Weight Loss Program

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Research has demonstrated that short-term diets don't work, and crash diets are especially useless. When you're hungry for a long period of time, your body's defenses against "starvation" begin to "kick in." In other words, in order to protect you from wasting away, your body will naturally slow down the metabolism in response to having less food, thus making it even more difficult to burn calories and shed body fat. In addition, when you starve yourself, about 50 percent of the weight you lose is lean muscle tissue. Your muscles produce enzymes that burn fat. So it follows that when you have less muscle, you're producing fewer enzymes and you're burning less fat. When you finally get around to eating again, your body converts the food into fat to protect you from further starvation. So what is the best approach to weight loss? Here are some short and long-term strategies.

A Short-Term Supplementation Program

1. **Green Tea Trim**
2. **Green Power**
3. **Multi-Vitamin**
4. **Chromium Picolinate**

A Long-Term Strategy: Web-based Support System for Long-Term Program
Consider a web-based support system for food and exercise advice such as iShape.com

Smart Eating Habits

Reducing body fat can be difficult but the dietary guidelines are fairly simple:

Eat *at least* three meals a day or utilize a meal replacement formula. If you skip a meal, your appetite will increase and your energy and blood sugar levels will decrease. In one study, rats that had 2-hour access to food nibbled and stayed lean. When they were forced to eat the same amount of food during one daily feeding, they became overweight. If you choose to use a meal replacement, be sure the first two ingredients aren't sugar and milk powder. Look for a meal replacement formula that contains a variety of important nutrients as well as important dietary fiber, with a balance between protein grams, carbohydrate grams and fat grams.

When you're hungry, snack on healthful foods such as fruit, carrots and other vegetables, unsalted pretzels, or rice cakes.

Eat plenty of fresh, unprocessed foods. Low-fat, nutrient-dense foods are your best choices. These include fresh fruits, vegetables, legumes (beans and peas), and whole grains. These foods help balance your blood sugar levels and promote fat-burning.

Limit your fat intake. Fat can satisfy your hunger more quickly, but its low bulk may lead you to consume excess calories before you feel satisfied. In addition, high-fat diets can damage your body's ability to use carbohydrates, which could contribute to adult-onset diabetes according to *Foods & Nutrition Encyclopedia*, by Audy H. Ensminger, *et al.* (2nd Edition, Vol.2).

Drink at least eight ounces of water daily. While you're losing weight, toxins stored in fat tissue are released into your bloodstream. Drinking plenty of water makes it easier for your liver and kidneys to cope with the breakdown.

Cut down on caffeine intake, as this can stimulate the appetite, and try substituting hot coffee with green and herbal teas.

Do not eat late at night. If possible have your evening meal at least 3 hours before bedtime. If you take the majority of your daily calories early in the day, this will support your metabolism, and give you a more restful sleep. During sleeping hours, the body does its repair work, if it is busy digesting a meal it won't have the chance to do this work effectively, and you may wake up tired instead of feeling rested. If your schedule makes it difficult to eat the evening meal early, then try to have just a light meal in the evening with a hot drink.

Smart Exercise
Smart exercise includes stretching, toning/strengthening, and aerobics workouts. For optimal fat-burning benefits, your exercise program should bring your heart rate up to 60 to 80 percent of your maximum for 30 minutes three to five times a week. To find out what your ideal rate is, subtract your age from 220 and then calculate 60 to 80 percent of that figure.

Getting Off the Blood Sugar Roller Coaster
Many individuals who struggle with excess weight also struggle with runaway blood sugar levels. Obesity can trigger insulin insensitivity and vice versa. Insulin is a hormone manufactured by the beta cells of the pancreas. Insulin accelerates the rate at which the cells in the body absorb the sugar (glucose) in the bloodstream. When cells become insensitive to insulin, glucose has a harder time getting into the cells. Because of this, the body's mechanisms for burning fat stores are damaged. Fortunately, specific natural compounds can increase insulin activity, which leads to improved blood sugar control and significant weight loss. Let's look at some of these compounds in more detail.

Fiber: Are You Getting Enough?
Although the National Cancer Institute recommends 20 to 30 grams of fiber a day, most Americans only get about 10 to 15 grams daily. This fiber deficiency clearly contributes to the high rate of obesity and other ills in our society.

Fiber is a powerful asset to anyone trying to shed extra pounds. Dietary fiber helps balance blood sugar and promotes the effectiveness of insulin. In addition, the body uses high-fiber foods for energy instead of storing them as fat. Fiber also slows down digestion and delays emptying of the stomach making the feeling of fullness last longer. Some studies indicate that by reducing insulin levels and appetite, soluble fibers reduce calorie intake and fat storage.

