NEW ROOTS HERBAL

NATURAL HEALTH PRODUCTS
WWW.NEWROOTSHERBAL.EU

» OSTEOARTICULAR HEALTH

BONE HEALTH, JOINT HEALTH, INFLAMMATORY PROCESSES

- Exclusive information for health-care professionals-

New Roots HERBAL

BONE HEALTH

StrongBones

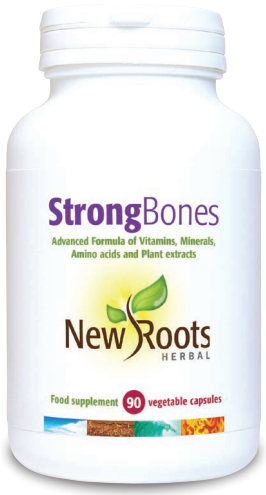
With microcrystalline hydroxyapatite, the most bioavailable form of calcium.

Nutritional information	2 capsules
Minerals:	
Calcium (from hydroxyapatite)	300 mg (38%*)
Phosphorus (from hydroxyapatite)	150 mg (21 %*)
Proteins (from hydroxyapatite)	300 mg
Magnesium (from Mg bisglycinate)	48,3 mg (13%*)
Zinc (from Zn mono-L-methionine sulfate)	3,1 mg (31%*)
Manganese (from Mn citrate)	0,9 mg (45%*)
Copper (from cupric citrate)	0,31 mg (31%*)
Boron (from boric acid)	1,1 mg
Field horsetail (*E. arvense*) (7% silica)	10 mg
Vitamins:	
Thiamin (vit. B1) (thiamin HCL)	1,4 mg (127%*)
Vit. K2 (menaquinone 4 and 7)	31 µg (41%*)
Vit. D3 (cholecalciferol, 167 IU/caps.)	8,3 µg (166%*)
Vit. C (L-ascorbic acid)	62 mg (78%*)
Vit. B12 (methylcobalamin)	50 µg (2.000%*)
Folate (calcium-L-methylfolate)	166,7 µg (83%*)
Amino acids:	
L-Lysine	100 mg
L-Proline	100 mg
Glucosamine (from *Aspergillus niger*)	84 mg
Antioxidants:	
Turmeric (*C. longa*) (95% curcuminoids**)	6,7 mg
Grape seed (*V. vinifera*) (95% PACs)	20 mg
Green tea (*C. sinensis*) (5,25mg EGCG/caps.)	14 mg
Lutein (from *Tagetes erecta*)	0,7 mg
Lycopene (from *Lycopersicon esculentum*)	1,7 mg

*NRV: Nutrient Reference Value in %

**provides curcumin I, demetoxicurcumin and bisdemetoxicurcumin.

Recommended daily dose: 2 capsules one to three times daily with food.

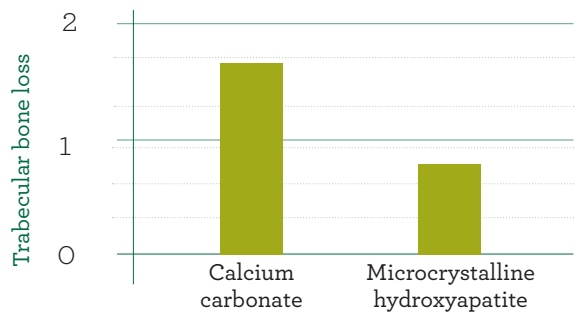


Microcrystalline Hydroxyapatite* (MCH) [1-2]:

Natural compound main component of the bone matrix.
Organic source of calcium for maximum absorption. It is the most bioavailable form of calcium.
Same type of calcium as found in the bones.
Optimum Calcium-Phosphorus ratio (2:1).
Rich in osteospecific organic components (phosphorus, collagen and proteins) that contribute to stimulate osteogenesis and bone formation.
Source of proteins (type I collagen) essential for the proper maintenance of connective tissue. They afford strength and traction to the bone extracellular matrix.

Oral administration of MCH is more effective than calcium carbonate in reducing trabecular bone loss in patients with osteoporosis. [3-4]

MCH treatment *VS* calcium carbonate (CC) in osteoporosis.



*Our MCH is sourced from New Zealand cattle. Certified free of antibiotics, herbicides, pesticides, bovine spongiform encephalopathy (BSE) and recombinant bovine growth hormone (rBGH). Freeze-dried for high quality.

StrongBones Vegetarian

New generation vegetarian formula for optimal bone regeneration

Nutritional information:	3 capsules
Minerals:	
Calcium (from calcium phosphate, tribasic)	333 mg (42%*)
Phosphorus (from calcium phosphate, tribasic)	157,4 mg (22%*)
Magnesium (from magnesium bisglycinate)	90 mg (24%*)
Zinc (from zinc mono-L-methionine sulphate)	3,1 mg (31%*)
Manganese (from manganese citrate)	0,9 mg (47%*)
Copper (from cupric citrate)	0,31 mg (31%*)
Boron (from boric acid)	1,1 mg
Field horsetail (*Equisetum arvense*) (7% silica)	10 mg
Vitaminas:	
Thiamin (vit. B1) (from thiamin hydrochloride)	1,4 mg (127%*)
Vitamin K2 (from menaquinone-4 and menaquinone-7)	31 µg (41%*)
Vitamin D3 (cholecalciferol) (111 IU/caps.)	8,3 µg (166%*)
Vitamin C (L-ascorbic acid)	62 mg (78%*)
Vitamin B12 (methylcobalamin)	50 µg (2.000%*)
Folate (calcium-L-methylfolate)	166,7 µg (83%*)
Amino acids:	
L-Lysine	100 mg
L-Proline	100 mg
Glucosamine (from *Aspergillus niger*)	84 mg
Antioxidants:	
Turmeric (*Curcuma longa*) (95% curcuminoids**)	7,5 mg
Grape seed (*Vitis vinifera*) (80% OPC)	20 mg
Green tea (*Camellia sinensis*) (75% EGCG; 3,5 mg/caps.)	14 mg
Lutein (from *Tagetes erecta*)	0,7 mg
Lycopene (from Lycopersicon esculentum)	1,7 mg

