## Ultra Osteo-Guard<sup>®</sup> plus Bonolive®

Bone and joint health<sup>‡</sup>

### DESCRIPTION

Ultra Osteo-Guard plus Bonolive® provides a unique combination of chelated calcium, collagen, vitamin D<sub>3</sub>, vitamin K<sub>2</sub>, magnesium, and olive leaf to support bone strength and healthy bone mineralization throughout the lifespan. KoACT® is a calcium-hydrolyzed collagen chelate that was shown in a clinical study to support a healthy BAP/TRAP5b ratio, a biomarker of bone synthesis and resorption. Bonolive® is a unique olive leaf extract standardized to 40% oleuropein content that has been shown in various studies to promote bone formation by enhancing the number and activity of the bone-building cells. Bonolive has also been clinically researched in aging adults to support knee and joint comfort during every day activities.<sup>‡</sup>

### **INDICATIONS**

- Supports bone mineral density and flexibility<sup>‡</sup>
- Supports bone building and healthy bone metabolism<sup>‡</sup>
- Knee and joint comfort<sup>‡</sup>

### FUNCTIONS AND MECHANISM OF ACTION

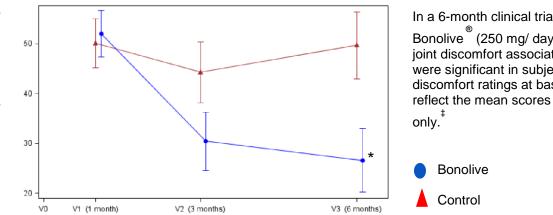
Bone remodeling is a continuous process of formation and resorption. Osteoclasts and osteoblasts are two primary types of bone cells. Osteoblasts, the more exterior cells, are responsible for bone mineralization. Osteoclasts, found beneath the osteoblasts, are responsible for bone resorption. When calcium levels in the blood drop, the osteoblasts change shape, allowing the osteoclasts to become exposed and release calcium from the bones to the rest of the body. It is generally accepted that obtaining enough dietary calcium in combination with the vitamins and minerals that are required for bone building including boron, magnesium, phosphorus, vitamin K2, and vitamin D support healthy bone mineralization. Vitamin K enhances bone formation by carboxylating osteocalcin. This enables osteocalcin to bind to calcium and promote healthy bone mineralization. <sup>‡</sup>

KoACT<sup>®</sup> is a unique patented calcium collagen chelate that supports bone mineral density compared to calcium alone. It provides a strong, flexible and fibrous protein network that supports bone structure and helps bone withstand daily impact. In a human study, KoACT® was shown to support bone mineral density in total body DXA scans after three months of intake at a 5 gram dose. Furthermore, a comparison study to calcium alone indicates support for a healthy BAP/TRAP5b ratio, a biomarker of bone synthesis and resorption. Oleuropein is a phenolic compound found in olive leaves and has been shown in various studies to promote bone formation by enhancing the number and activity of the bone building cells, particularly osteoblasts. The patented ingredient Bonolive® is a unique bioavailable and water-soluble extract standardized to 40% oleuropein. Bonolive® at a dose of 250 mg daily has been clinically shown to support comfort in the knee joints while walking and during other everyday activities. In a 6-month RCT of 124 subjects >55 years Bonolive helped to moderate joint discomfort associated with walking and other common types of movement, such as bending and straightening the knee. Subjective data show improved quality of life and improved ability to perform basic daily activities. <sup>‡</sup>

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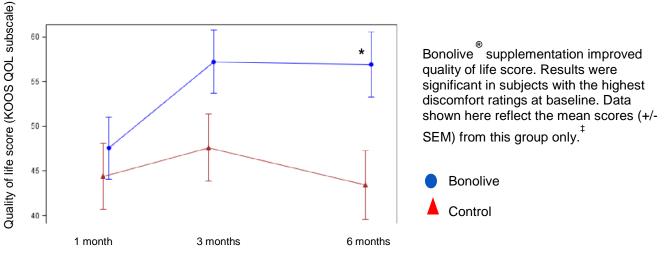
Bonolive<sup>®</sup> moderates knee discomfort while walking in healthy adults: Results from a randomized, controlled clinical trial<sup>‡</sup>



In a 6-month clinical trial of 124 adults aged >55 y,

Bonolive (250 mg/ day) helped to moderate knee joint discomfort associated with walking. Results were significant in subjects with the highest discomfort ratings at baseline. Data shown here reflect the mean scores (+/- SEM) from this group only

Bonolive<sup>®</sup> supports quality of life in adults with knee discomfort: Results from a randomized, controlled clinical trial<sup>‡</sup>



### FORMULA (#202461)

Serving size 2 tablets:	
Vitamin D3 (as cholecalciferol)	25 mcg (1,000 IU)
Calcium (from microcrystalline hydroxyapatite	- · · ·
and KoACT® calcium collagen)	300 mg
Phosphorus (from microcrystalline hydroxyapatite)	300 mg
Magnesium (from magnesium glycinate	
/amino acid chelate)	300 mg
KoACT <sup>®</sup> Calcium Collagen Chelate	
(supplying 650 mg bovine collagen peptides	1000 mg

## Ultra Osteo-Guard® plus Bonolive®

Other ingredients: Microcrystalline cellulose, d-hydroxypropyl cellulose, carboxymethylcellulose sodium, sunflower lecithin, tablet coating (hypromellose, glycerin) **Gluten-free, Non-GMO** KoACT® is a registered trademark of AIDP, Inc. Bonolive® is a trademark of BIOACTOR B.V.

### SUGGESTED USE

Adults take 2 tablets, 2 times daily with food or as recommended by a healthcare practitioner.

### SIDE EFFECTS

No adverse side effects have been reported.

#### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

### REFERENCES

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#### For more information on Ultra Osteo-Guard® plus Bonolive™ visit douglaslabs.com

‡ These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

