Indications for use:

- Maintaining Support to Bone Health
- Maintaining Support to Cardiovascular System Health
- Maintaining Support of the Nervous System Health
- Maintaining Support to Immune System Health

Australian Owned and Manufactured in Australia:

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The right choice for the best outcome

EACH TABLET CONTAINS

Calcium ascorbate *(Equiv, Calcium 15mg Vitamin C 131mg)*	150mg
Calcium Orotate *(Equiv. Calcium 11.44mg)*	100mg
Magnesium Orotate Dihydrate *(Equiv. Magnesium 6.56mg)*	100mg
Magnesium Citrate *(Equiv. Magnesium 8.10mg)*	50mg
Manganese amino acid chelate *(Equiv. Manganese 5mg)*	50mg
Zinc amino acid chelate *(Equiv. Zinc 10mg)*	50mg
Chromium Nicotinate *(Equiv. Chromium 50µg)*	402µg
Selenomethionine *(Equiv. Selenium 5µg)*	12.5µg
Molybdenum trioxide *(Equiv. Molybdenum 33µg)*	50µg
Potassium Iodide *(Equiv. Iodide 150µg)*	196µg
Borax (sodium borate) *(Equiv. Boron 227µg)*	2mg
Equisetum arvense Herb Ext. dry. Conc. (Horsetail) *(Equiv. Equisetum arvense herb dry)*	20mg 200mg
Vitamin K2 *(as Menaquinone 7, 90µg)*	90µg
Vitamin D3 *(Equiv. Vitamin D3 500 IU)*	12.5µg
Lecithin	65mg
Calcium Pantothenate *(Equiv. Calcium 4.2mg & pantothenic acid 45.8mg)*	50mg
Curcuma Longa Rhizome ext. dry. conc. from C. longa rhizome dry	3.42g
Equiv curcuminoids *(fr. curcumin C3 complex 95%)*	50mg

Free From: Wheat products (Gluten), Nuts, Peanuts, Egg, Dairy, Milk, Artificial colouring, lactose, Crustacean, Fructose, Sucrose, Salt, Preservatives.

Suggested dose: One tablet Morning and Night. Or as directed by your healthcare practitioner. Children as directed by your health care Practitioner.

Store below 25° C in a cool dry space. Replace cap tightly after each use. Once open the tablets must be used within 90 days.

Code: 7091 • Pack size: 60 Tablets
Aust L 310282

Proudly distributed by:

MULTI MINERAL FORMULA

With Vitamin K2 (MK7), Vitamin D3 & Curcumin C3 Complex 95%

Advanced Medicine Australia Multi – Mineral Formula providing all the Minerals needed to build and maintain healthy bones, joint cartilage and connective tissues. Multi-Mineral Formula is made up of bioavailable Minerals and being low dose, it ensures that no one mineral competes with other minerals for receptor sites in the Gastro Intestinal Tract "GIT" thereby allowing for maximum absorption of all the minerals. Multi – Mineral Formula is formulated keeping in mind how food in our diet provides minerals naturally, so it is considered be safe to take long term, or even for a life time, to make sure our bones, joints and connective tissues remain in good Health as we age. Multi – Mineral Formula is also beneficial for Healthy Bones, Joints and connective tissues in young individuals.

Multi-Mineral Formula has the added benefit of Vitamin K2 (MK7), Vitamin D3, and Potassium Iodide (Equiv. Iodine 150µg) to assist with the uptake of Calcium and Magnesium in bones.

Curcuma Longa Rhizome Ext. (Dry. Conc. Form C Longa rhizome 3.42 grams), Equiv to 50mg Curcuminoids (from C3 Complex 95%) is also added to reduce inflammation and assist with cartilage repair in the joints.

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There are conflicting reports in the scientific literature regarding the levels of mineral and trace elements required for healthy adults with the suggestion that all of these elements can be obtained by eating a healthy diet high in plant based foods (vegetables, salads, fruits, nuts, grains and seeds). However, in today's climate many people are eating a nutrient deficient diet of fried foods, foods high in saturated and oxidised (trans-) fats, salt, refined sugar, alcohol and caffeine. Such foods and drinks are of very poor nutrient value and can lead to deficiencies in certain minerals and trace elements and may even lead to disease states. Additionally, many agricultural areas where crops, orchards, vegetables, and pastures are grown can be deficient in minerals and trace elements through being naturally low in these elements or made deficient through poor farming practice such as the over use of super phosphate. This can result in the food sources being nutrient deficient and not providing the required levels of minerals and trace elements to those consuming the produce.

In cases where individuals become low or deficient in minerals and trace elements there are many published articles showing that this can lead to poor health and disease states. It is in these cases that supplementation with a multi mineral containing trace elements may be very beneficial, particularly as minerals and trace elements are used by the body for a multitude of functional, structural, antioxidant and anti-inflammatory purposes plus immune responses.