*NRV: Nutrient Reference Value in %.

**provides curcumin I, demetoxicurcumin and bisdemetoxicurcumin.

Recommended daily dose: 3 capsules one to two times daily with food.

TRICALCIUM PHOSPHATE:

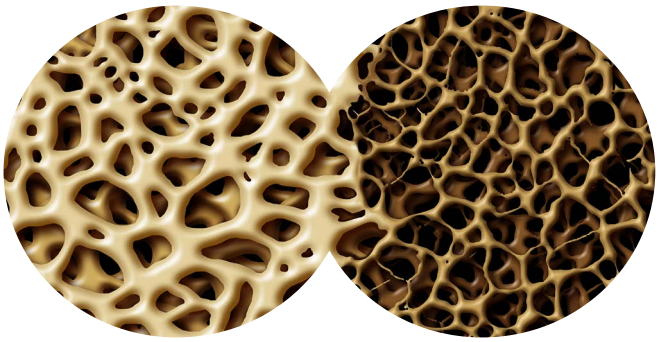
Vegetarian form of calcium for maximum absorption.
Of mineral origin instead of MCH of bovine origin.
Supplies 1,000 mg of calcium and 472.23 mg of phosphorus per daily dose.

GLUCOSAMINE of plant origin (from *Aspergillus niger*).

VITAMIN D3 from lanolin (not suitable for vegans).

Healthy bone

Osteoporotic bone



Common ingredients

STRONG-BONES & STRONG-BONES Vegetarian

- With cofactors for maximum absorption
- Complete, broad-spectrum formulas for optimal bone health
- Natural approach to prevent the onset of osteoporosis

Co-Factors [11-13]: for nutrient assimilation and bone formation.

Zinc:
- Essential for collagen formation and protein synthesis.
- It contributes to the absorption of vitamins A and E.

Manganese:
- Essential for bone growth and cartilage formation
- Contributes to the production of synovial fluid in joints.

Copper:
- Contributes to the formation of bone, connective tissue and collagen.
- Together with vitamin C and Zn, it favours the formation of elastin.

Silica (from horsetail):
- Accelerates the repair of connective tissue in terms of strength and elasticity.

Essential amino acids:
- L-Proline: necessary for the production of collagen and cartilage for healthy joints, ligaments and tendons.
- L-Lysine: increases calcium absorption.

Vitamin B1 (thiamine):
- Reinforces circulation, blood formation, carbohydrate metabolism and digestion.
- Important antioxidant.

Vitamin K2 (menaquinone 4 and 7):
- Inhibits the formation of osteoclasts, which are responsible for bone resorption.

Vitamin D3 (cholecalciferol):
- Necessary for the absorption of calcium and phosphorus.

Vitamin C:
- An antioxidant that is crucial for collagen formation
- Necessary for the repair and growth of connective tissue.

Vitamin B12 (methylcobalamin):
- Deficiency of this vitamin is a risk factor for altered bone mineral density.

Folate:
- Contributes to prevent bone fractures.

Glucosamine:
- A natural component of cartilage.

Calcium:
Essential for healthy bones and teeth.
Increases growth and bone density.
Inhibits bone absorption of toxic metals such as lead.

Phosphorus:
Essential for the development of bones and teeth, as well as for cell growth.

Magnesium bisglycinate [5]:
Plays a critical role in calcium absorption.
Essential for the metabolism of calcium - vitamin D3.
Magnesium bisglycinate is four times more bioavailable.

Antioxidants [6-10]: Protection against oxidative stress, regulation of inflammatory processes, and the playing of a very important role in bone formation.

Turmeric (95% curcuminoids):
- Antiinflammatory action.
- Related to bone microarchitecture.

Grape seed (95% proanthocyanidins):
- Improves bone density.
- Reduces synovial inflammation.

Lutein:
- Reduces the incidence of hip fracture due to osteoporosis

Green tea (75% EGCG):
- Improves bone mineral density by enhancing osteoblast formation and suppressing osteoclastogenesis.

Lycopene:
- Protects osteoblasts from oxidative stress.

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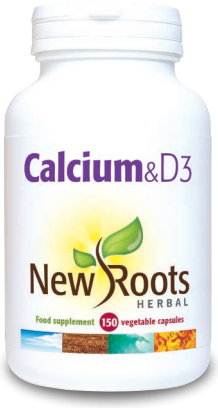

CALCIUM & D³.

High potency calcium citrate + vitamin D3 for maximum absorption.

Nutritional information	1 capsule
Calcium citrate	169 mg
Vit. D3 (55 IU/caps)	1,4 µg

*NRV: Nutrient Reference Value in %.

