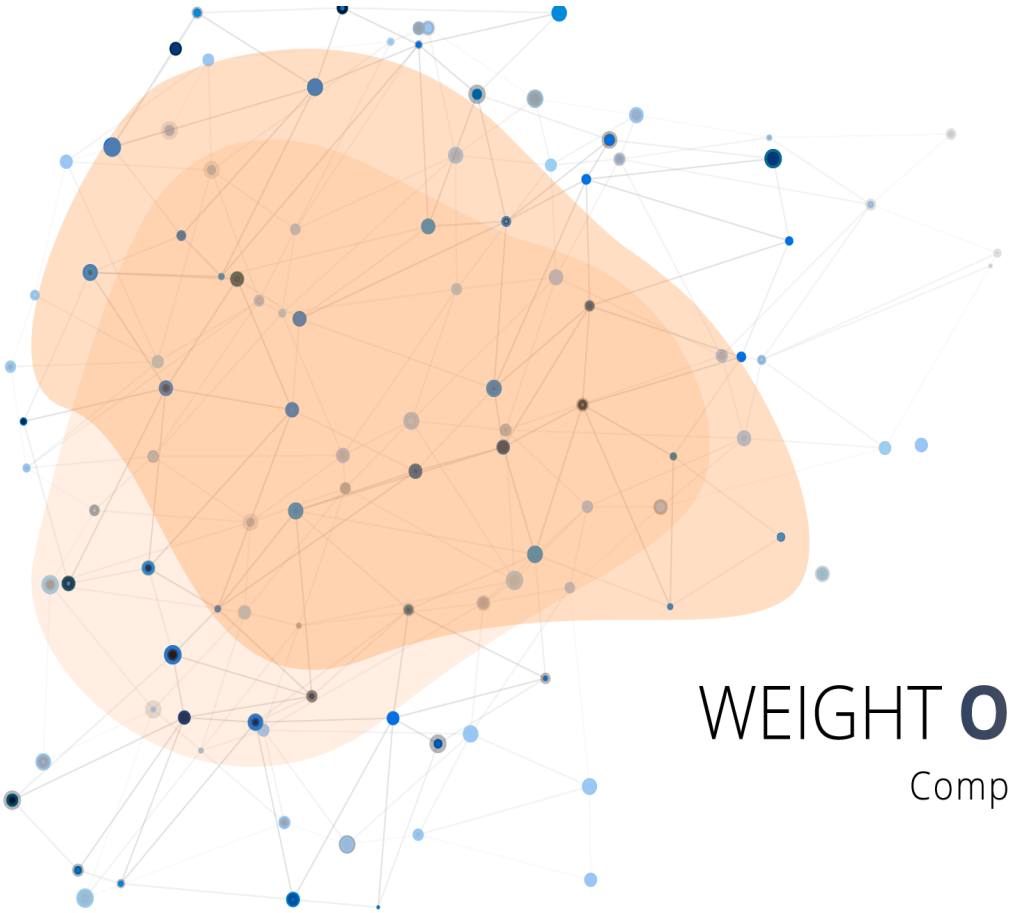


WEIGHT **OPTIMIZATION**

Comprehensive Nutrient Panel

Patient: **SPECTRACELL, TEST**

Accession ID: 2106300140

Provider: Sample Provider, M.D.

Order Status: Complete

6030 North Course Drive, Houston, TX 77072
1(800) 227-5227 | support@spectracell.com | www.spectracell.com

SpectraCell Laboratories
Science + Health + Solutions

PATIENT		SPECIMEN		PROVIDER	
NAME **SPECTRACELL, TEST**	AGE **52**	ACCESSION ID **2106300140**	DATE COLLECTED **06/30/2021**	ACCOUNT ID **00000000**	CLIENT NAME **Sample Provider, M.D.**
DOB **1/1/1970**	GENDER **Male**	ORDER ID **1139-MD Location-210630**	DATE RECEIVED **06/30/2021**	ADDRESS **123 S. Any Street** **ANYWHERE, TX 77000**	
PATIENT ID **19-115-00445**			DATE REPORTED **07/01/2021**		

Your Micronutrient Results Summary

These cellular deficiencies may suggest the underlying cause of a myriad of unwanted symptoms and if corrected, can optimize overall health and performance.

Functional Deficiencies

Abnormal	Suggested Supplementation *
Glutathione	600 mg b.i.d. (1200 mg daily) of N-Acetylcysteine (NAC) Take each dose with a meal
Immunidex	Address individual micronutrient deficiencies.
Vitamin B3 (niacin)	100 mg b.i.d. (200 mg daily) of Niacin

Borderline Deficiencies

Borderline
Alpha Lipoic Acid
Carnitine
Cysteine
Glutamine
Vitamin C
Vitamin E
Vitamin K2

Micronutrients and Weight Management

Micronutrients directly affect the ability of a cell to metabolize food. For example, carbohydrate metabolism is dependent on several B vitamins and minerals. A deficiency in just one micronutrient can potentially have an impact on a person's metabolism. A deficiency in several micronutrients can exacerbate this effect. By repleting deficient micronutrients, you are potentially altering your metabolism in a way that makes you more efficient at burning fat for energy.

