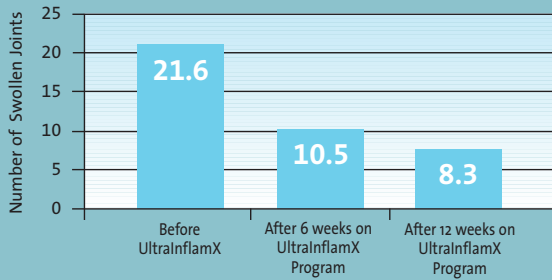


*Statistically significant decreases
in swollen joints and C-reactive
protein levels*

Clinical Trial: Rheumatoid Arthritis

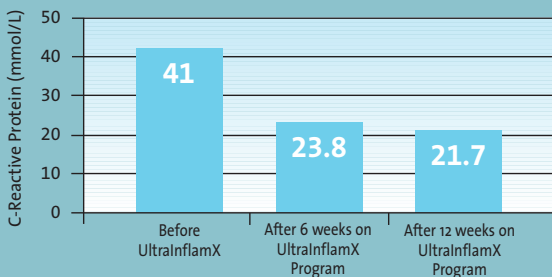
Results of an open-label clinical trial of rheumatoid arthritis patients (n=10) on the UltraInflamX Program, which includes an elimination diet:

62% Decrease in Swollen Joints with the UltraInflamX Program!



Clinical assessment for swollen joints, as determined on 25 joints by a metrologist, showed 21.6 ± 14.1 before beginning the program and 10.6 ± 6.8 at 6 weeks, and 8.3 ± 6.0 ($p=0.002$) at 12 weeks after starting the UltraInflamX Program.

47% Decrease in C-Reactive Protein Levels with the UltraInflamX Program!



Assessment for serum C-reactive protein showed 41.0 ± 22.6 mmol/L before beginning the program, 23.8 ± 25.2 mmol/L at 6 weeks, and 21.7 ± 18.1 mmol/L ($p=0.019$) at 12 weeks after starting the UltraInflamX Program.

UltraInflamX[®] Medical Food

**Clinically Tested, All-Natural Approach to
Managing Inflammation**

Patient Benefits:

- Specifically formulated to support patients with symptoms or conditions associated with inflammation, such as:
 - ▶ Inflammatory conditions of the intestinal tract, skin, or joints
 - ▶ Immunologic or autoimmune dysfunction
 - ▶ Bronchial asthma
 - ▶ Osteoarthritis
 - ▶ Rheumatoid arthritis
- Provides a scientifically designed blend of nutrients to:
 - ▶ Rebalance eicosanoid metabolism
 - ▶ Support anti-inflammatory activity
 - ▶ Combat oxidative stress
 - ▶ Support detoxification pathways
 - ▶ Promote healthy gastrointestinal function
- Comes with step-by-step program instructions and dietary recommendations

Scientifically formulated and clinically tested to decrease inflammatory damage and promote healing in patients with chronic inflammatory conditions.

Clinically proven! UltraInflamX and a managed elimination program support inflammatory control.

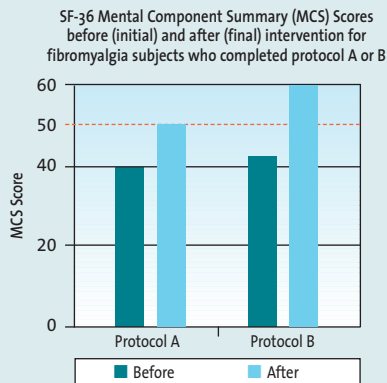
RESULTS OF CLINICAL AND CASE STUDIES

Clinical Trial: Fibromyalgia

A 6-week clinical pilot trial to evaluate the effects of UltraInflamX was conducted in 21 patients with fibromyalgia lasting 6 months or longer. Subjects were divided into two groups—Protocol A received UltraInflamX with no dietary changes; Protocol B received UltraInflamX with dietary changes.²

Figure 1

A significant improvement was observed in mental functioning ($P < 0.05$) as assessed by the SF-36^{*} questionnaire. (Scores lower than 50 indicate compromised functioning.)



Case Study^{**}: Ulcerative Colitis

A 52-year-old white female presented with a diagnosis of ulcerative colitis. Her main complaints were 3 to 4 liquid or ill-formed bowel movements per day, which included explosive-type gas and occasional blood. The subject's initial sedimentation rate[†] was assessed initially, and again at 4 weeks. Her MSQ^{††} score was assessed initially, again at 4 weeks, and once more at 12 weeks.³

Figure 2

After just 4 weeks on the UltraInflamX Program, the patient's sedimentation rate decreased from 30 to 20 mm/h (reference range is 0-30). This result suggests a decrease in overall inflammation.

