as glycogen in the liver and muscle mass), the capacity to store amino acids, the building blocks of protein, is almost zero. Supplying the body with several small amounts of protein throughout the day is therefore more important than eating one high-protein meal. Should you decide to eat lots of protein during one meal only, some of it will be used, but most of it—the excess—will be burned in the Krebs Cycle. A few hours later, when the body needs amino acids again, there will be none available, and the body will actually tear down some valuable muscle mass.

You'll recall that maintaining lean body mass (muscle) is most important to men and especially for women. Two processes, anabolic (muscle building) and catabolic (tearing down muscle to get amino acids) are always going on at the same time. However, as early as 2-1/2 hours after supplying the last protein in a meal, catabolic processes (tearing down muscle, which you don't want to occur) can occur more frequently than anabolic processes.

That's the reason why you must supply a small amount of protein in every meal, and also snack on small amounts of non-fat protein (such as 1/4 cup of non-fat yogurt or other non-fat protein) between meals and right before going to bed. This is especially important when you are trying to build lean body mass for body-shaping.

To lose or not to lose

Well, now you know how to shed those pounds, but is this

really what you want to do? There are numerous people who see no need to shed those extra pounds. This may be because they think that it is too much work or that they are simply satisfied with themselves. Another example is that they may be in a relationship where the extra weight doesn't bother them and their partner may find it attractive.

A few years ago, a male co-worker announced his engagement at the office. A few days later, when we met his future bride, we were all quite surprised because they didn't really seem to fit together. He was active, sporty and weight-conscious while his girl was quite a bit overweight and didn't appear to be interested in physical activities. We were quite wrong! Both liked hiking, which they actively pursued, and he ("confessed" to us during an evening out with the boys) was really turned on by his over-sized lady. Opposites attract! Both people were happy, and following a strict weight-loss program would have affected the harmony of their relationship. Why fix something that isn't broken?

SECTION 10

DISTRESS: KNOW THY ENEMY

Our Anti-Aging Stress Checklist

1) Do you know what stress (distress) can do to you and how it can age you prematurely? Are you aware it can damage your health in many ways? At this point, we'll assume that most people are aware of the damaging potential of stress, and we won't go into more details. However, should stress still be a mystery to you, I suggest you read "Stress Without Distress," by Professor Hans Selye, who still remains the number one educator on stress. If you are more the auditory type, get the tapes entitled "Managing Your Stress Levels," by Murray Susser, M.D.

2) Can you recognize when your stress changes to distress?

Keep a record of distress symptoms such as a fast heartbeat, tense muscles, or a feeling in your stomach like a bundle of knots. In short, when a stress situation occurs, do you stay cool or does the stress change into distress, causing distress symptoms to appear? Record when you grind your teeth or talk to yourself. Does the stress wear you out or do you thrive on it? How often do you go over your limit or come close to it? Are you physically exhausted after a few situations like this?

3) Can you evaluate your life in terms of distress? Analyze both your work situation and your private life. Keep adversity in perspective. Try to be rational about what is really important to you. How do you rate your stress situation when taking everything into account?

4) If you ever become ill, do you really talk to your doctor and make sure that he/she listens? Your physician should be familiar with your psychologically vulnerable points. Accept responsibility for your health. Don't expect your doctor to mend all that you have neglected. Accept the responsibility of helping him or her to heal you.

5) Where is the key distress problem in your life? At work? In your private life? If things are unacceptable, meaning that there is more distress in your life than you can handle, get to the root of your problem. Most importantly, talk to the people who put you under distress! Try to solve the problem or at least find ways to ease the distress. Communication among people is the most effective stress relief.

6) Do you meditate? A must for everybody: learn to meditate. Living an active and creative life—whatever profession you are in—means that you are frequently pushing yourself to the limit in order to achieve your goals. Living on the edge of your mental and physical capacities not only requires that you know exactly what you can handle, but also demands that you know the techniques for keeping yourself in balance and harmony. It's important to know how to give yourself a quick re-charge whenever necessary. Meditating is the best way to achieve that!