Recommended daily dose: 1–4 capsules daily with food.

- PREVENTION OF CALCIUM DEFICIENCY STATES
- CALCIUM IS THE ESSENTIAL BUILDING BLOCK OF BONES (OSTEOPOROSIS)
- PREMENSTRUAL SYNDROME AND MENOPAUSE (HELPS TO REDUCE SYMPTOMS)

Calcium (citrate) [1-3]:

- Contributes to the formation and maintenance of healthy bones and teeth.
- Essential in the contraction mechanism of muscles, including the heart, and in blood clotting.
- Participates in good response of the immune system.

Vitamin D3 [7]:

- Stimulates calcium absorption through the small intestine.
- Facilitates the reabsorption of calcium and other minerals in bone.

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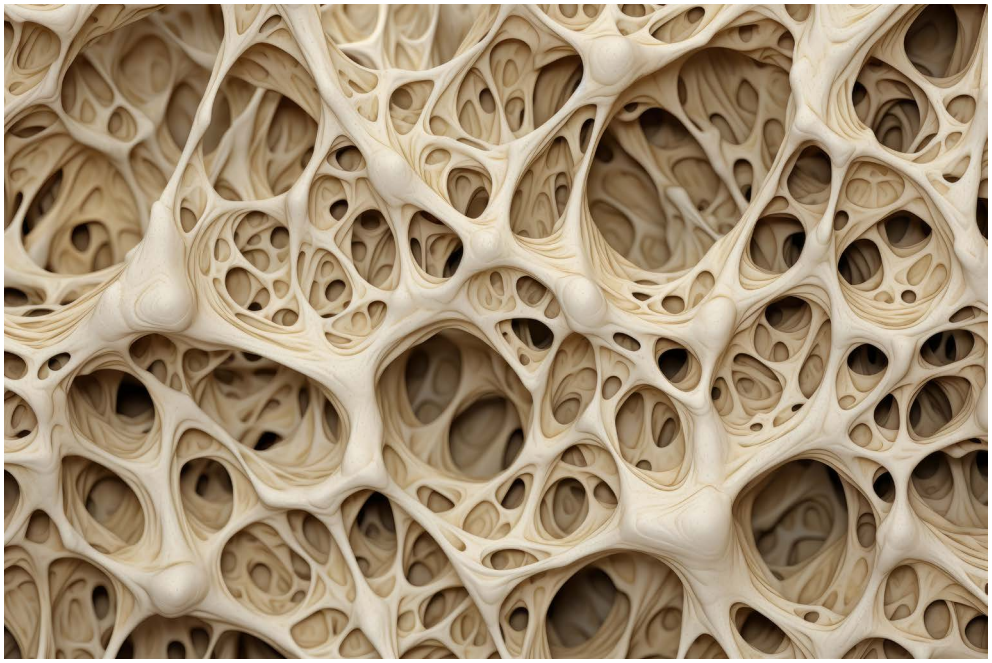
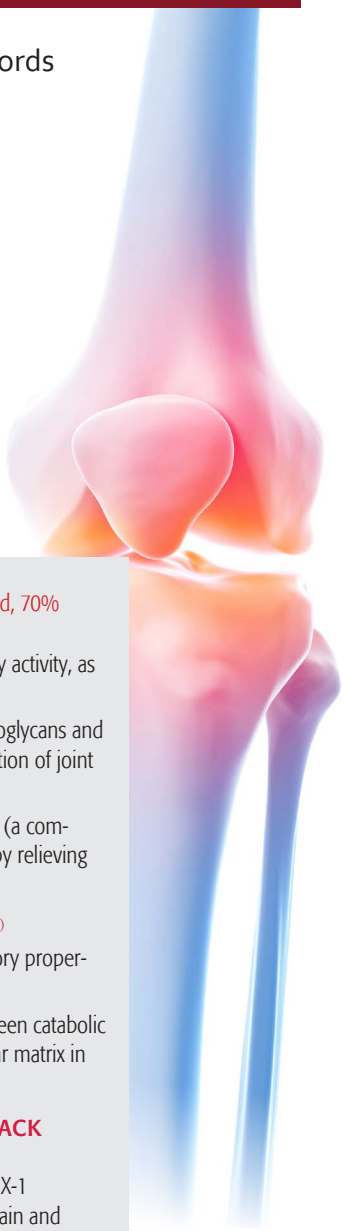


JOINT COMPLEX

Natural relief of joint pain and inflammation. Strengthens cartilage and connective tissue

A synergistic formula with the supply of an innovative nutrient called ESM® that affords great support for joint health, improving range of motion and flexibility.



- IMPROVES FLEXIBILITY AND ELASTICITY, RELIEVING STIFFNESS OF THE JOINTS
- STRENGTHENS CARTILAGE AND CONNECTIVE TISSUE
- RELIEVES CONSTRAINTS ON PAINFUL JOINTS
- NATURAL RELIEF OF JOINT PAIN AND INFLAMMATION

Nutritional information:	2 capsules
ESM® (internal eggshell membrane)	500 mg
Boswellia serrata (45% boswelllic acid)	260 mg
Devil's claw (*H. procumbens*) (10% harpagosides)	160 mg
Turmeric (*C. longa*) (95% curcuminoids*)	200 mg
Piperine (from black pepper, *Piper nigrum*)	4 mg

ESM® is a registered trademark of Torolis S.L

Recommended daily dose: 1 capsule twice daily.

