Cheshire and Mersey Vitamin, Folic Acid and Iron Supplementation Guideline

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The North West Neonatal Network (NWNODN) consists of 3 locality neonatal networks, Cheshire and Merseyside (CM) Lancashire and South Cumbria (LSC) and Greater Manchester (GM). This document has agreed by locality Clinical Effective Groups (CEG) and can be adapted for local use. **Please acknowledge source if this document is adapted for local use.**	

Background

Preterm infants have an increased requirement for vitamins/iron/folic acid and yet have suboptimal stores in view of premature delivery/low birthweight.
There are guidelines/recommendations available regarding optimal doses eg *ESPGHAN Enteral nutrient supply for preterm babies Journal of Paediatric Gastroenterology & Nutrition 2010.* However, practice remains variable between units within our own region and nationally.
There are different multivitamin preparations available and additionally specific preterm formulas are supplemented with vitamins/iron/folic acid
Parents within our network have identified that a consistent approach to vitamin supplementation between units would support *Family Integrated Care* by reducing the confusion that can arise when infants are moved between units or discharged from one unit with follow up arrangements under another clinical team.

Aim

To provide a pragmatic NWNODN endorsed guideline that will ensure premature and low birthweight infants receive adequate vitamin/iron/folic acid to meet their nutritional needs but without giving excessive or inadequate supplementation for long periods of time. This is a consensus statement aiming to be as simple as possible and recognises that specific groups of babies might be slightly under- or over-treated for short periods of time.

This intention is that this guideline is used in conjunction with individual unit's Enteral Feeding policies.

Target Population:

<2kg and/or <34 weeks gestation at birth

Supplement used:

1. **Abidec** (in preference to Dalivit because of concerns about its high Vitamin A content). If there is a personal/family history of peanut or soya allergy, Abidec drops should be avoided as they contain refined peanut oil.

   Dose: 0.6ml OD to commence when on full feeds regardless of age as per flowchart.

2. **Folic acid.** Following feedback from Parent Advisory Group agreed to use weekly versus daily supplementation.

   Dose: 1mg weekly (on Friday) to commence when on full feeds regardless of age as per flowchart.
   Please note: dose will be different for those treated for haemolytic disease of the newborn (typically 1mg daily)

3. **Iron.** Sodium feredate (Iron 5.5mg per 1mL) oral solution

   Dose: 1ml daily as per flowchart.

References

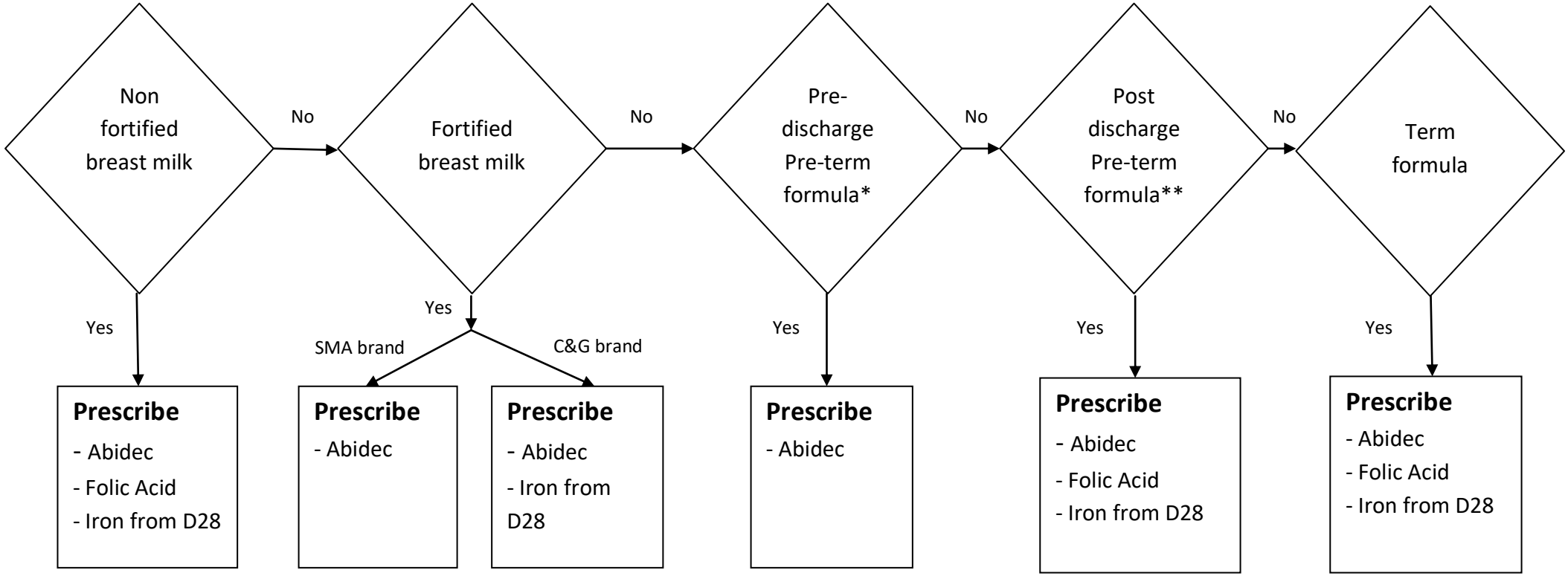
1. Chief Medical Officer. Meeting the need for vitamin D. CMO Update 2005;42:6

2. Department of Health. Department of Health Report on Health and Social Subjects. 41 Dietary reference values for food, energy and nutrients for the United Kingdom. Report of the Panel on Dietary Reference Values of the Committee on Medical Aspects of Food Policy. London: HMSO, 1991.

3. Department of Health. Department of Health Report on Health and Social Subjects. 49 Nutrition and bone health with particular reference to calcium and vitamin D. Report of the Subgroup on Bone Health, Working Group on the Nutritional Status of the Population of the Committee on Medical Aspects of Food Policy. London: HMSO, 1998.

4. ESPGHAN Committee on Nutrition. Enteral Nutrient Supply for Preterm Infants: Commentary From the European Society for Paediatric Gastroenterology, Hepatology, and Nutrition Committee on Nutrition. Journal of Pediatric Gastroenterology and Nutrition. 2010; 50: 1-9.

Flow Chart to support supplementation decisions:



*Pre-discharge pre-term formula refers to SMA Gold Prem 1 or Nutriprem 1

** Post Discharge pre-term formula refers to SMA Gold Prem 2 or Nutriprem 2

Length of treatment:

- Continue Abidec to 5 years of life as per CMO's recommendations.
- Babies <30 weeks at birth and/or 1kg birthweight aim to continue Iron and Folic Acid up to 1 year of age. More mature and/or larger babies could discontinue supplementation at 6 months based on clinical decision.