You can meditate any time, whenever you have 30 minutes for yourself. Personally, I find it most effective in the late afternoon or early evening, as a means of “coming down” from a hectic work day or for recharging purposes.

You can meditate in literally any position, but I find it most effective when lying down. Turn off everything, the radio, TV and telephone. Nothing should bother or interrupt you in the next 30 minutes. Lie down on your back on a comfortable couch or bed, hands relaxed at your sides. Close your eyes, relax, and think positive thoughts.

The main purpose of relaxing is to prepare yourself to meditate. Starting with your feet, search for tense spots in your body. Imagine draining the tension through the bottoms of your heels. Now, move up to your calves, search for tense spots, and drain the tension through the bottoms of your heels.

Do the same thing for your entire body, moving upward to your

knees, thighs, abdomen, chest, arms, neck and head.

Do it step by step. Relax and search for tense spots, and each time, drain the tension through the bottoms of your feet.

Often, I don't even make it up to my chest before I am asleep. A short nap like this, lasting for fifteen to thirty minutes, is refreshing and gives you a tremendous re-charge.

Dealing With Stress

A reporter interviewed a respected general and asked, "With all the responsibilities of your job, and the daily life-and-death decisions you have to make, don't you get any ulcers?" The General replied, "Me, get ulcers? I give ulcers!"

While some people fall apart and can't handle even the faintest stress, others thrive on it. It is like a life force for them. The majority of us, however, fall somewhere in between. As we go through life we learn about stress and how it can affect us, and our choice of jobs and environment reflects, at least to some degree, our capacity for dealing with-or needing-stress. That's why a fine arts teacher didn't become a fighter pilot, and why the fighter pilot isn't sitting at a desk writing about home economics.

Back in the seventies, when stress became an acceptable social disease and everybody used it as an excuse to run to their shrinks, we used to talk about stress-masochists-people who put themselves into

jobs or situations that gave them more stress than they could handle. We called them stress-sissies. This was somewhat a reversal of terms, meaning that there were many people who weren't man or woman enough to admit that they really had no business waddling around in the stressful situations they put themselves in.

Don't Ignore the Signs

Can't we just skip the stress and distress business and move on to more important topics? No, because our social structure doesn't allow us to act and behave in a "normal" fashion. In pre-historic times, the situation was much simpler. Encountering danger, we decided either to run or to stand and fight. Our bodies prepared us for action by pouring adrenal hormones into our blood stream. Our hearts beat faster. The blood composition changed so that, in case of injury, it could clot faster. Blood vessels constricted and the pumping of the heart raised our blood pressure.

When modern people are under stress, our bodies react similar to those of our primitive ancestors. However, because our social structure allows us no outlet for the tensions which distress creates, we just sit there and grind our teeth. If distress situations occur frequently, the adrenal changes can bring on physical damage including inflammatory and atherosclerotic changes in blood vessels.

When stress changes to distress, it becomes a mean force, capable of giving us heart attacks, making nervous wrecks out of us, and even inducing cancer. On the basis of the many negative effects distress can induce in our bodies, Professor Hans Selye developed his "Stress Theory on Aging," which—by the way—is one of the few

theories on aging that hasn't died of old age yet.

Avoid making adverse or unnecessary moves, but do not be afraid to alter situations that are detrimental to you and that can be changed. If you are trying to put your head through a brick wall, the wall will win. You know the saying about getting out of the kitchen if you can't stand the heat; be man or woman enough to admit it when something is just too much for you.

“Fight always for your highest attainable aim, but never put up resistance in vain,” warns Professor Hans Selye. If life puts you under stress, and you need to learn how to handle it, get “Stress Mastery,” a cassette tape by Murray Susser, M.D. As a practicing physician and former jet pilot, Dr. Susser can show you how mastery of stress is the path to comfort and success. For details, see the “Additional Reading and Audio List.”

