

**UltraClear RENEW™ Medical Food**



Clinically tested, all-natural medical food for the management of pain and stiffness associated with fibromyalgia.



“My patients with chronic musculoskeletal pain don’t have to worry about serious side effects. I recommend a safer approach.”



# A New, Safer Approach to Relief for Fibromyalgia Patients with Chronic Muscle Pain

Conventional approaches for widespread musculoskeletal pain of unknown etiology target only a few symptoms. Moreover, they may carry a risk for serious adverse events. UltraClear RENEW offers new hope with a safer, multi-mechanistic approach.

## **The Need for a New Way to Offer Symptom Relief**

Scientific literature suggests that there may be multiple causes for chronic muscle pain and associated symptoms that seriously impact daily living. That’s why no single approach to date offers reliable relief for a majority of patients. Due to an increasing frustration with existing therapeutic options for these challenging conditions, today’s standard of care reflects the incorporation of more self-management and lifestyle approaches.

## **The Environmental Effect: Increasing Symptoms**

An increasing amount of research suggests that environmental influences may either trigger or exacerbate debilitating symptoms associated with musculoskeletal pain syndromes. In fact, 47%-67% of fibromyalgia patients report increased symptoms following specific environmental chemical exposures. Among worsening of other symptoms, toxin exposure can result in prolonged firing of the body’s pain receptors, increasing sensitization and exaggerating the central nervous system response. And exposure to the heavy metal mercury may contribute to altered inflammatory and immune responses and have neurotoxic effects.<sup>1-9</sup>

## **The UltraClear RENEW Program—a New, Safer Approach**

UltraClear RENEW is the only medical food for fibromyalgia patients that has been formulated to support the body’s natural removal of toxins, such as heavy metals. In a preliminary clinical study, the UltraClear RENEW program was shown to improve established measures for quality of life, such as reduction of pain and stiffness.<sup>10</sup>

## **The UltraClear RENEW Program**

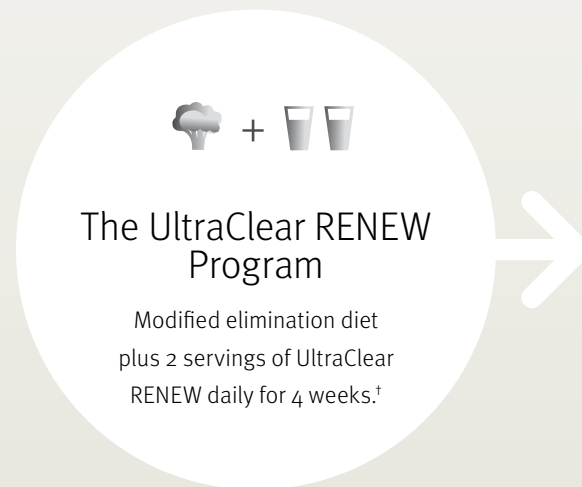
Consists of a targeted medical food with a modified elimination food plan for pain and stiffness associated with fibromyalgia

In a preliminary clinical study, UltraClear RENEW:

- Reduced symptoms and improved quality of life
- Increased excretion of certain heavy metals, such as mercury

# Clinically Effective in Improving Markers of Quality of Life and Heavy Metal Metabolism

A preliminary clinical study of women with fibromyalgia and dental amalgams was conducted over 8 weeks at the Functional Medicine Research Center<sup>SM</sup>, the clinical research arm of Metagenics, Inc.<sup>10</sup>



## The UltraClear RENEW Program

Modified elimination diet plus 2 servings of UltraClear RENEW daily for 4 weeks.<sup>†</sup>

## Key Findings

### Symptoms & Quality of Life<sup>††</sup>

- Target: Reduction of Markers
- Reduction in Fibromyalgia Impact Questionnaire (FIQ) total score. FIQ is used extensively as an index of therapeutic efficacy.<sup>11</sup>
- Clinically significant reduction ( $\geq 20$ ) in FIQ score among half of subjects, according to suggested criteria.<sup>12</sup> **See results for this subgroup.**→
- Reduction in Medical Symptoms Questionnaire (MSQ) score, a measure of physical and mental well-being. A reduced score suggests fewer symptoms and better overall quality of life.
- Reduction in total FibroQuest score, as well as subscales for pain and stiffness. FibroQuest is another recognized fibromyalgia symptoms survey; lower scores generally mean greater functional ability.

