



# DISCLAIMER

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The information contained within this document is restricted to and intended for professional use by licensed health care providers. The statements made should not be construed as a claim, nor does it represent any particular product procedure or advice as constituting a specific cure, whether palliative or ameliorative. Procedures and products mentioned are designed to support the client's health and may be considered as support for other procedures deemed necessary by the practitioner.

Although specific manufacturers make the supplements, herbs and homeopathies referenced in this document, the opinions expressed are those of the author and are not those of any of the manufacturers. This document is not designed to replace medical advice or medical treatments, but to be used adjunctively in the care and support of health and vitality.



# CHAPTER II: SUGAR HANDLING

## BLOOD SUGAR STABILIZATION

### RELATED CONDITIONS

- Hypoglycemia
- Reactive Hypoglycemia
- Low blood sugar
- Syndrome X
- Triglycerides high
- Carbohydrate sensitivity
- Pre-diabetic
- B vitamin deficiency
- Sugar sensitivity
- Food cravings
- Carbohydrate cravings

### PHYSIOLOGIC CONSIDERATIONS

Blood sugar problems begin in childhood with excess use of sugary snacks and drinks. This is extremely common today. The U.S. Department of Agriculture estimates that the average American consumes from 150 to 180 pounds of sugar each year—an unbelievable amount compared to two or three hundred years ago when normal sugar consumption was one to five pounds per year. As early as the 1940s, many doctors, including Weston Price, D.D.S., and Francis Pottenger, M.D., predicted the epidemic of modern degenerative illnesses stemming from the reliance on devitalized, denatured and artificial foods.

#### PROTOCOL AT A GLANCE

##### Primary Supplemental Support

Bio-Glycozyme Forte  
Biomega-3

##### Secondary Supplemental Support

Whey Protein Isolate  
Amino Acid Quick Sorb  
Beta-TCP  
ADHS  
Cytzyme-PAN  
Cytzyme-LV  
Cytzyme-AD  
Tri-Chol



Our bodies are simply not made to handle the excessive amount of sugar most people consume today. The result is diabetes and a variety of other degenerative, chronic illnesses,. These chronic illnesses may include cancer, cardiovascular disease, hypertension, obesity, immune impairment, hormone imbalances, fertility issues, chronic fatigue, depression, and hyperactivity, all of which are linked to high sugar intake and the effects of insulin.

Insulin is the hormone that signals the cells to take in glucose and other nutrients. Over-consumption of sugar and simple carbohydrates causes the tissues to become saturated with glucose. Over time, the cells can no longer accept additional glucose. The cells then begin to ignore the insulin signal. As insulin loses its effect on target cells, blood glucose levels soar setting the stage for metabolic syndrome, pre-diabetes and eventually Type II diabetes. This form of diabetes is a result of dietary indiscretion and is, for the most part, reversible with dietary and life style changes along with targeted nutritional therapy.

The progressive nature of sugar handling complications are caused by the hormonal adjustments the body makes in an attempt to manage sugar levels. Blood sugar levels may vacillate widely during the day with skipped meals and the reliance on sugary snacks and beverages for quick energy.

The other form of diabetes, Type I diabetes in principle, is not reversible and is the result of the loss of pancreatic beta cells located in the Islets of Langerhans. The islets are the cells, which make insulin. When the beta cells are destroyed, whether from viral infection, parasites, toxins or trauma, there is little chance of recovering the ability to make insulin. Yet, with dietary guidelines, nutritional therapy and insulin medications, these clients can live a healthy, nearly normal life.

## **PREDISPOSING FACTORS**

- Modern diet
- Reliance on simple carbohydrates, sugar, starch and alcohol
- Tobacco, caffeine and other stimulants
- Skipping meals, especially breakfast
- Protein deficiency
- Essential fatty acid deficiency
- Family history of obesity and diabetes

## **CLINICAL CONSIDERATIONS**

Individuals with sugar handling problems, such as hypoglycemia, experience fatigue, especially in the afternoon, and sometimes are shaky when meals are skipped. They typically crave coffee or sweets, have erratic energy levels, are at times moody and frequently present with hormonal concerns.



