

## **Chapter 9: Nutrition & Blood**

### **Anaemias and some other blood disorders**

#### 9.1.1.1 Oral Iron

Solid dose preparations

**Ferrous Fumarate 322mg tablets**

Ferrous fumarate 210mg tablets

Ferrous sulphate 200mg tablets

Liquid dose preparations

**Ferrous Fumarate 140mg/5mL SF oral solution**

Sodium Feredetate (Sytron® Elixir)

[NICE Clinical Knowledge Summary](#), has recently been updated and references 2021 [British Society of Gastroenterology guidelines](#) for the management of iron deficiency anaemia in adults. "We recommend that the initial treatment of IDA should be with one tablet per day of ferrous sulphate, fumarate or gluconate. If not tolerated, a reduced dose of one tablet every other day, alternative oral preparations or parenteral iron should be considered (*evidence quality—medium, consensus—92%, statement strength—strong*)."

This is however, out with advice in BNF, which is currently being reviewed.

Compound and MR preparations have no therapeutic advantage and should not be used

#### 9.1.2 Drugs used in Megaloblastic Anaemias

Hydroxocobalamin 1mg/ml injection

Oral cyanocobalamin is not routinely recommended, review regularly if need confirmed. See [Vitamin B12 guidance for Primary Care](#)

Folic Acid – 5mg tabs, 400 micrograms tablets

Prevention against neural tube defects: In Sheffield, we have funded all preconception and pregnant women to have access to free Healthy Start Vitamins (containing low dose folic acid) from their local Family Centre.

See '[Sheffield Extended Healthy Start Scheme](#)'. Patients can also purchase low cost supplements from their local supermarkets or pharmacy if they wish or if eligible can access Healthy Start Vitamins via the national scheme.

## **9.2 Fluid and Electrolytes**

#### 9.2.1.1 Oral Potassium

Sando K® effervescent tablets – **short term use only**

Potassium supplements are seldom required with the small doses of diuretics given to treat hypertension

#### 9.2.1.2 Oral Rehydration Salts (ORS)

Dioralyte® Sachets – natural & blackcurrant flavours

For infants make up with boiled and cooled water.

Please note, once reconstituted this can be kept in a refrigerator for up to 24 hours

## 9.4 Oral Nutrition

### 9.4.2 Enteral nutrition (NB. Preparations listed in appendix 2 of the BNF)

#### **Aymes® Shake**

Aymes® Actagain 1.5 Complete

If an Oral Nutritional Supplement (ONS) is required Aymes® Shake should be used in preference to Aymes® Actagain 1.5 Complete, as more cost effective. See [Prescribing Guidelines](#) webpage under 'Malnutrition and oral nutritional supplement prescribing' for a number of resources to support management of malnutrition'.

#### **Aymes® Shake Compact**

Aymes® Actagain 600

When a low volume supplement is clinically relevant use Aymes Shake Compact (powder) or, if unable to mix a powder use Aymes Actagain 600 (Ready to Drink, a once a day preparation) as cost effective choices. See [Prescribing Guidelines](#) webpage under 'Malnutrition and oral nutritional supplement prescribing' for a number of resources to support management of malnutrition'.

## 9.5 Minerals

### 9.5.1.1 Calcium supplements

Calcium supplements that do not contain Vitamin D are not routinely appropriate in osteoporosis. See BNF, [Calcium Imbalance](#) and [Phosphate Imbalance](#)

### 9.5.1.3 Magnesium

For further information about treatment of hypomagnesaemia please see following [guidance](#). If there is a requirement to prescribe a magnesium supplement there are a number of licensed preparations available including Magnesium Glycerophosphate (Neomag) 97mg (4mmol) chewable tablets or Magnesium Aspartate 243mg (Powder for Oral solution).

### 9.5.3 Fluoride

There are no water fluoridation schemes in Sheffield. In the southeast of Sheffield: Mosborough, Halfway, Beighton, Westfield, Hackenthorpe, Birley, Sothall, Waterthorpe and Owlthorpe have naturally fluoridated water at a sub-optimal level to prevent tooth decay of 400 micrograms per litre. Public Health strategies are in place to optimise exposure to fluoride in children and adults at high risk of developing dental caries. There may be indications where the regular use of a fluoride preparation is needed to reduce the risk of dental caries and a patient's regular dentist will signpost patients to obtain this over the counter. If POM preparation is required the patients General Dental Practitioner should prescribe this. GPs may be asked to prescribe fluoride preparations for vulnerable patients under the care of the specialist dental services, if they are not registered with a GDP. See [local guidance](#) for further information

Sodium fluoride toothpaste – 0.619% (2800ppm) and 1.1% (5000ppm)

The opinion of a dental practitioner should be sought prior to prescribing. Counsel patients to follow directions carefully. Teeth should be brushed for specified duration before spitting out.

