

المرول ۵ (ایل-آرنیختین ایل-اسپارشین، نیکوشن مانید دنامن نی()

Composition:

ng
ng
nğ
-

# Description:

Enervin<sup>®</sup> is a stable combination of two important endogenous amino acids, L-ornithine and L-aspartate. After administration it quickly breaks down into L-ornithine and L-aspartate. L-ornithine being a substrate of urea cycle converts toxic ammonia into non-toxic urea which is eliminated via kidneys, helping the diseased liver to carry out its normal function smoothly (DETOXIFICATION). This process lowers the elevated level of ammonia in blood (hyperammonaemia) which is a common problem in most of the liver diseases.

# Indications:

Enervin<sup>®</sup> as scientifically proven therapy is indicated in following liver disorders:

- Acute Hepatitis (Viral, Non Viral, Drug induced)
- Chronic hepatitis (with or without hyperammonaemia)
- Cirrhosis of liver
- Fatty liver with hyperammonaemia
- Hepatic encephalopathy
- As an adjuvant therapy with all hepatotoxic drugs

Dosage and administration: Enervin® Syrup

Adults: Two teaspoons full twice a day.

Children: One teaspoon full twice a day.

# MAINTENANCE THERAPY As directed by the physician.

# Caution:

In patients with severe renal insufficiency, blood urea and serum creatinine must be monitored regularly, serum creatinine value exceeding 3 mg/ml is regarded as a reference value.

### L-Aspartate:

L-Aspartate serves as an excitatory neurotransmitter in

the brain. This neurotransmitter may provide resistance to fatigue and thus lead to possessing more endurance. It is also a metabolite in the urea cycle, and participates in gluconeogenesis. L-Aspartate plays an important role as general acid in active centers, as well as in maintaining the solubility and ionic character of proteins. L-Aspartate helps to protect the liver from toxicity and the body from radiation. L-Aspartate is also recommended Hepatic encephalopathy, cirrhosis, impaired hepatic metabolism and blood flow lead to raised serum and CNS ammonia concentrations. L-Aspartate also helps to form the ribonucleotides that assist production of DNA and RNA and aids energy production from carbohydrate metabolism. L-Aspartate also helps to improve the function of the immune system, and may play a role in protecting against toxins and neural and brain disorders. Aspartate reportedly helps to treat the chronic fatigue. L-Aspartate easily converted to glucose when demand for alucose exceeds supply.

#### L-Ornithine:

The administration of L-Ornithine improves nutritional status in chronically malnourished and acutely malnourished patients. L-Ornithine supplementation may be helpful in cases of burn injury and wound healing. L-Ornithine activity has been associated with its ability to induce the secretion of anabolic hormones, such as insulin and growth hormone, and to increase glutamine and polyamine synthesis which help to improve the function of growth hormones & immune system. It also plays an important role in reducing cancer risk and in delaying cancer outbreak and recurrence. L-Ornithine is a prominent part of the urea cycle, which allows for the disposal of excess nitrogen. Most commonly, nitrogen is ingested through foods that contain protein. L-Ornithine with L-Aspartate was confirmed by randomized, placebo-controlled, doubleblind studies in patients with manifest hepatic encephalopathy and hyperammonemia. The drug was able to reduce high blood ammonia levels induced either by ammonium chloride or protein ingestion or existing as a clinical complication of cirrhosis.

# Riboflavin (vitamin B<sub>2</sub>):

Riboflavin is a water-soluble vitamin needed to process amino acid and fats activate vitamin B<sub>6</sub> and folic acid,

and help convert carbohydrates into the fuel the body runs on adenosine triphosphate (ATP). Under some conditions, riboflavin can act as an antioxidant. Riboflavin works with the other B vitamins. It is important for body growth and red cell production, and helps in releasing energy from carbohydrates. Riboflavin plays an important role in releasing energy from carbohydrate, fats and protiens. It also helps to maintain the integrity of red blood cells and nervous system function. Riboflavin regenerates glutathiamine, that's one of the main protector of the body cells against free-redical damage. Riboflavin is involved in energy production as part of the electron transport chain that produces cellular energy. Vitamin B<sub>2</sub> aids in the metabolism of carbohydrates, fats, and proteins, and is important in the prevention and treatment of cataracts. Riboflavin is vital for normal reproduction, growth, repair and development of body tissues including the skin, eves, connective tissue. mucous membranes and the immune and nervous systems. Deficiency of riboflavin is primarily manifested in the skin and mucous membranes. Characteristic symptoms of riboflavin deficiency include lesions of the skin, especially in the corners of the mouth, and a red, sore tongue. The first signs and symptoms of deficiency are a sore throat and sores at the corners of the mouth. Worsening symptoms include a swollen tongue. seborrheic dermatitis, anemia and impaired nerve functions

# Nicotinamide (vitamin B<sub>3</sub>)

Nicotinamide (vitamin B<sub>3</sub>) is a water-soluble vitamin which contributes to more than 50 vital bodily processes. Among them, Nicotinamide helps convert food into energy, it helps build red blood cell count synthesizes harmones, fatty acid and steroids. Nicotinamide helps to maintain skin, nerves, and blood vessels, supports the gastrointestinal tract, and detoxifies certain drugs and chemicals. It is also widely believed in the research community that vitamin B<sub>3</sub> helps regulate blood sugar levels. Nicotinamide has a powerful, almost drug-like effect, on the lowering of cholesterol levels and triglycerides, dilating blood vessels to improve circulation, and alleviating depression, insomnia, and hyperactivity.

# Manufactured by:

# <u>geniX</u>

# GENIX PHARMA PRIVATE LIMITED

44,45-B, Korangi Creek Road, Karachi-75190, Pakistan. UAN: +92-21-111-10-10-11, Fax: +92-21-111-10-10-22 E-mail: info@genixpharma.com Web.: www.genixpharma.com

A lack of Nicotinamide can affect every cell in the body. It is carried in the blood and found in all the tissues with the greatest concentrations found in the liver, kidneys, heart, brain and muscle. Because of its unique relationship with energy production, Nicotinamide deficiency is often associated with general weakness. muscular weakness, and lack of appetite. Skin infections and digestive problems also be associated with Nicotinamide deficiency. Symptoms of mild deficiency include indigestion, fatigue, canker sores, vomiting, and depression. The most common symptoms of Nicotinamide deficiency involve the skin, digestive system and the nervous system. In the skin, a thick, scaly, darkly pigmented rash develops symmetrically in areas exposed to sunlight. Nicotinamide deficiency also results in burning in the mouth and swollen & bright red tongue. Severe Nicotinamide deficiency causes pellagra, a disease characterized by mouth sores, skin rashes. diarrhea and dementia

# Presentation:

Enervin® Syrup Bottle of 120 ml.

#### Dosage:

Adults: Two teaspoonsful twice a day. Children: One teaspoonful twice a day. or as directed by the physician.

#### Instructions:

Protect from heat & sunlight. Keep all medicines out of the reach of children.

Shake well before use.

Please read the contents carefully before use. This package insert is continually updated from time to time.

بالغ:چائے کے۲ پیچےدن میں۲مرتبہ بیچ:چائے کا اچچیدن میں۲مرتبہ یا ڈاکٹر کی مدایت کے مطابق استعال کریں۔

تمام دوائیں بچوں کی پہنچ سے دوررکھیں۔ روشی اورگرمی سے بحا کررکھیں ۔

