Accurate Clinic
2401 Veterans Memorial Blvd. Suite16
Kenner, LA 70062 - 4799
Phone: 504.472.6130 Fax: 504.472.6128

www.AccurateClinic.com

Accurate Education

CRP (C-Reactive Protein)

C-Reactive Protein (CRP) is a biomarker of systemic inflammation that is independently associated with chronic pain and pain sensitivity. It may play a causal role in some pain conditions however the relationship is multifactorial, and further research is needed to clarify causality and therapeutic implications. Lowering CRP may be beneficial in some contexts, but direct evidence that CRP reduction improves chronic pain outcomes is currently limited.

CRP is also linked to pain sensitivity and symptom severity. Higher CRP levels correlate with increased pain sensitivity and greater symptom severity in chronic pain conditions, including fibromyalgia. However, other factors such as obesity, mood or sleep disturbances, contribute to the complex interplay of CRP and chronic pain.

While CRP is a biomarker of *systemic* inflammation, elevated CRP levels also reflect conditions associated with *acute* inflammation, including recent surgery or trauma and current or recent illness.

Interventions that Lower CRP

Diet and Foods

Anti-inflammatory Diet interventions, such as Mediterranean, vegetarian/vegan, and whole-food diets, are associated with both lower CRP and improved pain scores in chronic musculoskeletal pain. These diets can reduce pain and inflammation, but no single dietary approach stands out.

Caloric restriction, intermittent fasting, and ketogenic diets may improve pain and reduce inflammation.

Functional foods (foods that provide health benefits beyond their basic nutritional value, containing bioactive compounds, such as vitamins, minerals, antioxidants, probiotics, and prebiotics)

- **Chia Seeds, flaxseed**
- **Cranberries, pomegranate, blueberries**
- **Yogurt**

Supplements

- **Omega-3 fatty acids**
- **Curcumin**
- **Vitamin C**
- **Glucosamine and Chondroitin**

Medications

Lipid-lowering agents:

- **Statins** (e.g., atorvastatin, pravastatin, simvastatin, rosuvastatin) consistently lower CRP levels, with reductions up to 60% reported and effects independent of LDL-C lowering.
- **Omega-3 fatty acids** (fish oil) modestly lower CRP.
- **Niacin** may reduce CRP, though the effect is not consistent.

Anti-inflammatory agents:

- **Colchicine** (used to treat gout) may lower CRP and improve cardiovascular outcomes.
- **Non-steroidal anti-inflammatory drugs (NSAIDs)** (i.e. ibuprofen) can lower CRP.

Antidiabetic therapies:

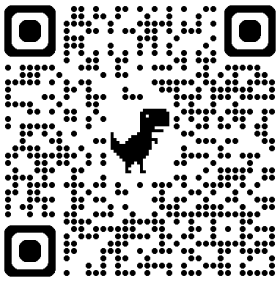
- **Sodium-glucose cotransporter-2 (SGLT2) inhibitors** (e.g. Jardiance (empagliflozin) and Farxiga (dapagliflozin)
- G**lucagon-like peptide-1 (GLP-1) receptor agonists** [e.g. Ozempic (semaglutide), Mounjaro (tirzepatide] reduce CRP independently of weight loss.

Therapies

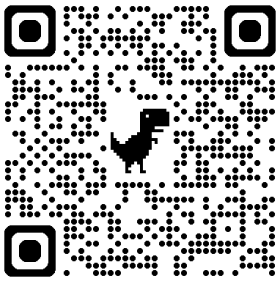
- Acupuncture and acupressure, Spinal manipulative therapy

Lifestyle Modifications

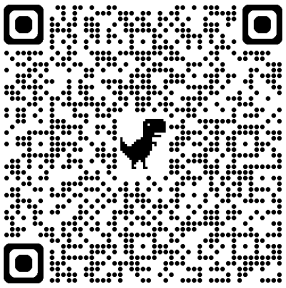
- Exercise, yoga and meditation



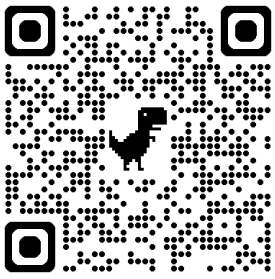
Chia Seeds



Curcumin

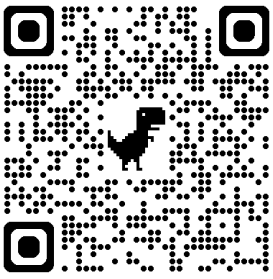


Omega-3 (Therapeutic)



Anti-Inflammatory Diet

Dietary Fiber



Systemic Inflammation