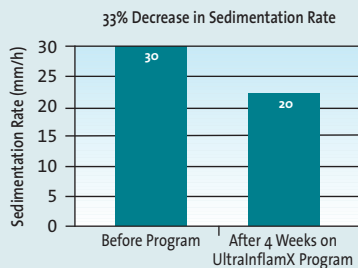
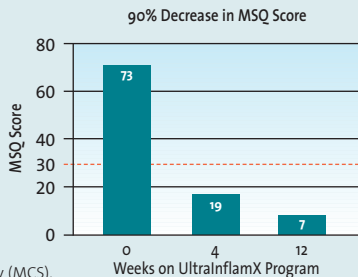


Figure 3

The patient had a substantial decrease in her MSQ score after 12 weeks on the UltraInflamX Program. (A score of < 30 is associated with 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 of lower than 50 indicate compromised functioning.

^{**} 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.

[†] A blood test that detects and monitors inflammation in the body. It measures the rate at which red blood cells (RBCs) in a test tube separate from blood serum over time, becoming sediment in the bottom of the test tube. The sedimentation rate increases with more inflammation.

^{††} 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.

WHAT SETS ULTRAINFLAMX APART?

- Clinically Proven.** In clinical and case studies, dietary programs that include UltraInflamX have shown a significant reduction in symptoms related to inflammation.^{1,3} Unlike our competitors, we conduct human research for real-life efficacy.
- History of clinical use.** Not only has UltraInflamX been extensively researched at the Functional Medicine Research Center, the clinical research arm of Metagenics, but also used by thousands of patients in clinics spanning the globe.
- Key anti-inflammatory phytonutrients.** Patented, research-based blend of specific types and amounts of nutrients designed to address underlying inflammatory reactions. **Ginger** (*Zingiber officinale*), an inhibitor of pro-inflammatory prostaglandin and thromboxane production. **Curcumin**, (*Curcuma longa*) scavenges nitric oxide, is an antioxidant, and inhibits production of pro-inflammatory prostaglandins.^{4,6} Curcumin is clinically used for postoperative inflammation, and both ginger and curcumin are clinically used for rheumatoid arthritis as well as osteoarthritis. **Hesperidin**, found in citrus foods, inhibits histamine release resulting in analgesic and anti-inflammatory activities.^{4,7}
- Promotes healthy GI function.** L-glutamine supports the integrity of the gastrointestinal mucosa barrier and may be beneficial in the prevention of bacterial translocation and intestinal inflammation.⁸
- Potent antioxidant nutrients.** Nutritional blend of: mixed carotenoids, zinc, manganese, selenium, quercetin, rutin, rosemary, and vitamins A, C, and E to reduce free radical generation, which can perpetuate inflammation.^{9,10}
- Free of common allergens.** Free of dairy products, gluten, wheat, egg, soy, corn protein, and yeast—as well as artificial flavorings, sweeteners, and colors.
- Low allergy potential rice protein.** Derived from a patented process, UltraInflamX contains rice protein concentrate with a lower allergy potential than normal rice. Fortified with the amino acids threonine and lysine, UltraInflamX provides a complete, easily digested source of protein.
- Easy to use.** A nutrient-dense, powdered form allows for easy mixing in water or in juice for a pleasant-tasting beverage. Available in Original and delicious Chocolate Orange flavors to suit a variety of tastes.



THE ULTRAINFLAMX PROGRAM

The UltraInflamX Program includes three phases designed to control health challenges that may be related to chronic inflammation. You may choose to tailor the suggested phase lengths in order to meet your patient's needs.

- **Phase 1** (Days 1-7): During Phase 1 patients eliminate potentially allergenic foods while slowly increasing their intake of UltraInflamX.
- **Phase 2** (Days 8-25): During Phase 2 patients follow the recommended dietary program along with two servings of UltraInflamX daily.
- **Phase 3** (Days 26 and beyond): During Phase 3 patients consult with their healthcare practitioner and decide how to continue the program.

Patients mix two scoops of UltraInflamX with 8-10 ounces of water, blend, and drink slowly. (Patients may use diluted fruit or vegetable juices depending on tolerance.)

This nutrient-rich powder makes an excellent breakfast beverage, a simple morning or afternoon snack, or a satisfying bedtime snack! Also convenient for patients who are traveling or on the go.

In certain cases, you may choose for your patients to use UltraClear SUSTAIN® medical food instead of UltraInflamX. UltraClear SUSTAIN was developed for patients with gastrointestinal problems. For more information, refer to the UltraInflamX & UltraClear SUSTAIN patient guide.

PROGRAM MATERIALS

- **UltraInflamX Patient Guide.** Comprehensive program guide with recipes, meal plans, and FAQs.
- **Quick-Start Guide.** Simple guide for those who want to get started immediately.
- **Modified Step Program.** Outlines a gradual approach to the program.
- **Commonly Asked Questions.** Helps practitioners answer questions patients often ask about the program.

For More Information on UltraInflamX and Inflammation Management

- **Prescribing Information.** A technical description of UltraInflamX, indications, and ingredients and their mechanisms of action.



