

CASE STUDY

UltraClear PLUS[®]

NUTRITIONAL SUPPORT FOR DETOXIFICATION

ULTRACLEAR PLUS[®] MEDICAL FOOD FOR NUTRITIONAL SUPPORT OF DETOXIFICATION IN A PATIENT WITH FIBROMYALGIA

Purpose

To show how nutritional support using UltraClear PLUS medical food can positively affect detoxification and therefore may benefit patients with fibromyalgia (FM).

Patient's Presentation and History

A 45-year-old white female presented with a 5-year history of FM and complained of generalized muscle pain, low energy, mental fogging, and difficulty concentrating. The patient had a personal history of sensitivity to caffeine, red wine, and chocolate, as well as a family history of autoimmune disease. She was taking no prescriptive medication but was taking a multivitamin, evening primrose oil, flaxseed oil, and a regular dose of aspirin.

Patient's Objective Information

- Initial MSQ* score was elevated at 87
- SF-36 PCS[†] and MCS[†] scores were substantially below normal ranges, indicating compromised physical and mental functioning
- Initial laboratory assessment showed low caffeine clearance (suggesting under-functioning of Phase I detoxification) and low Phase II activities

Plan

The patient was placed on:

- UltraClear PLUS at 2 scoops tid
- An elimination diet program, which removed common food allergens including gluten, dairy, corn, pork, and citrus

6 Week Results

After 6 weeks on the program, the patient reported feeling better, having less muscle pain, and improved energy; PCS and MCS scores also showed a positive trend. Laboratory results showed significant improvement with normalized Phase I caffeine clearance and normalized Phase II sulfation, glucuronidation, and glycine and glutathione conjugation activities (Figures 1-4).

Conclusion

Toxicity may be an important underlying factor in FM. This case study suggests that a targeted, nutrient-based support program, using UltraClear PLUS medical food with an elimination diet, may promote healthy detoxification and a decrease in symptoms.

Figure 1

The patient's caffeine clearance increased to within reference range: from 0.2 mL/min/kg to 1.0 mL/min/kg after 6 weeks on the UltraClear PLUS program.

This result translates into an improvement in Phase I detoxification.

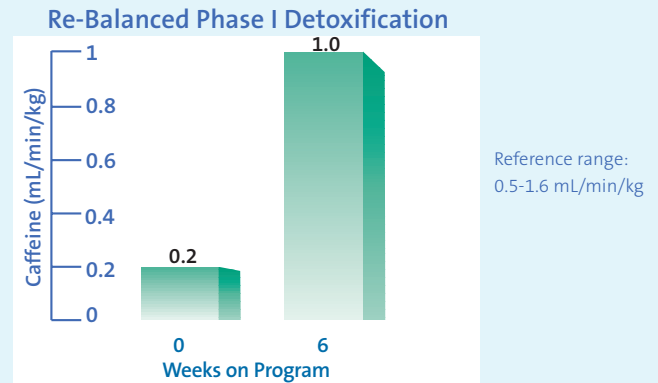


Figure 2

Glycine conjugation increased to within reference range: from 14% clearance to 45% clearance of the challenge substance after 6 weeks on the UltraClear PLUS program.

This result translates into an improvement in Phase II detoxification through glycine conjugation.

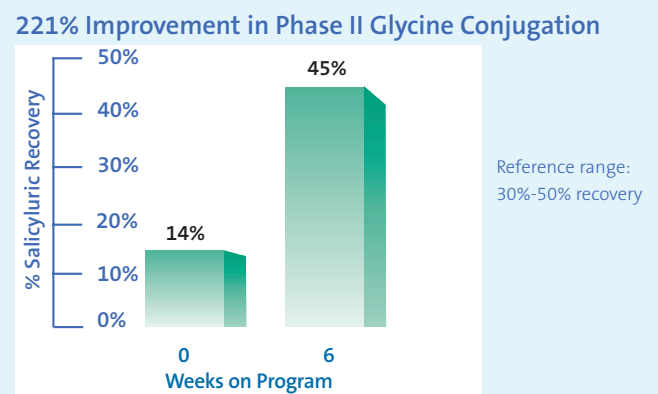


Figure 3

Sulfation increased to within reference range: from 6% clearance to 23% clearance of the challenge substance after 6 weeks on the UltraClear PLUS program.

This result translates into an improvement in Phase II detoxification through sulfation.

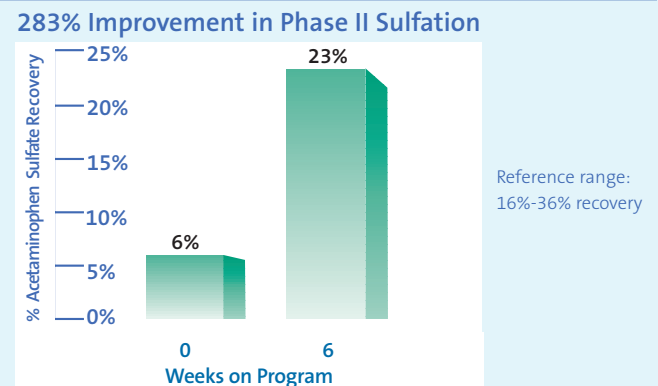
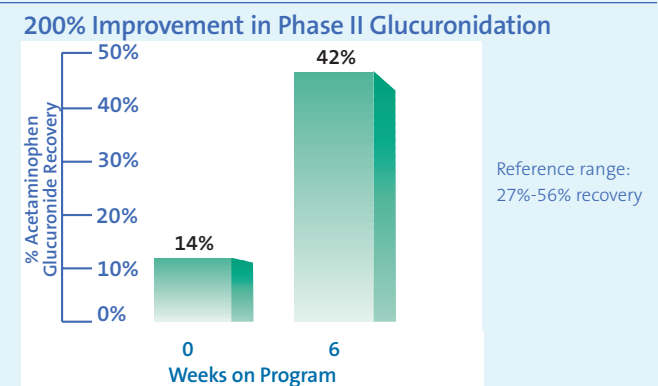


Figure 4

Glucuronidation increased to within reference range: from 14% clearance to 42% clearance of the challenge substance in 6 weeks on the UltraClear PLUS program.

This result translates into an improvement in detoxification through Phase II glucuronidation.



*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). Higher scores are associated with healthier individuals, whereas scores lower than 50 indicate compromised functioning.

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. UltraClear PLUS Medical Food is to be used under the supervision of a physician or other licensed healthcare practitioner.

Case Study: UltraClear PLUS[®] Medical Food for Nutritional Support of Detoxification in a Patient with Fibromyalgia. Metagenics, Inc; 002FM703.