### Heavy Metal Metabolism<sup>††</sup>

- Target: Increase in Markers
- Elevation of mRNA expression of metallothionein, a cellular protein that plays a crucial role in the metabolism of heavy metals and attenuates their toxicity in the body.<sup>13</sup>
- Significant elevation in creatinine-adjusted excretion of mercury.

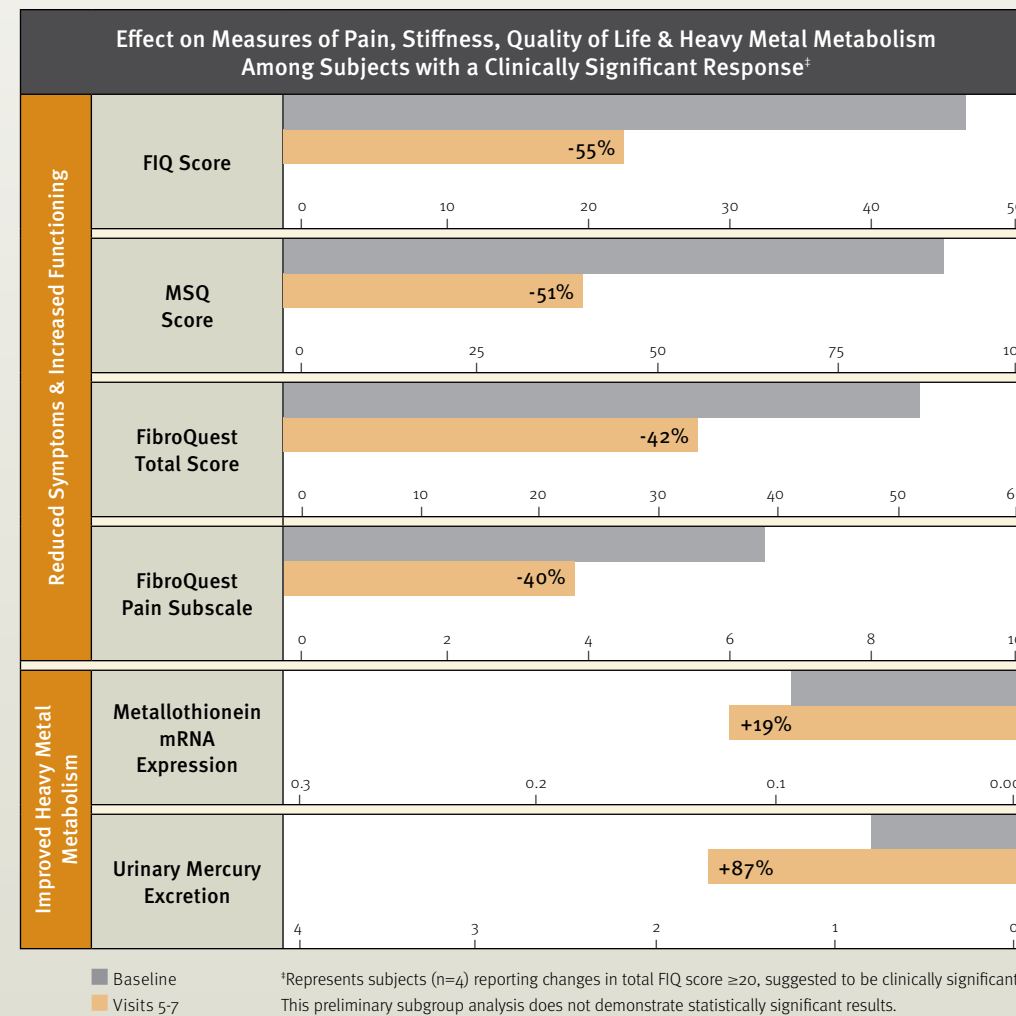
## In Vitro Research

Preliminary laboratory studies conducted at MetaProteomics<sup>®</sup>—the proteomics research arm of Metagenics, Inc.—suggest that key botanicals in UltraClear RENEW may modify upstream signaling pathways. Individual ingredients have been shown in vitro to positively modify Phase II enzymes (GST, NQO-1) and activators (Nrf-2, HO-1) associated with the antioxidant response element (ARE) and metal response element (MRE)—transcriptional elements that induce toxic element metabolism and hepatic detoxification.<sup>14</sup>

The ability to remove toxins may theoretically play a role in the etiology or exacerbation of a range of chronic diseases and conditions, including fibromyalgia.<sup>1</sup>

## Conclusion

Preliminary clinical research suggests that the UltraClear RENEW program may help fibromyalgia patients (with dental amalgams) manage pain and stiffness, as well as help increase urinary excretion of some heavy metals.