When addressing blood sugar problems, it is important to consider all aspects of sugar handling, including: stress, nutrient deficiency, particularly those necessary to run the Krebs cycle, glandular support for the adrenals, liver, pancreas, and the diet. Of course, proper exercise also plays a part.

## RECOMMENDATIONS

The symptoms that stem from blood sugar imbalance will never be successfully managed without a reorientation toward a balanced and wholesome diet. Therefore, the Sugar Control Diet is the primary intervention. Use the diet on a trial basis for two weeks. Usually within the first few days, one will note feeling much better and more energized. These folks just never figured out how bad they really felt while ignoring nutrition, skipping meals and relying on high glycemic foods to satisfy their cravings.

The diet is comprised of non-starchy vegetables, lots of fresh and wholesome vegetables, healthy fats, and sufficient protein. They are required to eat every two hours while on the diet. They never need to eat a lot at any one time; a fist full of nuts or half an apple; maybe a piece of cheese or a small serving of chicken would be sufficient. The goal is to keep them out of the low blood sugar stage so they must eat frequently. It is the low blood sugar stage where the cravings are strongest and impossible to resist. Thus, sweeteners of any kind are discouraged, in addition to protein bars or any other type of processed snack foods. Because of the short duration, most motivated people have no problems doing this. Usually patients feel so good on the diet that they realize the importance of managing their blood sugar with a nourishing diet.

## PRIMARY SUPPLEMENTAL SUPPORT

### BIO- GLYCOZYME FORTE

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*(MULTIPLE NUTRIENTS FOR SUGAR HANDLING PROBLEMS)*

*Bio-Glycozyme Forte* contains an extensive array of nutrients to support all aspects of sugar handling, including the action of insulin, glucagon and the glucocorticoids; tissue. It provides support for those organs most affected by sugar stress; including the adrenals, pancreas, liver, pituitary/hypothalamus, and all relevant Krebs cycle nutrients.

**Recommendation:** Take 1 to 3 tablets with breakfast and 1 to 3 with lunch. Alternately, some practitioners recommend taking this product mid-morning and mid-afternoon between meals when the blood sugar is at its lowest.



## BIOMEGA-3

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(EPA AND DHA FROM FISH OIL)

Fish oil is high in EPA and DHA, which are essential for proper brain function. Balanced essential fatty acids, along with proteins, will have a profound effect on sugar cravings. When the enzymes and co-factors are available, and proper fuels are balanced with essential fatty acids, sugar cravings will diminish.

**Recommendation:** 2 to 3 capsules once or twice daily, with meals

## SECONDARY SUPPLEMENTAL SUPPORT

### WHEY PROTEIN ISOLATE

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(WHEY PROTEIN ISOLATE)

This is an excellent source of quality protein, useful in stabilizing sugar cravings.

**Recommendation:** 1 to 2 scoops in a low-glycemic beverage of choice one or more times daily as needed for additional protein

### AMINO ACID QUICK-SORB

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(LIQUID AMINO ACIDS )

Use *Amino Acid Quick-Sorb* with symptoms of low blood sugar and when an individual is unable to eat. It will decrease the severe symptoms of hypoglycemia for an hour or two. Contains amino acids, which feed the Krebs's cycle without affecting blood sugar.

**Recommendation:** Take one or two squirts as needed to stabilize blood sugar

### BETA-TCP

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(BEET JUICE, TAURINE, VITAMIN C AND PANCREOLIPASE)

Taurine is essential in the production of bile; pancreatic lipase aids the digestion of fats; and beet concentrate effectively thins bile to decongest the liver and helps where there is a history of gallstones.



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**Beta-TCP** is also especially effective for individuals who are unable sleep throughout the night. This is often due to a low blood sugar in the middle of the night awakening the individual from adrenal stimulation. The betaine in **Beta-TCP** supports the liver to modulate blood sugar levels using fats and proteins.

**Recommendation:** Take 2 to 6 **Beta-TCP** tablets before bed

## ADHS

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(ADRENAL ADAPTOGEN—HERBAL)

**ADHS** (Adrenal hypersecretion) is effective when the adrenal glands have been under prolonged stress and where hormones, such as the glucocorticoids are over-produced. This state of “up-regulation” usually precedes the hypoadrenal state characterized by exhaustion, accompanied by body pain, possibly lung conditions, allergies, and general malaise. In a pre-diabetic or diabetic state, the client is frequently found to have dysregulation and hypersecretion of the adrenals.

