REVOCEP-D® ریووسپ۔ڈی

Sachet

Composition:

Each sachet contains:

Calcium carbonate	1000mg
Vitamin D3	400IU
Vitamin C	500mg
Zinc sulphate	2.5mg
Magnesium sulphate	10mg

(Manufacturer Specs.)

Calcium carbonate:

Calcium is the most abundant mineral in the body, and it is vital for bone health.Humans need calcium to build and maintain strong bones, and 99% of the body's calcium is in the bones and teeth. It is also necessary for maintaining healthy communication between the brain and other parts of the body. It plays a role in muscle movement and cardiovascular function.

Calcium plays various roles in the body. These include the following:

Bone health: Calcium is essential for the development, growth and maintenance of bone.As children grow, calcium contributes to the development of their bones. After a person stops growing, calcium continues to help maintain the bones and slow down bone density loss, which is a natural part of the aging process.Females who have already experienced menopause can lose bone density at a higher rate than males or younger people. They have a higher risk of developing osteoporosis, and need calcium supplements.

Muscle contraction: Calcium helps regulate muscle contraction. When a nerve stimulates a muscle, the body releases calcium. The calcium helps the proteins in muscle carry out the work of contraction. When the body pumps the calcium out of the muscle, the muscle will relax.

Cardiovascular system: Calcium plays a key role in blood clotting. The process of clotting is complex and has a number of steps. These involve a range of chemicals, including calcium. Calcium's role in muscle function includes maintaining the action of the heart muscle. Calcium relaxes the smooth muscle that surrounds blood vessels. Various studies have indicated a possible link between high consumption of calcium and lower blood pressure.

Other roles: Calcium is a co-factor for many enzymes. Without calcium, some key enzymes cannot work efficiently

Consuming enough calcium can result in:

A lower risk of developing conditions involving high blood pressure during pregnancy

Lower blood pressure in young people

Improved cholesterol values

A lower risk of colorectal adenomas

Following are good sources

Yogurt, milk, fortified dairy alternatives, such as soy milk, sardines and salmon, cheese, tofu, green leafy vegetables, such as broccoli, turnip leaves, nuts and seeds, especially almonds, sesame, and chia, legumes and grains, cornmeal and corn tortillas, some dark green vegetables, such as spinach, contain calcium. However, they also contain high levels of oxalic acid. Oxalic acid reduces the body's ability to absorb calcium.

How much Calcium required?

0–6 months:	200 mg
7–12 months:	260 mg
1–3 years:	700 mg
4–8 years:	1,000 mg
9–18 years:	1,300 mg
19–50 years:	1,000 mg
51–70 years:	1,000 mg for males and 1,200 mg for females

71 years and above: 1,200 mg

Pregnant and breastfeeding women require 1,000–1,300 mg depending on age.

A doctor may recommend additional calcium for people who:

have started menopause

stop menstruating due to anorexia nervosa or excessive exercise

have lactose intolerance or a milk allergy

follow a vegan diet

Calcium deficiency

The following conditions or lifestyle habits may result in low calcium levels, also known as hypocalcemia: Bulimia, anorexia, and some other eating disorders, mercury exposure, overconsumption of magnesium, long-term use of laxatives, prolonged use of some medicines, such as chemotherapy or corticosteroids, chelation therapy used for metal exposure, lack of parathyroid hormone, people who eat a lot of protein or sodium may excrete calcium, some cancers, high consumption of caffeine, soda, or alcohol, some conditions, such as celiac disease, inflammatory bowel disease, Crohn's disease, and some other digestive diseases, some surgical procedures, including removing the stomach, kidney failure, pancreatitis, vitamin D deficiency, phosphate deficiency.

The body eliminates some calcium in sweat, urine, and feces. Foods and activities that encourage these functions may reduce the levels of calcium in the body.

Side effects: Some people report gastrointestinal symptoms, such as bloating, constipation, gas, or a combination of all three when using calcium supplements. Taking the supplements with food, or spreading their intake throughout the day may help reduce the occurrence or intensity of the side effects.

