## **FOLIC ACID**

Trade Name	Folic Acid Solution - manufactured under licence by Biomed Laboratories
Class	Vitamin Supplement (Vitamin B9)
Mechanism of Action	Folic acid is an important precusor for 10-methylenetetrahydrofolate, an essential coenzyme in the synthesis of thymidylate. The megaloblastic changes produced by folic acid deficiency are secondary to failure of thymidylate synthesis.
Indications	Indication 1: Babies < 1500g on unfortified breastmilk (eg: those who have contraindications to HMF, failed HMF or parents have declined HMF)
	Indication 2: Severe haemolysis ie: Rhesus disease with or without the need for an exchange transfusion
Contraindications	Hypersensitivity to folic acid.
	Prior to treating megaloblastic anaemia with folic acid Vitamin B12 deficiency should be excluded as neuropathy may be precipitated.
Supplied As	50 microgram/mL 50mL bottle
Dilution	N/A
Dosage	50 microgram
Interval	Once a day
Administration	Oral with or without feeds
Compatible With	N/A
Incompatible With	N/A
Interactions	Concurrent use of folic acid and phenytoin may result in decreased effectiveness of phenytoin and reduced folic acid concentrations.
	Folic acid may decrease the serum concentrations and effectiveness of phenobarbital.
Monitoring	Full blood count may be useful
Stability	Preservative Free Discard 7 days after opening
Storage	Refrigerate – Do Not Freeze
Adverse Reactions	No significant adverse effects have been reported
Metabolism	Following administration, folic acid is rapidly absorbed primarily from the proximal end of the small intestine and converted by metabolism in the liver to the active agent 5-methyltetrahydrofolate.

	Approx 30% of the folic acid dose is excreted unchanged in urine.  The remaining 70% is mainly excreted in bile.
Comments	Babies<1500g receiving fortified breastmilk or on formulas will receive adequate daily amounts of folic acid and do not need extra supplementation
	While the terms folic acid and folate are used interchangeably in the literature folic acid is the more technically correct terminology to use.
References	<ol> <li>Medicines for Children, RCPCH 1999</li> <li>Neonatal Formulary,2000</li> <li>Micromedex</li> <li>Neofax in <a href="www.micromedexsolutions.com">www.micromedexsolutions.com</a></li> <li><a href="www.anmfonline.org">www.anmfonline.org</a></li> </ol>
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