FOR HEALTHCARE PROFESSIONAL USE ONLY

Transitioning to

Compleat® paediatric

13.8% of Compleat® paediatric contains rehydrated chicken and rehydrated vegetables (peas & green beans), peach puree and orange juice from concentrate

Contents:

Please use this guidance to help transition your patients from their current feeds to Compleat® paediatric.

We understand patients can be sensitive to any changes in their tube feeding. The aim of this guide is to help make that transition as smooth as possible.

1 Transitioning from a whole - protein formula (intact cow's milk protein)

Protein

Fibre

Calorie Density

Osmolarity

Administration & Dosage

1 Transitioning from a whole - protein formula (intact cow's milk protein)

Protein: Compleat® paediatric is a whole protein formula. 13.8% of the ingredients are food-derived (rehydrated chicken, green beans and peas, peach puree and orange juice from concentrate)

Nutritional information

Fibre

Osmolarity

Administration & Dosage

1 Transitioning from a whole - protein formula (intact cow's milk protein)

Protein

Fibre

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Calorie Density: Compleat® paediatric is 1.2kcal/ml – The acceptability and tolerance trial shows that Compleat® paediatric is well tolerated[1].

REF Nutritional information

Administration & Dosage

1 Transitioning from a whole - protein formula (intact cow's milk protein)

Protein

Calorie Density

Fibre: Feeds with dietary fibre are appropriate for most patients. Compleat® paediatric contains 1g of fibre per 100ml. 51% of the fibre comes from the food-derived ingredients (peach, orange juice, green beans and peas). The ESPGHAN committee on Nutrition states that[2], "fibre and its fermentation products (short-chain fatty acids) have shown potential beneficial effects on intestinal physiology and the prevention of both diarrhoea and constipation. Enteral feeds providing dietary fibre were shown to help reduce diarrhoea, with hydrolysed guar gum and pectin being superior to soy polysaccharides. The use of a mixture of bulking and fermentable fibre has been suggested as a preferable approach".

Nutritional information

1 Transitioning from a whole - protein formula (intact cow's milk protein)

Protein

Fibre

Calorie Density

Osmolarity: Consider a change in osmolarity from feed previously. High osmolarity may exacerbate symptoms of poor tolerance including diarrhoea[2]. Compleat® paediatric is iso-osmolar (280mOsm/l)

REF Nutritional information

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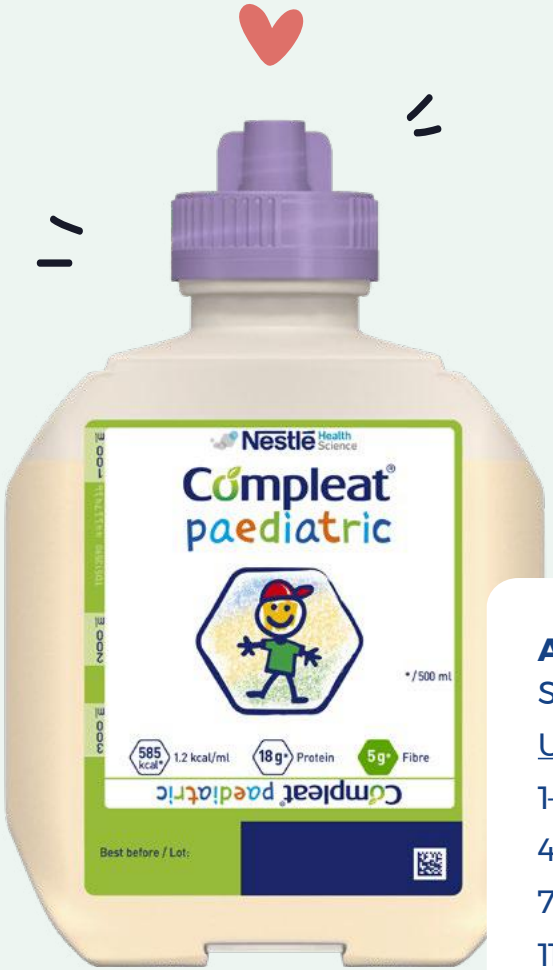
Fibre



Osmolarity

Calorie Density

Administration & Dosage: Shake well before use. Suitable as a sole source of nutrition.

UK Nutritionally complete in:

1–3 years: 700ml*

4–6 years: 929ml*

7–10 years: 1000ml**

11–14 years: 1450ml**

15–18 years: 1800ml**

* excluding Na ** excluding Na, K & Cl

2 Transitioning from a peptide-based (partially hydrolysed) formula

Protein

Fibre

Calorie Density

Osmolarity

Administration & Dosage

2 Transitioning from a peptide-based (partially hydrolysed) formula

Protein: Compleat® paediatric is a whole protein formula. Children have tolerated a transition from peptide formulas successfully.