**Recommendation:** Take 1 or 2 tablets at breakfast, and 1 or 2 at lunch. Do not take this product after 12:00 pm, as it may interfere with sleep patterns. Not recommended for pregnant or lactating women.

## CYTOZYME-PAN

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(PANCREAS TISSUE—NEONATAL BOVINE)

This neonatal glandular is useful in the treatment of pancreas-related dysfunction, in enzyme production, and in sugar regulation. Pancreatic exhaustion ultimately leads to diabetes. A decrease in pancreatic hormones has been successfully modulated and reversed with proper diet, supplements, and glandular support. This product is pivotal for recovering pancreatic function.

**Recommendation:** 2 to 4 tablets twice daily

## CYTOZYME-LV

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(LIVER TISSUE—NEONATAL BOVINE)

**Cytozyme-LV** enhances the regulation of blood sugar due to the liver’s central role in blood sugar modulation. The liver converts



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glycogen to glucose, and performs gluconeogenesis, which converts amino acids into a fuel source for the Krebs cycle. Conversely, the liver will convert excess glucose to its storage form of glycogen and triglycerides.

**Recommendation:** 1 to 4 tablets one to three times daily with meals

## CYTOZYME-AD

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(ADRENAL TISSUE—NEONATAL BOVINE)

With sugar handling stress there is often an accompanying adrenal deficiency or even exhaustion. The exhaustion may manifest after years of “hyperadrenia” and the chronic stress of the alarm-resistance phase. In many cases, the first supplemental support recommended is *Bio-Glycozyme Forte*, an excellent source of neonatal glandular with other nutrients to support adrenal function and sugar handling. *Cytozyme-AD* is useful, however, when additional adrenal support is indicated.

**Recommendation:** 1 to 3 tablets daily with meals

*When triglycerides are elevated, consider the following:*

## TRI-CHOL

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(NUTRIENTS TO NORMALIZE TRIGLYCERIDES AND CHOLESTEROL)

*Tri-Chol* is a botanical and nutrient combination, which is especially useful for high triglycerides.

**Recommendation:** 1 to 3 capsules twice daily



# TYPE II DIABETES

## RELATED CONDITIONS

- Adult-onset diabetes
- Non-insulin dependent diabetes mellitus (NIDDM)
- Diabetes mellitus
- Sugar diabetes

## PRE-DISPOSING FACTORS

This is a disease caused by over-consumption of sugar and simple carbohydrates, with a sedentary lifestyle. In the majority of cases, the client has consumed sugar since childhood exhausting any ability the body has to handle sugar. The result may include is a dysfunctional insulin hormone, decreased amount of insulin production, and an increased amount of insulin production with little sensitivity of the end organs response to the insulin hormone. To reiterate, Type II diabetes is generally reversible with a complete change in diet, high-quality targeted nutrients, and a regular exercise program.

### PROTOCOL AT A GLANCE

#### Primary Supplemental Support

GlucoBalance  
Biomega-3  
Whey Protein Isolate  
Cytosyme-PAN  
Beta-TCP  
ADHS

## RECOMMENDATIONS

- Implement the Sugar Control Diet.
- Implement moderate exercise program, at least three to four times weekly.
- Suggest targeted nutritional supplementation.

## PRIMARY SUPPLEMENTAL SUPPORT

### GLUCO BALANCE

*(HIGH-POTENCY MULTIPLE NUTRIENTS FOR SUGAR HANDLING)*

**GlucoBalance** is a multivitamin product specifically designed for diabetics and individuals who need help with blood sugar control. Those who are on prescription medications for blood sugar should





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consult with their physician because this product may decrease blood sugar levels, which will then effect requirements for medication.

**Recommendation:** 1 to 3 capsules per meal, six to nine capsules daily

## BIOMEGA-3

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*(EPA AND DHA FROM FISH OIL)*

Omega-3 fatty acids provide joint lubrication, distribute minerals to tissues, and support the anti-inflammatory eicosanoids, neurological and immunological functions. These folks are always deficient in essential fatty acids.