BOSWELLIA SERRATA (35% boswellic acid, 70% organic acids) [6-7]

- Boswellic acid possesses antiinflammatory activity, as it inhibits leukotriene production.
- It reduces the degradation of glycosaminoglycans and thus inhibits the degenerative transformation of joint surfaces.
- Boswellic acid together with glucosamine (a component of NEM®) exert positive effects by relieving knee pain and stiffness.

HARPAGOPHYTUM (5% harpagoside) [8-9]

- It possesses analgesic and antiinflammatory properties due to its harpagoside content.
- It contributes to restore the balance between catabolic and anabolic processes of the extracellular matrix in the joint.

TURMERIC (95% curcuminoids) AND BLACK PEPPER (piperine) [10-12]

- Antiinflammatory effect; it inhibits the COX-1 and COX-2 enzymes that cause chronic pain and inflammation.
- It inhibits the release of inflammatory mediators (prostaglandin E2, thromboxanes and eicosanoids), affording benefits similar to those of cortisone, but without its toxicity.
- Piperine increases the bioavailability of turmeric by up to 2,000%.

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Eggshell Membrane ESM®

Selection, production and control of raw materials at the source (Navarre, Spain)

Nutraceutical found in the inner membrane of the eggshell.

Powerful natural source of collagen, glucosamine, chondroitin and hyaluronic acid.

They are present in the same proportion as in the joints.

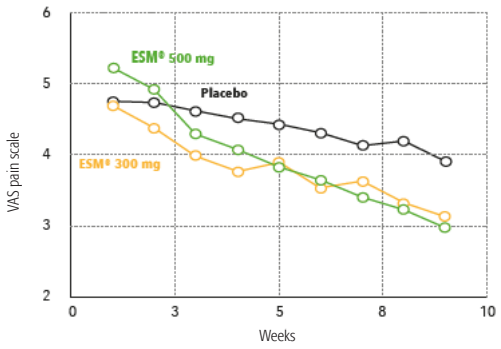
ESM is obtained through a natural process by mechanical action, washing and drying that preserves the natural structure of its components.

– SUPPLIES THE HIGHEST AMOUNT OF COLLAGEN ON THE MARKET –

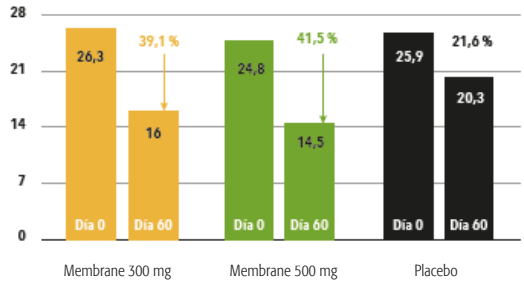
SCIENTIFIC EVIDENCE

CLINICAL TRIAL IN PATIENTS DIAGNOSED WITH OSTEOARTHRITIS
(Universidad Católica de San Antonio de Murcia, 2018)

REDUCTION OF PAIN ASSOCIATED WITH THE INFLAMMATORY PROCESS



IMPROVES FUNCTIONAL CAPACITY BY UP TO 41%



IT ALSO INCREASES COLLAGEN SYNTHESIS BY SKIN FIBROBLASTS

OTHER STUDIES:

» Results from another trial involving a dose of 500 mg showed a 27.8% increase in flexibility after 7 days of treatment and 43.7% at 30 days. Overall pain was reduced by 25.8% at 7 days and 72.5% at 30 days [5].

» Studies have been conducted on the safety of the inner membrane of the eggshell [1], its antiinflammatory activity [2] and the mechanism of action of such antiinflammatory activity [3].

» In a clinical trial, it resulted in a 15.9% decrease in pain and a 12.8% reduction of stiffness after only 10 days at a daily dose of 500 mg [4].

ESM®

IMPROVEMENT OF PAIN AND FLEXIBILITY IN JUST 7-10 DAYS

Composition:	
Protein	94%
Collageno (Types I,V,X)	35%
Elastin	4-5%
Chondroitin sulphate	2%
Hyaluronic acid	2%
Glucosamine	2%
Dermatan and keratan sulphate	1%
Growth factor TGF-β, IGF-1	
Amino acids:	
-Methionine -Cysteine	-Lysine -Tryptophan
Other substances:	
-Calcitonin -Ovocalixin -Ovotransferrin	-Ovocleidin -Desmosin -Isodesmosin

GLYCOSAMINOGLYCANS (GAGS):

GLUCOSAMINE AND CHONDROITIN:

ESSENTIAL POLYSACCHARIDES THAT SERVE AS STRUCTURAL COMPONENTS OF CONNECTIVE TISSUE, INTERSTITIAL FLUIDS AND SKELETAL STRUCTURES.

HYALURONIC ACID:

ABUNDANT IN SYNOVIAL FLUID, A LUBRICANT THAT FILLS THE MEMBRANE AND SURROUNDS THE JOINTS.

COLLAGEN:

A FIBROUS PROTEIN NECESSARY FOR CARTILAGE STRENGTH AND ELASTICITY.

Suggestion

Combine

Contributes to the growth and rejuvenation of bone, cartilage, connective tissue and synovial fluid production for a pain-free active lifestyle.

Contributes to develop and maintain stronger bones thanks to the adequate form of calcium in Osto-Fort, with cofactors for immediate absorption to prevent osteoarticular problems.

