

CASE #1071: Application of the FirstLine Therapy™ Therapeutic Lifestyle Changes Program on a Patient with Altered Body Composition and Elevated Cardiovascular Disease (CVD) Risk

PURPOSE

The purpose of this case study was to show how a therapeutic lifestyle program known as *FirstLine Therapy*—which includes a dietary program, regular exercise, and targeted nutritional support—can be beneficial in an obese patient with high risk for developing CVD.

PATIENT'S PRESENTATION AND HISTORY

A 33-year-old Caucasian female presented with concerns about her weight. She consumed a diet high in carbohydrates and saturated fats, with a low-to-moderate inclusion of vegetables. She had been diagnosed and treated for depression and anxiety in the past, but had discontinued a prescribed anti-depressant (escitalopram oxalate) a few months prior to presentation. At the time of presentation, she was not taking any medications or supplements.

The patient's past medical history included a D&C, C-section, and knee surgery. She had a paternal family history of coronary heart disease and a maternal family history of eating disorders.

Patient's Objective Information:

- HT: 70"; WT: 236 lb; BP: 110/68; BMI[†]: 33.9 kg/m²; body fat: 41.4%; lean mass: 58.6%
- Physical exam was unremarkable
- Significant laboratory findings: elevated hsCRP at 4.72 mg/dL

ASSESSMENT AND PLAN

Assessment: Altered body composition, elevated CVD risk secondary to elevated tChol/HDL-C and hsCRP

Plan:

The patient was placed on the *First Line Therapy* program, along with targeted supplements to address her elevated CVD risk, and was instructed to begin:

- UltraMeal Medical Food beverage mix to promote healthy body composition, 2 scoops/day
- UltraMeal Bar Medical Food to promote healthy body composition, 1/day
- EPA/DHA 300:200 supplement to promote cardiovascular health, 2 capsules/3 times per day
- Supplement containing reduced iso-alpha-acids (RIAA), rosemary extract, and oleanolic acid for inflammation, 1 tablet/3 times per day
- Folate (L-5-methyl tetrahydrofolate) 800 mcg to promote healthy homocysteine levels and cardiovascular health, 1 tablet/2 times per day
- Consuming a 1300 Cal/day diet
- Keeping a food journal
- Exercising 20-30 min/4 times per week

5, 7, and 11 Weeks after Starting the FirstLine Therapy Program

After **5 weeks**, the patient had lost 8 lb and her BMI had decreased to 32.7 kg/m². Her BIA had dramatically improved, with a decrease in body fat (36.8%) and increase in lean mass (63.2%). She reported feeling great, having no cravings, and said she was able to follow the diet and exercise program without difficulty.

After **7 weeks**, she had lost an additional 4 lb and reported having "a lot more energy." At **11 weeks**, she weighed 218 lb, for a total loss of 18 lb since starting the program. She showed continued improvement in BMI (31.3 kg/m²), body fat (36.9%), and lean mass (63.1%). She had stopped exercising 2 weeks earlier due to an injured ankle, but was planning to restart as soon as it healed.

13 and 17 Weeks after Starting the FirstLine Therapy Program

At **13 weeks**, the patient had lost an additional 2 lb. She had started lifting weights, and her BIA improved (body fat: 35.7%; lean mass: 64.3%). After **17 weeks**, the patient reported not adhering to the diet and exercise program while on vacation, from which she had just returned. She still lost an additional 3 lb, for a total weight loss of 19 lb since starting the program.

The patient's laboratory results indicated a dramatic improvement in hsCRP, which was at 0.997 mg/dL. She was advised to discontinue the UltraMeal beverage mix, continue using the UltraMeal Bars, continue the supplements as indicated, and restart the exercise program.

5.7% Decrease in Body Fat in 13 Weeks

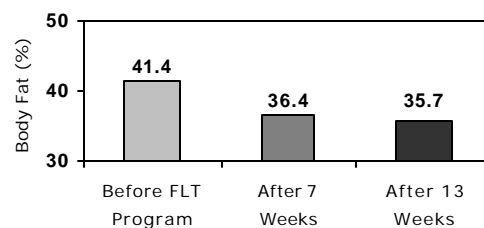


Figure 1. After 13 weeks, the patient's body fat percentage decreased from 41.4% to 35.7%. This result indicates the patient's body fat mass was substantially reduced with the *FirstLine Therapy* program.

5.7% Increase in Lean Mass in 13 Weeks

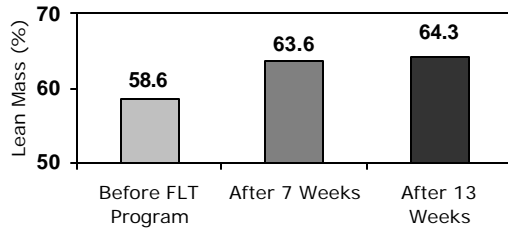


Figure 2. The patient's lean mass increased from 58.6 to 64.3 after 13 weeks. This result indicates the patient's body composition improved considerably with the *FirstLine Therapy* program.

79% Decrease in hsCRP in 17 Weeks

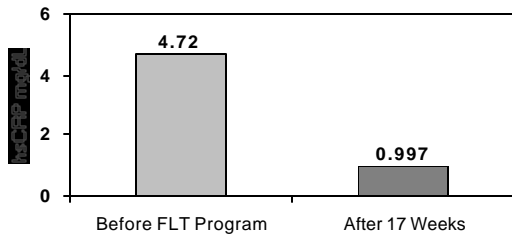


Figure 3. The patient's elevated hsCRP dramatically decreased from 4.72 to 0.997 mg/dL after 17 weeks. This result suggests a reduction in the patient's CVD risk with the *FirstLine Therapy* program.

12% Decrease in tChol to HDL-C Ratio in 17 Weeks

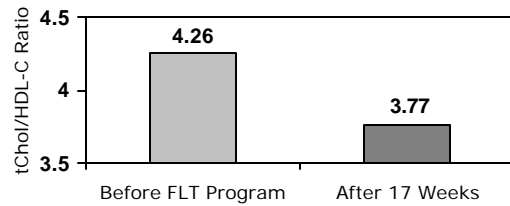


Figure 4. The patient's total cholesterol (tChol) to high-density lipoprotein cholesterol (HDL-C) ratio decreased from 4.26 to 3.77 (reference range: <3.5). This result also suggests a reduction in the patient's CVD risk after 17 weeks on the *FirstLine Therapy* Program.

SUMMARY

The dramatically positive results of this case study suggest that the *FirstLine Therapy* program—which incorporates healthy lifestyle changes such as a specialized dietary program, regular exercise, and targeted nutritional supplements—may improve body composition and decrease CVD risk in patients with these health concerns.

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).

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