“Managing Your Stress” seminars are held all over the country; and some very good motivators such as Dr. Bernie Siegal and Dr. Wayne Dwyer are teaching them. Attend one and you'll know in what direction you'll need to steer your life.

Finally, keep an open mind about psychotherapy. The fewer mysteries your own psyche has for you, the lower your chances of suffering distress-related diseases of the body or the mind. We all run our lives according to our individual “scripts.” We might not recognize how a possibly messed up script can cause the confusion in our life. Counseling or just opening up to a trusted and knowledgeable friend may show us the light at the end of the tunnel.

Stress is a Key Factor in Eating Disorders

People with eating disorders usually think that their nutrition is at fault. While learning how to eat right and avoiding hunger mechanisms is an absolute must in order to achieve desired results, psychological counseling and correcting the basic script are even more important. It is reported that 15 million “high achiever type” women suffer from eating disorders. Please check out Guerze Books of Santa Barbara who specialize in this field.

SECTION 11

SMOKING, ALCOHOL AND RECREATIONAL DRUGS

- 1. Are you aware that exposure to tobacco smoke GREATLY increases your risk of developing cancer, heart and lung diseases - - and causes premature aging?**
- 2. Do you know which good health practices can, at least partially, protect you from the effects of smoking?**
- 3. When it comes to alcohol consumption from the first to the last drink, are YOU in charge? Are you able to handle situations at any stage of your drinking?**
- 4. Have your friends told you that once you have the first drink, it's all downhill from there?**
- 5. If you are using recreational drugs, are you fully aware of the hazards of those drugs? Are you in charge of yourself or the drug? For example: Are you aware of the fact that recreational drug ABUSE (not use) is one of the greatest AIDS risk factors?**
- 6. If you are using any drugs have you ever seriously proven to yourself that you can stay off the stuff for at least 4 days? If you ever attempted that and failed, and now recognize that these drugs have a stronger hold on you than what you bargained for - GO TO THE END OF THIS SECTION AND READ "How to successfully get off drugs."**

Instead of looking at your “yes” or “no” answers, we suggest that you are just honest with yourself. You know if you should read this section. However, even if you do not have problems regarding these subject areas, we suggest that you read this section to get a better understanding of how to deal with people who are using drugs, alcohol and cigarettes.

Risks Associated with Cigarettes

This nasty habit accelerates aging and the onset of major diseases such as a variety of cancers (colon, larynx, bladder, kidney, pancreas, among others) as well as heart and lung diseases.

Lung Cancer: Smoking increases the risk of lung cancer up to 2,000% above normal. The risk increases with age according to Professor Oscar Auerbach, a prominent cell cytologist.

Laboratory experiments on animals show that inducing lung cancer is possible with the tar and nicotine of only five cigarettes. With varying percentages, smokers show increases in literally every type of cancer.

Heart Disease: Smoking increases the risk of heart disease in excess of 1,000% above normal. The risk of heart disease further increases with age and the number of cigarettes smoked per day.

Women over the age of 30 who smoke more than 15 cigarettes daily and take birth control pills, die of heart attacks or blood clots nearly 12 times more frequently than those who do not smoke (Dr.

Andruidh K. Jain, research analyst at the Population Council).

Vision: Eyesight in smokers decreases with age more rapidly than in non-smokers. The eyes need a great amount of oxygen which they get from blood. The nicotine in cigarettes causes the blood vessels in the eyes to contract so that they carry less blood and therefore, less oxygen (Dr. David Burns, U.S. Government, National Clearinghouse on Smoking).

Intelligence: Seven-year old children of smokers were tested and with only a few exceptions, they were clumsier than the children of non-smokers. They also had impaired spatial sense and were in the lower 10% of the their class (Prof. James Butler, England, a government-funded study).

Skin Aging: The increase in the number of facial wrinkles in smokers, relative to non-smokers, is directly proportionate to the number of cigarettes smoked. This is due to the fact (proven in the medical literature) that cigarette smoking significantly ages connective tissue.