Relieves joint pain and stiffness and thus removes the main obstacle to exercise.

Improves muscle tone, strengthening and protecting the joints.

STRONG BONES PROVIDE GOOD ATTACHMENT POINTS FOR LIGAMENTS AND TENDONS, ESSENTIAL FOR JOINT STABILITY.

JOINT-TISSU & MSM

Complete formula for joint health

- CARTILAGE, CONNECTIVE TISSUE AND BONE PROTECTION AND REPAIR
- REDUCTION OF INFLAMMATION, SWELLING AND JOINT STIFFNESS
- AFFORDS JOINT ELASTICITY AND FLEXIBILITY

Nutritional information	1 capsule
Glucosamine sulfate (sodium-free)	300 mg
MSM (methylsulfonylmethane)	300 mg
Shark cartilage	250 mg
Devil's claw (10% harpagosides)	25 mg

Recommended daily dose: 1–2 capsules three times daily with food.

GLUCOSAMINE SULPHATE [1-2]

- An essential component of native cartilage.
- Essential for the synthesis of glycosaminoglycans (GAGs), proteoglycans and glycolipids, which are responsible for the mechanical and elastic properties of cartilage.

METHYLSULFONYLMETHANE (MSM.) [3-4]

- A source of sulphur essential for the formation of chondroitin sulphates.
- It prevents inflammation and facilitates the repair of connective tissue and joints.
- Very effective in musculoskeletal disorders; it shortens the recovery time after sports injuries (joint pain, inflammation, overload, muscle cramps, etc.).

SHARK CARTILAGE [5]

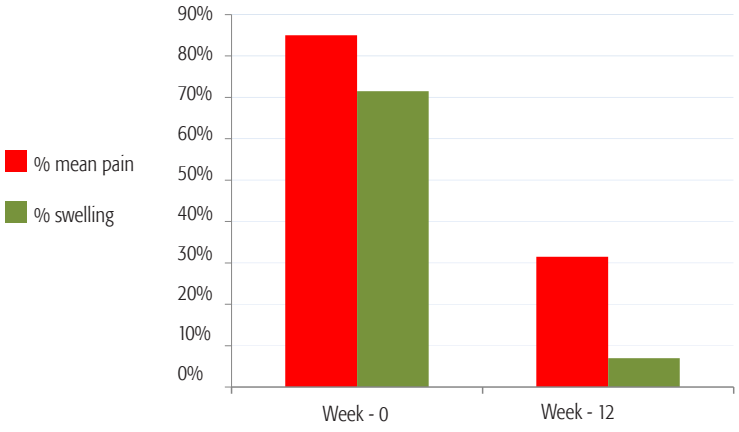
- It provides GAGs and other macromolecules found in all our joints.
- These compounds are responsible for maintaining adequate water levels in the cartilage matrix, thus helping to maintain its gel-like nature and protective function.

HARPAGOPHYTUM (5% harpagoside) [6]

- It possesses analgesic and antiinflammatory properties due to its harpagoside content.
- It contributes to restore the balance between catabolic and anabolic processes of the extracellular matrix in the joint.

SCIENTIFIC EVIDENCE

The combination of glucosamine and MSM reduces mean pain and swelling in osteoarthritis by 63% and 90%, respectively, after 12 weeks of treatment [7].



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CHONDROITIN & GLUCOSAMINE

Contributes to relieve joint pain associated with osteoarthritis

- PROTECTION AND CARE OF JOINT DETERIORATION DUE TO WEAR AND TEAR, ESPECIALLY IN HIGH-IMPACT SPORTS
- FACILITATES THE RESTORATION OF FLEXIBILITY, ELASTICITY AND CUSHIONING CAPACITY

Nutritional information	1 capsule
Glucosamine (sodium-free)	500 mg
Chondroitin (90% HPLC)	400 mg

Recommended daily dose: 1- 3 capsules daily.

GLUCOSAMINE SULPHATE [1-2]

- An essential component of native cartilage.
- Essential for the synthesis of glycosaminoglycans (GAGs), proteoglycans and glycolipids, which are responsible for the mechanical and elastic properties of cartilage.

CHONDROITIN SULPHATE [3-4]

- Glycosaminoglycan (GAG), which promotes the synthesis of cartilage matrix proteoglycans.
- It exerts antiinflammatory effects, controlling spontaneous pain and improving joint function.
- Without the side effects of nonsteroidal antiinflammatory drugs (NSAIDs) upon the digestive system, kidneys or coagulation.

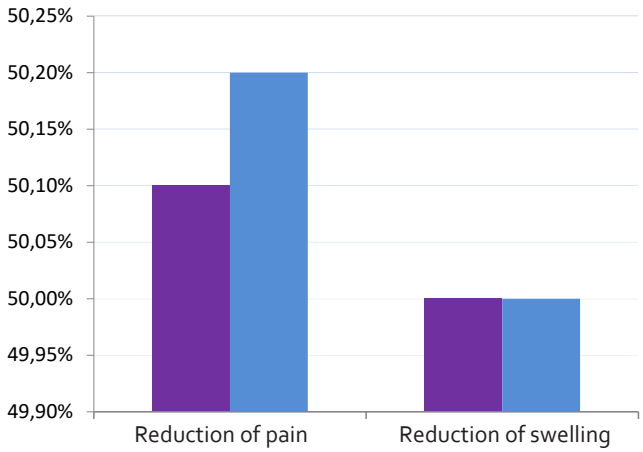
SCIENTIFIC EVIDENCE

Comparison of treatment with chondroitin and glucosamine versus *celecoxib* (NSAID) [5]

Group 1: 400 mg chondroitin + 500 mg glucosamine, 3 times per day.

