

*The Professional Standard for MCHC*

# Cal Apatite®

**Clinically Effective Bone Nutrition♦**

## Recommend Cal Apatite with Confidence

- ▶ Clinically tested support for complete bone health♦
- ▶ Over 20 years of effective and safe clinical use
- ▶ Highly absorbable nutrients for bone mineralization:♦
  - Calcium
  - Magnesium
  - Phosphorus
  - Trace minerals
- ▶ Type 1 collagen protein and the intact organic portion of bone for optimal bone development♦
- ▶ Exclusive raw bone constituent profile verification assures complete bone nutrition
- ▶ Very well tolerated



**Bones are more than calcium. So is Cal Apatite.**

# Cal Apatite<sup>®</sup> provides what calcium alone doesn't—everything bones are hungry for\*

CALCIUM

MAGNESIUM

PHOSPHORUS

BORON

ZINC

COPPER



## Cal Apatite<sup>®</sup> Forte Capsules

### Complete Bone Nutrition in Capsules with Vitamin D

- Purity-certified MCHC
- Vitamin D to support bone and muscular health\*
- Flexible dose format for delivering optimal levels of MCHC, calcium, and vitamin D\*
- Ideal for those who prefer capsules

#### 3 Capsules Supply:

MCHC.....	3036 mg
Calcium (as MCHC).....	684 mg
Phosphorus (as MCHC).....	357 mg
Vitamin D (as cholecalciferol).....	600 IU

**Recommendations:** Three capsules 1-2 times daily.

**Form:** 90 and 180 Capsule Bottles

## Cal Apatite<sup>®</sup> Plus

### Complete Bone Nutrition with Ipriflavone and Vitamin D

- Purity-certified MCHC
- Ipriflavone, a unique isoflavone derivative to support bone metabolism\*
- Vitamin D to stimulate calcium absorption and help regulate calcium and phosphorus homeostasis\*

#### 3 Tablets Supply:

MCHC.....	1500 mg
Calcium (as MCHC).....	660 mg
Phosphorus (as MCHC).....	423 mg
Vitamin D (as cholecalciferol).....	600 IU
Ipriflavone.....	150 mg

**Recommendations:** Three tablets 1-2 times daily.

**Form:** 90 and 270 Tablet Bottles

## Cal Apatite<sup>®</sup> with Magnesium

### Complete Bone Nutrition with Extra Magnesium

- Purity-certified MCHC
- 2:1 calcium to magnesium ratio
- Well-tolerated and absorbed magnesium sources
- No magnesium oxide

#### 3 Tablets Supply:

MCHC.....	1500 mg
Calcium.....	600 mg
Phosphorus.....	378 mg
Magnesium.....	300 mg (citrate, aspartate, bis-glycinate <sup>1</sup> )

**Recommendations:** Three tablets 1-2 times daily.

**Form:** 90 and 180 Tablet Bottles

<sup>†</sup> As MetaMag<sup>™</sup>, our proprietary fully reacted magnesium amino acid chelate.



## Only Microcrystalline Hydroxyapatite Concentrate (MCHC) has it all.

### And only Cal Apatite's exclusive raw bone constituent profile guarantees it.

#### COMPLETE BONE NUTRITION

- All-natural, bovine-derived, whole bone supplement
- Provides a full spectrum of highly absorbable macro- and trace minerals and other factors that comprise healthy bone\*
- Supplies an active protein matrix with bone growth factors

The integrity of the raw bone constituent profile and organic factors may underlie the Cal Apatite difference.\*

#### SCIENCE-BASED

- 30 years of research demonstrate the successful bone health support of MCHC\*
- MCHC is a highly absorbable, well-tolerated source of bone nutrition
- MCHC used extensively with an excellent safety profile\*

Given alone, MCHC is perfect bone nutrition. It also combines well with other bone-supportive nutrients for a targeted approach when desired.\*

#### EXCEPTIONAL QUALITY

- The exclusive Cal Apatite Constituent Profile guarantees the raw bone extract quality. Every batch guarantees raw bone extract integrity:
- Standardized levels of calcium & other macrominerals
- Naturally occurring protein & bone growth factors
- Collagen analysis indicating the majority is Type 1

Cal Apatite uses advanced, solvent-free, cold-processing technology that preserves the delicate organic factors that heat and solvents destroy.

