

# Agel MIN

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Vitamins and Minerals are essential tools in everyday human physiology. They function as coenzymes and cofactors that are involved in almost all biochemical processes in the body. In essence, vitamins and minerals are crucial to healthy living.

Before the days of “fast food” and “empty” calories, these vitamins and minerals were found naturally in our food. However, in modern days, as the average diet consists mostly of processed, manufactured food, there is overwhelming scientific evidence to support the intake of dietary supplements that are rich in vitamins and minerals [1-5].

Agel MIN is a proprietary formulation of vitamins and minerals that provides 100% of the RDI (Recommended Daily Intake) of almost all the essential vitamins and as much as 50% of the RDI of most of the essential minerals. More importantly, the bioavailability of these vitamins and minerals is enhanced due to the revolutionary gel technology employed in the MIN formulation. The vitamins and minerals are either dissolved or suspended in the gel, resulting in immediate availability for absorption by the digestive tract. In addition, the minerals used in the formulation of MIN are Albion™ Chelates. Albion Laboratories, Inc. is the world’s major producer of patented amino acid chelated minerals. Albion’s patented chelation processes bind minerals to amino acids, markedly increasing their bioavailability.

There are some who advocate using mega doses of various vitamins, presuming that if some is good, more is better. However, there is growing scientific evidence that too much of a good thing can be harmful [6-7]. Therefore, Agel’s formulation for a moderate dose of readily available vitamins and minerals is ideal.

## **MIN: StaMINa and Ageless Zest**

Agel™ MIN is the Gelceutical™ designed to nourish your stamina and deliver zesty health. MIN contains required daily levels of 12 essential vitamins and high levels of 11 essential minerals. MIN helps you get more energy from your food, and then stores these energy reserves to provide stamina. In addition, MIN’s essential vitamins and minerals sustain of over 5000 vital biofunctions to deliver vigor, drive, well-being and ageless zest.

### ***MIN Health Benefits***

#### **StaMINa™**

Stamina is defined as the complete physical and cognitive energy required for an active lifestyle. Unfortunately, many people lack stamina. They seem to “walk into a wall”. MIN contains 12 essential vitamins and 11 essential minerals to maintain your stamina. Increased stamina is obtained from MIN by providing essential nutrients that 1) generate stamina energy from food and 2) create an efficient biochemistry throughout the body.

# Agel MIN

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## **StaMINa Generation**

Vitamins and minerals are closely involved in the processes of converting food into energy. They are cofactors of enzymes that efficiently generate biochemical energy from carbohydrates, fats and proteins in the diet. Increased efficiency **equals** increased energy.

## **StaMINa = Energy Reserves**

Trillions of biochemical reactions take place every second within the body to maintain vigor, wellness and gusto. Every biochemical reaction requires energy. Essential vitamins and minerals work with biocatalytic enzymes that **minimize** the energy necessary for each biochemical reaction. Multiply trillions of reactions over thousands of seconds each day **equal** substantial energy reserves. These energy reserves provide stamina. Therefore, vitamins and minerals save energy — helping the body biochemistry to run efficiently. Stamina is the result of efficiency.

## **Ageless Zest™**

Regardless of age, the body should feel zest. Zest is a drive to live, feeling vim & vigor, and a state of good health regardless of one's chronological age. Ageless Zest is a composite of thousands and thousands of properly functioning biochemical reactions within the body. These biochemical reactions allow over 5000 functions within the body to maintain overall health, vigor, vim and vitality. Ageless Zest may be associated with vision, joints, bones, teeth, hair, smell, taste, hearing, touch, immune functions, heart, lungs, gastrointestinal, nerves, brain, muscles, tendons, cartilage, hormones, reproduction, pregnancy, respiration, coordination, etc. Falling levels of any one or more essential vitamins or minerals can create instabilities with some of the over 5000 functions – resulting in loss of zest, drive, spirit and vivacity. MIN's essential vitamins and minerals help maintain necessary micronutrient levels to ensure stability of over 5000 biofunctions. Ageless Zest is A-Z health.

## **Who and When**

MIN is recommended for healthy adults, teenagers, children and athletes. Consume MIN at the same time every day. Consume one Agel MIN packet a day. Endurance athletes may consume a second MIN packet for stamina.

## **Precautions**

Pregnant or nursing women should consult with their physician concerning the MIN formula.

## **Those who need MIN's StaMINa and Ageless Zest**

- Unable to finish tasks
- Tired of life

# Agel MIN

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- Without drive to work
- Lacking vim and vigor
- Why don't I feel enthusiastic?
- Always feel tired
- No get-up-and-go
- Frequently feel sick
- Wish I had more sick-days
- Loss of spirit to innovate
- Poor physical condition
- I'm feeling my age
- Less enthusiasm
- Feeling older every day
- Life is too complicated
- Wishing to be more successful
- My kids are always sick
- Where to people get all that stamina?
- My drive to work slows down by afternoon
- There is no "dash" to my step
- Feeling "over-the-hill"

\*This statement has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

## Agel MIN - Essential Vitamin Ingredients

### ***Vitamin A (Retinol, Retinal & Retinoic acid)***

an essential fat-soluble vitamin. Vitamin A's precursor is beta-carotene, a member of the antioxidant carotenoid family, is transported by retinol-binding protein to its destinations. Vitamin A is essential for proper vision, protein synthesis, cell differentiation, reproduction and growth. Vitamin A is found in dark leafy greens (spinach & broccoli) and yellow/orange vegetables & fruits (carrots, cantaloupe, winter squash, pumpkin, mango, - not corn or banana). Early signs of Vitamin A deficiency include anemia, bone weakness, joint pain, cracked teeth and frequent tooth decay.

