

# C-Rich

## Ascorbic Acid

### Presentation:

**C-Rich 250 Tablet:** Each chewable tablet contains combination of Ascorbic Acid & Sodium Ascorbate equivalent to Ascorbic Acid BP 250 mg

### Pharmacology

Ascorbic Acid (vitamin C) is a water-soluble vitamin. Ascorbic acid is required in several important hydroxylation, including the conversion of proline to hydroxyproline (and thus helps in collagen formation and tissue repairing); the formation of the neurotransmitters 5-hydroxytryptamine from tryptophan and noradrenaline from dopamine, and the biosynthesis of carnitine from lysine and methionine. Ascorbic acid appears to have an important role in metal ion metabolism, including the gastrointestinal absorption of iron and its transport between plasma and storage organs. There is evidence that Ascorbic acid is required for normal leucocyte functions. Deficiency of Ascorbic acid leads to scurvy, which may be manifested by weakness, fatigue, dyspnoea, aching bones, perifollicular hyperkeratosis, petechia and ecchymosis, swelling and bleeding of the gums, hypochromic anaemia and other haematopoietic disorders, together with reduced resistance to infections and impaired wound healing.

### Indications

Used to treat vitamin C deficiency, scurvy, delayed wound and bone healing, urine acidification, and in general as an antioxidant.

### Dosage & Administration

Not less than 250 mg daily and maximum of 1000 mg daily.

### Contraindications

Hypersensitivity to any components of this product. Ascorbic acid should not be given to patients with hyperoxaluria.

### Warning and precautions

- Increased intake of Ascorbic acid over a prolonged period may result in an increased renal clearance of Ascorbic acid, and deficiency may result if the intake is reduced or withdrawn rapidly.
- High doses of Ascorbic acid may give false-negative readings in faecal occult blood tests.
- Patients with rare hereditary problems of galactose intolerance, total lactase deficiency or glucose-galactose malabsorption should not take this medicine.

### Side Effects

- Nervous system disorders: headache.
- Vascular disorders: flushing.
- Gastrointestinal disorders: nausea, vomiting and stomach cramps. Large doses of Ascorbic acid may cause diarrhoea.
- Skin and subcutaneous tissue disorders: redness of skin.
- Doses of more than 600 mg daily have a diuretic effect.

### Use in Pregnancy & Lactation

#### Pregnancy

For Ascorbic acid no clinical data on exposed pregnancies are available. Animal studies do not indicate direct or harmful effects with respect to pregnancy, embryonal/foetal development, parturition or postnatal development. Pregnant women should exercise caution.

#### Lactation

Ascorbic acid is excreted in breast milk. Though again caution should be exercised, no evidence exists suggesting such excretion is hazardous to the infant.

### Drug interactions

Ascorbic acid increases the renal excretion of amphetamine. The plasma concentration of ascorbate is decreased by smoking and oral contraceptives. Ascorbic acid increases the absorption of iron. Concomitant administration of aspirin and Ascorbic acid may interfere with absorption of Ascorbic acid. Renal excretion of salicylate is not affected and does not lead to reduced anti-inflammatory effects of aspirin. Concomitant administration of aluminium-containing antacids may increase urinary aluminium elimination. Concurrent administration of antacids and Ascorbic acid is not recommended, especially in patients with renal insufficiency. Co-administration with amygdalin (a complementary medicine) can cause cyanide toxicity. Concurrent administration of Ascorbic acid with desferrioxamine enhances urinary iron excretion. Cases of cardiomyopathy and congestive heart failure have been reported in patients with idiopathic haemochromatosis and thalassaemias receiving desferrioxamine who were subsequently given Ascorbic acid. Ascorbic acid should be used with caution in these patients and cardiac function monitored. Ascorbic acid may interfere with biochemical determinations of creatinine, uric acid and glucose in samples of blood and urine.

### Overdose

At doses of over 3 gm per day unabsorbed Ascorbic acid is mainly excreted unmetabolised in the faeces. Absorbed Ascorbic acid additional to the body's needs is rapidly eliminated. Large doses of Ascorbic acid may cause diarrhoea and the formation of renal oxalate calculi. Symptomatic treatment may be required. Ascorbic acid may cause acidosis or haemolytic anaemia in certain individuals with a deficiency of glucose 6-phosphate dehydrogenase. Renal failure can occur with massive Ascorbic acid overdosage.

### Storage

Store in a cool (below 30°C) and dry place, away from light. Keep out of the reach of children.

### Packing

**C-Rich 250 Tablet:** Each box contains 20 blister packs with each blister of 15 Tablets.

Manufactured by:

 **GENERAL**  
Pharmaceuticals Ltd.  
Mouchak, Kaliakair, Gazipur, Bangladesh

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