Group 2: 200 mg celecoxib per day.
Study duration: 6 months.
Group 2 had more side effects.

	Reduction of pain	Reduction of swelling
Group 1	50,1%	>50%
Group 2	50,2%	>50%



Conclusions: the chondroitin + glucosamine group shows efficacy comparable to *celebiox* in reducing pain, stiffness, functional limitation and swelling/joint effusion after 6 months in patients with knee osteoarthritis. It moreover presents a good safety profile.

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M.S.M.

Provides nutrients for healthy joints

- Antiinflammatory and detoxifying action upon the connective tissue
- Participates in the formation of connective tissue
- Facilitates recovery from sports injuries
- Elimination of toxins, allowing the entry of nutrients
- Strengthens circulation

Nutritional information	1 capsule
M.S.M. (methylsulfonylmethane)	850 mg

Recommended daily dose: 1 or 2 capsules daily with food.

Methylsulfonylmethane (MSM.) [1-3]

- Nutraceutical that plays an important role in the health of skin, hair and nails.
- A source of sulphur, essential for the formation of chondroitin sulphates.
- It prevents inflammation and facilitates the repair of connective tissue and joints.
- Very effective in musculoskeletal disorders; it shortens the recovery time after sports injuries (joint pain, inflammation, overload, muscle cramps, etc.).
- It exerts an analgesic effect due to blocking of the transmission of pain impulses along C nerve fibres.

SCIENTIFIC EVIDENCE

Studies have reported that patients with osteoarthritis who received MSM for 12 weeks showed improvement in pain and physical function [4-5].

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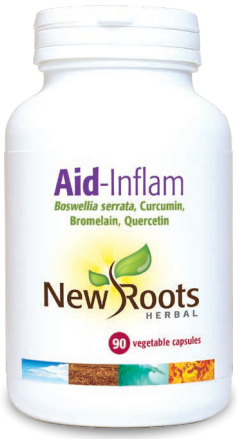
AID-INFLAM

Combination of plant extracts (boswellia and turmeric) with bromelain and quercetin



Nutritional information	2 capsules
Boswellia serrata	400 mg
Boswellic acids 35%	140 mg
Organic acids 70%	280 mg
Turmeric (*Curcuma longa*) (95% curcuminoids*)	400 mg
Bromelain (2.400 GDU/g)	200 mg 7,2 mill. FCC-PU
Quercetin	200 mg

*provides curcumin I, demetoxicurcumin and bisdemetoxicurcumin.

Recommended daily dose: 2 cáp. 1-3 veces al día.

- **OSTEOARTHRITIS, RHEUMATIC DISEASES AND SPORTS INJURIES**
- **REDUCES INFLAMMATION AND PAIN**
- **NATURAL COX-2 INHIBITOR**

BOSWELLIA SERRATA AND TURMERIC [1-4]

- They inhibit the action of cyclooxygenase-2 (COX-2), an enzyme that triggers the production of prostaglandins involved in the inflammation process.
- Boswellia protects cartilage and connective tissue against glycosaminoglycan degradation.
- Turmeric is a potent antioxidant capable of inhibiting the production of free radicals.

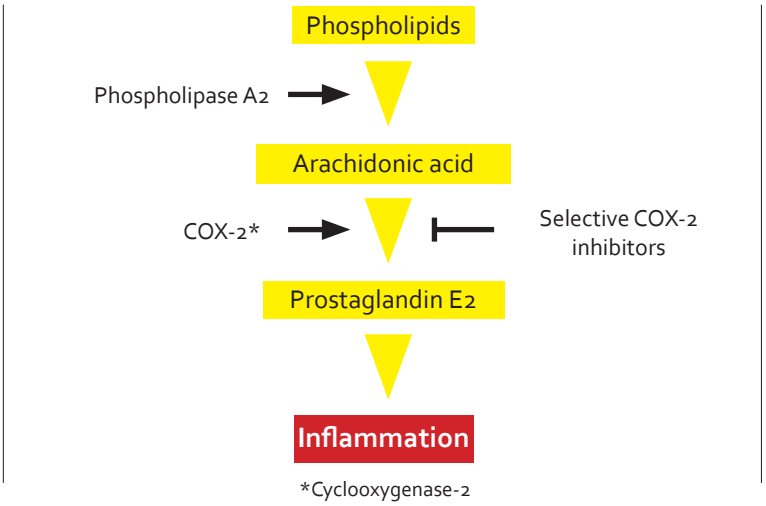
BROMELAIN [5,6]

- A proteolytic enzyme obtained from pineapple.
- It degrades pain-related kinins, dissolves fibrin clots and thus reduces inflammation and oedema.
- It regulates type 2 prostaglandins, which are involved in the onset of inflammatory processes.

QUERCETIN [7]

- A natural bioflavonoid found especially in onions and apples.
- It blocks COX-2, LOX-5, inhibiting the acute phases of inflammation.
- It also possesses antiallergic properties due to its ability to inhibit histamine production.