The Good News: Quitting is Worth the Effort

If you haven't induced cancer yet, from the time of quitting this ridiculous habit, your body starts to recover quickly. That is true for any age. The risk drops rapidly, coming down to a little bit above normal in six months.

Bearers of False Promises

In the pseudo-health literature, we often read that antioxidants can protect us against the effects of cigarette smoke. This is not totally true. Our own research on cancer-prone animals at Roosevelt University in Chicago showed the following:

Comparing two groups of mice subjected to cigarette smoke, we find that the group that received antioxidants such as Vitamins C and E, and the trace mineral, selenium, lived longer than that unprotected group. However, when comparing four groups of animals - - one subjected to cigarette smoke, another subjected to cigarette smoke with antioxidant protection, a non-smoking group and a non-smoking group with antioxidant protection, we find that the longest-lived group is the one that was not subjected to cigarette smoke and that also received antioxidant protection.

The bottom line: In agreement with the *Free Radical Theory on Aging*, antioxidants can interfere with causes of aging (free radicals) and increase life spans. However, and I hope that everybody will agree, we would rather apply this life-extending effect to our maximum life span than just balance the negative effects of a very negative health practice. Taking antioxidant supplements is especially important for smokers because they are much closer to developing cancer than non-smokers.

Exercise, partial protection against cigarette smoking

Dr. Carolyn Barlow of the Cooper Institute reported at the July 2000 meeting of the American College of Sports Medicine that men classified as unfit (based on treadmill tests) were 80% more likely than fit men to die from cancer. If you are a smoker, becoming fit can still cut your risk of lung cancer by 50%.

As you can see, this is probably the only section where we don't tell you what to do right at the beginning. That's simply because cigarette smokers are hard to cure. Many of them are truly hooked on their habit. I know, because I was one of them myself, and before finally quitting, I used every stupid and illogical excuse to justify continuing this addiction.

So, Quit Smoking!

Assuming that you are concerned about your rate of aging, health and disease prevention, and since there is no way to reduce the risk associated with smoking while puffing away, there is only thing to do: Quit smoking.

You can quit "cold turkey," or follow an approach that we offer or you can pay professionals to help you achieve your goal. Since our approach doesn't cost anything—and it also incorporates a basic principle, namely, giving you a little annoyance every time you smoke— we suggest you try it first:

1) Smoke only half the cigarette. The remaining half acts as a filter, and you get only about 1/4 of the addicting tar and nicotine into your lungs. Even if it means smoking a few more cigarettes, you will be ahead.

2) Smoke filter cigarettes and cigarettes low in tar and nicotine.

3) When you get the urge to light up, ask yourself if you can't

wait another 5 or 10 minutes. This reduces the number of cigarettes smoked per day.

4) If you hear or read about some new and devastating research findings about smoking, don't just say, "I know," and overlook it. Get your hands on as much information as possible and make yourself read everything at least twice. Let your brain do the judging.

5) If you see one of your favorite actors or actresses smoke in a movie—obviously, some kind of sneak advertising—imagine him or her being treated with chemotherapy and radiation for lung cancer—and someone is paying that person to smoke.

6) Think about the money you spend for cigarettes over a lifetime invested in a safe investment program. This could amount to as much as \$500,000 by the time you retire. For details on money and investment power, see Dr. Kugler's *Seven Keys to a Longer Life* (Stein & Day, 1979).

7) You can purchase reprints about smoking from *Reader's Digest*. Send them \$5.00 and ask for as many reprints as possible. You can also get educational material from the Lung or Heart Association or your local library.

Now, you make an agreement with yourself. You promise to read at least one, two or three pages of the material for every three or five cigarettes you smoke. If you smoke three or five cigarettes, you can't light up again before you read the number of pages you "contracted" to read.

