

# The Natural Approach to Healthy Blood-Sugar Metabolism

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## Part II: Overview - Solutions

**Therapeutic lifestyle changes** that focus on effective weight control, proper nutritional supplementation, a program of regular exercise, and specific dietary guidelines are very important to promoting healthy blood sugar metabolism.

The dietary guidelines should focus on two primary goals:

- 1) choosing foods that have a moderate effect on raising blood sugar, referred to as “low glycemic index” (GI) foods and;
- 2) choosing foods that improve the body’s ability to support the effect of insulin functionality, therefore, reducing “insulin resistance”.

Scientific data indicates that low GI diets promote weight-loss more effectively than any other types of diets. It is also evidenced that this weight loss promotes targeted fat loss. How does a GI diet do these things? Low GI diets prevent our bodies from throwing a metabolic switch that increases fat storage instead of fat-burning (high GI foods flip metabolic switch that causes the body to store protein, fat, and carbohydrates, rather than promote oxidation of these nutrients). (Low amounts of carbohydrates do not mean low glycemic index). Furthermore, low GI diets have a better cholesterol/lipid profile.

With the guidance of a healthcare provider who has the extensive knowledge of therapeutic lifestyle changes this can be an easy process that results in a healthy and delicious dietary plan.

### **Here are some of the top ten high GI Foods to avoid!**

Candy, cookies, juices with added sugar, white potato, chips (corn and potato), sweetened cereal, sweetened soda, sweet snacks, white breads and bagels (processed flour), and white rice.

Here are the top ten low GI Foods that will support normal sugar levels and an optimal insulin response. Apples, berries and cherries, barley, grapefruit, legumes (lentils, beans), nuts (almonds, walnuts, soy nuts, peanuts), oatmeal (unsweetened), green peas, tomatoes, and unsweetened plain yogurt.

**Eat frequently.** Consume meals approximately every three hours for the purpose of slow glucose release. Plan on consuming 3 small meals, and 2 – 3 snacks a day. Make it a point not to skip meals and incorporate light snacks in between meals.

**Consume high quality medical food shakes and bars.** While whole foods should be the cornerstone of your nutritional regimen, a high quality low GI medical food can be used in conjunction with, or as a substitution for a meal or snack.

### **Physical Activity: Why!**

It’s simple: physical activity burns calories, protects and builds muscles (which burns more calories), improves psychological factors, and reduces risk of illness.

According to a study by the Diabetes Prevention Program on 3,000 people with pre-diabetes, patients who began exercising about 30 minutes a day and lost 5% to 7% of their body weight (about 10-12 lbs. in someone weighing 200 pounds) lowered their risk of developing type 2 diabetes by 58%, compared to a group of patients who did not exercise. Example: walking at a brisk pace works well.

Nutritional supplementation may offer great benefit. There should help support carbohydrate absorption and blood-sugar metabolism. Just make sure to take them on a daily basis.

- 1) Chromium (picolinate) - 200 – 500 mg:
  - Helps insulin transport glucose into body cells. In August of 2005, FPA recognized chromium picolinate as a safe nutritional supplement with credible evidence to support its role in healthy glucose metabolism
- 2) Vanadium (as vanadyl sulfate) - 25 mg:
  - Provides support to insulin signal and helps in regulating glucose metabolism
- 3) Alpha Lipoic Acid - 100 mg:
  - A powerful antioxidant that has shown to improve insulin sensitivity, hence, helping to regulate blood-sugar levels
- 4) Chinese cinnamon bark:
  - In a double-blind, controlled trial, cinnamon bark was shown to promote healthy insulin and glucose metabolism in people with diabetes.
- 5) Multivitamin mineral (key elements – B-vitamins, biotin, vitamins C & E):
  - Should carry a comprehensive foundation of nutrients to aid in healthy glucose metabolism and reduce oxidative stress associated with hyperinsulinemia (an excess amount of insulin in the blood)
- 6) Green tea extract – 50 mg:
  - Should contain EGCG, which enhances insulin action
- 7) Conjugated Linoleic Acid (CLA) - 1000 – 2000 mg:
  - Supports glucose metabolism and improves insulin sensitivity
  - Research suggests that CLA may induce a change in body fat distribution with the greatest reductions occurring in the abdomen and legs
- 8) Omega-3 fatty acids (EPA/DHA) – 1 – 3 g:
  - Improve the effect of insulin. Essential fatty acids needed for healthy cells
- 9) Fenugreek:
  - Studies show that this herb improves glycemic control and insulin resistance
- 10) Protein - Dietary protein:
  - Adequate protein intake and nitrogen balance are key in controlling dysinsulinemia
- 11) Soluble fiber:
  - Helps lower postprandial (following a meal) blood glucose and insulin in type-2 diabetes

## **Blood Sugar in the News II**

New England Journal of Medicine, JAMA, and Diabetes Obesity Metabolism are just some of the named organizations/periodicals that have called for Therapeutic Lifestyle Changes (TLC) as a First-Line Therapy for blood-sugar issues. Additionally, Annals of Internal Medicine 2005, have taken the stance that TLC is more effective and less expensive than taking a name-brand blood sugar medication.

“It’s not a diet. It’s a way of life” Jack La Lanne

Source:

- 1) Metagenics.com. Blood Sugar Management Programs
- 2) Archives of Internal Medicine, July 24, 2006
- 3) Eur. J. Clin. Invest 2006; 36(5): 340-344
- 4) American Journal of Clinical Nutrition, October 2006: Vol. 84, 871-879
- 5) Reuters.com
- 6) Digestive Disease Week, 2006

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