





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

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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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Date: April 2021

Recommended Review Date: April 2023

Ratified by Barnsley Area Prescribing Committee on: 14th April 2021

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®					
ProCal® Shot	Ready-to-	'Amber-G' on the Barnsley Joint			
Fresubin® 5kcal Shot	drink liquids	Formulary			
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/m2 **OR** unintentional weight loss of ≥10% within 3-6 months **OR** initial BMI <20kg/m2 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 <u>Comparison of 'Items Available for Self-Purchasing' vs 'Prescribable</u> 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

Barnsley Position Statement

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

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

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 (Feb 2021).







Appendix I: Fat Emulsion Prescribing Algorithm

All fat emulsions have an Amber-G Traffic Light Classification and thus should only be initiated following a recommendation from a dietitian. Is the prescription for either Calogen®, ProCal Shot®, Fresubin Skcal Shot® or Calogen Extra® based on a dietitians recommendation? Yes No Please do not prescribe ONS Prescribing Criteria: Advise on food-based alternatives if patient wishes Does the patient meet ALL of the criteria below: Nο to continue with fat emulsion i.e 2 tablespoons 3 x 1) Patient is at risk of malnutrition (BMI 18.5kg/m2 OR unintentional weight loss daily of either: ≥10% within 3-6 months OR BMI <20kg/m2 AND weight loss ≥5%) Double Cream, Full-Fat Crème Fraiche, 2) Malnutrition has been caused by underlying disease Condensed Milk OR Nestle® Vegan Condensed 3) If realistic, 'Food First' has been trialled for at least one month without success Milk (*may contain traces of milk as made in a factory manufacturing milk products). Yes Does the patient meet any of the following exemption criteria: Prescribe fat emulsion. Enterally fed tube patients requiring additional calories in a Ensure requests are accompanied by a dietitian letter stating; compatible liquid form to meet their calculated requirements A justified rationale for the use of a prescribable fat Specific medical conditions such as renal, metabolic, emulsion malabsorption, complex paediatric, and other specialist disorders The reason why Aymes® Shake Compact, Ensure® that require a nutrient-specific diet eg ketogenic. Compact or a food-based alternative are The items available for self-purchasing and Aymes® Shake contraindicated Compact or Ensure Compact® are unsuitable for dietary, cultural The nutritional goal and/or religious beliefs. A review date. No 🚚 Prescribe Aymes® Shake Compact (57g sachet) OD. Yes Make up 1 sachet of Aymes® Shake Compact with 100ml of whole milk. Divide this drink into 3 x 45ml 'shots' and consume throughout the day. Once reconstituted, Aymes ® Shake Compact can be refrigerated for up to Does the patient have 24hrs. sufficient manual dexterity or the support available to prepare a Nο Prescribe Ensure® Compact, (125ml) OD. powdered product? Divide a 125ml bottle of Ensure @ Compact in to 3 x 'shots' (approx 40-45ml/shot) and consume throughout the day. Once opened, Ensure @ Compact can be refrigerated for up to 24hrs.