The principle behind all this is very simple: It aims at your brain which is the key and which is also very logical. When you follow this approach, your brain will get very annoyed and instead of saying, "Don't smoke, because if you do, you'll have to read more of this annoying material," it will just say, "don't smoke." Your head is where it all starts, so you'll find it easier to quit.

Try the Patch

If you can afford to spend a few dollars to help yourself quit smoking, try the patch. Nicotine in a skin patch helps tremendously in reducing the cravings associated with quitting. You have seen the advertising in newspapers and on TV. It works.

The Alcohol Factor

Health professionals usually consider non-drinkers as the healthiest, but that's not quite true. According to the latest research, people who drink up to 1-1/2 to 2 drinks per day (wine or beer is considered healthier than strong liquor) have the longest life spans. A number of papers have also been published that showed an improvement in heart disease risk factors with reasonable (little) alcohol consumption.

Up to 1-1/2 to 2 drinks per day doesn't appear to have any negative effects on health or longevity. However, when these lower limits are exceeded, your health quickly takes a dive. Liver functions are the first to be affected. Since the liver is involved with everything

from blood sugar homeostasis to detoxifying harmful substances and keeping immune functions at top performance levels, other organs follow quickly.

Drugs that Truly Destroy Lives

Heroin: Only a true lunatic, a person with absolutely no respect for his or her health, would ever consider doing heroin. The reality is that the absolute majority of people who use heroin are totally uneducated about the dangers. Unfortunately, for their first time, they have no idea about what they are getting themselves into. True addiction quickly destroys mind and body.

Cocaine: Cocaine is a sneaky drug because it makes people feel as if they are quite indestructible. At the same time, the people who know what's going on, look at them and acknowledge their state of mind.

The cocaine user tries to catch the initial high again but it doesn't return no matter how much money is blown up their noses. Meanwhile, they are blowing their rent money, mortgage payments, savings, and losing the respect of their families and friends. When the money runs out, users are divided into two groups. One continues with stealing, selling themselves and their property. The other wakes up from a bad dream, now realizing that it wasn't just a bad dream, faced with reality and strangely enough, often very willing to do it again. Some follow the lure of the white powder when little or more money becomes available to blow again still believing that they are in charge.

Why do cocaine users act like they do? The answers are published in many scientific studies that deal with neurotransmitters, the communication chemicals that our brain and nerve cells utilize. Highly sensitive balances represent what we “normal.” Imbalances of these neurotransmitters (dopamine, norepinephrine, serotonin, acetylcholine and more) can cause anything from depression to schizophrenia, as well as new disorders that many researchers lump together under “drug (cocaine)-induced imbalances,” AIDS complex risk, pneumonia, among others.

The bottom line: Don’t start because it results in imbalances of the neurotransmitters in the brain which are observed in brain aging and mental diseases. These imbalances can permanently damage your brain..

Amphetamines: They are similar to cocaine in their induction of neurotransmitter imbalances with different neurotransmitters being affected.

For the reader with some understanding of science, the following publications explain how amphetamines, cocaine and other drugs damage brain functions and throw the brain into imbalances: “A Primer on Neurotransmitters and Cocaine,” by Drs. R. Daigle, W. Clark and M. Landry; *Journal of Psychoactive Drugs*, Vol. 20 (3), September 1988; and “Cocaine and Other Stimulants,” by Drs. F. Gawin and E. Ellinwood; *New England Journal of Medicine*, pp.1173-1181, 1988.

Long-term brain damage was demonstrated for LSD many years ago, and recently (*Am J Psychiatry*, March 2001) long-term

brain damage was confirmed in Meth users. In animal experiments, a simple four-time use equivalent of Ecstasy caused permanent brain damage.

Marijuana: Some researchers believe that marijuana probably is safer and less damaging than alcohol. Several years ago, when doing computerized literature searches about marijuana, I came across a scientific study that showed that cancer-prone mice fed small amounts of marijuana actually had less cancer and lived longer. Try to find these references today and nothing comes up. Was “Big Brother” embarrassed by its findings have it removed from the computer banks? Everything in respect to health risks is relative! Alcohol killed about 15,000 people here in the US, and cigarettes killed about 450,000. It is reported that 2,000 to 3,000 deaths resulted last year due to cocaine and heroin use. There is not one single report of a death due to marijuana overdose.