Obviously, there are many factors that cause a person to gain weight – hormone levels, insulin sensitivity, fat cell metabolism, medications and of course, our lifestyle. How each of these factors – even what we eat – affect our body shape and weight is highly dependent on micronutrient status. So, regardless of the reason, a micronutrient deficiency may negatively alter a person's metabolism. Giving your cells the micronutrients they need to burn food for energy (versus fat storage) is a fundamental step in achieving optimal health, which includes being at a healthy weight. Similarly, many of the same nutrients that impact weight also impact Diabetes Management.

PATIENT: **SPECTRACELL, TEST** PROVIDER: **Sample Provider, M.D.** DATE REPORTED: **07/01/2021** ACCESSION ID: **2106300140**

* SpectraCell is a CLIA certified laboratory that reports functional micronutrient deficiencies in an individuals' cells, which is the purpose of this report. It is not intended to diagnose or treat specific medical conditions. The quality and bio-availability of supplements varies considerably and should be taken into account when developing a repletion regimen.

* The RDA (Recommended Daily Allowance) was first published in 1968 primarily for use in nutritional labeling of packaged foods. The DRI (Dietary Reference Intake), published in 1997, serves as replacements for the former RDA, although the actual values are generally within an order of magnitude, and are also primarily for use in nutritional labeling and fortification of packaged foods. In most cases, neither the RDA nor the DRI will be adequate to replete a nutrient in people who demonstrate a functional cellular deficiency of said nutrient. An evidence based approach was used to develop clinically relevant repletion recommendations, consisting of data from published studies and clinician expertise. However, the information presented is not intended nor implied to be a substitute for professional medical advice, diagnosis or treatment.

* Listed repletion suggestions are for patients 12 and older.

* For more information on nutrients (food sources, symptoms of deficiency, physiological functions), go to www.spectracell.com.

PATIENT: **SPECTRACELL, TEST** PROVIDER: **Sample Provider, M.D.** DATE REPORTED: **07/01/2021** ACCESSION ID: **2106300140**

Micronutrients	Patient Results	Reference Range	Patient Result	Interpretation
VITAMINS				
Vitamin A		>70%	78	
Vitamin B3 (niacin)		>80%	72	Deficient
Biotin		>34%	50	
Inositol		>58%	69	
Vitamin B12 (cobalamin)		>14%	22	
Vitamin D3		>50%	56	
Vitamin K2		>30%	36	Borderline
MINERALS				
Calcium		>38%	48	
Chromium		>40%	52	
Magnesium		>37%	57	
Zinc		>37%	46	
AMINO ACIDS AND METABOLITES				
Asparagine		>39%	52	
Carnitine		>46%	49	Borderline
Cysteine		>41%	44	Borderline
Glutamine		>37%	39	Borderline
ANTIOXIDANTS				
Coenzyme Q10		>86%	90	
Glutathione		>42%	38	Deficient
Alpha Lipoic Acid		>81%	82	Borderline
Vitamin C		>40%	42	Borderline
Vitamin E		>84%	87	Borderline
CARBOHYDRATE METABOLISM				
Fructose Sensitivity		>34%	47	
Glucose-Insulin Interaction		>38%	48	
CELL HEALTH				
Immunidex		>40-86%	36	Deficient

Asparagine - Supplementation of this amino acid delayed fatigue during exercise by decreasing the rate at which glycogen was used up.

Biotin - Boosts metabolism by improving glycemic control and lowering insulin, a hormone that promotes fat formation.

Calcium- Prevents the formation of fat cells as well as helps oxidize (burn) fat cells.

Carnitine - Helps reduce visceral adiposity (belly fat).

Chromium - Makes the body more sensitive to insulin, helping to reduce body fat and increase lean muscle.

Cysteine - Supplementation of this nutrient reduces body fat in obese patients.

Glucose-Insulin Response -

Glutamine - Reduces fat mass by improving glucose uptake into muscle.

Inositol - May increase adiponectin levels, a weight-loss hormone which helps manage weight.

This list is non-exhaustive. Other nutrients affect weight management.

Lipoic Acid - Supplementation improves glucose uptake which helps reduce fat mass.

Magnesium- A deficiency impairs a person's ability to use glucose for fuel, instead storing it as fat.

Vitamin A - Reduces a person's tendency to store food as fat; reduces the size of fat cells.