#### PURITY-CERTIFIED

- X-ray diffraction analysis verifies microcrystalline structure & delicate MCHC matrix
- All MCHC is from New Zealand & Australian pasture-fed cattle raised in pesticide-free environments
- New Zealand & Australian ministries of agriculture ensure the cattle eat a vegetarian diet to remain BSE ("Mad Cow Disease")-free
- Independently assayed for antibiotics, pesticides & microbial contaminants
- Independently assayed for lead & other heavy metals

# The perfect Cal Apatite® formula for every patient—men, women & children!

VITAMIN D

INTACT PROTEIN

BONE AMINO ACIDS

TYPE1 COLLAGEN

BONE GROWTH FACTORS

ORGANIC FACTORS



## Cal Apatite® 1000

### Complete Bone Nutrition Featuring Concentrated Calcium

- Purity-certified MCHC
- Convenient—1000 mg elemental calcium in three tablets

#### 3 Tablets Supply:

MCHC .....	3000 mg
Calcium .....	1011 mg
Phosphorus.....	609 mg

**Recommendations:** Three tablets daily.

**Form:** 90 and 180 Tablet Bottles

## Cal Apatite® Chewable

### Complete Bone Nutrition in a Chewable Tablet

- Purity-certified MCHC
- Great-tasting Natural Chocolate flavor
- High quality and proprietary mineral amino acid chelates for enhanced absorption
- Ideal for children and those who find it difficult to swallow tablets and capsules

#### 3 Chewable Tablets Supply:

MCHC.....	750 mg
Calcium.....	300 mg
Phosphorus.....	189 mg
Vitamin D (as cholecalciferol) .....	75 IU
Magnesium (as bis-glycinate) <sup>†</sup> .....	75 mg
Zinc (as glycinate) .....	6 mg
Copper (as glycinate).....	750 mcg
Manganese (as glycinate).....	750 mcg

**Recommendations:** Three tablets 1-3 times daily.

**Form:** 90 Tablet Bottle

<sup>†</sup> As MetaMag™, our proprietary fully reacted magnesium amino acid chelate.



## Fem Osteo®HRT

### Complete Bone Nutrition for Use with Hormone Replacement Therapy (HRT)\*

- Purity-certified MCHC
- Designed to supplement specific nutrients that may be depleted by HRT\*

#### 6 Tablets Supply:

MCHC .....	3361 mg
Calcium .....	1515 mg
Phosphorus .....	975 mg
Vitamin D (as cholecalciferol) .....	400 IU
Magnesium.....	200 mg (as magnesium bis-glycinate <sup>†</sup> )

**Other nutrients:** Vitamin A (beta-carotene) 25,000 mg, Vitamin E (d-alpha tocopheryl succinate) 400 IU, Vitamin C (Ultra Potent-C) 300 mg, Vitamin B<sub>6</sub> (pyridoxine hydrochloride) 50 mg, Niacin (niacinamide, niacinamide ascorbate) 200 mg, Pantothenic Acid (D-calcium pantothenate) 150 mg, Riboflavin 17 mg, Thiamin (mononitrate) 15 mg, Zinc (glycinate) 15 mg, Copper (glycinate) 2 mg, Manganese (glycinate) 250 mcg, Folate (folic acid) 800 mcg, Quercetin (dihydrate) 42 mg, Alpha-Carotene 270 mcg, Cryptoxanthin 77 mcg, Zeaxanthin 39 mcg, Lutein 39 mcg

**Recommendations:** Six tablets daily.

**Form:** 180 Tablet Bottle

## Cal Apatite®

### Complete Bone Nutrition

- Purity-certified MCHC
- Ideal for patients who prefer smaller tablets

#### 3 Tablets Supply:

MCHC.....	1500 mg
Calcium.....	626 mg
Phosphorus.....	398 mg

**Recommendations:** Three tablets 1-2 times daily.

**Form:** 90 and 270 Tablet Bottles

## Cal Matrix™

### Support for Bone & Joint Integrity\*

- Purity-certified MCHC
- Helps maintain normal joint strength and function by supporting healthy bone density and cartilage matrix integrity\*
- Delivers essential nutrients that comprise healthy skeletal connective tissue\*

