

# Nutricaa

# OPTIMA BONEACTIVE

Bone & Joint Health Formula



400g Tin Can

Osteoporosis and Osteopenia

Bone & Joint

Post-fracture Recovery

# Features, Advantages & Benefits

## ✦ Key Features

### High Bioavailable Calcium

536mg calcium per 100g (70% DV) with optimal calcium-to-phosphorus ratio for superior absorption.

### Collagen Type II

Contains collagen to support joint health, cartilage integrity, and flexibility.

### Complete Mineral Matrix

Magnesium (140% DV), Zinc, and Manganese for complete bone metabolism support.

### Vitamin D3 Enhanced

13mcg Vitamin D (50% DV) for optimal calcium absorption and bone remodeling.

### Sesamin (Extracted Sesame)

Natural phytoestrogen that promotes fracture healing via ER $\alpha$ /BMP2/SOX9 pathway activation.

## ✔ Indications for Use

- ✓ **Osteoporosis & Bone Loss** - Enhanced calcium and mineral content for bone density
- ✓ **Osteoarthritis & Joint Disorders** - Collagen Type II for joint support and mobility
- ✓ **Post-Surgery & Fracture Recovery** - Accelerated bone healing and strength
- ✓ **Athletes & Active Lifestyle** - Support for joint mobility and flexibility

