

# Roclin

(Choline as Bitartrate)

500mg Tablet  
125mg Syrup

راکلن  
(کولین)

## DESCRIPTION:

Choline (Roclin) is an essential nutrient that plays a vital role in maintaining the structural integrity of cell membrane. Choline (Roclin) is a precursor to acetylcholine which is an important neurotransmitter involved in memory, muscle control and other essential functions of the body.

Each Tablet contains	Each 5ml contains	Amount
Choline (as Bitartrate).....500 mg *	Choline (as Bitartrate).....125 mg *	

## PHARMACOLOGY:

### 1) Effect on disturbance of consciousness and hemiplegia after cerebral apoplexy.

- A) Choline improves the level of consciousness, EEG, etc. in patients with disturbance of consciousness due to head injury or brain surgery.
- B) Choline inhibits elevation of the thresholds for electrocorticographic arousal reaction and muscular discharge evoked by stimulation of the cerebral cortex and stimulates the ascending reticular activating system and pyramidal system to elevate both the level of consciousness and motor function.
- C) In patients with cerebral circulatory disturbance, Choline increases cerebral blood flow and decreases cerebral vascular resistance, thus improving cerebral circulation. In particular, Choline increases brain stem blood flow.
- D) In patients with cerebrovasculature disturbance, Choline improves central motor function by increasing the decreased electromyographic maximum work of the parietic muscle and retarding the appearance of fatigue phenomenon under an exercise load.
- E) Experimental Studies Shows that in cerebral ischemic rats, Choline is incorporated into the nerve cell Membranous fraction and accelerates lecithin biosynthesis, to improve lecithin metabolism.

### 2) Effect on Parkinson's disease

- A) Choline suppresses the induced muscular discharge mainly involving the extrapyramidal factors derived from stimulation of the hippocampus, and inhibits abnormal excitation of the extrapyramidal system.
- B) Choline antagonizes the decrease of dopamine in the caudate nuclei caused by destruction of the substantia nigra and increases the dopamine content of the brain in normal animals.
- C) Choline inhibits development of catalepsy and akinesia due to bulbocapnine, a dopaminergic receptor inhibitor.

### 3) Effect on pancreatitis

- A) Choline mitigates degeneration, mainly necrosis of the pancreatic and hepatic tissues and prolongs the survival time. The effect of Choline is more pronounced when it is used in combination with a protease inhibitor.
- B) Experimental Studies Shows that Choline administered is well incorporated into the membranous lipid fraction of the pancreas in the recovery period in rats with experimental acute pancreatitis, it appears that Choline is involved in the repair of the membrane of the pancreas through acceleration of lecithin biosynthesis.
- C) Choline inhibits serum phospholipase A2 activity and suppresses decomposition of lecithin human pancreatic juice and in the serum patients with acute hepatitis.

### 4) Treatment in combination with anticholinergics in the following cases of Parkinson's disease, in which tremor is especially severe:

- A) Cases in which adverse reactions have developed under treatment with L-DOPA.
- B) Cases in which the administration of L-DOPA is difficult because of post-laparotomy or complications.
- C) Cases in which L-DOPA is ineffective.

### 5) Concomitant therapy with protease inhibitors in the treatment of the following diseases:

- A) Acute Pancreatitis.
- B) Acute exacerbation of chronic recurrent Pancreatitis.
- C) Acute Pancreatitis after surgery.

## FUNCTIONAL BENEFITS:

Brain Function & Memory Choline (Roclin) is a precursor for acetylcholine, which is an important neurotransmitter in the brain associated with memory.

Athletic Performance & Recovery (Roclin) Choline serves as a precursor for acetylcholine which is involved in skeletal muscle innervation and muscle control.

Cardiovascular & Liver Health

Choline (Roclin) is oxidized in the body to form betaine which provides a methyl group for the conversion of homocysteine to methionine. (Roclin) Choline is a required component of Very Low Density Lipoproteins (VLDL); these lipoproteins help to transport fat and cholesterol away from the liver through the blood to the tissues that require them.

## FDA REVIEWED STRUCTURE FUNCTION CLAIMS:

May help memory problems associated with aging Prenatal use may lead to lifelong improvement of visuospatial memory in children born from the pregnancy.

Supplementation during infancy & childhood may lead to improved lifelong memory.

May reduce fatigue and increase vigor during strenuous exercise.

May help to reduce levels of plasma homocysteine.

May promote healthy liver function.

## Dosage Syrup:

Children: 1 to 2 teaspoonful daily.

Adults: 1 to 2 tablespoonful daily.

or as directed by healthcare adviser.

## Dosage Tablet:

As directed by healthcare adviser.

Regulatory: Choline Bitartrate is GRAS (Generally Recognized as safe) for use in food and beverages.

## ADVERSE REACTIONS:

A) Hypersensitivity: Hypersensitivity symptoms, such as rash, may infrequently occur. Discontinue administration of Choline in such case.

B) Psychoneurologic: Insomnia may infrequently occur and headache, dizziness, excitation, or convulsions may rarely occur.

C) Gastrointestinal: Nausea may infrequently occur and anorexia may rarely occur.

D) Others: Feeling of warmth may infrequently occur and transient blood pressure changes or malaise may rarely occur.

## STORAGE:

Store in a cool and dry place.

Keep out of the reach of children.

Protect from heat & sunlight

## PRESENTATION:

120ml in pet bottle.

10 tablets in alu alu pack.

خوراک: معالج کی ہدایت کے مطابق استعمال کریں۔

احتیاط: دوا کو خشک اور ٹھنڈی جگہ پر رکھیں۔

دھوپ کی روشنی سے بچائیں۔

تمام ادویات بچوں کی پہنچ سے دور رکھیں۔

Manufacturer Enlistment No: 0078  
Product Enlistment No. 0078,0035

Manufactured by:  
**Natrimed**  
Laboratories  
Plot # B-42, S.I.T.E Super highway,  
Phase-1, Karachi

Marketed by:  
**ORGANIC**  
Natural Sciences