

# FOLET

## Composition

Each **FOLET Tablet** contains:

Folic acid

5 mg

## Pharmacology

**FOLET** is a member of the vitamin B group. It is reduced in the body to tetrahydrofolate, which is a coenzyme for various metabolic processes. Body stores of folate in healthy persons have been reported as being between 5-10 mg, but may be much higher. About 150-200 µg of folate a day is considered a suitable average intake for all healthy persons except women of childbearing potential and pregnant women who require additional folic acid to protect against neural tube defects in their offspring.

Deficiency of folic acid leads to megaloblastic anemia probably because it is necessary for the production of the purines and pyrimidines, which are essential precursors of deoxyribonucleic acid. The megaloblastic marrow of cobalamin deficiency is due to interference with folic acid utilization and the morphological changes of such deficiency can be reversed by folic acid.

Folic acid is rapidly absorbed from the gastrointestinal tract, mainly from the duodenum and jejunum. Dietary folates are stated to be less well absorbed than crystalline folic acid. The naturally occurring folate polyglutamates are largely decoujugated and reduced by dihydrofolate reductase in the intestines to form 5-methyltetrahydrofolate, which appears in the portal circulation, where it is extensively bound to plasma proteins. Folic acid administered therapeutically enters the portal circulation largely unchanged since it is a poor substrate for reduction by dihydrofolate reductase. It is converted to the metabolically active form 5-methyltetrahydrofolate in the plasma and liver.

The principal storage site of folate is the liver, it is also concentrated actively in the cerebro-spinal fluid (CSF). Folate undergoes enterohepatic circulation and the metabolites are eliminated in the urine and the folate in excess of body requirements is excreted unchanged in urine. Folate is distributed into breast milk.

## Indications

**FOLET** may be used to prevent or cure deficiency of folate.

Folic acid supplement taken before conception and during the early weeks of pregnancy has been shown to prevent fetal neural tube defect. Women hoping to conceive and who have had an affected child are advised to take folic acid 5 mg per day.

Folic acid supplementation is needed in premature infants because they miss the build-up of folate stores that normally occurs in the last few weeks of pregnancy.

**FOLET** is indicated for malabsorption syndromes particularly in gluten-sensitive enteropathy and tropical sprue, poor absorption of folic acid from the small intestine often leads to megaloblastic anemia.

**FOLET** is indicated for chronic hemolytic states, where erythropoiesis is accelerated, and in myelofibrosis, where haemopoiesis is inefficient. Extensive shedding of skin cells in exfoliative dermatitis, inflammatory states like rheumatoid arthritis, and malignant disease like lymphoma, can similarly lead to folate deficiency. Folate loss during chronic haemodialysis may be sufficient to require replacement.

### **Contraindications**

Imprecisely diagnosed megaloblastic anemia is the principal contraindication to the use of **FOLET**.

### **Precautions**

Some cancers are folate dependent and **FOLET** should be used in malignant disease only where there is confirmed folate deficiency anemia.

### **Pregnancy & Lactation**

Use of **FOLET** during pregnancy and lactation is advisable, for women who are at high risk of having a pregnancy affected by neural tube defect. Failure of the fetal neural tube to fuse normally during the first 4 weeks of pregnancy may result in one of several congenital defects. These include anencephaly and spina bifida. The latter ranges from spina bifida occulta, where neurological abnormalities are rare, to meningocele to meningomyelocele, where the meninges, or meninges and spinal cord, herniate outwards through the vertebral defect and which may be associated with hydrocephalus and paralysis of the lower limbs and sphincters.

### **Drug Interactions**

Antiepileptics, particularly phenytoin, primidone and phenobarbitone, occasionally cause a macrocytic anemia that responds to folic acid. This may be due to enzyme induction by the antiepileptics increasing the need for folic acid to perform hydroxylations.

Antimalarials like pyrimethamine, may interfere with conversion of folates to the active tetrahydrofolic acid, causing macrocytic anemia.

Methotrexate, a folate antagonist, may cause megaloblastic anemia especially when used long-term.

### **Adverse Reactions**

**FOLET** is generally well tolerated. Gastrointestinal disturbances and hypersensitivity reactions have been reported rarely with folic acid. It may precipitate status epilepticus.

### **Dosage & Administration**

The usual recommended adult dose of **FOLET** is 1-4 tablets daily in divided doses.

The usual recommended dose of **FOLET** in children is 1-2 tablets daily in divided doses.

**Presentation**

**FOLET** is available in a blister of 30 tablets.