» Mechanism of action of the COX-2 inhibitors



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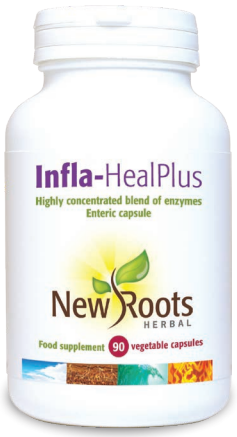
INFLA-HEAL PLUS

Inflammation & joints. Complete enzyme, zinc and antioxidant formula



Nutritional information	2 capsules
Pancreatic enzymes 4X	500 mg
Protease	50 000 USP-PC
Amylase	50 000 USP-AGU
Lipase	10 000 USP-LU
Bromelain (2.500 GDU/g)	345,6 mg; 864 GDU
Papain	3 600 000 USP-PU
Trypsin	36 000 USP-TU
Providing: Chymotrypsin	720 USP-CU
Rutin	170 mg
L-Cystein (HCl)	20 mg
Zinc	5,2 mg (52%*)

*NRV: Nutrient Reference Value in %.

Recommended daily dose: 1 capsule two to four times daily between meals.

- MULTI-ENZYME FORMULA
- A NATURAL WAY TO TREAT ACUTE AND CHRONIC INFLAMMATION.
- ACCELERATES RECOVERY FROM TISSUE INJURIES
- RESTORES JOINT MOBILITY AND IMPROVES CIRCULATION

ENZYMES [1-4]

- Pancreatin contains protease, which breaks down proteins in damaged tissues, accelerating their recovery.
- Bromelain and papain regulate prostaglandin production and reduce inflammation.
- Trypsin and chymotrypsin are also proteolytic enzymes that reduce inflammation.

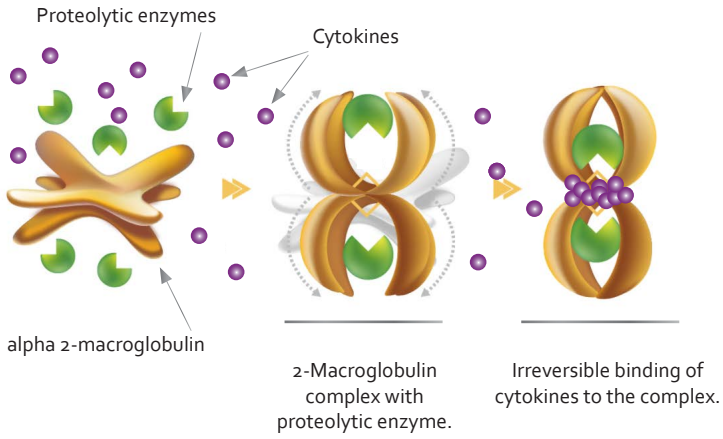
RUTIN AND L-CYSTEINE [5,6]

- Rutin is a bioflavonoid that possesses antioxidant and antiinflammatory properties.
- L-cysteine is an amino acid with an antioxidant action that reduced glutathione (GSH) balance. Any imbalance of GSH can contribute to the death of damaged cells.

ZINC [7]

- An essential mineral that functions synergistically with the enzyme SOD.
- It is essential for 30 other enzymes, some of which are critical for immune cells to replicate and keep chronic inflammation under control.

» Antiinflammatory mechanism of action of enzymes



Other antiinflammatory mechanisms of enzymes

- » Degradation of plasma proteins in the interstitial space in acute inflammation, eliminating inflammatory mediators.
- » Blocking of prostaglandin type 2 (PEGE2) synthesis.
- » Modulation of TGF-β expression.
- » Anti-oedema and fibrinolytic activity. They increase tissue permeability by promoting oedema reabsorption.
- » They reduce bradykinin, a proinflammatory peptide.

Systemic enzymes (bromelain, papain, trypsin, chymotrypsin) form a complex with the plasma glycoprotein alpha 2-macroglobulin, favouring the elimination of excess cytokines (IL-1, IL-6, IFN-γ and TNF-β) and reducing inflammation.

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Collagen MultiMax 5

Collagen [1,2]:

- Contributes to maintain the structural integrity of joints, bones and cartilage. Helps repair joint damage, muscle recovery, prevent age-related sarcopenia, etc.

ESM® (EGGSHELL INNER MEMBRANE) (inner membrane of the eggshell) [3,4]:

- A natural source of glycosaminoglycans, glucosamine, chondroitin and hyaluronic acid, essential for maintaining healthy cartilage and synovial fluid.
- It possesses antiinflammatory action, reducing joint pain and stiffness.

Hyaluronic acid [5,6]:

- Present in all connective tissues and organs, such as skin, synovial fluid, etc.
- In patients with osteoarthritis of the knee, it helps to reduce pain, improve physical function and improve quality of life.

Vitamin C [7,8]:

- Crucial for collagen synthesis, which is essential for the proper functioning of bones, teeth, cartilage, gums, skin and blood vessels.
- It can help accelerate bone healing after fracture and speed recovery from musculoskeletal damage by increasing type I collagen synthesis and reducing oxidative stress parameters.

Magnesium [9,10]:

- A cofactor in many enzymatic processes needed for cellular energy utilization.
- It is essential for the correct metabolism and absorption of calcium.
- It exerts a positive effect upon stress states and has a calming action. It improves heart activity and regulates fats and glucose in the blood.