**Recommendation:** 2 to 4 capsules two to three times daily with meals

## WHEY PROTEIN ISOLATE

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*(WHEY PROTEIN ISOLATE)*

*Whey Protein Isolate* is an additional quality protein to support normal blood sugar levels and reduce sugar cravings.

**Recommendation:** 1 scoop one to three times daily as needed

## CYTOZYME- PAN

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*(PANCREAS TISSUE—NEONATAL BOVINE)*

*Cytozyme-PAN* provides glandular support for repair and regeneration of an exhausted and deficient pancreas organ. Very useful for diabetics.

**Recommendation:** 1 to 4 tablets one to three times daily



## BETA-TCP

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*(BEET JUICE, TAURINE, VITAMIN C AND PANCREOLIPASE)*

Taurine is essential in the production of bile, pancreatic lipase helps with the digestion of fats, and beet concentrate effectively thins bile to decongest the liver and help where there is a history of thick bile, gallstones, or other bile duct problems. It also supports the breakdown of fats for fuel while stabilizing blood sugar.

**Recommendation:** 1 to 4 tablets with meals

## ADHS

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*(BOTANICAL AND NUTRIENT FOR SUPPORT OF THE ADRENAL GLAND)*

This combination nutrient and botanical is especially useful for cases of hyperadrenia, commonly found in diabetics and pre diabetics.

**Recommendation:** 1 to 2 tablets at breakfast and perhaps 1 or 2 at lunch; always take before 12:00 pm to avoid interruption of nighttime sleep patterns



# HEALTHY HORMONE DIET

## PROTEIN

Protein meals are best eaten early and mid-day (before 4:00 or 5:00 in the afternoon). Patients may have as much protein as desired (unlimited meat, poultry, fish, eggs). In addition, also consider a protein shake or supplement for a quick and easy meal replacement when needed.

## VEGETABLES

Eat as much as you want, as you can never eat too many vegetables. Focus on dark leafy greens, and a variety of bright and rich colors. Consider fresh vegetable juicing to increase intake of plant foods. Eat some vegetables raw or lightly cooked every day unless otherwise directed by your doctor. Use starchy vegetables, such as potatoes and yams, sparingly.

## GRAINS

Whole grains may be eaten when there are no food allergy concerns and weight is normal. If, however, weight is a problem, grains should be eliminated along with sugar and other high glycemic foods. Grains are best eaten whole, soaked or fermented prior to consumption to increase nutritive value. Soaking grains begins the digestive process and helps to neutralize inhibiting factors such as phytic acid.

## FATS

Eat plenty of wholesome natural fats, such as butter and oils from coconut, sesame, olive, hemp, walnut, flax, etc. Supplemental fish oil is normally recommended. Avoid all artificial fats and oils, such as hydrogenated or partially hydrogenated oils. Most people should decrease use of Omega-6 oils and increase omega-3 oils. Ideally, intake of omega 6 and omega 3 fats should be nearly equal.

## FRUITS

Be careful with fruits. They should be eaten alone or as a snack between meals. Limit the sweeter fruits, such as bananas, grapes, persimmons, papayas, dried fruits, etc. One to three pieces of low glycemic fruit daily are sufficient. Best fruits are most berries, papaya, mangos, avocados, coconuts, kiwi, guava, olives and pineapple.

## NUTS

Eat raw nuts and seeds liberally, especially raw cashews, almonds, walnuts, pumpkin seeds, etc.

## DAIRY

Dairy is not recommended for most people unless there are no allergy problems. If no allergies are present, suggest raw, unpasteurized and non-homogenized dairy products when available. Also, recommended are milk products such as raw goat or sheep milk, or raw cheeses, and unsweetened yogurt or kefir.



## **SWEETENERS**

Sweeteners should be limited and not used on a regular basis.

## **STIMULANTS**

Stimulants, such as sugar, caffeine, tobacco, tea and alcohol are best avoided.

## **WATER**

Drink a minimum of one quart of fresh, pure, water daily for each fifty pounds of body weight.