The major forces that prevent legalization of marijuana are ignorance and the alcohol industry. But once again, I must stress that habitual marijuana use may simply be masking deeper-seated emotional problems which the prospective user would be wiser to confront. You do not need drugs to obtain optimal happiness or fulfillment in life. Its legitimate medical uses should not be restricted, however, as in the case of glaucoma and pain prevention.

During a conference on aging, a study group discussed marijuana. When the leader of the discussion asked how many of the attendees had ever smoked marijuana, one of the doctors replied, “Well, we all went to college.” Everybody laughed. However, when the discussion focused on the age at which the various individuals had

smoked marijuana, a unanimous point was made.

The majority of health professionals felt that, had they started smoking marijuana at an earlier age, for instance, high school, their performance in school would have dropped dramatically. Some of them doubted if they would have made the grade to get into the college of their choice. Marijuana definitely is not a drug that makes you think and study. People who smoke it require extreme self-discipline and understanding of its effects in order to succeed in academia.

There is one thing about recreational drugs that is 100% sure: THIS SO-CALLED “WAR” AGAINST ILLEGAL DRUGS THAT WASHINGTON KEEPS FIGHTING IS A WAR THAT WE ARE LOSING, BIG TIME!

Unfortunately, it is brainless, illogical, and not commonsensical or science-based. In terms of logic relative to this drug war, the 17th century witch-hunts were pure logic (recognize the cynicism)!

Anti-Bill of Rights: In attempts to produce results, individual freedoms are not only violated, but ignored and straight-out mauled.

Prejudice: If you get caught with drugs and you’re rich and white, you most likely will go to a fancy hotel-like rehab. If you are poor and a person of color, you will most likely go to jail.

Fighting the war on drugs is financially draining to our country. It is in violation of jailing laws (ineffective as deterrent

measure). **It is worse than stupid, and much more.**

Let us take a quick look at a much abbreviated summary:

This Brainless Washington Drug War

The cost of this war against illegal drugs has been rising steadily over the years. In 1985, there were some estimates suggesting \$14 billion per year as the total cost to our country. This was quickly followed by news releases in 1987 and 1988 claiming an annual cost of \$18 to 21 billion. None of the estimates appeared to be based on solid data until, in 1994, when estimates were based on a Rand Corporation study, suggesting a cost of \$50 billion annually.

By the beginning of 1997, newspapers reported calculations by at least three different groups, all agreeing on numbers that ranged from \$110 to 130 billion annually. Personal discussions with various experts, including the 1998 California candidate for the US House, Superior Court Judge James P. Gray, put the cost at \$130 to 150 billion annually. As we all know, costs have further increased since then. Despite the tremendous cost increases, **only one thing is sure: We are losing this war BIG TIME!**

Watching the 1997 Congressional hearings on the drug war was like watching a bad Hollywood movie. Obviously, with no knowledge at all about what is going on in the streets, each “expert” only reported on those minuscule, but unimportant areas where they could claim a little success while ignoring all the big failures, thus portraying a false picture of success. The other group of actors in this scenario were the members of Congress who listened to those “experts,” making believe that they didn’t see through the bull they

were being served.

In January of 1997, we (the International Academy of Alternative and Anti-Aging Medicine) alerted members of the House and the press that drug pushers were giving away free heroin samples and other hard drugs. We also explained why an increase in those drugs would have far-reaching consequences on AIDS, STDs and other major diseases. Nobody paid attention! Newspapers just recently confirmed our projections by reporting “skyrocketing use of heroin.”

What does this have to do with AIDS and other diseases?

