



News *You* Can Use

USA & CANADA

The Diabetes Epidemic: Bad Today, Worse Tomorrow!

There are approximately 18.2 million people in the United States suffering from diabetes.¹ According to the Centers for Disease Control and Prevention (CDC) diabetes, already considered an epidemic, is expected to increase by over 165 percent in the next fifty years. “Rates are expected to climb rapidly because of lifestyle changes, including increases in obesity ...”²

What Is Diabetes?

Diabetes is a disease in which the body either does not produce or does not properly use insulin. Insulin is a hormone the body employs to bring glucose from the blood into tissues to be used as an energy source. Special cells in the pancreas called beta cells create insulin. If the efficiency of these cells is compromised due to poor cellular intake or elimination, these cells may become over-burdened and can “wear out”³

There are three major types of diabetes:¹
Type 1 Diabetes results from the body’s

failure to produce insulin. **Type 2 Diabetes** results from insulin resistance combined with relative insulin deficiency; the body fails to properly utilize insulin.

Gestational Diabetes effects approximately 4% of all pregnant women but generally disappears immediately following the birth of the baby.⁴

Diabetics can become ill if they become hypoglycemic or hyperglycemic. That is, when the blood sugar becomes too low or too high.⁵ Keeping blood sugar levels in the safe zone is critical in controlling this disease.

At GNLD....

We call these spikes and drops in insulin levels the Glycemic Roller Coaster. In addition to causing a near constant demand for insulin secretion, two important secondary signals are sent out as a result of this roller coaster ride. The first causes the body to go into fat storage mode, and the second curtails fat

utilization. The result is known as the Insulin Trap, and it will impact your ability to lose weight as well as your ability to control diabetes.

Glycemic Response Index

Carbohydrates are classified as either high glycemic response or low glycemic response depending upon the measure of the incremental glucose response per gram of carbohydrate, which affects how rapidly they are absorbed as glucose. During the past decade several studies have provided strong support to demonstrate the correlation between type 2 diabetes and a diet that consists of long-term intake of high glycemic index carbohydrates.

Researchers have found that in addition to high-glycemic index foods producing greater insulin resistance, replacing them with low-glycemic index foods can actually improve glycemic control. These changes include replacing products made with white flour and potatoes with whole-grain, minimally refined cereal products.⁶

Scientists have established that because low glycemic response foods are converted to glucose and enter the bloodstream more slowly, they also provide a greater amount of sustained energy. Because they cause less insulin to be secreted, blood glucose levels stay within “safe” parameters and leave the blood more gradually and over a longer period of time. The result is a longer period of satiety before hunger signals return. A healthy diet that results in weight loss is key to decreasing the risk of diabetes.



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According to the Joslin Diabetes Center at Harvard School of Medicine, the risk of type 2 diabetes can be cut by more than 50% by changes in diet and exercise. "The results of the nationwide Diabetes Prevention Program ... showed that people with impaired glucose tolerance can reduce their risk of developing diabetes by 58 percent if they lose a modest amount of weight and begin a program of 30 minutes of exercise daily."²

Control Diabetes and Lose Weight at the Same Time!

Always on the frontier of nutritional science, GNLD's Scientific Advisory Board and Global Science Network developed a weight loss program that follows these principles. The GR² Control[®] program, as the name implies, revolves around controlling glycemic response. The number "2" represents the exponential benefits for long-term health through a low glycemic response diet. These benefits include lower risk of heart disease and preventing or controlling diabetes.

Many people cannot distinguish between high- and low-glycemic response foods. Through the the Enjoy and Avoid Guide, the GR² Control program identifies these foods and includes suggestions for snacks and main meals.



The complete GR² Control products work together to:

- ◆ Re-balance nutrient intake
- ◆ Re-program the biochemical signal network and
- ◆ Re-energize the body

The GR² Control program utilizes the latest understanding of the glycemic response to lower insulin secretion demands, keeping you off the Glycemic Roller Coaster and out of the Insulin Trap. It provides sustained feelings of

satisfaction between meals, maintains balanced and controlled energy levels, and keeps "fat-storage doors" closed and "fat-burning doors" open. Formulated with supervision and input from the Scientific Advisory Board and the Global Science Network, GR² Control is truly on the cutting edge of weight loss and disease prevention science.

Controlling diabetes and other diseases through a sound, scientifically based nutritional program makes good sense. GNLD is proud to be a part of the formula.

References

1. American Diabetes Association: www.diabetes.org
2. Joslin Diabetes Center: www.joslin.harvard.edu
3. USC study: "Many Latino children well on way to diabetes and heart disease" www.scienceblog.com
4. WebMD.com: www.webcenter.health.webmd.netscape.com
5. www.jdf.org
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Cellular Nutrition & Diabetes

Unhealthy cells play a central role in the onset of diabetes. Diabetes is characterized by poor beta cell function. Beta cells create insulin in the pancreas and scientists believe that when the body is developing insulin resistance, these cells are over-burdened and can "wear out".³

Research suggests that beta cell function begins declining significantly before diabetes is diagnosed. Proper nutrition, therefore, must begin at the cellular level.