Vitamin B3 - Increases adiponectin, a weight-loss hormone secreted by fat cells.

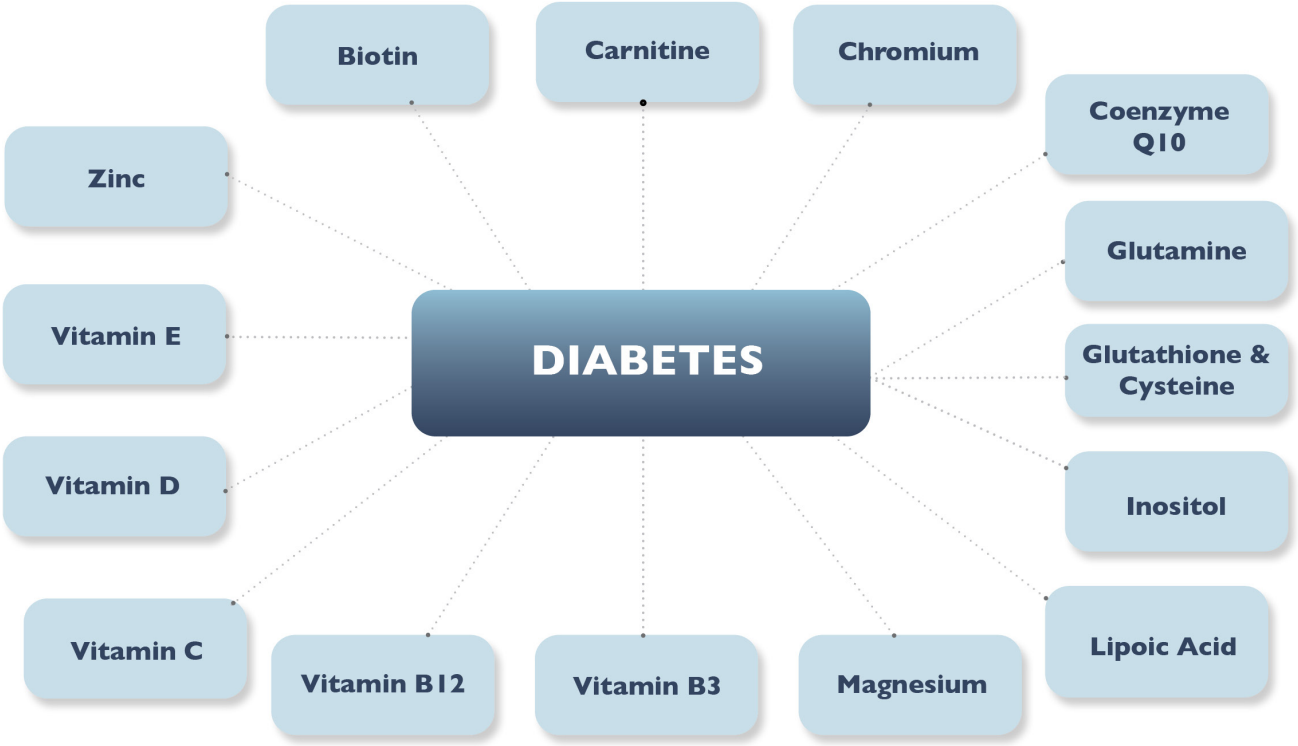
Vitamin B5 - Lowers body weight by activating enzymes that burn fat cells. One study linked B5 supplementation to less hunger when dieting.

Vitamin E - Prevents pre-fat cells from changing into mature fat cells, thus reducing body fat.

Vitamin K - A deficiency linked to excess fat tissue. Helps metabolize sugars.

Zinc - Reduces leptin, a beneficial hormone that regulates appetite.

PATIENT: **SPECTRACELL, TEST** PROVIDER: **Allen Joshua, DO, MD** DATE REPORTED: **07/01/2021** ACCESSION ID: **2106300140**



Biotin - Helps control blood sugar.

Carnitine- May improve insulin sensitivity.

Chromium- Helps insulin work more efficiently in the body.

Coenzyme Q10 - May improve blood sugar control in diabetics.

Glutamine - May improve blood sugar control in diabetics.

Glutathione & Cysteine- Supplementation of this nutrient reduces body fat in obese patients.

Inositol - Helpful in treating some diabetic complications.

Lipoic Acid - Enhances glucose uptake into cells.

Magneisum - Deficiency reduces insulin sensitivity.

Vitamin B3 - Helps insulin function more efficiently.

Vitamin B12- Diabetic medications deplete B12.

Vitamin C - May help lower blood sugar in diabetics.

Vitamin D - Lowers inflammation linked to diabetes.

Vitamin E - Protects insulin producing cells from damage.

Zinc - Affects gene expression linked to diabetes.

This list is non-exhaustive. Other nutrients affect diabetes.