### References:

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<sup>†</sup> After a 4-week control phase with UltraClear MACRO<sup>®</sup> (macronutrient base) and the Standard American Diet. Seafood excluded from both diets.

<sup>††</sup> Results presented as a mean of scores (visits 5-7) for all subjects versus baseline (visit 1) unless otherwise noted.



### Scientifically Formulated Through the ExpressSyn<sup>®</sup> Process

UltraClear RENEW is part of a select group of novel formulations that set a new standard of clinical certainty in natural products by demonstrating efficacy, bioavailability, and a high level of predicted safety.

The ExpressSyn Process is the most significant product development innovation in the history of nutraceuticals and combines cell proteomic research, safety evaluations, human ex vivo research, and human clinical research.

# Medical Foods Programs to Address Chronic Muscle Pain & Fatigue

Recommend UltraClear RENEW and UltraClear PLUS medical foods for fibromyalgia and chronic fatigue syndrome.

## The UltraClear RENEW Program

The only medical food program for fibromyalgia patients formulated to address altered pain signaling and neuromuscular function with additional support for heavy metal metabolism. This program consists of the UltraClear RENEW medical food and a modified elimination diet.

## The UltraClear PLUS Program

Based on more than 20 years of clinical experience, this unique program addresses altered energetic function in patients with chronic fatigue syndrome with additional support for phase II hepatic detoxification function. This program consists of the UltraClear PLUS medical food and an elimination diet.

