

## **C-Retard® 500 mg**

### **Natural Vitamin C**

#### **Composition:**

Each capsule contains:

500 mg Ascorbic acid in spansules form.



#### **Pharmacokinetics:**

C-Retard capsules insure a rapid continuous steady flow of absorption of ascorbic acid along the 6 to 8 hours after its oral administration. It ensures a steady blood level of ascorbic acid in physiologic and therapeutic concentrations. This presents a great advantage over ordinary vitamin C capsules as:

- C-Retard capsules provide a continuous adequate tissue concentration required for the above mentioned vital physiological processes. Namely: Healing, regeneration of immunity, hemopoiesis processes, iron absorption, etc....
- C-Retard maintains the total body stores of ascorbic acid.
- C-Retard administration avoids the unnecessary excess ascorbic acid elimination taking place with single oral high doses.
- C-Retard capsules does not produce the unnecessary oxalate formation which takes place following ingestion of high doses of ascorbic acid given in ordinary capsules forms.
- Consequently unlike other Vit C preparations, C-Retard, does not produce oxalate renal stones even, if taken in high doses.

#### **Actions:**

C-Retard capsules allows a continuous steady release of ascorbic acid which provides a physiological and therapeutic blood level, essential for the maintenance of the following vital processes:

- 1-It functions as co-factor in a number of hydroxylation and amidation reactions, by transferring electron to enzymes that provide reducing equivalents. Accordingly it facilitates:
  - Conversion of certain prolines and lysine residues in procollagen to hydroxyproline and hydroxylysine which are the source of collagen complex.
  - Oxidation of lysine side-chain in proteins to hydroxytrimethyl lysine for carnitine synthesis.
  - Transformation of folic acid to folinic acid which is essential for cell growth and its differentiation, particularly in the hemopoietic system.
  - Microsomal drug metabolism responsible for combating poisons and for detoxification.
  - Transformation of dopamine to nor-adrenaline.
  - Formation of bile acid (salts) from cholesterol.

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- 2.Promotes amidatory enzymes involved in the process of cerebral peptide hormones synthesis namely oxytocin, anti-diuretic hormone and cholecystakinasase.
- 3.Reduces non-heme ferric iron to the ferrous state in the stomach and consequently increases intestinal absorption of iron.
- 4.Essential for adrenal corticosteroid synthesis in the suprarenal cortex.
- 5.Acts as a general water-soluble antioxidant and may inhibit the formation of nitrosamines during digestion and maintains many metal co-factors in the reduced state mainly copper and iron.

On tissue level C-Retard regulates synthesis of collagens, proteoglycans and other organic intracellular matrix in teeth, cartilage, bone, capillaries and endothelium. It is therefore essential for wounds healing regeneration processes, teeth formation, strengthening the capillary endothelium.

#### **Indications:**

- Common cold.
- Ascorbic acid deficiency (scurvy).
- Promotes healing of wounds following surgery.
- Helps in regeneration processes.
- Helps in teeth formation and gum care.
- During pregnancy and lactation.
- In infectious diseases, viral and bacterial as influenza, rheumatic fever, typhoid and paratyphoid, etc....
- Adjuvant in iron deficiency anaemia.
- Ladies taking oral contraceptives.
- To counter act some of the hazards of smoking and environmental pollution.

#### **Adverse Effects:**

C-Retard capsules is well tolerated unlike other Vit C preparations, it does not produce oxalluria or oxalate renal stone formation and is therefore, well tolerated in renal patients.

#### **Dosage and Methods of Administration:**

**(unless prescribed otherwise, the usual dose is):**

Adults: 1 to 2 capsules once or twice daily.

Children (over age of 12): One capsule daily.

#### **Package:**

A carton box contains a strip of 10 capsules and an insert.

#### **Storage conditions :**

Store at room temperature 25°C or below

Keep out of reach of children

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