Alert Routine folic acid supplementation is not required in preterm infants on fully fortified human milk. There is no folic acid in Penta-vite Liquid Multivitamins (with Iron and for Infants), two commonly used multivitamin preparations in New South Wales.

Indication Prevention and treatment of folic acid deficiency. Moderate to severe hereditary spherocytosis.

Action Folic acid is essential for formation of coenzymes that participate in nucleic acid synthesis (particularly purines and pyrimidines), the metabolism of some amino acids and the catabolism of histidine. Folic acid is required for maintenance of erythropoiesis. It is used as a supplement before and during pregnancy to prevent neural tube defects.

Drug Type Vitamin B9

Trade Name Blackmores Folate Tablets; Foltabs Tablets; Megafol Tablets; Folic Acid Oral Solution; Folic Acid Injection Biological Therapies; Folic Acid Injection Phebra

Presentation Auspman 500 microg/mL oral solution (contains 10.55% v/v ethanol; 10.55 mL ethanol in 100 mL)

5 mg/mL 1 mL vial [Phebra] (each vial contains 34.5 mg/mL of sodium)
15 mg/mL 1 mL vial [Biological Therapies] (each vial contains 2.4 mg/mL of sodium)
1 mg/mL oral solution can be prepared by pharmacy.

500 microg/tablet

Dosage/Interval Enteral supplementation*

Preterm infants: 35–100 microg/kg/day

Full term infants (0–6 months) : 65 microg/day (not per kg)

Treatment of folic acid deficiency (including moderate to severe hereditary spherocytosis):

100 microg/day (not per kg)

*Estimated enteral intakes based on 100 mL/kg human milk and 170 mL/kg fortified human milk are 8.5 and 50-73 microg/kg/day respectively.

Route Oral

Maximum Daily Dose

Preparation/Dilution PO: In-house pharmacy can prepare a 1 mg/mL oral solution using the vials for injection as follows:

1. Use a needle and syringe to withdraw 6 mL (= 30 mg) of folic acid injection from 6 vials [Phebra] or 2 vials [Biological Therapies] and transfer to amber glass bottle.
2. Measure and add 24 mL of sterile water for irrigation to glass bottle and mix thoroughly.

Administration PO: Administer orally with or without feeds

Monitoring No specific monitoring required.

Contraindications No information.

Precautions No information.

Drug Interactions Phenytoin: Concurrent use of folic acid and phenytoin may result in decreased folate concentrations and decreased phenytoin effectiveness. Increase dose of phenytoin as required.

Phenobarbital (phenobarbitone): When given for folic acid deficiency, may decrease phenobarbital (phenobarbitone) concentration and its therapeutic effect; monitor phenobarbital (phenobarbitone) concentration and clinical effect. Increase dose of phenobarbital (phenobarbitone) as required.

Adverse Reactions Toxicity from overdosage is not reported in newborns. In adults, high folate concentrations have been associated with low zinc (Fuller 1992). Weight loss, neurological, gastrointestinal and psychological symptoms were also reported in adults on high doses (Campbell 1996).

Compatibility Not applicable.

Incompatibility Not applicable.

Stability Oral solution prepared in-house is stable for 60 days. Refrigerate. Protect from light.

Storage Auspman 500 microg/mL oral solution to be stored below 25°C Refrigerate (2–8°C) oral solution prepared in-house
Folic acid

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