

Insulin Resistance Protocol

Lab values to use as a screen for Insulin Resistance or Dysregulation

<u>Fasting</u> Insulin	10 IU /ml or below	optimal
	Over 10 IU/ml	high
HBGA1C or Glycated Hemoglobin	5.4 or less percent	optimal
	5.6 - 5.8	acceptable
	5.9 - 6.9	high
	7.0 or higher	at risk of diabetic complications
Glucose	70 - 85 mg/dl	optimal
	85 - 110 mg /dl	high
	110 - 126	very high
	126 plus	indicative of diabetes
Anion Gap	(Sodium +Potassium) – (CO2 +Chloride) = Anion Gap; if that number is 14 or over and the CO2 is low (under 24) consider a thiamine deficiency, and supplement with a phosphoralated form like Bio-3B-G®. Low B1 is often the cause of elevated glucose.	
Leptin	4 - 6 ng/dl	optimal
	Up to 9 ng /dl	acceptable
	10 plus ng/dl	high

Any of the above values that are 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

GlucoBalance® Use 2-3 capsules 3 times per day, a formula developed by Dr.'s 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 three times per in 30 days

Optimal EFAs® Use 2 capsules three times per day, a mixture of omega 3's 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 (Bio-B3 Plus 250™) To help burn sugars more efficiently 1-2 tablets tid.

Bio-3B-G® Each low dose tablet is 1.5 mg take 2 every waking hour for 10 days and monitor blood sugar, then 3 tid for 60 days.

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

Monitor Blood levels on a regular basis and adjust nutrient dosage levels accordingly the closer patients follow dietary and lifestyle modifications the lower dose nutrients will be needed.