### ***Vitamin D (Calciferol)***

an essential fat-soluble vitamin. Vitamin D can be synthesized by the body (with adequate exposure to sunlight) in connection with previtamin D3. The active form of Vitamin D (calcitriol) is a messenger that signals calcium-availability for bone growth. Vitamin D, A, C & K, along with minerals calcium, phosphorus & magnesium are essential for bone growth. Vitamin D is found in fortified milk, fortified margarine and butter; as well as synthesized by UV sunlight exposure. Early signs of Vitamin D deficiency include bone weakness (rickets) and bone brittleness (osteoporosis).

# Agel MIN

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## ***Vitamin E (Tocopherol)***

an essential fat-soluble vitamin. Vitamin E is a powerful fat-soluble antioxidant that protects cell wall fluidity and nutrient transport. Vitamin E antioxidant is recharged by Vitamin C. Vitamin E is found in vegetable oils, olive oil, leafy green vegetables, whole grains, nuts and seeds. Early signs of Vitamin E deficiency include fatigue, leg cramps, blurred vision, nausea, anemia, loss in muscle coordination and impaired speech.

## ***Vitamin C (Ascorbic acid)***

an essential water-soluble vitamin. Vitamin C is a powerful antioxidant against free radicals and is helpful for neurotransmitters synthesis (helping with coordination). Vitamin C helps you receive energy by efficiently metabolizing amino acids (from protein). Vitamin C is found in citrus, berries, fruits, & green vegetables. Early signs of deficiency are usually in elderly, alcoholics, and infants. Vitamin C may guard against colds and help your immune system.

## ***Vitamin B1 (Thiamin)***

an essential water-soluble B-vitamin. Thiamin is an enzyme cofactor (with TPP) for efficient conversion of protein, carbohydrate and fat into energy. Thiamin is important for proper functioning of nerve membranes. It is needed for the metabolism of many sugars. Thiamin is found in whole grains, meats, greens & beans. Early signs of deficiency are depression, muscle weakness (after only 10 days), apathy, confusion, irritability and rapid degeneration of nervous system activity.

## ***Vitamin B2 (Riboflavin)***

an essential water-soluble B-vitamin. Riboflavin is an enzyme cofactor (with FAD and FMN) for many energy metabolism reactions involving dietary proteins, carbohydrates and fats. Riboflavin is found in dark, green, leafy vegetables & dairy products. Early signs of deficiency are that minor injuries do not heal because new cells cannot replace old cells, confusion, greasy skin, inflammation of the eyes, lips, or tongue.

## ***Vitamin B3 (Niacin)***

an essential water-soluble B-vitamin. Niacin is an enzyme cofactor (with NAD and NADP) for rapid metabolism of protein, carbohydrate and fat to energy in every cell. Niacin is found in dairy products, meats & whole grains. Early signs of B3 deficiency are fatigue, decreased appetite, indigestion that can lead to diarrhea, dermatitis, dementia and death.

# Agel MIN

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## ***Vitamin B5 (Pantothenic acid)***

an essential water-soluble B-vitamin. Pantothenic acid is an enzyme cofactor (with CoA) for energy metabolism from all food sources. Pantothenic acid is found in meats, mushrooms, broccoli and whole grains. Early signs of deficiency include fatigue, vomiting, nausea, stomach cramps, insomnia, depression, irritability and apathy.

## ***Vitamin B6 (Pyridoxine)***

an essential water-soluble B-vitamin. Pyridoxine is an enzyme cofactor (with PLP & PMP) converting amino acids & fatty acids into energy. Some pyridoxine can be stored in muscle tissue. Vitamin B6 influences immune system activity and cognitive performance. Vitamin B6 is found in bananas, potatoes, chicken, fish, and meats. Early signs of B6 deficiency include anemia, depression, confusion, fatigue, headaches, nerve damage and dermatitis.

## ***Vitamin B12 (Cobalamin)***

an essential water-soluble B-vitamin. Vitamin B12 activates folate activity and is activated by folate. Vitamin B12 helps DNA synthesis for new cells, protects nerve cells, and promotes normal growth & bone cell activity. B12 found in meats & dairy products. Early signs of B12 deficiency include fatigue, hypersensitivity of skin, anemia, sore tongue & degeneration of nerves.

