

Lab Values To Screen For Insulin Resistance or Dysregulation

Triglycerides	Under 100 is the goal Levels greater than 60% of total cholesterol should be addressed especially if HDL are 40 or below. Further testing and monitoring is in order.
<u>Fasting Insulin</u>	10 IU /ml or below are optimal Over 10 IU/ml is high
HBGA1C or Glycated Hemoglobin	5.4 or less percent is optimal >5.7 insulin resistance developing 6.5 or higher new guidelines for diabetes
Glucose, fasting	70 - 85 mg/dl is optimal 85 - 110 mg /dl is high 110 - 126 very high 126 plus indicative of diabetes
Insulin Resistance Calculation	(Fasting Insulin X Fasting Glucose) Divide that number by 405. If that calculation is greater than 1.8 you have insulin resistance.
Leptin (use RIA testing)	4 - 6 ng/dl is optimal Up to 9 ng /dl is acceptable 10 plus ng/dl is high

Any of the above values above OPTIMAL or ACCEPTABLE should be addressed. Patients using glucometers should continue taking their regular glucose levels when taking nutrients to enhance blood sugar regulation.

Several authors have indicated that toxins and environmental factors have impaired glucose control. Consider a detox program like the 3-Step Detox as a prelude to any therapy. Use step one and two as outlined and use the nutrients below as maintenance. Contact your local Biotics representative for the dietary suggestions and exact protocols. Getting a head start with an aggressive dietary and allergy reducing program will reduce inflammation, and help patients free better faster. I generally see insulin, cholesterol, triglycerides and blood sugar levels decrease as well.

STEP ONE: 7-10 DAYS... continue until the bottles are finished

Beta TCP 5, three times a day with meals
Bromelain Plus CLA 4 with each meal

STEP TWO: 20 DAYS

Bio-Detox Pack one with each meal
Detox Drink to be taken as a meal replacement (generally breakfast) and as a mid afternoon snack. The Detox Drink contains the following:
NutriClear 2 scoops
Whey Protein Isolate (Pea Protein Concentrate if sensitive to Whey) 1-2 scoops

STEP THREE: 60 days retest and modify as needed.

Tuesday Minute

GlucoBalance® Use 2-3 capsules, three times per day, a formula developed by Drs. Jonathon Wright and Allan Gaby as a source of foundational nutrients. Use the 3 capsules for heavier patients or lab numbers in the high range discussed above. Reduce to 2 capsules, three times per in 30 days.

Optimal EFAs® Use 2 capsules, three times per day, a mixture of omega-3s and organic GLA with some flax seed oil to reduce inflammation via N-F-kappa B pathways.

Bio-D-Mulsion Forte® 2 drops yields 4,000 IU, some studies show vitamin D works as good or better than some medication to reduce blood sugar.

Lipoic Acid 100 mg, three times per day, to prevent neuropathy and provide antioxidants to protect tissue.

Niacinamide 500 mg, three times per day, to help burn sugars more efficiently.

Mg-Zyme™ (magnesium) Start with 3 tablets at bedtime and increase to bowel tolerance. The goal is a loose but formed stool. Magnesium will draw water to the bowel and have a laxative effect if too much is used.

REDUCE CARBOHYDRATES TO NO MORE THAN 60 GRAMS PER DAY until Blood sugar is stabilized and then monitor and balance carbohydrate levels and flood sugar. It may be necessary to go lower than 60 in some case.

Use 60 grams if weight loss is an issue.

CONSIDER TESTING FOR GOOD SENSITIVITIES... numerous authors have shown blood sugar dysregulation occurs more frequently when food sensitivities are not addressed. For unresponsive cases this can often seem miraculous. Test for both IgG and IgA. US BioTek is very reasonable 206-365-1256 and can be done using blood spot technology and therefore does not require venipuncture.

INCREASE SOME FORM OF EXERCISE AS PART OF A DAILY EXPERIENCE... The best way to reduce sugar is to burn it through movement. See Tuesday Minute on exercise #197 and #299 called High Intensity Interval Training. Exercise is not an option once the battle begins.