Fibromyalgia	Chronic Fatigue Syndrome
<p><b>UltraClear RENEW™</b> Medical Food</p> <p>Nutritional Information per Serving (Original flavor): Serving size About 2 scoops (40 g), Servings per container 21 (by weight), Calories 130, Total Fat 3 g (Saturated Fat* 1 g, <i>Trans</i> Fat 0 g), Cholesterol 0 mg, Sodium (as sodium chloride) 220 mg, Potassium (as dipotassium phosphate, potassium citrate, and potassium iodide) 520 mg, Carbohydrate 20 g (Dietary Fiber 3 g, Sugars 6 g), Protein 12 g.</p> <p>*Saturated fat content is contributed by a beneficial form of fat, medium chain triglycerides, which have recognized health benefits.</p> <p><b>Each Serving Contains:</b> Vitamin A (as beta carotene) 4000 IU, Vitamin A (as retinyl palmitate) 1000 IU, Vitamin C (as ascorbic acid) 300 mg, Calcium (as calcium citrate) 150 mg, Iron 1 mg, Vitamin D (as cholecalciferol) 35 IU, Vitamin E (d-alpha tocopheryl acetate) 42 IU, Thiamin (as thiamin HCl) 2 mg, Riboflavin 2 mg, Niacin (as niacinamide) 7 mg, Vitamin B<sub>6</sub> (as pyridoxine HCl) 3.4 mg, Folic acid 80 mcg, Vitamin B<sub>12</sub> (as cyanocobalamin) 3.6 mcg, Biotin 135 mcg, Pantothenic acid (as D-calcium pantothenate) 36 mg, Phosphorus (as dipotassium phosphate) 230 mg, Iodine (as potassium iodide) 53 mcg, Magnesium (as citrate, chloride, and sulfate) 160 mg, Zinc (as zinc gluconate) 10 mg, Copper (as copper gluconate) 1 mg, Manganese 1 mg, Chromium (as chromium polynicotinate) 50 mcg, Proprietary Spent Hops (<i>Humulus lupulus</i>) Powder 1000 mg, L-Glycine 800 mg, Prune (<i>Prunus domestica</i>) Skin Extract 125 mg, L-Glutamine 100 mg, Watercress (<i>Nasturtium officinale</i>) Whole Plant Extract 67 mg, Ellagic Acid [from pomegranate (<i>Punica granatum</i>) Whole Fruit Extract] 50 mg, DL-Methionine 50 mg, L-Threonine 35 mg, L-Lysine (as L-lysine HCl) 35 mg, Sulfate (magnesium sulfate) 20 mg, L-Cysteine (as L-cysteine HCl) 15 mg, Catechins (from decaffeinated green tea extract) 15 mg.</p> <p><b>Other Ingredients:</b> Rice protein concentrate, rice syrup solids, fructose, natural flavors, partially hydrolyzed guar gum, olive oil, medium-chain triglycerides, cellulose gum, and silica.</p> <p><b>Directions:</b> Blend, shake, or briskly stir about 2 level scoops (40 grams) of UltraClear RENEW into 8 fluid ounces of chilled water or juice twice daily. For highly sensitive individuals, consider reducing consumption to 1/2 to 1 scoop with 4 to 5 ounces of chilled water or juice twice daily during the first 3 to 4 days before starting a full daily dose.</p> <p><b>Form:</b> 30 oz (840 g) Container</p>	<p><b>UltraClear PLUS®</b> Medical Food</p> <p>Nutritional Information per Serving (Original flavor): Serving size About 2 scoops (44 g), Servings per container 21 (by weight), Calories 160, Fat 3 g (Saturated Fat*1 g, <i>Trans</i> Fat 0 g, Cholesterol 0 mg, Sodium 70 mg, Potassium 420 mg (as dipotassium phosphate and potassium iodide), Carbohydrate 19 g (Dietary Fiber 2 g, Sugars 6 g), Protein 15 g.</p> <p>*Saturated fat is contributed by the beneficial fat, medium chain triglycerides, which have recognized health benefits.</p> <p><b>Each Serving Contains:</b> Vitamin A (as retinyl palmitate) 1000 IU, Vitamin A (as beta-carotene) 4000 IU, Vitamin C (as ascorbic acid) 300 mg, Calcium (calcium citrate and dicalcium phosphate) 200 mg, Iron 0.5 mg, Vitamin D (as cholecalciferol) 35 IU, Vitamin E (as d-alpha tocopheryl acetate) 42 IU, Thiamin (as thiamin HCl) 2 mg, Riboflavin 2 mg, Niacin (as niacinamide) 7 mg, Vitamin B<sub>6</sub> (as pyridoxine HCl) 3.4 mg, Folic acid 80 mcg, Vitamin B<sub>12</sub> (as cyanocobalamin) 3.6 mcg, Biotin 135 mcg, Pantothenic Acid (as D-calcium pantothenate) 36 mg, Phosphorus 200 mg, (as dipotassium phosphate and dicalcium phosphate), Iodine (as potassium iodide) 53 mcg, Magnesium (as magnesium citrate and sulfate) 200 mg, Zinc (as zinc gluconate) 10 mg, Copper (as copper gluconate) 1 mg, Manganese 1.3 mg, Chromium (as chromium polynicotinate) 50 mcg, L-Glycine 1600 mg, L-Glutamine 100 mg, L-Cysteine (as L-cysteine HCl) 15 mg, L-Lysine (as L-lysine HCl) 35 mg, L-Threonine 35 mg, DL-Methionine 50 mg, Sulfate (as magnesium sulfate) 20 mg, Catechins (from decaffeinated green tea extract) 15 mg.</p> <p><b>Other Ingredients:</b> Rice protein concentrate, rice syrup solids, natural flavors, olive oil, medium-chain triglycerides, and silica.</p> <p><b>Directions:</b> Blend, shake, or briskly stir about 2 scoops (44 grams) of UltraClear PLUS into 8 fluid ounces of chilled water or juice twice daily. For highly sensitive individuals, consider reducing consumption to 1/2 to 1 scoop with 4 to 5 ounces of chilled water or juice twice daily during the first 3 to 4 days before starting a full daily dose.</p> <p><b>Form:</b> 32.6 oz (924 g) Container</p> <p><b>Also Available:</b> Natural Berry and Pineapple Banana flavors; convenient bars</p>

“I’ve tried almost everything. This works for me.”



To order, call your Metagenics Representative or Customer Service today.

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If you're a patient, talk to your healthcare provider today.

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These certifications for Good Manufacturing Practices demonstrate the Metagenics commitment to purity and quality.



Metagenics is committed to using only environmentally-friendly papers and inks.

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