## ***Folate***

an essential water-soluble vitamin. Folate is an enzyme cofactor (with THF and DHF) that is essential for regeneration. It activates vitamin B12, helps in the synthesis of DNA and is essential for new growth. Folate is essential for pregnant women. Folate (from the word foliage) is found in asparagus, green leafy vegetables, grains, beans, peas, oranges and avocados. Early signs of Folate deficiency include irritability, fatigue, confusion, headache, anemia and gastrointestinal deterioration. Folate deficiencies occur when there is a high demand for new cell synthesis: pregnancy, cancer, burns, measles and blood loss.

## ***Biotin***

an essential water-soluble vitamin. Biotin is necessary for proper functioning of the energy-producing TCA Cycle. Biotin is found in soybeans, egg yolks, whole grains, fish and organ meats. Early signs of Biotin deficiency include skin rash, depression, lethargy, numb/tingling sensation in arms/legs, hair loss and fatigue.

## Agel MIN Essential Mineral Ingredients

### ***Calcium***

an essential macromineral. Calcium, the most abundant mineral in the body, is essential for the strength and growth of skeletal bones and teeth. Calcium contributes to muscle contractions, blood clotting, nerve impulse transmission and hormone secretion. Calcium is found in water, milk, milk products, tofu, broccoli, watercress & cauliflower. Early signs of calcium deficiency include bone weakness, brittle bones, cracked teeth and fatigue.

### ***Phosphorus***

an essential macromineral. Phosphorus, the second most abundant body mineral, is essential for bone strength, bone growth and teeth strength. Phosphorus is part of all energy reactions in the body, is a key component of DNA and RNA (cell growth) and is integral in phospholipids that control protein-activation cell nutrition. Phosphorus is found in all meat sources, beans, seeds, nuts, milk and milk products. Early signs of phosphorus deficiency include demineralization of bones and teeth, bone weakness, fatigue and lethargy.

### ***Iodine***

an essential mineral. Iodine is the key nutrient of the thyroid gland that regulates body metabolism, body temperature, growth, reproduction, nerve growth and muscle function. Iodine is found mainly from iodized table salt, sea salt, sea-grown plants (seaweed) and animal life (seafood). Early signs of iodine deficiency include low metabolism, fatigue, lack of initiative and eventually goiter (enlargement of thyroid gland in throat).

### ***Magnesium***

an essential macromineral. Most magnesium reserves are bound in bone and teeth. Magnesium is a common enzyme cofactor in facilitating efficient biochemical reactions. Magnesium is necessary for muscle contraction, blood clotting, regulating blood pressure, metabolism of food to energy and for immune system health. Magnesium is found in water, nuts, whole grains, green leafy vegetables, chocolate and seafood. Early signs of magnesium deficiency are weakness, confusion, bizarre muscle movements, difficulty swallowing and fatigue.

### ***Zinc***

an essential macromineral. Zinc is a very common metalloenzyme cofactor that is intrinsically involved in generating energy from food. Zinc, in conjunction with calcium and magnesium, are essential for bone growth and bone strength. Zinc also affects blood

# Agel MIN

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clotting, thyroid hormone function, insulin activity, activates Vitamin A, wound healing, fetal development and influences learning and behavior. Zinc is found in protein-rich foods (meat, poultry and seafoods), beans, peas and whole-grains.

## ***Selenium***

an essential micromineral. Selenium is a powerful antioxidant that also part of the enzyme glutathione peroxidase. Selenium and Vitamin E work in antioxidant synergy. Selenium is needed for proper thyroid (metabolism) function. Selenium is found as a trace mineral in many fruits and vegetables; as well as in meat and seafood. Signs of selenium deficiency include fatigue and heart diseases.

## ***Copper***

an essential micromineral. Copper is a common cofactor with many enzymes (metalloenzymes) to generate maximum energy from the food you eat. Copper is found in beans, peas, whole grains, nuts, seafood and drinking water. Copper deficiency is rare, but can be implicated with high blood cholesterol, genetic disorders, anemia and bone abnormalities.

## ***Manganese***

an essential micromineral. Manganese is a common enzyme cofactor (metalloenzymes); working with many enzymes to efficiently converts food into energy. Manganese is typically stored in bone, liver and kidneys. Manganese is found in nuts, whole grains and leafy vegetables.

## ***Chromium***

an essential micromineral. Chromium enhances insulin action, is involved in the conversion of carbohydrate and fat into energy. Chromium is found in meats, nuts and vegetable oils. Chromium deficiency can lead to diabetic-type inability to metabolize glucose normally.

## ***Molybdenum***

an essential micromineral. Molybdenum is a cofactor for several metalloenzymes to convert food into energy. Molybdenum is found in legumes, leafy green vegetables, milk, whole grains and milk products.

## ***Vanadium***

a trace mineral. Vanadium is involved in normalizing blood glucose, strengthening teeth and bones. Vanadium is found in grains, mushrooms and seafood.

## ***Inositol***

a key portion of phospholipids that make up cell membranes. Inositol allows for proper neurotransmission, metabolic regulation and normal growth. Inositol is found in seafood (krill).

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