In addition to a high-fiber diet, many individuals have found that supplemental fiber helps them stick with their weight-loss program. *New Facts About Fiber*, by Betty Kamen, Ph.D., recommends taking a fiber supplement about a half hour before eating. That helps subdue the appetite and makes it easier to reduce calorie intake. Naturally, there are many types of fiber available. The following have proven to be especially beneficial for weight loss.

Green Tea Trim

Green Tea Leaf (Camellia Sinesis) (95% polyphenols, Polyphenols ≥ 95%, Catechins ≥ 60%, EGCg ≥ 35%, Caffeine ≥ 2%) 150 mg.

Of the four primary polyphenols in green tea, research reveals that Epigallocatechin gallate (EGCG) is the most effective. According to a recent study published in the "American Journal of Clinical Nutrition", the formula found in this formula with its unique ratios of particular constituents, can increase the thermogenesis by up to over 40%.

What makes green tea so revolutionary is this simple fact: green tea has the ability to stimulate thermogenesis. Thermogenesis, or heat creation, increases metabolic rate which is the holy grail of weight loss, but is not accompanied by an associated increase in heart rate. Scientists have found that green tea stimulates thermogenesis and this effect cannot be completely attributed to its caffeine content because the thermogenic effect of green tea is greater than an equivalent amount of caffeine. Clinical studies conducted by Dr. Abdul Dulloo, of the University of Geneva in Switzerland brought the conclusion that green tea weight loss programs raises metabolic rates and speeds up fat oxidation.

As part of their study, the investigators measured the 24-hour energy expenditure of 10 healthy men receiving three doses of caffeine (50 mg.), green tea extract (containing 50 mg. caffeine and 90 mg. epigallocatechin), or a placebo per day. The study authors report that, compared with placebo, subject taking green tea extract had a "significant increase" (+4%) in daily energy expenditure. Dr. Abdul Dulloo mentioned about this experimental green tea weight loss program, "Stimulation of thermogenesis and fat oxidation by the green tea extract" did not raise subjects heart rates, the researchers note. This may render green tea superior to stimulant diet drugs, which can have adverse cardiac effects, especially in "obese individuals with hypertension and other cardiovascular complications."

Green tea is the first and only, all natural fat burning product which can selectively increase fat oxidation without jitters and mood swings, increased heart rate, heart palpitations, and other similar side effects associated with Ma-Haung, (ephedrine). Researchers theorize that one of the green tea's mechanism of action relies on the synergy between EGCG and caffeine. Green tea's catechins (a subclass of flavonoids) and caffeine work in the following ways:

1. Inhibiting the enzyme, catechol O-methyltransferase (COMT), which is responsible for breaking down noreinephrine, thus increasing this neurotransmitter's life in the synaptic cleft.

2. Inhibiting phosphodiesterases, thus increasing the life of cyclic AMP (cAMP) in the cell.

Together, these effects heighten the impact of norepinephrine is the neurotransmitter which plays a large role in the control of thermogenesis and fat oxidation for weight loss.

Other of the many benefits of green tea:

- Prevents Arthritis
- Perfect for all Body Types
- Burns Fat
- Ephedra-free
- Spares Lean Mass
- No Side Effects
- Reduce high blood pressure
- Reduce the risk of heart attack

There are three methods of decaffeinating teas. One is a chemical based process using ethyl acetate; the other is a CO2 process and the third is the all natural “water process”. Drinking decaffeinated tea is like drinking colored water. Once a tea is decaffeinated using any of the above processes, it tends to lose most of its properties. Since tea has 1/3 the caffeine than in coffee, it is very tempting to not have decaffeinated tea. Decaffeinated tea doesn't show the same health benefit, nor do herbal teas.

A 12 oz. can of Coca-Cola has 45.6 mg. of caffeine - Pepsi 37.2 mg.
A cup of brewed coffee has 80-135 mg. of caffeine - instant 65-100 mg.
A cup of tea has 40 mg. of caffeine.
Two Green Tea Concentrate capsules have 30 mg. caffeine.