Case Study

Calorie Density

Fibre

Osmolarity

Administration & Dosage

2 Transitioning from a peptide-based (partially hydrolysed) formula

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Fibre

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Administration & Dosage

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Nutritional information

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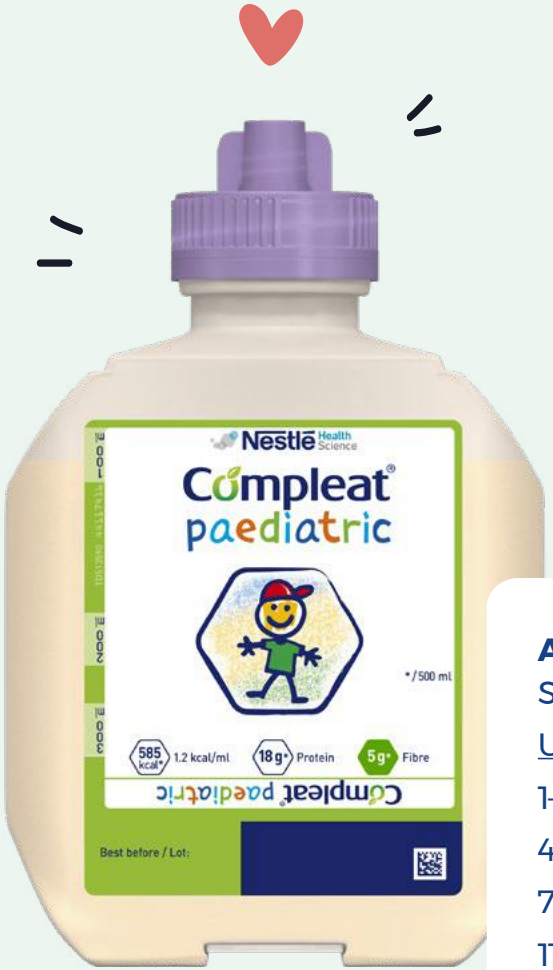

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3 Transitioning from an extensively hydrolysed or amino acid formula

Protein

Fibre

Calorie Density

Osmolarity

Administration & Dosage

3 Transitioning from an extensively hydrolysed or amino acid formula

Protein: Compleat® paediatric is a whole protein formula. While some children have tolerated a transition from both extensively hydrolysed and amino acid formulas to Compleat® paediatric successfully, Compleat® paediatric **is not suitable** for children with milk and fish allergy.

Case Studies Nutritional information

Fibre

Osmolarity

Administration & Dosage

3 Transitioning from an extensively hydrolysed or amino acid formula

Protein

Fibre

Osmolarity

Administration & Dosage

Calorie Density: Take into consideration the increased/ decreased volume of fluid in Compleat® paediatric from previous formula and potential requirement for extra fluids.

Nutritional information

3 Transitioning from an extensively hydrolysed or amino acid formula

Protein

Calorie Density

Fibre: Peptide and amino acid feeds generally don't contain any fibre or have a low fibre content. Be mindful of this when transitioning to Compleat® paediatric, a gradual introduction is recommended.

Nutritional information

Administration & Dosage

3 Transitioning from an extensively hydrolysed or amino acid formula

Protein

Fibre

Calorie Density

Osmolarity: Consider a change in osmolarity from feed previously. Compleat® paediatric is iso-osmolar (280mOsm/l)