## 9.6 Vitamins

### 9.6.1 Vitamin A

Vitamin A deficiency is rare in the UK. Vitamin A and D capsules may be used in cystic fibrosis patients. Vitamin A and D capsules contain 400 units (10 micrograms) of Vitamin D, If a patient requires Vitamin D supplementation please see [below](#)

### 9.6.2 Vitamin B group

Thiamine tablets (vitamin B1), 50mg, 100mg

OTC

NICE recommends continuing with thiamine for patients at high risk of developing Wernicke's encephalopathy. For full guidance refer to [NICE CG100](#), [CG115](#). Please note, Vitamin B compound and Vitamin B compound strong are considered 'less suitable for prescribing' and have been included on the Sheffield CCG [STOP list](#)

### 9.6.3 Vitamin C

Vitamin C (Ascorbic acid) is licensed for prevention and treatment of scurvy, claims that vitamin C supplements ameliorate colds or promote wound healing have not been proven

### 9.6.4 Vitamin D

In July 2016, SACN and Public Health England updated their advice on the supplementation of Vitamin D. It is now recommended those patients at risk take a supplement all year round and those not at risk take a supplement containing 10 micrograms of Vitamin D during the autumn and winter months to help prevent Vitamin D deficiency. This should be alongside safe sun exposure and dietary intake.

In Sheffield, we encourage self-care and recommend patients to purchase low cost supplements from their local supermarkets or pharmacy, or if they are eligible via the national scheme. We discourage the prescribing of maintenance dose Vitamin D. However, certain eligible groups of patients will be able to have access to free Healthy Start Vitamins available from their local [Family Centre](#). Please see '[The Sheffield Extended Healthy Start Scheme](#)'

#### Risk groups:

Key recommendations for Healthcare Professionals are;

Promote vitamin D supplementation in at risk groups; consider; adding prompts to clinical records, recommend and record vitamin D supplementation whenever possible, e.g. flu clinics, newly registered patient template, medication review, falls follow up appointments.

Risk groups are;

- Infants and children aged under 4
- all pregnant and breastfeeding women, especially teenagers and young women
- older people aged 65 years and over
- people who have low or no exposure to the sun, for example those who cover their skin for cultural reasons, who are housebound or confined indoors for long periods
- people who have darker skin, for example people of African, African-Caribbean and South Asian origin, because their bodies are not able to make as much vitamin D
- those with particular dietary needs (for example, those who avoid nuts, are vegan or have a halal or kosher diet)

Only check vitamin D status if patient has symptoms of deficiency or at very high risk

See [Prescribing Guidelines](#) under 'Vitamin D' for patient information leaflets to support self-care with vitamin D

**Deficiency** - Refer to local [Adults](#), [Pregnancy/Breastfeeding](#) and [Children's](#) guidance.

#### Adults

**InVita® D<sub>3</sub> 50,000 IU soft capsules** – weekly dose for 6 weeks

**NB:** For those patients with a low BMI (<20kg/m<sup>2</sup>) a lower dose is indicated in this cohort of patients. This is in line with local guidance.

InVita® D<sub>3</sub> 25,000 IU soft capsules – weekly dose for 6 weeks

If liquid preparation required:

InVita® D<sub>3</sub> 25,000 or 50,000 IU oral solution – see above for appropriate dosing.

Please note InVita® D<sub>3</sub> 25,000 and 50,000 IU capsules contain gelatine, however, this is Halal and Kosher certified, therefore, this formulary choice is suitable for those who follow a Halal or Kosher diet. However, they are not suitable for those who follow a vegetarian or vegan diet. Plenachol® 20,000 or 40,000 IU capsules are a suitable first line alternative for vegetarians. Please note, the InVita® oral solutions are also suitable for vegetarians, however this is not as cost effective. For further information on preparations suitable for vegetarians / vegans see [here](#).

### **Pregnant / Breastfeeding Women**

**Fultium® - D<sub>3</sub> 3,200 IU capsules** – daily dose for 10 weeks

### **Children**

**Thorens 10,000 IU/ml oral drops solution** – see [guidelines](#) for dosing

**Insufficiency / post correction of deficiency** – Refer to local [Adults](#), [Pregnancy/Breastfeeding](#) and [Children's](#) guidance.

Patients who are identified as being insufficient or who have previously had vitamin D deficiency corrected should be advised first line to purchase a suitable supplement over the counter to prevent them from becoming deficient. Also refer to local guidelines (Links above and the [self-care guidance](#))

**Adults (including pregnant women)** - Advise taking a daily supplement containing between 800IU – 1,000IU (20-25 micrograms) vitamin D.

Preparations can be obtained from community pharmacies, supermarkets or health food stores.

**Children** – Advise taking a supplement that provides 340-400 units / day (8.5 – 10 micrograms). Dose dependant on age.