Minerals play a role in the function and hormone production of the thyroid gland through a number of different pathways. Firstly, iodine acts as a homeostatic regulator of thyroid function via its essential requirement for the production of tetraiodothyronine (thyroxin or T4) and triiodothyronine or T3 (6). The thyroid hormones, in turn, play an important role in basal metabolic rate, red blood cell production, metabolism of carbohydrates, fats & proteins, maintenance of water and electrolyte balance, and blood calcium levels via their production of calcitonin. The thyroid requires calcium and selenium for calcitonin production and low levels of selenium can normalise T4 concentration when iodine levels are low (7). An iodine deficiency (hypothyroidism) during pregnancy has been shown to cause defective development of the foetus which can result in stunted growth, mental retardation, abnormal skin development, and deaf mutism (8). Low zinc, selenium, manganese, and copper can all lead to increased prevalence of thyroid disease (9, 10, 11, 12) and low magnesium can play a role in hyper- and hypo- thyroidism (13).

Two metalloprotein antioxidant enzymes (superoxide dismutase, or SOD, and catalase) depend on specific minerals for their activity. SOD removes superoxide from the body by converting it to oxygen or hydrogen peroxide and catalase removes hydrogen peroxide by converting it to water. In humans there are 3 forms of SOD, one that is in the cytoplasm, one in extracellular fluids and one in the mitochondria. The former two require copper and zinc for their activity (14, 15) while the latter requires manganese (16). Catalase activity is dependent on iron in its ferrous form (17) and has been shown to be involved in reducing the graying process of human hair during aging (18). Immune function is greatly assisted by supplementation with selenium (1), zinc (2), copper (3), and iron (4) but can be adversely affected by excess copper (5) so moderation in supplementation is recommended.

Magnesium is a co-factor for over 300 enzymes in the body and thus plays an active role in many biological functions in humans. Taken orally it reduces leg cramps during pregnancy (19, 20) and can play a part in reducing skeletal muscle cramps (21). Magnesium is also involved in cardiovascular and bone health and it reduces the risk of insulin resistance, arteriosclerosis, neurological disorders, migraines, headaches, stroke and ADHD (22, and references therein). The authors conclude that supplementation is of benefit in most cases.

Calcium is an important component of bones and teeth and supplementation with this mineral has been shown to improve bone density in children and adolescents (23, 24, 25) and reduce femoral and hip fractures in elderly women and patients (26, 27).

Zinc is a very important mineral in human growth and development where it is essential for the health of skin (28, 29), connective tissues (28), and bones (30) plus a major role in growth and cell proliferation (31). Some evidence also indicates a relationship between low zinc status and incidence and severity of rheumatoid arthritis symptoms (32, 33).

Potassium has a protective effect against vascular damage in patients with salt-sensitive hypertension (34) and is important in the management of hypertension (35). Supplementation with potassium reduces the risk of hypertension and increases life expectancy (36).

Molybdenum is an essential co-factor for enzymes but is most important as a co-factor for sulphite oxidase in mitochondria. Sulphite oxidase converts damaging sulphite into sulphate in order to protect the mitochondria and assist with ATP production and to control phosphoadenosine-phosphosulphate (PAPS) activity. The availability of sulphate through this mechanism has an important regulatory role in both neurological and vascular system function (37).

Chromium may regulate insulin levels and thus play a role in reducing type-2 diabetes as it is a major component in Glucose Tolerance Factor. Supplementation with chromium has been shown to increase HDL cholesterol (38).

Boron is an essential trace element important in maintaining bone health. Its action appears to be via vitamin D3 induced calcium absorption and protection of calcium loss by enhancing estrogen activity (39).

Orotic acid is required for pyrimidine biosynthesis and plays a role in the repair of injured myocardium by stimulating the production of glycogen and ATP (40).

Cucurmin may provide benefits for patients with type-2 diabetes (41) and arthritis (42) due to its antioxidant and anti-inflammatory properties (43) and has been demonstrated to have potential anti-cancer properties (44).

Equesetum arvense has been demonstrated to reduce the risk of osteoporosis and improve cartilage production possibly due to its high silicone and calcium content (45).

Vitamin K2 (menaquinone 7) is a variant form of vitamin K that is synthesised by bacteria (eg. in the small intestine) and by conversion of vitamin K1 by certain animal tissues such as arterial walls, pancreas and testes. Its best known role is as a blood clotting factor but it also plays a significant role in the uptake of calcium into bones (46, 47) possibly through stimulation of production of the hormone osteocalcin in osteoblasts and is often used as a supplementary treatment for osteoporosis.

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