
**NUTRITIONAL SUPPORT USING THE ULTRAGLYCEMX[®] PROGRAM
IN A PATIENT WITH INSULIN RESISTANCE**

Purpose

To show how targeted nutritional support featuring UltraGlycemX medical food may be useful in patients with insulin resistance.

Patient's Presentation and History

A 59-year-old Caucasian female presented with elevated blood glucose, lack of energy, poor sleep, and muscle pain. Her home fasting glucose measurements were elevated between 115 and 140 mg/dL. The patient had a history of fibromyalgia (FM), arthritis, depression, hyperthyroidism, and hypertension. Her sleep was compromised, and she reported waking three times per night due to pain.

Patient's Objective Information

- Initial MSQ* score (108) was substantially elevated
- Initial PCS[†] (35.5) and MCS[†] (41.8) scores were low
- BMI^{††} was 35.5 (indicating obesity and altered body composition)
- 2-hr postprandial glucose (168 mg/dL) and insulin 189 μ IU/mL were elevated (indicating hyperinsulinemia).
- Total cholesterol (234 mg/dL) and triglyceride (309 mg/dL) levels were also elevated (indicating abnormal lipid profile)
- Prescriptive medications and supplements included amlodipine and benazepril HCl combination (5 mg/10 mg bid), bisoprolol fumarate and hydrochlorothiazide combination (5 mg/6.25 mg qd), levothyroxine (175 μ g qd), low-allergy potential, 88% insoluble, 12% soluble dietary fiber supplement (1 scoop qd), and dehydroepiandrosterone (DHEA, 10 mg bid)

Plan

Along with continuing prescription medications and supplements, the patient was placed on:

- UltraGlycemX, 2 scoops bid
- UltraGlycemX dietary plan, 1300 calories per day
- 600 mg EPA and 400 mg DHA, 2 capsules bid

4 and 8 Week Results

After 4 weeks, the patient reported improved energy, no more mood swings, and was waking only once per night. She was 90% compliant with the recommended diet and reported no binge eating, but was experiencing flatulence. She had discontinued the bisoprolol/hydrochlorothiazide on her own. She was instructed to add a botanical supplement to help with the flatulence.

The patient continued to do well after 8 weeks, was no longer waking at night, and was able to start a more aggressive exercise routine. She was instructed to gradually decrease UltraGlycemX to 1 scoop bid, increase the EPA and DHA to 3 capsules bid, and begin a natural thyroid support supplement.

12 and 16 Week Results

At 12 weeks, the patient reported less energy, increased muscle pain, headaches, and feelings of hunger. UltraGlycemX was increased back to 2 scoops bid.

After 16 weeks, the patient reported having more energy and fewer cravings. She had lost a total of 17 lbs and her laboratory results showed normalized lipids while her home fasting glucose was averaging 105 mg/dL.

Conclusion

This case study suggests that targeted nutritional support that combines supplements with a low-glycemic-index diet—such as UltraGlycemX medical food, fish oil supplement, and the UltraGlycemX dietary plan—may help promote healthy blood glucose, insulin, and lipid levels in patients with hyperinsulinemia.

Figure 1

After 16 weeks, the patient’s triglycerides (reference range: 30-200 mg/dL) had decreased from 309 mg/dL to 85 mg/dL.

The results suggest a substantial improvement in triglyceride levels.

72% Reduction in Triglycerides

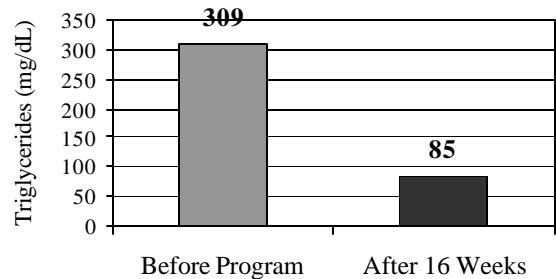


Figure 2

After 16 weeks, the patient’s total cholesterol (reference range: 120-200 mg/dL) was reduced from 234 mg/dL to 184 mg/dL.

This result suggests a notable improvement in total cholesterol levels.

21% Reduction in Total Cholesterol

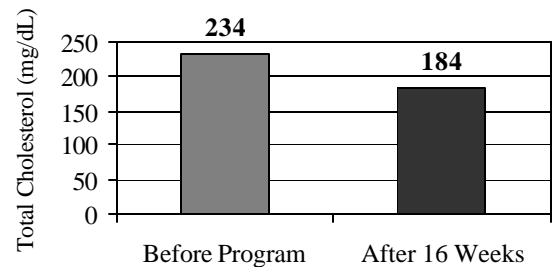
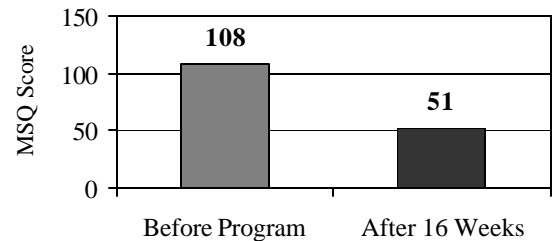


Figure 3

The patient’s Medical Symptoms Questionnaire* score (reference range: <30 = few or low intensity symptoms) was reduced from 108 to 51 over a 16-week period.

The results suggest a considerable decrease in symptoms.

53% Reduction in MSQ Score



© Metagenics, Inc. MET883 3/04

*The Medical Symptoms Questionnaire[®] (MSQ) is a clinical tool for the evaluation of general physical symptoms. Total scores above 75 are generally associated with substantial symptomatology and disability; scores below 30 generally indicate few or low intensity symptoms.

†The Medical Outcomes Survey SF-36 is a well-validated, general quality-of-life questionnaire that summarizes health outcome in two reliable reproducible scores: the Physical Component Summary (PCS) and the Mental Component Summary (MCS). Scores of 50 or higher are associated with healthier individuals, whereas scores lower than 50 indicate compromised functioning.

††Body Mass Index (BMI) is computed by the weight (kg) divided by the square of the height (m).

Note: The information provided in this case study describes the results of one patient under the care of a licensed healthcare practitioner and may not be a typical response. UltraGlycemX medical food is to be used under the supervision of a physician or other licensed healthcare practitioner.

Case study: Nutritional Support Using UltraGlycemX in a Patient with Insulin Resistance. Metagenics, Inc; 013IR1103.