# SUGAR CONTROL DIET

The following is a trial diet designed to help recalibrate the body's sugar control mechanisms. It increases energy and vitality when followed closely. This diet may not be a healthy diet over a long term, but it is beneficial during a trial period. As physical symptoms improve, foods may be added back into the diet. This way of eating takes planning, but is well worth the effort. Most people will lose their cravings for unhealthy foods within one or two weeks. Many are pleased to experience weight loss without feeling hungry or deprived. Those who need to gain weight often find weight return without undue effort. Eat small amounts of food every two hours. Between meals, a small amount of nuts, or one half of an apple, is enough. No processed or packaged foods are allowed. Patients should eat only whole foods as they are found in nature. See the Ten Guidelines for a Healthy Diet.

## **PROTEIN**

Each meal should include a minimum of 4 to 6 ounces of protein. Eat as much as you desire. Meat, poultry, fish, and eggs are unlimited. Consider a protein shake as a quick easy meal.

## **VEGETABLES**

Eat as much as you want, you can't eat too many vegetables. Focus on dark leafy greens, and a variety of bright and rich colors. Consider vegetable juicing to increase intake of plant foods. Eat some vegetables raw or lightly cooked everyday unless otherwise directed by your doctor. No starchy vegetables allowed, such as potatoes or yams.

## **GRAINS**

Consume no wheat, including breads, rolls, muffins and pasta. The only grain allowed is whole grain brown or wild rice, and only at the evening meal. All rice should be roasted first before cooking. Place dry uncooked rice in pan and brown, some of the kernels will pop. Then cook as normal.

## **FATS**

No artificial fats or oils such as margarine hydrogenated or partially hydrogenated oils. Eat plenty of wholesome natural fats such as butter, lard, chicken fat, coconut, flax, hemp, sesame, olive, walnut, and borage oils. Supplemental fish oil is often recommended.

## **FRUITS**

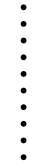
One or two pieces of fruit daily is plenty for normal physiology, on this diet however, fruit is not recommended, except for low glycemic fruits such as an avocado, raw coconut, or perhaps half an apple as a snack.

## **NUTS**

Eat plenty of raw nuts, especially raw cashews, almonds, walnuts, pumpkin seeds, etc.

## **DAIRY**

Do not consume dairy unless specifically allowed by your doctor.



## **SWEETENERS**

No sweeteners of any kind are allowed.

## **SNACK EVERY TWO HOURS**

To avoid erratic blood sugar fluctuations, eat something every two hours. Only a small amount of food is necessary at one time.

## **DRINK PLENTY OF WATER**

## **10 GUIDELINES FOR A HEALTHY DIET**

- Avoid or eliminate all artificial, processed and packaged foods and beverages. Choose organic produce and organic, grass-fed, free-range meats and dairy when possible.
- Reduce, avoid or eliminate all insulinogenic such as foods and stimulants including sugar, cakes, cookies, candy, bread, pastas, potatoes, starchy grains and vegetables, soda, chocolate, coffee, caffeine containing teas, and alcoholic beverages.
- Identify and eliminate food allergens.
- Eat breakfast. Protein is best early in the day and carbohydrates later in the day.
- Avoid eating anything other than a light snack near bedtime.
- Eat large amounts of whole or juiced greens and brightly colored vegetables daily.
- Use healthy organic oils liberally. Include raw butter and cream, as well as flax, hemp, coconut, olive, walnut, sesame oils, etc. Supplementation with quality balanced essential fatty acids is recommended.
- Include plenty of traditional foods such as fermented foods, slowly cooked soup broths made with fish, chicken or beef bones, and traditional culinary spices and condiments.
- Consume fewer calories in general, and select foods with the highest nutritional density.
- Drink one quart of pure water daily for each 50 pounds of body weight.