Complications: Very high levels of calcium can lead to:

- Kidney problems
- Calcification of soft tissues and blood vessels
- Kidney stones
- Constipation

Vitamin D3:

Vitamin D3 is a fat-soluble vitamin. Our body produces vitamin D3 naturally when it's directly exposed to sunlight. We can also get vitamin D3 from certain foods and supplements to ensure adequate levels of the vitamin D3 in our blood.

Vitamin D3 promotes calcium absorption in the gut and maintains adequate serum calcium and phosphate concentrations to enable normal bone mineralization and to prevent hypocalcemic tetany. It is also needed for bone growth and bone remodeling by osteoblasts and osteoclasts. Without sufficient vitamin D3, bones can become thin, brittle, or misshapen. Vitamin D3 sufficiency prevents rickets in children and osteomalacia in adults. Together with calcium, vitamin D3 also helps protect older adults from osteoporosis.

Getting enough vitamin D3 is important for typical growth and development of bones and teeth, as well as improved resistance to certain diseases.

Vitamin D3 may fight disease: In addition to its primary benefits, research suggests that vitamin D3 may also play a role in:

- Reducing the risk of multiple sclerosis
- Decreasing the chance of heart disease
- Reducing the likelihood of severe illnesses
- Supporting immune health.

Vitamin D may regulate mood and reduce depression: Research has shown that vitamin D might play an important role in regulating mood and decreasing the risk of depression.

A review of 7,534 people found that those experiencing negative emotions who received vitamin D3 supplements noticed an improvement in symptoms. Vitamin D3 supplementation may help people with depression who also have a vitamin D3 deficiency.

Another study identified low vitamin D3 levels as a risk factor for more severe fibromyalgia symptoms, anxiety and depression.

Vitamin D deficiency: Several factors can affect our ability to get adequate vitamin D3 from sunlight alone.

We may be less likely to absorb enough vitamin D from the sun if we:

- Live in an area with high pollution
- Use sunscreen
- Spend most of our time indoors
- Live in a big city where buildings block sunlight
- Have darker skin (The higher the levels of melanin, the less vitamin D3 our skin can absorb.)

These factors can increase our risk of vitamin D3 deficiency. That's why it's important to get some of our vitamin D3 from non-sunlight sources.

Symptoms of Vitamin D3 deficiency: The symptoms of a vitamin D3 deficiency in adults may include:

- Tiredness, aches, and pains
- Severe bone or muscle pain or weakness
- Stress fractures, especially in legs, pelvis and hips

Some food sources of Vitamin D3: Some foods contain vitamin D3 naturally, and others are fortified with it. You can find vitamin D in the following foods:

Salmon, sardines, herring, canned tuna, cod liver oil, beef liver, egg yolk, shrimp, regular mushrooms and those treated with ultraviolet light, milk (fortified), certain cereals and oatmeals (fortified), yogurt (fortified), orange juice (fortified), It can be hard to get enough vitamin D3 each day through sun exposure and food alone, so taking vitamin D3 supplements could help.

How much Vitamin D3 required? The Recommended Dietary Allowances for vitamin D3 are as follows:

- Infants (0–12 months): 10 mcg (400 IU)
- Children and teens: 15 mcg (600 IU)
- Adults ages 18–70: 15 mcg (600 IU)
- Adults over age 70: 20 mcg (800 IU)
- Pregnant or breastfeeding women: 15 mcg (600 IU)

Vitamin C:

Vitamin C (ascorbic acid) is a water-soluble vitamin that is necessary for normal growth and development. It is an antioxidant that helps maintain the connective tissue protein collagen, protects against infection, and helps iron absorption. Vitamin C is necessary in the body to form collagen in bones, cartilage, muscle, and blood vessels and aids in the absorption of iron.

Dietary sources of vitamin C include fruits and vegetables, particularly citrus fruits such as oranges. Severe deficiency of vitamin C causes scurvy. Although rare,

scurvy includes potentially severe consequences, and can cause sudden death. Patients with scurvy are treated with vitamin C and should be under medical supervision. Many uses for vitamin C have been proposed, but few have been found to be beneficial in scientific studies.