UltraInflamX

Nutrient Profile:

Caloric Distribution	Percent of Total Energy
Protein	30% of calories
Carbohydrate	48% of calories
Fat	22% of calories

Nutrition Information per Serving

Serving Size:	2 Scoops (52 g)
Servings Per Container:	14
Calories	200
Fat	5 g
Cholesterol*	0 mg
Sodium	100 mg
Potassium	400 mg
Total Carbohydrate	28 g
Complex	21 g
Simple	7 g
Dietary Fiber	4 g
Protein	15 g

Each Serving Contains

	% RDI
Vitamin A (as retinyl palmitate)	2500 IU 50
Vitamin A (as mixed carotenoids)	2500 IU 50
Vitamin C	180 mg 300
Calcium (as calcium citrate)	275 mg 25
Iron	1 mg 5
Vitamin D (as cholecalciferol)	100 IU 25
Vitamin E (as d-alpha tocopheryl acetate)	100 IU 330
Thiamin (as thiamin HCl)	2 mg 130
Riboflavin	2 mg 120
Niacin (as niacin and niacinamide)	35 mg 175
Vitamin B ₆ (as pyridoxal-5'-phosphate)	5 mg 250
Folic Acid	80 mcg 20
Vitamin B ₁₂ (as cyanocobalamin)	3 mcg 50
Biotin	150 mcg 50
Pantothenic Acid (as D-calcium pantothenate)	5 mg 50
Phosphorous (as dicalcium phosphate)	200 mg 20
Magnesium (as magnesium citrate)	280 mg 70
Zinc (as Opti-Zinc®)	10 mg 70
Selenium (as selenomethionine)	75 mcg 110
Copper (as copper gluconate)	1 mg 50
Manganese (as manganese gluconate)	2 mg 100
Chromium (as ChromeMate® GTF)	60 mcg 50
Molybdenum (as molybdenum amino acid chelate)	38 mcg 50
N-Acetylcysteine	100 mg **
L-Glutamine	750 mg **
L-Threonine	34 mg **
L-Lysine (as L-lysine HCl)	770 mg **
Citrulline	100 mg **
Hesperidin	200 mg **
Quercetin	200 mg **
Turmeric Rhizome Extract (<i>Curcuma longa</i>)	210 mg **
[standardized to 95% (200 mg) curcuminoids]	
Rosemary Leaf Extract	100 mg **
(<i>Rosmarinus officinalis</i>)	
D-Limonene	100 mg **
Rutin	200 mg **
Ginger Root Extract	100 mg **
(<i>Zingiber officinale</i>) [standardized to 5% (5 mg) total pungent compounds]	
Sodium Sulfate	75 mg **

Other Ingredients: Rice protein¹ concentrate, rice syrup solids, rice bran, olive oil, and medium chain triglycerides, natural flavors.

Directions: Blend, shake, or briskly stir two level scoops into eight ounces of chilled water or juice.

Form: 25.7 (728 g) Powder Container

Opti-Zinc® and ChromeMate® GTF are registered trademarks of InterHealth, Inc. U.S. Patent Nos. 6,210,701; 6,352,712

¹Production of rice protein is covered by U.S. Patent #4,876,096

*Information on cholesterol content is provided for individuals who, on the advice of a physician, are modifying their dietary intake of cholesterol.

**Daily value not established

References

- Lewis D. Modification of inflammatory activity in rheumatoid arthritis patients treated with a modified diet and UltraInflamX. Study Site: Department of Medicine and Complementary Medicine Research Unit, Monash University, Australia. Unpublished data.
- Lukaczer D, Schiltz B, Liska D. A pilot trial evaluating the effect of an inflammatory-modulating medical food in patients with fibromyalgia. *Clin Prac Altern Med* 2000;1(3):148-56.
- Case Study: UltraInflamX® medical food for the treatment of a patient with ulcerative colitis. Metagenics, Inc. 2003;00UC803.
- Lindahl M, Tagesson C. Flavonoids as phospholipase A2 inhibitors: Importance of their structure for selective inhibition of group II phospholipase A2. *Inflammation* 1997;21(3):347-56.
- Chan MM. Inhibition of tumor necrosis factor by curcumin, a phytochemical. *Biochem Pharmacol* 1995;11:1551-56.
- Sreejayan Rao MN. Nitric oxide scavenging by curcuminoids. *J Pharm Pharmacol* 1997;49:105-07.
- Lee CJ, Lee JH, Seok JH, et al. Effects of baicalein, berberine, curcumin and hesperidin on mucin release from airway goblet cells. *Plant Med* 2003; 69(6):523-26.
- Fujita T, Sakurai K. Efficacy of glutamine-enriched enteral nutrition in an experimental model of mucosal ulcerative colitis. *Br J Surg* 1995;82:749-51.
- Skaper SD, Fabris M, Ferrari V, et al. Quercetin protects cutaneous tissue-associated cell types including sensory neurons from oxidative stress induced by glutathione depletion: cooperative effects of ascorbic acid. *Free Radic Biol Med* 1997;22(4):669-78.
- Negre-Salvayre A, Affany A, Hariton C, et al. Additional antilipoperoxidant activities of alpha-tocopherol and ascorbic acid on membrane-like systems are potentiated by rutin. *Pharmacology* 1991;42:262-72.

UltraInflamX and UltraBalance® medical foods are researched, developed, and manufactured by Metagenics, Inc.



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