Green tea is an extremely logical supplement for obese people. In addition to its weight loss effect, green tea protects against a number of conditions that are VERY common among the obese:

- Green tea has been found to reduce the risk of having a stroke.[12,13]
- Green tea has anti-cancer and anti-tumor effects.[14,15]

Key Ingredients:

Gymnema, *Gymnema Sylvestre* (Chief)
Gymnema, long known to Ayurvedic medicine, blocks sugar taste and lowers blood sugar levels in Type II diabetes. Also increases the number of insulin producing cells in the pancreas in animal studies. Gymnema has been shown to reduce dosages of conventional medication and insulin in Type II patients (Baskaran, 1990). It also suppresses sweet taste and reduces sugar craving in humans. Studies in animals have shown that gurmarin, a peptide isolated from gymnema, blocks the sweet taste of glucose and sucrose (Harada, 2000). Another study demonstrated insulin releasing activity in-vitro by alteration of membrane permeability of cells (Persaud, 1999). Thus, Gymnema basically stabilizes blood sugar and balances hypoglycemia, and supports the spleen and pancreas to even insulin during weight loss.

Asian Ginseng, *Panax Ginseng* (Chief)
Ginseng has been found to protect the body and nervous system from stress, stimulate & increase metabolic function, increase physical & mental efficiency, lower blood pressure & glucose levels when they are high, and raise them when they are low, increase gastrointestinal movement & tone, increase iron metabolism, and cause changes in nucleic acid (RNA) biosynthesis. Ginseng has also been found to stimulate the central nervous system in small amounts, and depress the central nervous system in large doses.

Kelp, *Laminaria* (Deputy)
Is a major herbal nutrient to support healthy thyroid functioning. Kelp, a sea vegetable, contains elemental iodine in balance with other minerals and phyto-nutrients. This marine herb has long been associated with healthy thyroid balance. Supporting the thyroid helps prevent hypo-metabolism that is often associated with weight gain. It is one of the best weight-reduction support plants available. Iodine in Kelp supports a healthy thyroid, thereby reducing one major possible contributor of obesity. Additionally, the trace mineral content of Kelp is among the highest of any known single natural source. Cultural studies relating to the result of diet including Kelp have determined a link to a lower breast cancer rate, less obesity, heart disease, rheumatism, arthritis; lower blood pressure; less thyroid disease; less constipation and gastro-intestinal ailments and less infectious disease. Kelp provides nutritional support to the nervous system and heart in

the form of vitamins, minerals and cell salts. Kelp can support increases the body's ability to burn off fat through exercise. Thus, stamina is boosted, allowing cells to consume energy more efficiently. Kelp also supports lower blood cholesterol levels.

Hawthorn, *Crataegus oxyacantha* (Deputy)
Hawthorn helps to cut through fat and, from a traditional Chinese view, it removes food stagnation. Hawthorn provides support to offset the increased demands made on the heart by the condition of being overweight. Hawthorn also helps recondition and tone-up the heart muscles while assisting in the reduction of body weight, especially if the weight reduction plan includes some form of routine exercise (*as it should*). It is very important that the heart be able to supply sufficient oxygen to the tissues in order to maintain good health. Hawthorn berries support an oxygen-saving effect on the heart muscle. It also exhibits a very strong vasodilatory action, and it lowers peripheral resistance to blood flow. After several hours of food abstinence, this herb produces a significant decrease in free fatty acids and in lactic acid within the body. These findings indicate that Hawthorn has an anabolic (*building up*) effect on the metabolic process, and may also help to reduce coronary stress induced by being overweight.

Evodia, *Evodia Rutaceae* (Assistant)
Contains *evodiamine*, an alkaloid of the fruit. This is a warming herb to help quicken the metabolism. Animal studies have demonstrated that it can prevent obesity. Trigliceride levels and cholesterol levels were significantly reduced along with epididymal fat mass. It has also been shown to inhibit colon cancer cells.

Licorice, *Glycyrrhiza glabra* (Messenger and Harmonizer)
Very sweet, neutral, moist, restoring, relaxing, softening, increases digestion and absorption of the formula, restores endocrine function. Licorice is the most frequently used herb in Traditional Chinese Medicine (TCM) and has been extensively studied. TCM classifies licorice as a sweet, mild herb and uses it to supplement the body, clear "latent heat," regulate stomach functions, expectorate the lungs, and invigorate the spleen. It has been used as an antipyretic, detoxifier, and anti-inflammatory. Many TCM formulas use licorice as a corrective adjutant and harmonizing ingredient. In China, licorice root has been called "The Great Detoxifier." Licorice helps to stabilize the blood sugar and protects the spleen pancreas from sugar swings. It acts on the endocrine system and the liver as an anti-hepatotoxic, effective in treating hepatitis and cirrhosis. Also as an expectorant and anti-inflammatory it is useful in coughs and bronchitis. A recent study found that licorice root actually stimulates the production of interferon, that critical chemical in the immune system that could be the key to preventing and treating many immune response deficiency diseases. A group of Russian researchers have found that licorice root inhibits the growth of certain tumors. Licorice root also possesses estrogenic activity, and is said to be beneficial as a uterine tonic and to induce normal ovulation.

