

COMPOSITION

Eprim[™] 500: Each liquid filled soft gelatin capsule contains 500 mg of Evening Primrose oil (Oenothera biennis L.).

Eprim[™] **Plus**: Each liquid filled soft gelatin capsule contains 1000 mg of Evening Primrose oil (Oenothera biennis L.).

DESCRIPTION

Evening Primrose is a plant native to North America. Evening primrose oil (EPO) has been the subject of hundreds of scientific studies, which led to it becoming one of the most widely used botanical medicines today. EPO is sold in over 30 countries as a dietary supplement, drug or food. In 2000, Evening primrose oil ranked 10th of all herbal dietary supplements in U.S. food, drug and mass-market retail outlets.

Clinical studies have focused on its use in treating problems associated with essential fatty acid (EFA) deficiency including premenstrual syndrome, atopic eczema, inflammation and diabetic peripheral neuropathy. EPO is relatively high in essential fatty acids (EFAs), particularly gamma-linolenic acid (GLA, 7-10%).

Evening primrose oil preparations consist of a clear, golden yellow, fixed oil extracted by cold expression or solvent extraction, from the seeds of *Oenothera biennis L.*, which first occur during the second year of plant growth. Evening primrose oil is a biennial herb, infertile for the first year.

PHARMACOLOGY

Improves EFA composition of plasma, erythrocyte, platelet lipids and α -tocopherol levels in non-diabetic persons and Type 1 diabetic patients; increases total fat and EFA content of mother's milk; affects fatty acid composition of serum lipids and adipose tissue in men with low dihomo-gamma-linolenic acid (DGLA) levels; helps maintain normal cellular structures and is the precursor of DGLA, which is the parent of the 1-series prostanoids and as a precursor of arachidonic acid, the parent of the 2-series prostanoids.

In vitro

Cytostatic activity on malignant cell lines; suppresses cancer cell proliferation of human osteogenic sarcoma cells.

INDICATIONS

- Dysmenorrhea
- Cyclical mastalgia
- Low breastmilk supply
- Acne vulgaris
- Atopic dermatitis & Eczema
- Pregnancy mask

MECHANISM OF ACTION

Evening primrose oil (EPO) supplies gamma linolenic acid (GLA). The bioactivity of EPO is due primarily to its GLA content. By supplying GLA, it bypasses the rate-limiting step in the metabolism of LA. After ingestion of EPO, GLA is rapidly absorbed and then converts directly to DGLA and other prostaglandin precursors. It also acts on the prostanoid pathway.

DOSAGES

One or two capsules two to three times daily or as advised by the physician.

ADVERSE EFFECTS

Adverse effects are rare at recommended dosages. Overdose may cause loose stool and abdominal pain.

CONTRAINDICATIONS

Previously it was not recommended for patients diagnosed with schizophrenia or those already receiving epileptogenic drugs such as phenothiazines. However, a recently published analysis of clinical trials involving polyunsaturated fatty acids in the treatment of schizophrenia did not indicate a clear therapeutic or adverse effect of evening primrose oil supplements on schizophrenic patients.

PREGNANCY AND LACTATION

No known restrictions. Non-teratogenic, based on animal studies. LA, GLA, and DGLA are important components of human breast milk, so it is reasonable to assume that evening primrose oil may be taken while nursing. According to World Health Organization (WHO), pregnant or lactating women should get 5% of their total daily caloric intake from EFAs.

STORAGE

Store below 30°C. Protect from light & moisture. Keep out of reach of the children. **HOW SUPPLIED**

Eprim^M 500 Softgel Capsule: Each container contains 6/15/30/50/100 liquid filled soft gelatin capsules.

Eprim[™] Plus Softgel Capsule: Each container contains 6/15/30/50/100 liquid filled soft gelatin capsules.

Manufactured by

SQUARE PHARMACEUTICALS LTD. HERBAL DIVISION BSCIC, Pabna, Bangladesh

