### Indication
Prevention of vitamin deficiency in infants < 35 weeks gestation or < 2 kg birth weight.

### Action
Multi-vitamin supplement

### Drug Type
Multivitamin

### Trade Name
Penta-Vite

### Maximum daily dose
0.45 mL

### Presentation
Oral liquid
Each 0.45 mL contains:
- Vitamin A retinyl palmitate 490 microg
- Vitamin B1 thiamine 0.54 mg
- Vitamin B2 riboflavine sodium phosphate 1.1 mg (equiv. riboflavine 800 microg)
- Vitamin B3 nicotinamide or Niacin 7.1 mg
- Vitamin B6 pyridoxine 135 microg
- Vitamin C ascorbic acid 42.8 mg
- Vitamin D cholecalciferol 10.1 microg (400 Units)

### Dosage / Interval
0.45 mL daily. NOTE: Dose not based on weight.

### Route
Oral

### Administration
Oral or intra-gastric tube.
Administer undiluted or mixed with a small amount of milk into infant’s mouth through a feeding teat or via intra-gastric tube.

### Contraindications
Not yet tolerating full feeds.

### Adverse Reactions
Direct administration into the mouth may cause choking and apnoea.

### Stability
Store in refrigerator after opening. Discard 9 weeks after opening (write date opened on bottle).

### Storage
Store unopened bottle below 25°C. Protect from light.

### Evidence summary
No studies were located which examined the impact of multivitamin supplementation on any outcomes in low birth weight (LBW) infants.
Policy statements from organisations in developed countries recommend providing multivitamin supplementation with a neonatal multivitamin preparation containing vitamins A, D, C, B1, B2, B6, pantothenic acid and niacin to all LBW infants receiving human milk from birth until the infant attains a weight of 2000 g.
Many units provide a multivitamin preparation to all LBW infants until 6 to 12 months chronological age.
Vitamin D – There is evidence of reduced linear growth and increased risk of rickets in babies with a birth weight < 1500 g fed un-supplemented human milk. There is no consistent benefit of increasing the intake of vitamin D above 400 Units per day.
There are no clinical trial data on the effect of vitamin D on key clinical outcomes in infants with a birth weight > 1500 g.

### Level of evidence
Expert opinion

### References