Green Power

Chlorophyll is the life-blood of all plants, converting sunshine into life-supporting nutrients. Chlorophyll-rich plants are known to be immune enhancing, to stop bacterial growth, remove toxins, counteract inflammations, build the blood, renew tissues, improve the liver function and activate enzymes. This formula combines chlorophyll-rich plants from the sea and land. The aquatic micro-algae spirulina and chlorella contain twice the chlorophyll of any land plant. They were among the first organisms on the planet, with over three and a half billion years of supporting life. In addition to chlorophyll, micro-algae contain the highest sources of protein, beta-carotene and nucleic acid of any animal or plant food.

Kelp, a sea vegetable, binds heavy metals, pesticides, and such carcinogens as PCBs, and carries them safely out through the intestines. Kelp also nourishes and protects the thyroid. Wheat and barley grass can

pick up as many as 90 minerals from the estimated 102 found in rich soil. It has a high nutrient content with hundreds of unique digestive enzymes not available in such concentrations in other plants. These enzymes help slow cellular deterioration and mutation and are beneficial in degenerative diseases and in reversal of the aging process.

Spirulina is a group of 1,500 species of microscopic aquatic plants. The two most common species used for human consumption are *Spirulina maxima* and *Spirulina platensis.* Spirulina is particularly rich in protein and also contains carotenoids, vitamins, minerals, and essential fatty acids though its vitamin B12 content does not appear to be readily usable by people.[1,2] Most health benefits to humans claimed for spirulina and other blue-green algae supplementation are supported by anecdotes rather than scientific research. Test tube and animal studies have demonstrated several properties of large amounts of spirulina or spirulina extracts, including antioxidant,[3] antiviral,[4 5] anticancer,[6 7 8 9] anti-allergy,[10 11] immune-enhancing,[12 13 14] liver-protecting,[15 16 17] blood vessel-relaxing,[18] and blood lipid-lowering[19 20] effects.

A small, controlled study found that overweight people taking 8.4 grams per day of spirulina lost an average of three pounds in four weeks compared with one and a half pounds when taking placebo, though this difference was not statistically significant and no effects on blood pressure or serum cholesterol were observed.[21] A later controlled trial found a small cholesterol-lowering effect when 4.2 grams of spirulina per day were taken for eight weeks, but serum triglycerides, blood pressure, and body weight were unchanged.[22]

Multi-Vitamin

The right supplements can help stabilize your blood sugar levels, control your appetite, and ensure that you are getting all the nutrients you need as your cutting calories. "Smart supplementation" makes it easier to stick with your weight control program, and more importantly, helps you stay lean and healthy over the long haul.

Dietary "Insurance"

When you are cutting calories, you run the risk of cutting nutrients. That is not only hard on your health, but also hard on your weight-loss program.

Chromium Picolinate

Chromium is a trace mineral that is critical to proper insulin activity. By promoting the body's sensitivity to insulin, chromium improves blood sugar control and influences fat metabolism. In one study, subjects who took 200 to 400 micrograms of chromium a day averaged a total loss 4.2 pounds of fat and a gain of 1.4 pounds of muscle. Greater muscle mass means greater fat-burning activity.

In addition, the typical American diet doesn't provide enough chromium. The National Academy of Science recommends 130 micrograms a day, but most of us get far less. Chromium levels are depleted by refined sugars, white flour products, and lack of exercise. Chromium is an essential trace mineral that helps the body maintain normal blood sugar levels. In addition to its well-studied effects in diabetes, preliminary research has found that chromium supplementation also improves glucose tolerance in people with Turner's syndrome—a disease linked with glucose intolerance.[1]

Chromium may also play a role in increasing HDL ("good") cholesterol[2] while lowering total cholesterol levels.[3] Chromium in a form called chromium picolinate, has been studied for its potential role in altering body composition. Preliminary research in animals[4] and humans[5 6] suggested that chromium picolinate increases fat loss and promotes a gain in lean muscle tissue.

Green Tea.

Green tea contains volatile oils, vitamins, minerals, and caffeine, but the primary constituents of interest are the polyphenols, particularly the catechin called epigallocatechin gallate (EGCG). The polyphenols are believed to be responsible for most of green tea's roles in promoting good health. Green tea has been shown to mildly lower total cholesterol levels and improve the cholesterol profile (decreasing LDL "bad" cholesterol and increasing HDL "good" cholesterol) in most,[2 3 4 5] but not all,[6] studies. Green tea may also promote cardiovascular health by making platelets in the blood less sticky.

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