General Use: Vitamin C is a critical component of both disease prevention and of basic body building processes.

The benefits of Vitamin C include:

• Allergy and asthma relief. Vitamin C is present in the lung's airway surfaces, and insufficient vitamin C levels have been associated with bronchial constriction and reduced lung function.

• Cancer prevention. Vitamin C is a known antioxidant and has been associated with reduced risk of stomach, lung, colon, oral, and prostate cancer.

• Cataract prevention. Long-term studies on vitamin C supplementation and cataract development have shown that supplementation significantly reduces the risk of cataracts, particularly among women.

• Collagen production. Vitamin C assists the body in the manufacture of collagen, a protein that binds cells together and is the building block of connective tissues throughout the body. Collagen is critical to the formation and ongoing health of the skin, cartilage, ligaments, corneas, and other bodily tissues and structures. Vitamin C is also thought to promote faster healing of wounds and injuries because of its role in collagen production.

• Diabetes control. Vitamin C supplementation may assist diabetics in controlling blood sugar levels and improving metabolism.

• Gallbladder disease prevention. A study of over 13,000 subjects published in the Archives in Internal Medicine found that women who took daily vitamin C supplements were 34% less likely to contract gallbladder disease and gallstones, and that women deficient in ascorbic acid had an increased prevalence of gallbladder disease.

• Immune system booster. Vitamin C increases white blood cell production and is important to immune system balance. Studies have related low vitamin C levels to increased risk for infection. Vitamin C is frequently prescribed for HIV-positive individuals to protect their immune system.

• Neurotransmitter and hormone building. Vitamin C is critical to the conversion of certain substances into neurotransmitters, brain chemicals that facilitate the transmission of nerve impulses across a synapse. Such neurotransmitters as serotonin, dopamine, and nor epinephrine are responsible for the proper functioning of the central nervous system, and a deficiency of neurotransmitters can result in psychiatric illness. Vitamin C also helps the body manufacture adrenal hormones.

Food Sources: All fruits and vegetables contain some amount of vitamin C. Green peppers, citrus fruits and juices, strawberries, tomatoes, broccoli, turnip greens and other leafy greens, sweet and white potatoes, and cantaloupe, papaya, mango, watermelon, brussels sprouts, cauliflower, cabbage, winter squash, red peppers, raspberries, blueberries, cranberries, and pineapples.

Adverse effects and cautions: Vitamin C supplements are generally well tolerated. However, high doses may cause stomach irritation, nausea, vomiting, drowsiness, headaches or rash. Adverse reactions are rarely, if ever, seen when the nutrient is consumed according to established guidelines.

Zinc sulphate:

Zinc is a mineral. It is called an "essential trace element" because very small amounts of zinc are necessary for human health. Since the human body does not store excess zinc, it must be consumed regularly as part of the diet. Common dietary sources of zinc include red meat, poultry, and fish. Zinc deficiency can cause short stature, reduced ability to taste food, and the inability of testes and ovaries to function properly.

Zinc is taken by mouth for the treatment and prevention of zinc deficiency and its consequences, including stunted growth and acute diarrhea in children, slow wound healing and Wilson's disease.

It is also used for boosting the immune system, improving growth and health in zinc deficient infants and children, for treating the common cold and recurrent ear infections, the flu, upper respiratory tract infections, preventing and treating lower respiratory infections, swine flu, ringing in the ears, and severe head injuries. It is also used for malaria and other diseases caused by parasites.

Zinc is needed for the proper growth and maintenance of the human body. It is found in several systems and biological reactions, and it is needed for immune function, wound healing, blood clotting, thyroid function, and much more. Meats, seafood, dairy products, nuts, legumes, and whole grains offer relatively high levels of zinc.

Zinc deficiency: It is not uncommon worldwide. Symptoms include slowed growth, low insulin levels, loss of appetite, irritability, generalized hair loss, rough and dry skin, slow wound healing, poor sense of taste and smell, diarrhea, and nausea. Moderate zinc deficiency is associated with disorders of the intestine which interfere with food absorption (malabsorption syndromes), alcoholism, chronic kidney failure, and chronic debilitating diseases.

