

CASE #1072: Application of FirstLine Therapy™ Therapeutic Lifestyle Changes Program on a Patient with Altered Body Composition, Hypercholesterolemia, and Perimenopausal Hot Flashes

PURPOSE

The purpose of this case study was to show how a therapeutic lifestyle changes program known as *FirstLine Therapy*—which includes a dietary program, regular exercise, and targeted nutritional support—can be beneficial in a patient with altered body composition, hypercholesterolemia, and perimenopausal hot flashes.

PATIENT'S PRESENTATION AND HISTORY

A 48-year-old Caucasian female presented with concerns about her weight and reported frequent hot flashes. Previous laboratory tests indicated she was hypercholesterolemic. She admitted to consuming lots of “fast food” and “eating on the run,” as well as skipping meals and then gorging.

The patient's past medical history included hypertension, migraines, hyperlipidemia, vaginal dryness, and bladder incontinence. She was currently taking metoprolol succinate, 50 mg/day for hypertension. She had undergone surgery to have a normal breast cyst aspirated a few months prior to presentation.

She had a maternal family history of hypertension and diabetes and her brother had hyperlipidemia.

Patient's Objective Information:

- HT: 70"; WT: 220 lb; BMI¹: 36.6 kg/m²; waist circumference: 42"
- Physical exam was unremarkable
- Significant laboratory findings: elevated 2-hr PP insulin; elevated tChol and LDL-C

ASSESSMENT AND PLAN

Assessment: Altered body composition, hypercholesterolemia, perimenopausal hot flashes, and fits the criteria for metabolic syndrome by the National Cholesterol Education Program (NCEP)

Plan:

The patient was placed on the *FirstLine Therapy* program, along with targeted supplements to address her hypercholesterolemia and perimenopausal hot flashes, and was instructed to begin:

- UltraMeal® Medical Food beverage mix for altered body composition, dyslipidemia, metabolic syndrome, and estrogen imbalance, 2 scoops/2 times per day
- UltraMeal® Bar Medical Food for altered body composition, dyslipidemia, metabolic syndrome, and estrogen imbalance, 1/day
- Foundation nutritional support packets containing a multivitamin, minerals, and EPA/DHA to support overall health, 1 packet/2 times per day

- Sugarcane-derived policosanol to promote healthy blood lipid levels, 1 capsule/2 times per day
- Guggulipid/no-flush niacin complex to promote healthy blood lipid levels, 1 capsule/2 times per day
- Combination supplement featuring isoflavones from kudzu and red clover to promote healthy estrogen metabolism, 3 capsules/day
- Black cohosh/soy isoflavone combination supplement to relieve perimenopausal hot flashes, 1 capsule/2 times per day
- Indole-3-carbinol/rosemary extract combination supplement to promote healthy estrogen metabolism, 1 capsule/day
- Consuming a 1600 Cal/day diet
- Keeping a food journal
- Exercising ½ hour/3-4 times per week

RESULTS

2, 5, and 12 Weeks after Starting the FirstLine Therapy Program

After **2 weeks**, the patient was instructed to add EPA/DHA 300:200, 2 capsules/day. At the **5 week** visit, the patient had been losing weight steadily. She reported “doing great” and noted a reduction in hot flashes. By the **12th week**, she had lost a total of 20 lb and her BMI had decreased to 33.3 kg/m². She reported that her hot flashes continued to diminish, but had been experiencing vaginal dryness. Her laboratory results indicated low testosterone. Estriol vaginal cream was prescribed, to be applied at bedtime for 14 days, then 2–3 times per week.

21, 38, and 48 Weeks after Starting the FirstLine Therapy Program

At **21 weeks**, the patient's BMI had decreased to 31.6 and her weight was 190 lb, for a total loss of 30 lbs since starting the program. Her laboratory findings included the normalization of tChol, a decrease in TG, and a reduction of LDL-C to near reference range. She was advised to decrease her caloric intake to between 1300 and 1600 Cal/day. At the **38 week** visit, the patient weighed 174 lb (for a total loss of 46 lb) and laboratory tests indicated normalized 2-hr PP insulin values.

After **11 months (48 weeks)**, the patient reported her hot flashes had abated, and she had discontinued the combination supplement featuring isoflavones from kudzu and red clover on her own without a recurrence of hot flush episodes. She had lost a total of 49 lb since she began the program, and her final BMI was 28.5 kg/m² (an 8 point decrease since she began the program).

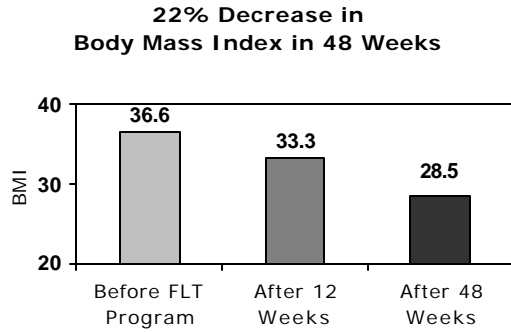


Figure 1. After 48 weeks, the patient's body mass index (BMI) decreased from 36.6 to 28.5 kg/m². This result indicates the patient had a considerable improvement in body composition with the *FirstLine Therapy* program.

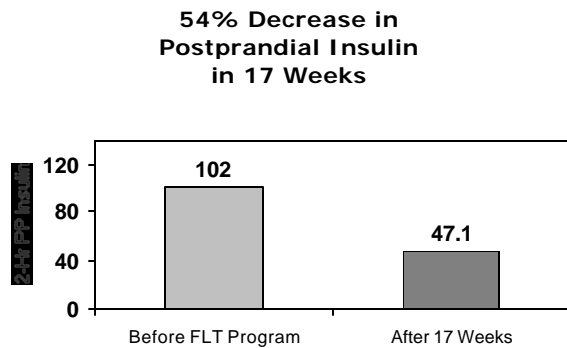


Figure 2. The patient's postprandial (after meal) insulin value decreased from 102 µIU/mL to within reference range at 47.1 µIU/mL (reference range: 22-79 µIU/mL) after 17 weeks. The result suggests the patient's insulin levels substantially improved with the *FirstLine Therapy* program.

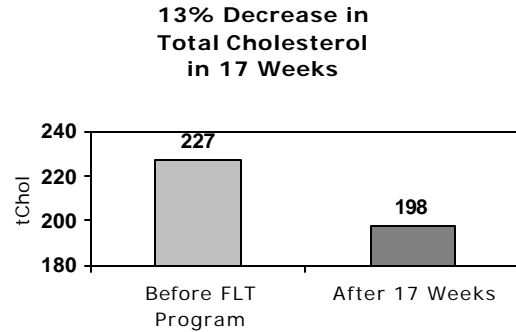


Figure 3. After 17 weeks, the patient's total cholesterol (tChol) decreased from 227 to within reference range at 198 mg/dL (reference range: 110-200 mg/dL). This result indicates a noteworthy improvement in total cholesterol levels.

SUMMARY

This case study has demonstrated a positive long-term effect on a patient with altered body composition, hypercholesterolemia, elevated postprandial insulin, and bothersome perimenopausal hot flashes with the application of the *FirstLine Therapy* therapeutic lifestyle changes program.

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.

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