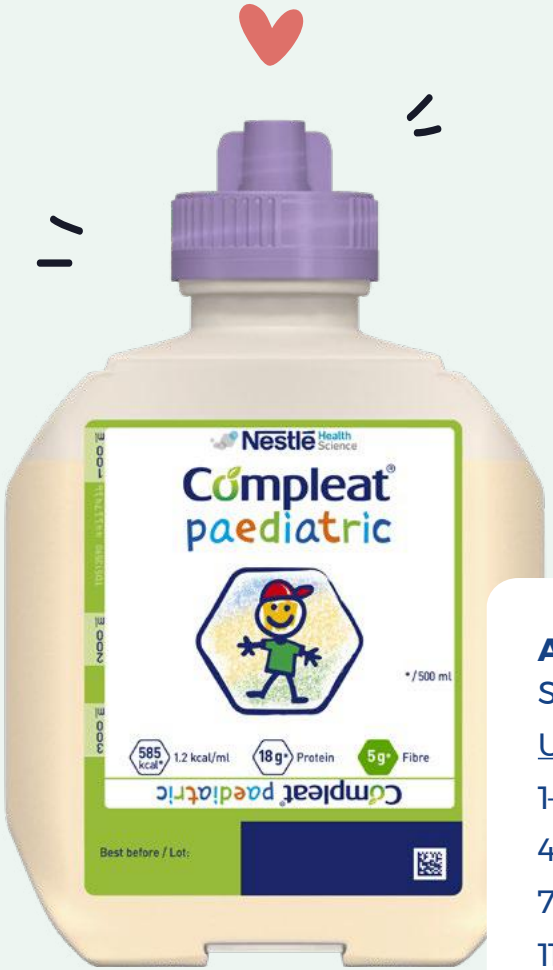
Nutritional information

& Dosage

3 Transitioning from an extensively hydrolysed or amino acid formula

Protein

Fibre



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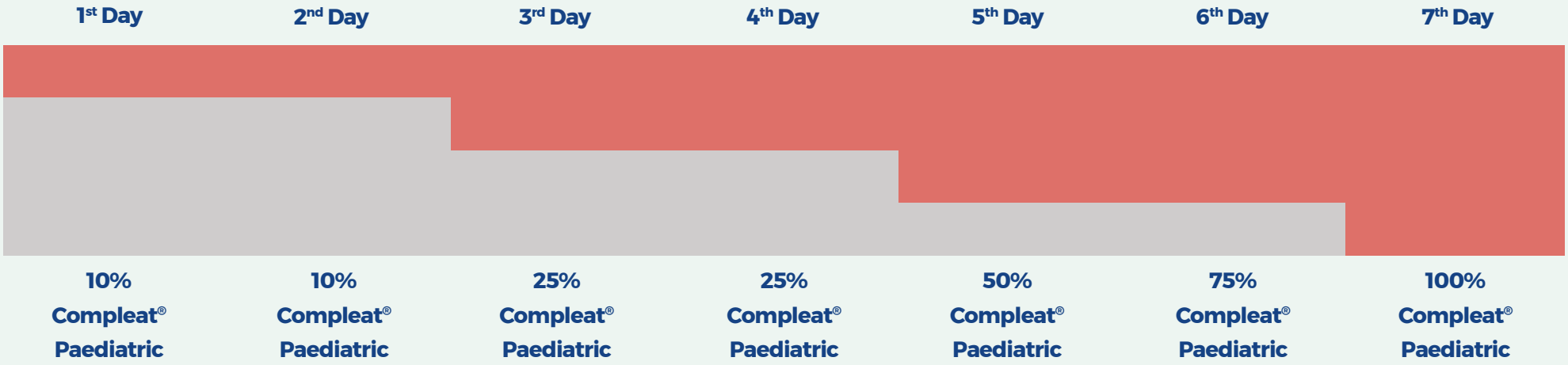
3 Transitioning from an extensively hydrolysed or amino acid formula

Regimen Considerations

- Using clinical judgement, consider adding the new feed in gradually. The table below is an example titration guide. You may feel it is appropriate to introduce more slowly and in lower volumes.



- Focus on symptom changes/improvements

Compleat® paediatric

3 Transitioning from an extensively hydrolysed or amino acid formula

Considerations for parental/carers wishes and expectations

- Take into consideration parental/carers anxieties and wishes in starting a new feed – they may wish to change over gradually
- Do they wish to use Compleat® paediatric in addition to a homemade blended diet?

Useful Resources:

BDA Practice Toolkit: The Use of Blended Diet with Enteral Feeding Tubes

Nutrition and dietetics service: Blended diet via a low profile balloon gastrostomy feeding tube Essex (Basildon, Brentwood and Thurrock

Compleat® paediatric

3 Transitioning from an extensively hydrolysed or amino acid formula

Further guidance on allergies

Some children on tube feeds who have been fed amino acid or extensively hydrolysed formulas may never have been introduced to food allergens before. Ideally, when introducing new foods, you would follow NHS guidance for the introduction of new foods that could trigger an allergic reaction and introduce the following allergens one at a time to check for a reaction; cow's milk, egg, cereals containing gluten, nuts and peanuts, seeds, soya, shellfish, mustard, celery and fish[3]. With tube feeding, introduction of allergens one at a time is not possible. In order to mitigate any risk please use the check list below (Table 1 Allergen list):

NHS guidance **Food allergy and intolerances** **Table 1 Allergen list**

- Check how food allergens in your current formulation match to Compleat® paediatric if they contain the same allergens; milk protein and fish protein. Please note Compleat® paediatric contains chicken, which is not a common allergen but can cause a reaction in Food Protein Induced Enterocolitis Syndrome (FPIES)
- If mixed feeding, having tastes and/or blended diet, check to see if the food allergens contained in Compleat® paediatric (milk and fish) are already consumed regularly and safely in oral diet (NB patient medications may also contain these food allergens)
- Check for a documented clinical history of a food allergy
- If food allergy is suspected to milk and fish, take a detailed allergy history. Full details of what to cover in an allergy history can be found on the **NICE CKS** and **IFAN and IAAI Statement**
- Consider parental allergies and co-morbid atopic conditions such as asthma, eczema, or allergic rhinitis