## 🧪 Key Supporting Ingredients

### 🦴 Bone Health

**Calcium Phosphate (536mg):** 70% DV - Essential mineral for bone strength and density.

**Vitamin D3 (13mcg):** 50% DV - Enhances calcium absorption for optimal bone health.

**Magnesium (367mg):** 140% DV - Works synergistically with calcium for bone formation.

### 🦴 Joint Support

**UC Collagen Type II:** Undenatured collagen that supports cartilage integrity and joint flexibility.

**Casein Protein (22g):** High-quality protein for muscle and tissue support around joints.

**Gum Arabic Fiber:** Prebiotic soluble fiber supporting overall health and nutrient absorption.

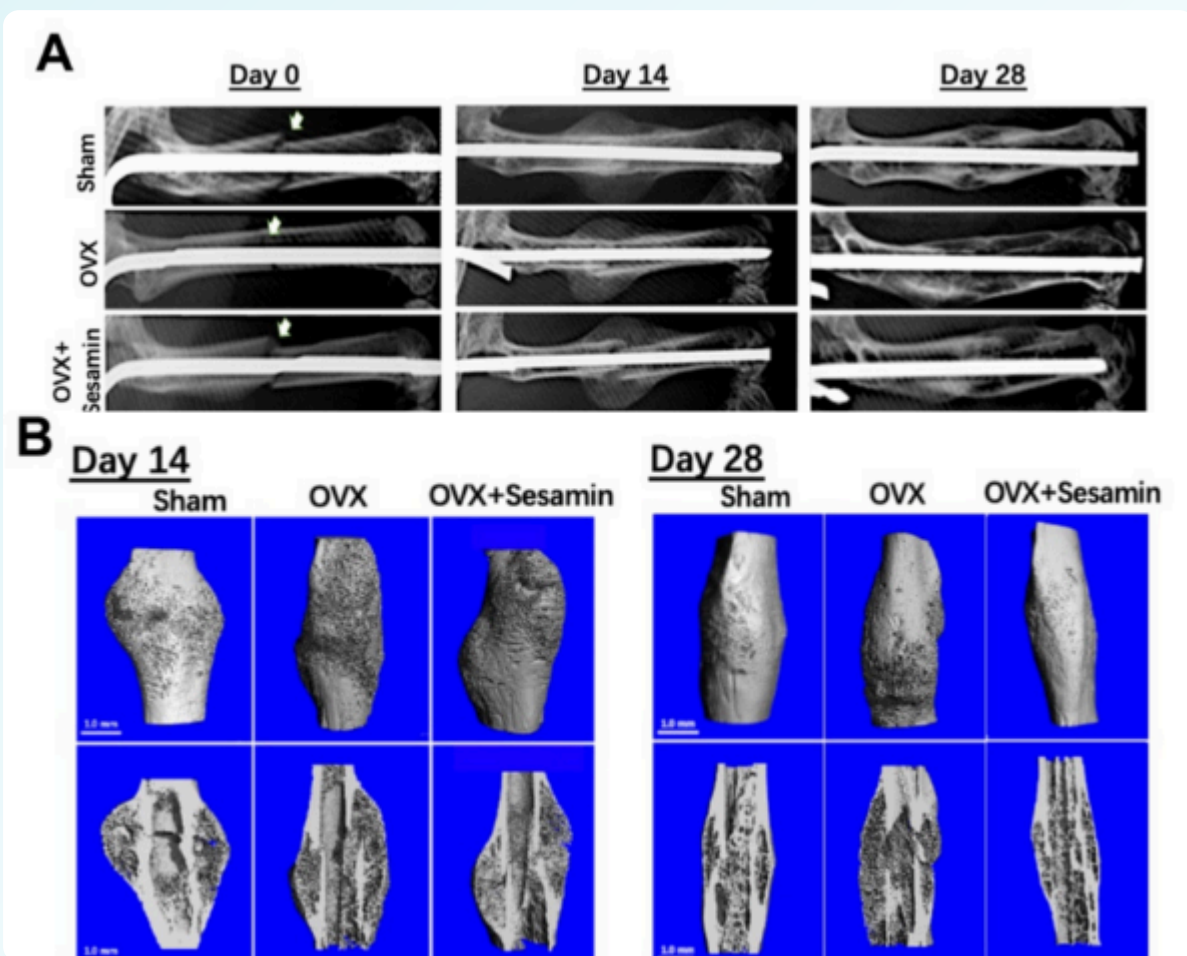
### 🩹 Fracture Healing

**Extracted Sesame (Sesamin):** Promotes fracture healing via ER $\alpha$ /BMP2/SOX9 pathway activation.

**Ascorbic Acid (Vitamin C):** Essential for collagen synthesis and bone matrix formation.

**Complete Mineral Matrix:** Zinc and Manganese support bone metabolism and healing.

# Clinical Evidence & Research



## Clinical Study Summary: Sesamin Promotes Osteoporotic Fracture Healing

**Study Overview:** This study investigates sesamin, a natural phytoestrogen derived from sesame, as a safer alternative to estrogen replacement therapy for promoting fracture healing in postmenopausal osteoporosis. Traditional treatments often carry risks of serious side effects.

**Mechanism:** Sesamin acts as a ligand for estrogen receptor alpha (ER $\alpha$ ), forming a hydrogen bond with residue ARG346. This activates the bone morphogenetic protein 2 (BMP2) signaling pathway, critical for bone and cartilage development.

**Key Findings:** Sesamin significantly enhanced angiogenesis (blood vessel formation) by upregulating VEGF and Mmp2 markers. It promoted chondrogenesis (cartilage development) and increased proteoglycan synthesis. In ovariectomized sample, oral sesamin (80 mg/kg/day) improved callus formation, bone reconnection, narrower fracture gaps, and better mechanical strength.

**Conclusion:** Sesamin facilitates osteoporotic fracture healing by stimulating both chondrogenesis and angiogenesis through the ER $\alpha$ /BMP2/SOX9 pathway, making it a promising herb-derived bioactive compound for treating fractures in postmenopausal women.

# Optima BoneActive - Product Information

Complete nutritional support for bone and joint health

## OPTIMA BONEACTIVE IS FORMULATED TO AID IN SUPPORTING

- Osteoporosis and osteopenia management
- Post-fracture recovery and bone healing
- Joint pain and stiffness relief
- Age-related bone density loss prevention
- Nutritional support during chemotherapy
- Pre and post-surgical nutritional optimization
- Cardiac patients requiring bone health support
- ICU patients needing comprehensive nutrition
- Athletes and active individuals for joint protection
- Calcium and vitamin D deficiency supplementation

## INGREDIENTS

Extracted Sesame, Casein Protein, Sucrose, Gum Arabic (INS-414), Ascorbic Acid (INS-300), Calcium Phosphate (INS-341), Magnesium Carbonate (INS-504), Vitamin Premix, UC Collagen Type II, Elettaria Cardamomum, Aspartame (INS-951), Sodium Bicarbonate (INS-500), Carboxymethyl Cellulose (INS-466), Xanthan (INS-415), Pink Salt, BHT (INS-321).

## KEY NUTRITIONAL FACTS (PER 100G)

Nutrient	Amount	% DV
Calories	450	-
Protein	22g	44%
Calcium	536mg	70%
Vitamin D	13mcg	50%
Magnesium	367mg	140%
Vitamin C	23.6mg	100%
Zinc	13.6mg	100%
Dietary Fiber	22g	79%
Vitamin E	58.3mg	390%
Vitamin B12	90mcg	3333%
Manganese	5.6mg	240%
Selenium	60mcg	120%
Pantothenic Acid	21.8mg	400%
UC-II Collagen	Type II(40gm)	

## PREPARATION INSTRUCTIONS

Take 5 heaped teaspoons (40g) of powder in a cup/mug/shaking bottle. Add 160ml of normal water or milk. Stir or shake well until powder mixes completely. Take promptly after preparation.

1

Take 40g powder

2

Add 160ml water/milk

3

Stir 40-50 sec

## PRODUCT DETAILS

FORMAT

400g Tin

FLAVOR

Natural

SERVINGS

10/Container

SERVING SIZE

40g (5~ tsp)

UNITS/CARTON

4

PRODUCT CODE

0788792139817

## QUALITY & SAFETY TESTING

- ✓ Heavy Metal Tested
- ✓ Toxin Tested
- ✓ Microbiology Tested



BCSIR Tested

### ⚠ Allergen & Cautions

Avoid taking Optima BoneActive if you are allergic to any of its ingredients. Not indicated for people with phenylketonuria. The product contains artificial sweetener to reduce calories. The product is manufactured in a facility that processes milk, nut and wheat products. Not for injection. Not recommended for children under the age of 5 years without professional advice. Pregnant and breastfeeding mothers should consult a professional before taking Optima BoneActive.

## Ready to Experience Optima BoneActive?

Request a free sample today and discover how Optima BoneActive can support your patients' bone and joint health.

[Request a Sample](#)



[www.nutricaa.com](http://www.nutricaa.com)



[info@nutricaa.com](mailto:info@nutricaa.com)



+8801717390779

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This product is not intended to diagnose, treat, cure, or prevent any disease.