ARTHROBEN™

Medical Food for the dietary management of osteoarthritis
and musculoskeletal inflammation related to athletic or other physical activity

INGREDIENTS

Arthroben™	Amount per serving
Serving size	11 g
Flavocoxid	250 mg
Fortigel™	5 g
Verisol™	2.5 g

ARTHROBEN™ is available in a delicious tasting apple flavored powder

RECOMMENDED USE
Mix 11 grams (approx. 1 1/2 tablespoons) in 8 ounces of water per day, or as directed by a physician

REFERENCES:

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ARTHROBEN™

MEDICAL FOOD

For the dietary management of osteoarthritis and musculoskeletal inflammation related to athletic or other physical activity

A safe, effective, non-NSAID anti-inflammatory for osteoarthritis patients

EFFECTIVE

- As effective as naproxen in managing knee osteoarthritis[1]
- Increased mobility and function
- Stimulates connective tissue repair

SAFE

- Gentle on the GI tract[2]
- Balanced inhibition of COX-1, COX-2, and 5-LOX pathways[3]

NSAIDs

Selective or unbalanced inhibition of an individual COX or LOX pathway is believed to result in most of the common side effects associated with chronic NSAID use.

NSAID Side effects:

- GI complaints, i.e., nausea, heartburn, dyspepsia, abdominal pain
  —May occur in up to 40% patients with chronic NSAID use[6]
- Bleeding ulcer [7,8]
- Kidney damage that may persist even after drug withdrawal in some cases[9,10]
- Cardiovascular events (MI, stroke, etc.)[11,12]
- Congestive heart failure
  —"NSAIDs were responsible for approximately 19% of hospital admissions with CHF" [13]
  —"The burden of illness resulting from NSAID-related CHF may exceed that resulting from gastrointestinal tract damage." [13]
- Hospitalization and death:
  —Approximately 107,000 patients are hospitalized annually for NSAID-related GI complication[13]
  —At least 16,500 NSAID-related deaths occur each year among arthritis patients alone.[14,15]
  (Statistics do not include deaths ascribed to the use of over-the-counter NSAIDS)
  —Many physicians and most patients are unaware of the magnitude of the problem.[15]

ACETAMINOPHEN SIDE EFFECTS:

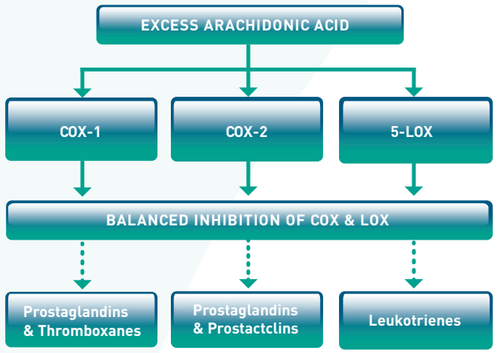
- The leading cause of acute liver failure[16]
- Kidney toxicity[17]

"Patients with high cardiovascular or gastrointestinal risk should avoid using NSAIDs." [17]

ARTHROBEN™ produces relatively balanced inhibition of COX-1, COX-2 and 5-LOX pathways

ARTHROBEN™ balances COX-1 & COX-2 metabolism by inhibiting both enzymes relatively equally, in addition to inhibiting 5-LOX, which helps to minimize systemic side effects while effectively managing the metabolic imbalances of OA.

The unique combination of actives in ARTHROBEN™, inhibit inflammation and oxidation, increase functional mobility, and stimulate connective tissue repair.



ARTHROBEN™

ARTHROBEN's 4 pronged approach to the dietary management of osteoarthritis:

1. Reduces inflammation—balanced COX and LOX inhibition
2. Potent antioxidant protection to reduce joint degeneration
3. Reduces stiffness; increases joint mobility and function
4. Stimulates connective tissue repair

KEY ACTIVES IN ARTHROBEN™

Flavocoxid

Flavocoxid is a proprietary blend of the flavonoids baicalin and catechin that was shown as effective as naproxin in managing knee osteoarthritis, and produced improvements in 87% of patients.[1]

Dual Action of Flavocoxid:

1. Balanced inhibition of COX-1, COX-2 and 5-LOX pathways. This balanced down-regulation, though weaker than traditional NSAIDs and selective COX-2 inhibitor drugs, is not associated with the side effects commonly seen with selective COX inhibitors.
2. By acting as a strong antioxidant to limit free radicals and oxidative damage to cartilage and other connective tissue of the joints.

Fortigel® & Verisol®

Fortigel® & Verisol® are standardized mixtures of collagen peptides derived from a patented process of hydrolysis of porcine or bovine type I collagen. These ingredients boost anabolic processes in connective tissues and provide building blocks for all collagen in the body.

Fortigel®

- 16 human clinical trials (approximately 2800) subjects demonstrating a positive effect on joint health
- Reduced need of analgesics[4]
- Increased joint mobility[5]
- Improved radiographic markers of cartilage health

Verisol®

Verisol® (like Fortigel®) stimulates anabolic processes in connective tissue

- Tested in two recent human clinical studies (pre-publication) for its effects on type I collagen in skin
- Improved skin elasticity and collagen type I content

ARTHROBEN™: The freedom to move. The power to heal.

CLINICALLY SHOWN TO BE AS EFFECTIVE AS NAPROXEN IN MANAGING KNEE OSTEOARTHRITIS[1]