Copper [11-13]:

- Necessary for the collagen and elastin structure of the bone matrix. It is a cofactor of the enzyme lysyl oxidase, which is needed for the formation of lysine-derived cross-links in collagen and elastin.
- It also plays a key role in inhibiting bone resorption, preventing calcium loss from the bones.

Silica [14,15]:

- Accelerates the repair of connective tissue, affording strength and elasticity.
- Exerts effects on bone tissue because it stimulates the production of osteoblasts, participates in the formation of type I collagen and promotes its structural stability.

Boron [16,17]:

- Essential for the metabolism of calcium, phosphorus, magnesium and vitamin D_3.
- It influences mineral metabolism by improving calcium absorption and reducing urinary excretion.
- Intervenes in collagen turnover, since it increases collagen synthesis, contributing to bone formation.

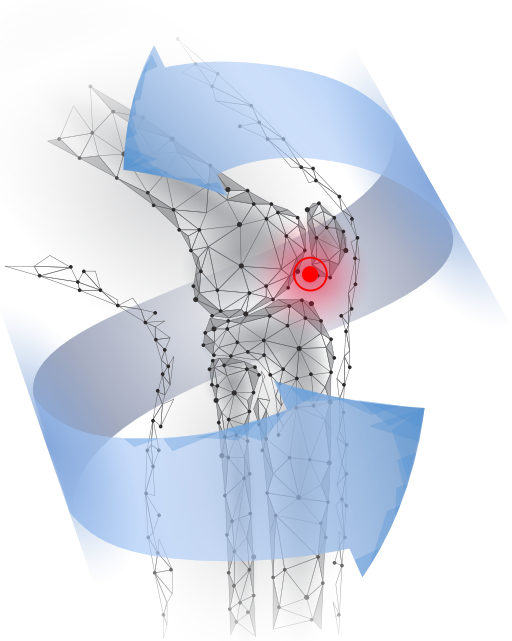
Malic acid [18,19]:

- It is the basis of the start of the Krebs cycle, which is crucial for energy production.
- It increases the amount of malate in mitochondria, thereby increasing the energy production capacity of the cell, reducing fatigue and improving exercise tolerance.

Harpagophytum (Devil's claw) [20,21]:

- Harpagoside possesses analgesic and antiinflammatory properties; its main function is to inhibit the release of cytokines that contribute to the inflammatory process.
- It inhibits the catabolic processes that lead to the degradation of joint cartilage.

Collagen MultiMax 5



Nutritional information	Per serving 11 g	Per 100 g
Energy (kJ/kcal)	136/32	1.240/295
Fats	0,0 g	0,4 g
Saturates	0,0 g	0,0 g
Carbohydrate	1,1 g	9,8 g
Sugars	0,0 g	0,1 g
Fibre	0,0 g	0,3 g
Protein	7 g	63 g
Salt	0,5 g	4,1 g
Other nutrients:	**Per serving 11 g**	**VRN***
Hydrolyzed porcine collagen (type I y III)	5 000 mg	
Hydrolyzed chicken collagen (type II)	40 mg	
Hydrolyzed bovine collagen (type I y III)	2 500 mg	
ESM® internal eggshell membrane (type I, V and X)	300 mg	
Hyaluronic acid	25 mg	
Vitamin C (L-ascorbic acid)	40 mg	50%
Magnesium (from magnesium citrate)	187,5 mg	50%
Copper (from cupric gluconate)	0,5 mg	50%
Silica (from bamboo extract)	40 mg	
Boron (from boric acid)	3 mg	
Malic acid	500 mg	
Devil's claw (*H. procumbens*) (6:1) (2,5% harpagosides)	150 mg	

*NRV: Nutrient Reference Value in %.

Recommended daily dose: 1 measuring spoon (11 g) daily.

A formula with 5 types of collagen, hyaluronic acid, vitamin C, minerals and Harpagophytum

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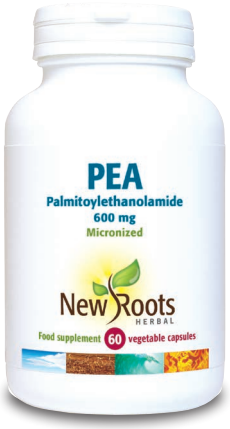
PEA (palmitoylethanolamide)

Affords relief from chronic pain and inflammation



- ANTIINFLAMMATORY AND ANALGESIC ACTIVITY
- ACTS UPON THE CANNABINOID RECEPTORS. ALTERNATIVE TO CBD
- ENHANCES THE ACTION OF ANALGESICS WHEN USED AS COADJUVANT
- NO KNOWN DRUG INTERACTIONS
- WITHOUT ADVERSE EFFECTS. DOES NOT CREATE DEPENDENCY

Nutritional information	1 capsule
Micronized palmitoylethanolamide	600 mg

Recommended daily dose: 1–2 capsules daily.

PALMITOYLETHANOLAMIDE (PEA) (1-21)

- Palmitoylethanolamide is a natural compound produced by the body to protect cells from inflammation and pain.
- It inhibits the release of inflammatory cytokines such as interleukins IL-1β and IL-6, as well as tumour necrosis factor alpha (TNF-α).
- Clinical trials suggest that PEA may be useful in patients with sciatica, chemotherapy-induced neuropathy, generalized pain, migraine, glaucoma, burning mouth syndrome, major depressive disorder (MDD), autism, myasthenia gravis, carpal tunnel syndrome, temporomandibular joint (TMJ) pain and osteoarthritis of the knee.

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