This current research is, of course, not new to GNLD. For over 45 years, GNLD scientists have known that good nutrition begins at the cellular level. Each cell is like a miniature human body. Every cell must be able to take in nutrients and eliminate waste products efficiently through the membrane that surrounds it.

In 1958, scientists formulated a dietary supplement that replaces the lipids and sterols lost through deficient diet or food processing. This supplement became known as Tre-en-en[®] Grain Concentrates. Tre-en-en is a unique combination of concentrated extracts from whole-wheat berry, rice bran, and soybeans.

With the rise in diabetes and other weight-related diseases, cellular nutrition and supplements that improve cellular efficiency are critical now more than ever.





The SAB Has The Answers!

GNLD's Scientific Advisory Board Answers Your Important Health Questions

Q. *I asked my doctor about high-protein/low-carbohydrate diets, and she said high-protein diets are bad for the kidneys. I would like to begin the GR² Control program, but I'm concerned because it seems like a high-protein diet.*

A. While the GR² Control® Meal Replacement Protein Shakes themselves are high in protein and low in fat and carbohydrates, the program as a whole is not a high-protein diet. In fact, the GR² Control Program is scientifically designed to balance protein, fat, and carbohydrates in order to enhance weight-loss. Reviewing a weight-loss program with your doctor is an excellent idea. We assure you that the GR² Control plan, as outlined in the Success Guide, will not cause harm to the kidneys.

Q. *Is the amount of sodium in the GR² Control Meal Replacement Protein Shake considered high?*

A. Sodium is an essential nutrient. It has been classified as an electrolyte and is also integral to the metabolism of proteins and carbohydrates and the maintenance of the body's acid/alkali balance. Although there has been no established RDA for sodium, most medical experts agree that we should consume no more than 2400 milligrams of sodium per day. (American Heart Association: www.americanheart.org)

The GR² Control Meal Replacement Protein Shakes have 350 mg of sodium per serving. With the two servings per day and the recommended meal plan, your sodium intake should fall well below the generally accepted recommended daily amount.

Q. *My teenager struggles with her weight. What would be the best diet for her?*

A. The best plan for a healthy lifestyle for children begins with regular exercise and a nutritious diet that is low in sugar and "junk food." The word "diet" too often implies a temporary nutritional program; most children need to learn healthy eating habits early to encourage a lifetime of healthy choices that include a balance of proteins, carbohydrates, and fats. Chips, soda, and processed fast foods are the detriment of too many children today.

If your teen's pediatrician suggests that your child needs to lose weight, consider the GR² Control program. It is a safe, effective method. Through the meal replacement protein shakes and the Enjoy and Avoid booklet, the program will guide you and your child towards healthy food choices that enable the body to burn fat for fuel rather than storing it.

DO OUR CHILDREN DESERVE LESS?

Over the past two decades, obesity in American children has nearly doubled. As a result of this disturbing pattern, more children are being diagnosed with what are generally considered adult conditions, including sleep apnea, hypertension, high cholesterol, and type 2 diabetes.¹ Additionally, recent studies have found that overweight children consistently perform lower on tests measuring math and verbal skills.²



Although genetics are a factor, inactivity and poor nutrition prevail as root causes of this trend. According to the Centers for Disease Control's National Health and Nutrition Examination Survey (NHNES), today's American youth are considered the most inactive generation in history. Only one state in our union, Indiana, requires daily physical education for students in elementary schools.³

According to Michael Goran, Ph.D., professor of preventive medicine and physiology and biophysics at the Keck School of Medicine at USC, "Obesity is now a critical, common nutritional problem in children. These studies show that the likely common pathway linking obesity to increased risk for type 2 diabetes and cardiovascular disease is insulin resistance."⁴

In addition to health issues, there is a social stigma attached to being overweight.¹ Children do not want to be overweight, but they need to

be given the tools to achieve a healthy weight. The fundamental steps leading towards a healthy weight are exercise and diet. Whether through organized children's activities or planned family outings, the credo should be, "Let's Get Moving!"

The second fundamental principle in avoiding childhood obesity centers on healthy dietary choices. In a society where "super-sized" and "fast" describe many food options, and burger joints target children as their primary market, adults need to show responsibility in educating children and providing healthy alternatives.

A healthy nutritional plan must offer a variety of nutrients and a balance of protein, carbohydrates, and fat. Fad diets encourage a temporary approach with weight loss as the ultimate goal. GNLD's GR² Control®, on the other hand, promotes overall improved health while empowering an individual to control glycemic response, enabling the body to burn fat as fuel rather than storing it. In other words, GR² Control helps you lose weight while improving your overall health.



Dietary supplements are thus increasingly necessary to fill the nutritional gaps created by the processing methods that have become standard in the food industry. We should not leave our children out of the supplement equation. With products such as Liqui-Vite® and Vita-Squares®, which contain vitamins, carotenoids to strengthen immunity, and Tre-en-en® Grain Concentrates to support optimal growth and development, we can address these critical nutritional needs. Our children deserve the best, and that begins with proper nutrition.

References

1. www.americanobesity.com
2. "Overweight Kids Lag in Early School Years," DeNoon, Daniel; WebMD Medical News; www.webmd.com
3. www.cdc.org
4. USC study: "Many Latino children well on way to diabetes and heart disease" www.scienceblog.com

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