Compleat® paediatric

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Table 1 Allergen list

	Gluten Free	Milk Free	Egg Free	Soya Free	Wheat Free	Nut and Peanut Free	Fish Free	Mustard Free	Celery Free	Sesame Free	Molluscs/ Crustaceans Free
Compleat® paediatric	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes

- Consider parental allergies and co-morbid atopic conditions such as asthma, eczema, or allergic rhinitis

NHS guidance Food allergy and intolerances

3 Transitioning from an extensively hydrolysed or amino acid formula

Further guidance on allergies

Table of guidance once a detailed allergy history has been taken

Food Allergy Scenario	Recommended Action
If a food allergy to either milk or fish are confirmed	Do not introduce Compleat® paediatric before seeking advice from an allergy specialist
If a food allergy to either milk or fish are suspected Please note Compleat® paediatric contains chicken, which is not a common allergen but can cause a reaction in (FPIES)	**IgE** • Arrange SPT &/or serum- specific IgE in line with local guidelines and refer or seek advice from a specialist allergy centre before introducing Compleat® paediatric
	Non-IgE &/or FPIES • Align with local guidelines and refer or seek advice from a specialist allergy centre before introducing Compleat® paediatric
If no suspected food allergy to either milk or fish but a diet history shows that these allergens have not been regularly or recently included in the patient's diet:	**Hospital patient** Swap to Compleat® paediatric and monitor patient
	Home environment Recommend possible trial of a peptide-based formula. If no reaction continue with Compleat® paediatric (rationale: if patient had an undiagnosed allergy to CMA then the reaction is likely to be mild if they have previously been on an amino acid formula)
If no suspected food allergy to either milk or fish and these food proteins have regularly and recently been included in the patient's diet through tastes, blends, feeds or medicines	Continue to introduce Compleat® paediatric

BSACI allergy centres

Irish Food Allergy Network

Acknowledgements
This guidance was created with the help of Dr. Su Bunn (Aberdeen, Scotland), Marti van der Linde (Worcestershire North), Deborah Griffin (Cork, Ireland) and Kristian Bravin, RD, MSc, Specialist Paediatric allergy and gastroenterology dietitian (University Hospitals Leicester).

Where insufficient evidence exists, recommendations are based on best practice. Each patient is an individual; this tool has been developed to support clinical practice and should be used in conjunction with clinical judgment and patient and carer wishes.

References
1. Thorton-Wood, C. & Saduera, S. J Neonatol Clin Pediatr. 2020:7;50:1-5. **2.** Braegger C, et al; ESPGHAN Committee on Nutrition. Practical approach to paediatric enteral nutrition: a comment by the ESPGHAN committee on nutrition. JPediatr Gastroenterol Nutr 2010;51:110-22 **3.** NHS. Food allergies in babies and young children. Accessed July 2021. Available from: https://www.nhs.uk/conditions/baby/ weaning-and-feeding/food-allergies-in-babies-and-young-children/

Compleat® paediatric

Glossary

IgE	Immunoglobulin (Ig)E-mediated food allergy follows exposure and sensitisation to trigger food allergen(s) with the development of serum-specific IgE antibody. It produces immediate and consistently reproducible symptoms which may affect multiple organ systems. Reactions typically occur up to 2 hours after cow's milk protein ingestion, usually within 20–30 minutes
Non-IgE	Non-IgE-mediated food allergy involves a cell-mediated mechanism and reactions are typically delayed. They usually manifest between 2 and 72 hours after cow's milk ingestion
FPIES	Food Protein Induced Enterocolitis Syndrome (FPIES) is a delayed (non IgE mediated) food allergy which leads to repeated vomiting and other gastrointestinal symptoms 1-6 hours after a problem food (or formula) is eaten
Galactosaemia	Galactosaemia, which means "galactose in the blood," refers to a group of inherited disorders that impair the body's ability to process and produce energy from a sugar called galactose
Whole Protein Formula	Contains intact cow's milk proteins
Partially Hydrolysed Formulas	The proteins are broken down into smaller peptides. Not suitable for allergy management
Extensively Hydrolysed Formulas	The proteins are broken down by hydrolysis into smaller peptides and some free amino acids. Usually clinically tested for the dietary management of cow's milk allergy
Amino Acid Formulas	Contains no whole proteins but free individual amino acids