#### 6 Tablets Supply:

MCHC.....	2688 mg
Calcium.....	1224 mg
Phosphorus.....	774 mg
Vitamin D (cholecalciferol) .....	400 IU
Magnesium (bis-glycinate) <sup>†</sup> .....	220 mg

**Other nutrients:** Glucosamine Sulfate (D-glucosamine sulfate HCl) 500 mg, Vitamin C (Ultra Potent-C) 500 mg, Manganese (glycinate) 1 mg, Zinc (glycinate) 15 mg, Copper (glycinate) 2 mg, Boron (citrate) 390 mcg, Chromium (nicotinate glycinate) 240 mcg, Horsetail Aerial Parts (*Equisetum arvense*) 150 mg

**Recommendations:** Six tablets daily.

**Form:** 180 Tablet Bottle

<sup>†</sup> As MetaMag™, our proprietary fully reacted magnesium amino acid chelate.



## Cal Apatite & a healthy diet



The dosage recommendations for the Cal Apatite family of products are based on a healthy diet.

Dosages can be adjusted based on the patient's diet or special needs.

## BONE—A WORK IN PROGRESS

**Bone, like other tissues in the body, constantly renews itself.**

Throughout life, bone is continually resorbed and formed through the dynamic process of bone remodeling, which is necessary for the normal development and maintenance of bone mass. Bone resorption occurs when osteoclast cells remove minerals and collagen from bone. Bone formation follows when osteoblast cells use proteins and other building blocks to produce collagen—which attaches to calcium, phosphorus, and numerous other minerals—resulting in the deposit of new bone tissue. Over a period of days and weeks, a natural crystallization process transforms the collagen- and mineral-rich tissue into the finished product hydroxyapatite crystals—the substance that makes bone so hard.

It's easy to appreciate how microcrystalline hydroxyapatite concentrate (MCHC)—which naturally comprises healthy bone—is complete bone nutrition. Feeding bone what it's made of makes sense!

### Maintaining Bone Mass for a Lifetime

Maximizing peak bone mass in the growing years, coupled with reducing the rate of age-related bone loss later in life are key to maintaining optimal bone mass throughout life. During the younger years, the remodeling process favors new bone formation, permitting a significant and critical increase in bone growth until



peak bone mass is achieved between the ages of 20 and 30. Once peak bone mass is attained, remodeling is usually in balance until the fourth decade of life.

Subsequently, resorption is slightly favored, resulting in a small, continual loss of bone. As the aging process continues, genetics, diet, health status, certain medications, and exercise influence how well bone mass is maintained.

### MCHC for Women, Men, and Children

An adequate intake of calcium and other bone-supportive nutrients can help maximize peak bone mass and maintain strong bones throughout a lifetime. MCHC provides complete bone nutrition to support healthy bone formation, and is therefore suitable for women, men, and children. ♦

## Dare to Compare to Find Complete Bone Nutrition

Nutrients	Cal Apatite	Heat-Processed Bone	Bone Meal	Multi-Mineral Supplement	Oyster Shell Calcium	Calcium Chelate	Calcium Citrate	Calcium Carbonate
MCHC Calcium	✓	✓						
Phosphorus	✓	✓	✓	✓	✓			✓
Magnesium	✓	✓	✓	✓	trace			
Trace Minerals	✓	✓	trace	✓				
Mineral Complex	✓			✓				
Type 1 Collagen	✓	trace	trace					
Bone Amino Acids	✓	trace						
Protein	✓	trace						
Organic Factors	✓							

Only **Cal Apatite** offers complete bone nutrition to help maintain strong bones for a lifetime. ♦

♦ These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.



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Manufacturing Facility



Therapeutic Goods Administration

These certifications for Good Manufacturing Practices demonstrate the Metagenics commitment to purity and quality.



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