AIDS researchers who had previously questioned the wisdom of the HIV-AIDS hypothesis (www.duesberg.com) reported that scientific publications in six major medical journals found a between 93% and 100% connection between abuse (not use) of hard drugs and AIDS. (References: Marmor, *Lancet*, 5.15.82, Jaffe, *Ann Int Med*, 8.83, Havarkos, *STD*, Oct./Dec. 85, Kaslow, *JAMA*, 261:23/89, Archibald, *Epidemiology*, 3:203.93, and Duesberg, *Genetica*, 2.95.) Since 1997, the number of references connecting drug abuse and AIDS have increased to 85.

There is Logic in Numbers

In 1994, the Rand Corporation think tank conducted a study that evaluated the cost of reducing drug consumption by one percent through each of four approaches. Reduction through source control (getting other countries not to grow drugs) was \$800 million. Preventing drugs from getting into the country was \$350 million. Reduction via domestic law enforcement was \$250 million. Since our country combines all of these methods, the average cost of reducing

drug consumption by one percent is somewhere around \$500 million. By comparison, the Rand Corporation put the cost of reducing drug consumption by one percent via treatment and rehab at only \$34 million.

In the meantime, several studies demonstrated that drug addiction is a true medical problem, and that the induction of cravings (the urge to repeat drug use) is due to drugs and drug metabolites that remain in the body and nerve tissue for long time periods. An international meeting sponsored by FASE (Foundation for Advancement in Science and Education) was held in 1994 in Los Angeles and researchers elaborated on many of these findings. They presented data to show that a niacin-based detox method, supported by consuming vegetable oils and taking antioxidants (see section 5), could eliminate about 2/3 of toxins from the body (including drugs and drug metabolites) in about six weeks.

The success rate of presently practiced drug rehab programs is only about 8% to 15% (distressingly low), and obviously kept low by the drug residues in the body that keep inducing the cravings for drugs. However, when drug rehab programs are combined with the niacin-based detox method, success rates increase to 60% to 70%. Since this is at least an improvement factor of four, this suggests that the cost of reducing drug consumption by one percent is 1/4 of \$34 million, or a mere \$8.5 million. Relative to the \$500 million cost of the presently practiced (failing) approach, \$8.5 million is about 1/60th. We now conclude that **while the cost of the presently practiced - and failing - war on drugs is at least \$ 120 billion, we could be spending \$2 billion and be successful.**

For some, the \$120 billion figure (based on 1997 calculations, and projected to be around \$160 billion today) appears high and inflated; they suggest that it is “only from \$60 to 90 billion.” Even if this is so, this would only suggest that the drug rehab approach would cost even less.

Treating drug abuse as a medical disorder also requires decriminalization, possibly legalization. People on both sides of this issue are more often emotional than factual - that’s the key problem. As we see it, there is a lot of dishonesty in government reporting. They try too hard to play big daddy in order to scare you. Then people realize this just isn’t so and government then loses credibility.

The starting point should be legalization of marijuana, the major financial base-support system of the illegal drug trade. From 50% to 80% of court cases are marijuana possession related (not marijuana crime related - a big difference). The government’s definition of marijuana as Schedule 1 drug is totally dishonest and potentially dangerous. When doing anti-drug counseling, users have frequently told me that they thought that it didn’t make any difference if they smoked marijuana or crack (or even used heroin) because - as they saw it - it was all the same (classified as Schedule C1 drug).

Besides, government “facts” suggest that marijuana is a “gateway” drug, meaning that its use will lead to the use of hard drugs. This, according to numerous studies, including a report by the government’s own IOM (Institute of Medicine) is incorrect. They also reported that it had medicinal uses for AIDS and cancer besides being effective as an anti-anxiety substance. The IOM also confirmed that marijuana is neither carcinogenic, addictive in itself, or

immunosuppressive.

Legalizing marijuana would GREATLY cut down on the drug trade's financial support base. It could create in excess of \$20 billion in taxes. It would certainly empty our jails, pointing our legal system back in the direction of true justice, not trampling our individual freedoms.

