The Science of Weight Loss

There has been a wide divergence between the marketing of weight loss and the science of weight loss over the last 20 years. The marketing of weight loss has focused on moving products with a weight loss label on them. There has been little proof that any of these products produce either permanent weight loss or improved health for the majority of people using them.

The science of weight loss focuses on three elements:
♦ Preventing release of large quantities of insulin.
♦ Intake of the proper forms and quantity of fiber to create a sensation of fullness.
♦ An increase in metabolic rate through exercise, meal frequency and/or supplementation to improve fat burning.

Anti-Aging GR²Control

GR² Control by GNLD is a state of the art scientific weight control program. The name requires a little explanation. It stands for “Glycemic Response Squared Control.”

Glycemic response refers to the tendency of a meal to trigger insulin release and rise in blood sugar. The primary concept behind GR² Control is not caloric reduction, but rather keeping blood sugar and insulin levels low. Thus glycemic response is controlled. The “squared” refers to two other components of the program. One is a blend of six fibers designed to slow the release of carbohydrates into the body and create a sensation of fullness. The other is an herbal preparation which inhibits storage of fat on the body and increases the ability of the body to burn calories.

This revolutionary anti-aging and health promoting program, as already noted, does not focus on caloric restriction, but rather reducing insulin levels in the body. When insulin levels are high the body’s fat creation mechanisms are turned on and the body’s fat burning machinery shuts down.

The validity of this approach is supported by human clinical proof, successful human trials, and peer reviewed scientific publications.

The Real World Results

GR² Control Weight Loss Program was used during an 8-week weight loss trial with over 50 volunteers. Results of the trial were amazing. The group lost a total of 604 pounds in only eight weeks! One volunteer lost 37 pounds during the trial period.

Volunteers reported feeling more energetic and not hungry while on the program. Perhaps most significant, volunteers reported that the program was easy to live with on a day-to-day basis. Volunteers were also pleased with the variety of meal recommendations.

Human Clinical Trials

GR² Control was tested at a leading research facility to determine how it compared with other weight loss products and also with a typical American breakfast. Blood samples were taken after meals to determine the amount of insulin produced in response to products or foods. GR² Control consistently produced more...
stable insulin levels and lower insulin levels than all other meals or products tested.

**GR2Control Meal Replacement**

The meal replacement is low carbohydrate and high protein. It seizes control of blood sugar and stabilizes it, resulting in a dramatic feeling of satisfaction and fullness. This formulation is rich in nutrients including all 22 amino acids. It comes in two delicious flavors: Chocolate Dream and Vanilla Whisper. Those of us who have tried it have found it one of the best tasting beverages we have ever used.

Most people note a considerable loss of water during the first couple of days on the product. Elimination of water in fat cells is an important part of weight loss. Drinking adequate water as recommended in the program is very important to the success of the weight control program.

**Energizing Formula**

The energizing formula contains brindal berry (garcinia cambogia), small Indian ipecac (Gymnema sylvestre), bladderwrack, dandelion, green tea, butternut and cayanne. Dr. Ann Walker, who runs a medical herbal clinic in London, has tested this formulation for some time and found it helpful for both weight control and also increasing energy. The formula supports fat utilization, supports appetite control, and prevents water retention.

**Brindall Berry**

One of the ingredients in the formula is Garcinia cambogia or Brindall berry. This is a yellowish fruit that is about the size of an orange, with a thin skin, and deep furrows similar to acorn squash. It is native to South India where it is dried and used extensively in curries. It has been used historically in the Ayurvedic treatment of obesity.

Garcinia contains 20-30% HCA (hydroxycitric acid). This has been shown to inhibit fatty acid and cholesterol synthesis.1 Rat studies show a significant reduction in food intake, body weight, and serum triglyceride levels compared to controls.2

Seven clinical studies with higher order animals have shown that food intake is reduced by up to 46% after oral dosage of HCA. No rebound eating was found after discontinuation. The Malabar tamarind reduces appetite, effectively promotes weight loss, and provides a sustained increase in energy.3

**Gymnema sylvestre**

The leaves of the woody climber from India have been used in the treatment of diabetes mellitus for centuries. This herb may decrease the appetite for sweets. Extracts have been shown superior to oral hypoglycemic drugs in “subjective reports of well-being, long term glycemic control, and the lowering of plasma lipids.”4 This herb is a powerful support for function of the pancreas. One study suggested the ability to regenerate the insulin producing cells of the pancreas.5

**Bladderwrack**

Bladderwrack is a kelp particularly rich in natural iodine. This increases metabolic rate producing energy and helping burn fat. In one clinical trial patients taking bladderwrack lost much more weight than the control group.6