Zinc plays a key role in maintaining vision, and it is present in high concentrations in the eye. Zinc deficiency can alter vision, and severe deficiency can cause changes in the retina.

Zinc might also have effects against viruses. It appears to lessen symptoms of the rhinovirus (common cold), in addition, there is some evidence that zinc has some antiviral activity against the herpes virus.

Low zinc levels can be associated with male infertility, sickle cell disease, HIV, major depression, and type 2 diabetes, and can be fought by taking a zinc supplement.

Side effects: Zinc is likely safe for most adults in amounts not larger than 40 mg daily. In some people, zinc might cause nausea, vomiting, diarrhea, metallic taste, kidney and stomach damage, and other side effects. Using zinc on broken skin may cause burning, stinging, itching, and tingling.

There is some concern that taking doses higher than 40 mg daily might decrease how much copper the body absorbs. Decreased copper absorption may cause anemia.Taking high amounts of zinc is likely unsafe. High doses above the recommended amounts might cause fever, coughing, stomach pain, fatigue, and many other problems.

Magnesium sulphate: Magnesium is the fourth most abundant mineral in our body. In fact, our body can't work properly without it. Magnesium is essential for hundreds of metabolic processes and many other important bodily functions, from producing energy to building important proteins.

Dietary sources of magnesium include legumes, nuts, seeds, and green leafy vegetables. Smaller amounts are found in meat and fish.

Moreover, low levels of magnesium are linked to a number of health conditions, such as type 2 diabetes, heart disease, and Alzheimer's disease.

May help reduce blood pressure: Taking magnesium supplements may help reduce blood pressure levels.Studies show that people with high blood pressure may see improvements when supplementing this mineral.

May improve sleep: Magnesium plays an important role in sleep.People with low magnesium levels are more likely to experience sleep problems, such as difficulties falling or staying asleep, and magnesium supplements have been shown to improve sleep.

May improve mood: Some studies link low levels of magnesium with depression, and this has led researchers to wonder whether supplementing with this mineral could help treat this condition.

May benefit blood sugar management: Magnesium plays a crucial role in insulin and glucose metabolism. Many people with type 2 diabetes, also have a magnesium deficiency.In part, that's because high blood sugar or insulin levels can increase the amount of this nutrient that patients lose through urine.

It's been suggested that taking magnesium supplements may improve insulin resistance, a metabolic issue in which cells don't respond properly to insulin.Insulin is an important hormone that helps regulate blood sugar levels. Thus, improving insulin resistance can promote better blood sugar management, especially in people with diabetes.

May reduce heart disease risk: Low levels of magnesium have been linked to an increased risk of heart disease.That may be because low levels of this mineral negatively affect heart disease risk factors such as blood sugar and blood pressure.

May improve migraine: Low levels of magnesium have been linked to migraine, a condition characterized by intense, recurring headaches.

Side effects: Though magnesium supplements are generally considered safe. Most people who take magnesium supplements don't experience side effects, but magnesium can cause gut-related issues such as diarrhea, nausea, and vomiting, especially when used in large doses.It's important to note that people with kidney issues are at a higher risk of experiencing adverse effects related to magnesium supplements.

Dosage & Administration: Take one to two sachets daily, or as directed by a healthcare provider.

Do not exceed recommended daily dose. Opened sachet must be used immediately.

Store in a cool & dry place and keep out of the reach of children.

Preparation: Add the contents of sachet in a glass of water and mix thoroughly.

Nutraceutical Product: Not for treatment of any disease.

طریقہ استعمال: ساشے میں موجود پاؤڈر کو ایک گلاس پانی میں حل کر کے فوری استعمال کریں۔

خوراک: ایک سے دو ساشے روزانہ یا معالج کی ہدایت کے مطابق استعمال کریں۔ **احتیاط:** دھوپ اور شدید گرمی سے بچائیں۔

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