Consider prescribing supplementation in the following groups;

- Calcium and vitamin D for Osteoporosis
- Has other active bone diseases and there are concerns about compliance i.e. Osteopenia
- Renal Disease
- If poor compliance and repeated episodes of deficiency
- In patients who may have a lifelong or chronic condition or have undergone surgery that results in malabsorption

Continuing need should however be reviewed on a regular basis

### **Adults**

**InVita® D<sub>3</sub> 800 IU soft capsules** – daily dose

InVita® D<sub>3</sub> 25,000 IU soft capsules – monthly dose\*

InVita® D<sub>3</sub> 25,000 IU oral solution - monthly dose\*

\*Please note monthly dose can be an option in patients with compliance issues

Please note InVita® D<sub>3</sub> 800 unit capsules contain gelatine, however this is Halal and Kosher certified, therefore this formulary option is suitable for those who follow a Halal / Kosher diet. However, they are not suitable for those who follow a vegetarian or vegan diet. Desunin® 800 IU tablets are a suitable alternative for vegetarians. For further information on preparations suitable for vegans see [here](#).

### **Pregnant / Breastfeeding women**

**Fultium® - D<sub>3</sub> 800 IU capsules** – daily dose

### **Children**

**Healthy Start Vitamins for Children** – if eligible on [extended scheme](#) these are available from [Family Centres](#)

InVita® D<sub>3</sub> 2,400 IU/ml liquid drops – daily dose

Abidec® multivitamin drops (contains arachis oil) – daily dose

Dalivit® oral drops (only prescribe these if child has an allergy to peanuts) – daily dose

Reviewed June 2021. Amendment Feb 2022 Updated: July 2024

Review Date June 2026

While children are taking multivitamin drops no other vitamin supplement containing vitamins A and D should be taken unless under medical supervision. Patients should not exceed the stated dose

### **Calcium (for further information please see Chapter 6.6)**

The daily recommended intake for calcium in elderly patients is 1000 – 1200mg. For all institutionalised or housebound elderly and those with a prior hip fracture, consider dietary intake of calcium and if the recommended daily amount is not being achieved then supplementation of Calcium and Vitamin D should be considered. Note supplementation at these doses does not require routine monitoring.

**Calci-D® chewable tablets** (1000mg calcium +1000 units vitamin D) (gelatine free)

NB. usual recommended daily dose – ONE daily

**Adcal-D<sub>3</sub>® Caplets** (300mg calcium + 200 units vitamin D per caplet) (gelatine free)

NB. usual recommended daily dose – TWO twice daily providing daily dose of 1200mg calcium and 800 units vitamin D

For patients requiring a dissolvable Calcium / Vitamin D preparation, Adcal-D<sub>3</sub> Dissolve Effervescent Tablets is an appropriate alternative. The usual recommended daily dose is ONE twice daily providing a daily dose of 1200mg calcium and 800 units vitamin D.

For patients who require administration via enteral tube feeding, Cacit D<sub>3</sub> effervescent granules sachets are a suitable option as per [NEWT guidelines](#) recommendation.

#### 9.6.7 Multivitamin preparations

Vitamin capsules BPC

Children

**Healthy Start®** (see below)

Abidec® drops\*

Dalivit® oral drops

\*Contains arachis oil

Healthy Start Children's vitamin drops contain vitamin A, D and C. Healthy Start® vitamins are available from all Family Centres and are free to those eligible. See [link](#) to see if patients qualify. Sheffield Family Centres and community pharmacies can now sell Healthy Start vitamins to those not eligible. For further information on the Sheffield Extended Healthy Start scheme please see [here](#).

#### 9.7 Bitters and tonics

No products recommended as evidence of benefit lacking.

Other: **Thickeners**

Nutlis® Clear

Nutlis® Clear (175g tin) is the first-line formulary choice thickening agent across Primary Care in Sheffield. It is a cost effective, gum based thickener in line with that used in Sheffield Teaching Hospitals (ensuring continuity of care)

Gum-based thickeners represent the newer generation of food thickeners offering several advantages over traditional starch-based counterparts, being unaffected by amylase in saliva, which can cause the drink to thin and become an aspiration risk. They are also usually found to be more palatable, with a consistent smooth texture throughout, improved stability (not over thickening with time) and require a smaller quantity of powder for the different consistencies.

Gum-based thickeners commonly use xanthan gum as the main ingredient alongside other ingredients such as maltodextrin.

Thickeners should be used under the guidance of dysphagia trained professionals using International Dysphagia Diet Standardisation Initiative (IDDSI) classifications (2018). Further information can be found [here](#)

Other thickeners to be considered as a secondary choice for patient flexibility.

**For more detailed information about this section please see following [guidance](#).**

6<sup>th</sup> edition - September 2015

7<sup>th</sup> edition – November 2017

8<sup>th</sup> edition – June 2021

9<sup>th</sup> edition – July 2024