Have you ever witnessed the agony of an AIDS or cancer patient (on drug treatments) who tried to swallow one bite of food and threw up 10 bites? I have, and I know that smoking marijuana not only keeps food down but also helps keep important immune-enhancing supplements down.

Legalization of marijuana will lead to a DECREASE in usage.

Several European countries have legalized marijuana. The fear that it might lead to increased use proved to be unfounded. As a matter of fact, legalization results in a 20 to 25% decrease in usage. Listening to - mostly young - users explains this phenomenon: "It's not against the law, so it becomes uninteresting." - - - Talk about logic! But as long this is happening, let's be happy. These - true, not government BS - facts have also been documented in a compendium called *Cancer Treatment & Marijuana Therapy (Marijuana, Medicine & The Law Series)* by R. C. Randall. In addition, Hebrew University researcher R. Mechoulam acknowledges these findings in his paper "Recent advances in cannabinoid research," published in the October 6, 1999 issue of *Forschende Komplementarmedizin*.

Not sure about this entire issue? Not sure that this drug war has

to be terminated or at least greatly changed? Rent a few movies: “*Saving Grace*” (a hilarious British comedy that debunks the marijuana-drug connection), “*Traffic*,” and “*Blow*.” Also, please listen to New Mexico Governor Gary Johnson, a courageous man, for having the guts to make efforts to bring this (!X!!*) drug issue out into the open. After watching these movies, and reading Gov. Johnson’s published articles and discussions, ask yourself if YOU believe that a person who has the bad habit of smoking should go to jail.

How to - successfully - get off drugs

First, a few facts: Addiction to drugs is caused by drugs and (mainly) drug metabolites that remain in the body - in body fat and nerve tissue - for months and years to come. This is what causes the cravings to repeat drug use. Drug use also causes imbalances in neurotransmitters (those chemicals in the brain that are important for normal functioning). For example, cocaine and amphetamine abuse cause depletion of serotonin (important for sleep, low levels associated with depression). Therefore, falling asleep (especially with long-term use) becomes impossible.

Drug abuse usually leads to malnutrition, and malnutrition is a key factor in immune suppression. After the drug-induced high, there follow the “lows” with mood changes, depression, anxiety, etc. There is a difference between use and abuse, as there is a difference between a drinker and an alcoholic. Just as incarceration of alcoholics did nothing to deter alcohol use, incarceration of drug abusers does nothing to deter future drug use. When they return to the streets, they go back to using drugs.

Drug abuse (not use) is a disease, and it must be classified as a disease and treated as such. Today's drug rehabilitation programs have a success rate of never more than 15%. When drug rehab programs are combined with the niacin-based detox method, success rates climb to 60% to 70%. Another drug rehab problem is that these programs are not "closed door." This means that, when the urge hits the addict, they walk out of the door and are quickly back to using.

Effectively getting off drugs

- a) Make rehab centers "closed door" for at least 1 to 2 weeks.
- b) Use the niacin-based detox method to eliminate drugs and drug metabolites from the body; sweating via exercise and/or sauna. Take niacin (we prefer non-flushing niacin), antioxidants and some quality vegetable oils (omega-3 fatty acids) taken about 1 hour before the induced sweating. For details see Part II, Section 5.
- c) Use natural antidepressants like St. John's Wort during the day. Have three regular meals and avoid sugar consumption.
- d) Eat some turkey meat during the day (contains tryptophan), and take some tryptophan (500 to 1,000 mg), or 100 to 200 mg 5-HTP (5-hydroxytryptophan) before bedtime to induce serotonin production in the brain, thus inducing sleep.
- e) Improve overall nutrition with a strong supplementation program.
- f) Enhance and re-activate immune functions via cytokine

stimulation: This could include any one or all of the following:
Echinacea, vitamin E with selenium, phycotene, colostrum extract,
thymic protein-A, and IP-6.

g) Educate people - with honest facts - about the dangers of
drug abuse such as AIDS risk, brain damage and reduced reaction
times.