**Dandelion**

Dandelion is an excellent diuretic. Elimination of fluid in fat cells is an essential component of successful weight loss. Dandelion is also one of the most powerful detoxifying herbs. Many toxins are stored in body fat today and it is important that these be detoxified during weight loss. Dandelion also has a powerful stimulatory effect on the gallbladder which may help eliminate fat.7

**Green Tea**

Green tea is a powerful source of antioxidants which promote liver function. The liver produces substances which help emulsify and burn fat.8

**Butternut**

Butternut has a mild laxative effect helping to prevent constipation. It also lowers cholesterol levels and helps the liver eliminate wastes.9

**Cayenne**

Cayenne is a stimulant to metabolic rate and to blood flow. It is also known to be a tonic to digestion.10

**References:**

2. Rao, RN, and Sakariah, KK, “Lipid-lowering and antiobesity effect of (-)hydroxycitric acid,”
barley is used to treat diabetes. It works extremely effectively in stabilizing blood sugar. Some have suggested that it is barley’s high organic chromium content.2

**Oat Fiber**

Oat fiber has been shown to reduce cholesterol.3 Oat bran has also been used to treat diabetes.4 One writer hints that oat fiber may be a “panacea” due to the way it aids the body in fat utilization.5

**Soy fiber**

Soy fiber has the ability to alter lipids in the blood after meals.6 It has also been used to stabilize the stool of children with diarrhea.7 Soy fiber has a good balance of cellulosic and noncellulosic components.8 Soy and oat fibers have been used in the treatment of diabetes medically.9

**Orange fiber**

One of the best fibers to increase butyrate formation in the digestive tract. See below.11

**Gum Arabic**

Gum arabic has a significant cholesterol lowering effect. When intestinal bacteria ferment some fibers they produce a breakdown product called butyrate which is a primary nutrient essential for the health of the cells that line the colon. Gum arabic is among the best fermentation fibers for the production of butyrate.10 Other fibers which break down to butyrate in order of effectiveness are: citrus, soy and oat.11

**Konjac Glucomannan**

A double-blind, crossover study found that 3.9 grams of konjac glucomannan reduced cholesterol concentrations by 10% within four weeks. LDL or “bad” cholesterol dropped by 7.2% and triglycerides dropped by 23%. There were no adverse effects. The ability of this fiber to reduce these fat measurements indicates it is a good bet to augment a weight control program not only by lowering tissue fats, but also by creating a sensation of fullness with meals.

**References**


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**Appetite Reducer**

The appetite reducer in the new weight control formula consists of six kinds of fiber. These are:

**Barley Bran**

Barley bran is one of the most effective means of improving transit time. This helps prevent constipation during weight loss.1 In Iraq

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**Footnotes**

Why is Weight Loss Desirable?

Excessive weight not only impacts an individual’s self-esteem, but also increases the risk of a number of health problems. Among the many health problems associated with excessive weight are increased risk of heart disease and diabetes. Increased weight puts stress on the joints, especially those in the hips and knees, increasing the risk of excessive wear and tear on these tissues.

In addition to these risks, fat cells produce estrogen. Many physicians have described an estrogen overload syndrome which may increase the risk of breast and uterine cancer in women as well as contribute to benign prostatic hypertrophy and prostate cancer in men.

Fat cells have also been shown to recently produce a hormone called resistin. This hormone impairs insulin action and causes intolerance to glucose or blood sugar. This may explain the strong association between obesity and diabetes.

Prevention of obesity reduces the risk of a wide range of health problems.


Obesity and Carbohydrates

Two-thirds of the overweight are obese. Insulin inducing carbohydrates are the base of the problem. “Glycemic Response” is a term which has been developed to describe the speed and height of the glucose response to different foods. Low glucose is normal in the morning. The body has a glycemic control zone where insulin is not released in great quantities. Unfortunately, many Americans begin the day with coffee and a doughnut or orange juice and toast. This exceeds the body’s glycemic control zone and insulin is released. If a lunch of a hamburger and coke follows this perpetuates the glucose and insulin imbalance.

Excessive glucose in the bloodstream is a dangerous thing in the blood stream which is why it must be removed. Glucose can dehydrate the brain. In the diabetic this can result in a coma. Glucose is also a powerful oxidant and can damage arteries, kidney and eyes. Glucose can also combine with tissues in a reaction called glycosylation, changing the structure of proteins in the body.

The body is so sensitive to excess glucose that excessive insulin can be produced when goods are consumed which cause a rapid rise in glucose. Excessive insulin is a problem itself. It opens the doorway for fat storage and closes the door for fat burning. The result is that those with elevated insulin levels gain weight and become obese.

Each person determines by the way they eat whether their body is in the glycemic control zone or is experiencing a glycemic roller coaster.