

## Primary Care Prescribing Guidance: Fat Emulsions for the Purpose of Oral Nutrition Support

| <u>Contents</u>   | Pg       |
|---|----------|
| <b>1. Fat Emulsions.....</b>  | <b>2</b> |
| Table 1: Fat Emulsions Currently on the Barnsley Joint Formulary.....   | 2        |
| <b>2. ONS Prescribing Criteria.....</b>   | <b>2</b> |
| <b>3. Fat Emulsion Alternatives.....</b>  | <b>2</b> |
| 3.1: Alternatives for those who meet ONS prescribing criteria.....  | 2        |
| Table 2: ‘Compact’ ONS Currently on the Barnsley Joint Formulary.....   | 3        |
| 3.2: For those who do not meet ONS prescribing criteria.....  | 3        |
| Table 3: A Comparison of ‘Items Available for Self-Purchasing’ vs<br>‘Prescribable Compact ONS’ vs ‘Prescribable Fat<br>Emulsions’..... | 3        |
| <b>4. Exemption Criteria.....</b>   | <b>4</b> |
| <b>5. References.....</b>   | <b>4</b> |

### [Appendix I: Fat Emulsion Prescribing Algorithm](#)

This document is intended for use in primary care as a guide on the use of fat emulsions for the purpose of oral nutrition support. This is not a substitute for clinical judgement or any advice given by a clinician. The information provided here is correct at the time of publishing and will undergo periodic reviews to ensure that it remains up to date.

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## 1. Fat Emulsions

Fat emulsions are low volume, calorie dense oral nutritional supplements (ONS) that are available on prescription for those who meet ONS prescribing criteria. The nutritional content of a fat emulsion varies by product with some containing fat alone whilst others have additional nutrients such as protein, carbohydrate, vitamins and minerals.

Table 1: Fat Emulsions Currently on the Barnsley Joint Formulary

| Product              | Preparation            | Traffic Light Classification              |
|----------------------|------------------------|---|
| Calogen®             | Ready-to-drink liquids | 'Amber-G' on the Barnsley Joint Formulary |
| ProCal® Shot         |                        |   |
| Fresubin® 5kcal Shot |                        |   |
| Calogen® Extra       |                        |   |

They are typically prescribed in primary care as a 30ml 'shot' to be consumed three times a day (TDS) and are used as an adjunct therapy to food in the treatment of malnutrition. However, there are nutritionally comparable/superior, more cost-effective alternatives to fat emulsions available for either self-purchasing or on prescription dependent upon whether the individual meets ONS prescribing criteria or not.

## 2. ONS Prescribing Criteria

To meet ONS prescribing criteria, the patient **MUST MEET ALL** of the criteria below:

- 1) Patient is at risk of malnutrition (BMI 18.5kg/m<sup>2</sup> **OR** unintentional weight loss of ≥10% within 3-6 months **OR** initial BMI <20kg/m<sup>2</sup> **AND** weight loss ≥5%)
- 2) Malnutrition has been caused by an underlying disease
- 3) If realistic, 'Food First' has been trialled for at least one month without success

## 3. Fat Emulsion Alternatives

### 3.1: Alternatives for those who meet ONS prescribing criteria

If a patient meets ONS prescribing criteria, dividing one whole 'compact' ONS drink in to three (approximately equal) 'shots' is a more cost-effective alternative to prescribing 30ml TDS of a fat emulsion product.

Table 2: 'Compact' ONS Currently on the Barnsley Joint Formulary

| Product              | Preparation   | Traffic Light Classification                           |
|----------------------|---|--|
| Aymes® Shake Compact | Powdered product made by mixing 1 sachet (57g) with 100ml of whole milk | 'Green' classification on the Barnsley Joint Formulary |
| Ensure® Compact      | Ready-to-drink liquid (125ml bottle)                                    | 'Amber-G' on the Barnsley Joint Formulary              |

### 3.2: For those who do not meet ONS prescribing criteria

Readily available items such as double cream, condensed milk and full-fat crème fraiche are available for self-purchasing. These products are nutritionally comparable to prescribable fat emulsions.

Table 3: A Comparison of 'Items Available for Self-Purchasing' vs 'Prescribable Compact ONS' vs 'Prescribable Fat Emulsions'

| Category                            | Product                        | Vol (ml)/day | Dosage            | Kcals | Protein (g) | Cost (£) per 30 days* |
|-------------------------------------|--------------------------------|--------------|-------------------|-------|-------------|-----------------------|
| Items Available for Self-Purchasing | Double Cream                   | 90           | 2 Tablespoons TDS | 420   | 1.3         | 7.64                  |
|                                     | Full Fat Crème Fraiche         | 90           | 2 Tablespoons TDS | 270   | 2.4         | 8.01                  |
|                                     | Condensed Milk                 | 90           | 2 Tablespoons TDS | 290   | 6.7         | 6.75                  |
|                                     | Nestle® Vegan Condensed Milk** | 90           | 2 Tablespoons TDS | 299   | 1.4         | 12.00                 |
| Prescribable 'Compact' ONS          | Aymes® Shake Compact           | 135          | 45ml TDS          | 320   | 12.2        | 14.70                 |
|                                     | Ensure® Compact                | 125          | 40-45ml TDS       | 300   | 12.8        | 39.90                 |
| Prescribable Fat Emulsions          | Calogen®                       | 90           | 30ml TDS          | 405   | 0.0         | 68.04                 |
|                                     | Pro-Cal® Shot                  | 90           | 30ml TDS          | 300   | 6.0         | 60.15                 |
|                                     | Fresubin® 5kcal Shot           | 90           | 30ml TDS          | 450   | 0.0         | 67.27                 |
|                                     | Calogen® Extra                 | 90           | 30ml TDS          | 360   | 4.5         | 68.85                 |

\* Prices correct as of Jan 2021. Prices sourced from a selection of online supermarket websites and MIMS

\*\* May contain traces of milk as the product is made in a factory manufacturing milk products.

### **Barnsley Position Statement**

NHS Barnsley CCG does **NOT** recommend prescribing fat emulsions for the routine treatment of malnutrition.

#### 4. Exemption Criteria

The following groups of patients may be excluded from this guideline and can be prescribed a fat emulsion providing the patient meets ONS prescribing criteria **AND** the request is made by a dietitian:

- Enterally fed tube patients requiring additional calories in a compatible liquid form to meet their calculated requirements.
- Specific medical conditions such as renal, metabolic, malabsorption, complex paediatric, and other specialist disorders that require a nutrient-specific diet eg ketogenic.
- The suggested items available for self-purchasing and Aymes® Shake Compact or Ensure Compact® are unsuitable for dietary, cultural and/or religious beliefs.

For patients who meet an exemption criterion, the dietitian must provide;

- A justified rationale for the use of a prescribable fat emulsion
- The reason why Aymes® Shake Compact, Ensure Compact® and/or food-based alternatives are inappropriate
- The nutritional goal
- A review date.

#### 5. References

- 1) National Institute for Health and Care Excellence (NICE). *Nutrition support for adults* CG32. Accessed online at [www.nice.org.uk/Guidance/CG32](http://www.nice.org.uk/Guidance/CG32) (Feb 2021).

## Appendix I: Fat Emulsion Prescribing Algorithm