# WEIGHT MANAGEMENT

## RELATED CONDITIONS

- Diet and weight loss
- Obesity
- Type II diabetes
- Adult-onset diabetes
- Non-insulin dependent (NIDD)
- Diabetes mellitus
- Sugar diabetes
- Reactive hypoglycemia
- Syndrome X
- High triglycerides and LDL Cholesterol

### PROTOCOL AT A GLANCE

#### Primary Supplemental Support

GlucoBalance  
 CLA  
 ADHS  
 Biomega-3  
 Cytozyme-PAN

#### Secondary Supplemental Support

Bio-Glycozyme Forte  
 Beta-TCP  
 Whey Protein Isolate

## PREDISPOSING FACTORS

Obesity is usually a result of lifestyle and over-consumption of sugar and simple carbohydrates. Endocrine dysfunction can be a contributing factor. Generally, the individual has consumed excess amounts of sugar, simple carbohydrates and allergens for many years and the body's ability to make or to use insulin or manage sugar is impaired. This condition is, for the most part, reversible with diet, exercise and supplementation.

## RECOMMENDATIONS

- Implement the *Sugar Control Diet*.
- Suggest moderate aerobic exercise.

## PRIMARY SUPPLEMENTAL SUPPORT

### GLUCO BALANCE

(HIGH POTENCY MULTIPLE NUTRIENTS FOR SUGAR HANDLING)

*GlucoBalance* is a multivitamin developed for diabetic blood sugar control.

**Note:** Individuals on medications should consult their physicians



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and monitor blood sugar levels, as this product may decrease blood sugar.

**Recommendation:** 2 to 3 capsules per meal, six to nine capsules daily

## CLA

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*(CONJUGATED LINOLEIC ACID)*

*CLA* product accelerates breakdown of fatty tissues and reduces adipose tissue.

**Recommendation:** 2 to 3 capsules two to three times daily

## ADHS

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*(ADRENAL ADAPTOGEN—HERBAL)*

*ADHS* stabilizes cortisol levels, which at high levels (as in Syndrome X), contribute to trunk obesity and the effects of insulin in fat storage.

**Note:** Not recommended for pregnant or lactating women.

**Recommendation:** 1 to 3 tablets at breakfast, and one or two at lunch. Do not take this product after 12:00 pm, as it may interfere with sleep patterns.

## BIOMEGA-3

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*(EPA AND DHA FROM FISH OIL)*

These fats are “essential,” particularly when trying to lose weight. When the system is balanced in essential fatty acids, food cravings disappear without effort. Omega-3, especially EPA and DHA, are most deficient in the western diet.

**Recommendation:** 2 to 3 capsules once or twice daily with meals





## CYTOZYME- PAN

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(PANCREAS TISSUE—NEONATAL BOVINE)

*Cytozyme-PAN* neonatal glandular support repairs the pancreas and is useful in diabetic conditions.

**Recommendation:** 2 to 4 tablets twice daily

## BIO- GLYCOZYME FORTE

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(MULTIPLE NUTRIENTS FOR SUGAR HANDLING PROBLEMS)

*Bio-Glycozyme Forte* product contains an extensive array of nutrients to support all aspects of sugar handling, including the action of insulin, glucagon and the glucocorticoids; and tissue support for those organs most affected by sugar handling stress. It also supplies adrenal, pancreas, liver, pituitary, hypothalamus and Krebs cycle nutrients. Some clients do better on this product than *GlucoBalance*. Use one or the other in most cases.

**Recommendation:** 2 to 3 tablets per meal, up to six to nine daily.

## SECONDARY SUPPLEMENTAL SUPPORT

### BETA-TCP

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(BEET JUICE, TAURINE, VITAMIN C AND PANCRELIPASE)

The beet concentrate, containing betaine (trimethylglycine), effectively thins bile to decongest the liver and helps where there is a history of gallstones. Taurine is essential in the production of bile, pancreatic lipase helps with the digestion of fats, and vitamin C is essential in the conversion of cholesterol to bile salts, decreasing liver and gallbladder congestion.

**Recommendation:** 2 to 4 tablets per meal.



## WHEY PROTEIN ISOLATE

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*(WHEY PROTEIN ISOLATE)*

*Whey Protein Isolate* is an excellent protein supplement that helps control cravings for junk foods. Use as a meal replacement and in place of convenience foods. Mix in a blender with crushed ice and frozen or fresh fruit (be careful not to make it too sweet).

**Recommendation:** 2 level scoops once or twice daily