

Effect of "Purple Power" on C-Reactive Protein in Rheumatoid Arthritis Model



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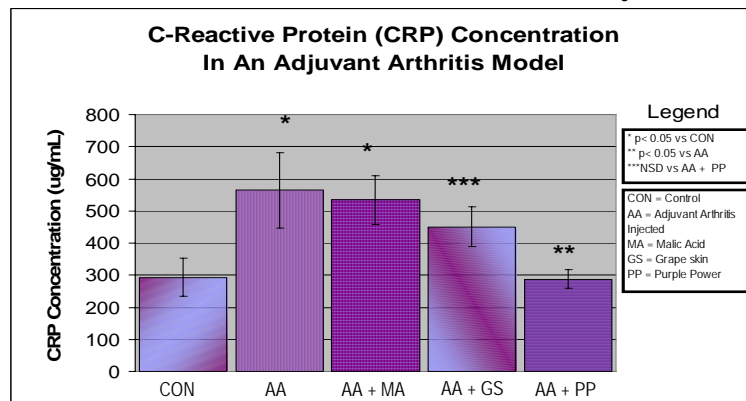
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Rheumatoid Arthritis (RA)

- Chronic, inflammatory, autoimmune disease that causes pain, stiffness, swelling, joint erosion and limitation in the motion and function of multiple joints
- If left untreated, RA can produce serious destruction of joints which could lead to disability
- 2 million Americans suffer from RA. 75% are women. Peak onset is 20-45 years of age



Experimental Design

Rats were fed one of four diets for two weeks prior to rheumatoid arthritis induction, with one group as control.

Adjuvant-Induced Arthritis Model: 0.5 mg mycobacterium butyricum in 0.1 mL of light mineral oil is injected into one hind paw of anesthetized rats. Polyarthritic involvement is seen within 2 weeks and is a classic model for testing anti-arthritis effects of therapeutic agents.

End points are paw volumes of both primary and secondary paws, body weight

changes, serum markers of inflammation, and arthritic scores of secondary paws.

Blood samples were taken 16 days after induction and serum CRP levels were measured

Results

5% Purple Power in diet significantly normalized CRP levels to control

Significance

PURPLE POWER may protect against systemic inflammation that leads to accelerated aging of the cardiovascular system in rheumatoid arthritis

C-Reactive Protein (CRP): A Critical Update

(Pepys MB., Hirschfield GM. (2003). C-Reactive Protein: a critical update. *J. Clin. Invest.* 111 (12):1805-1812.)

1. CRP and Inflammation
2. CRP and Arthritis
3. CRP and Cardiovascular Disease
4. Atherosclerosis and Inflammation
5. CRP and Myocardial Infarction
6. Arthritis, Systemic Inflammation, and Accelerated Atherosclerosis
7. Clinical markers include CRP, serum amyloid A, homocysteine, fibrinogen



Research Information: www.healthygrapes.com

Product Information: www.musprocorp.com