



A guide to...

High Energy and High Protein Diet for Children *Patient Information*

How to contact us

Nutrition and Dietetics
Watford General Hospital
West Hertfordshire Hospitals NHS Trust
Vicarage Road Watford
Hertfordshire WD18 0HB

Tel: 01923 436 236

If you need this leaflet in another language, large print, Braille or audio version, please call **01923 217 198** or email westherts.pals@nhs.net



Author	Diana David
Department	Nutrition and Dietetics
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Children grow at different rates and in some children their growth may be slower than expected. This may be due to factors such as poor appetite or difficulties in meeting their increased nutritional requirements. It is important that children meet their nutritional needs to help them grow, minimise their risk of malnutrition and reach their full potential for good health.

It is important for everyone to have foods from all food groups (carbohydrates, protein, fats, dairy, fruits and vegetables). When following a high energy and high protein diet, it is encouraged to increase the amount of fat and protein-containing foods.



The following information will give you guidance on a 'food first' approach to increase the energy and protein content of foods and drinks, which will help meet your child's nutritional requirements.








General advice








- Encourage three meals a day – aim to offer breakfast, lunch, and dinner.
- Aim for two to three snacks throughout the day – offer in between meals.
- Large portion sizes can be off putting to some children, so offer small meals and snacks more often.
- Offer a pudding after each meal
- Use a range of full-fat products – e.g. whole milk, gold top Jersey milk, double cream, full-fat yoghurt and full-fat cheese.
- Offer drinks after food has been offered first – this is to avoid children from feeling full.
- Fortify food with extra calories and protein – see below.







Food fortification

Food fortification involves adding common household ingredients to regular meals and drinks to boost their nutritional value without increasing the portion size. Below are examples of food fortifiers you can use to enhance the nutritional content of your child's meals and beverages:

Fortifier	Amount	Nutritional information	Where to use
Dried skimmed milk powder 	1 tablespoon (15g)	50kcal 5.0g protein	Milk (see page x) Hot chocolate Milkshakes / smoothies Cereals / porridge Creamy soups Mashed potatoes
Butter 	1 teaspoon (5g) 1 tablespoon (15g)	37kcal <0.1g protein 100kcal <0.1g protein	Bread: toast, bagel, sandwich, croissant, brioche, naan, roti, chapati, paratha Pancakes, waffles Rice, pasta / Porridge Main meals: Cooked vegetables Sauces / gravies Mashed potatoes / Eggs Crackers, biscuits


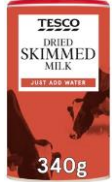
<p>Ghee</p> 	<p>1 teaspoon (5ml)</p>	<p>45kcal <0.1g protein</p>	<p>Naan, roti/chapati, paratha Curries Cooked vegetables Rice</p>
<p>Olive oil</p> 	<p>1 tablespoon (15ml)</p>	<p>130kcal 0.0g protein</p>	<p>Cooked vegetables Main meals Pasta and grains Sauces Soups / stews Mashed potatoes Eggs</p>
<p>Cream (e.g. double, whipped, squirty)</p>  	<p>1 tablespoon (15ml)</p>	<p>70kcal 0.5g protein</p>	<p>Porridge / cereals Creamy soups Creamy main dishes Mashed potatoes Sauces / gravies Milkshakes / smoothies / hot chocolate Puddings Scrambled eggs / omelettes Yoghurt</p>
<p>Coconut cream</p> 	<p>1 tablespoon (15ml)</p>	<p>35kcal 0.2g protein</p>	<p>Curries Soups Milkshakes / smoothies Puddings Sauces / gravy Mashed potatoes / Pasta</p>
<p>Hard cheese:</p> <p>Cheddar</p>  <p>Parmesan</p> 	<p>1 matchbox-size piece (30g)</p> <p>1 matchbox-size piece (30g)</p>	<p>125kcal 8.0g protein</p> <p>121kcal 10.0g protein</p>	<p>Pasta Pizza Soups Sauces Sandwiches Mashed potatoes</p> <p>Baked main meals Scrambled eggs / omelettes</p>

<p>Soft cheese</p> 	1 tablespoon (15g)	35kcal 1.0g protein	Bread: toast, bagels Sauces / gravies Soups Scrambled eggs / omelettes Mashed potatoes
<p>Full-fat Greek yoghurt</p> 	1 pot (100g)	99kcal 4.0g protein	Milkshakes / smoothies Porridge Fruits Sauces Soups Dips
<p>Mayonnaise</p> 	1 tablespoon (15g)	97kcal <0.1g protein	Sandwiches Wraps Burgers Dips Baked main meals
<p>Egg white powder</p> 	1 teaspoon (5g)	15kcal 3.5g protein	Milkshakes / smoothies Juice Sauces / gravies Soups
<p>Jam, marmalade, honey</p> 	1 tablespoon (15g)	38-50kcal <0.1g protein	Bread: toast, bagels, sandwiches Cereals / porridge Pancakes / waffles Smoothies
<p>Dried fruit</p> 	30g	100kcal 0.7 protein	Cereals / porridge Cakes Yoghurt
<p>Seeds</p> 	1 tablespoon (15g)	75kcal 3.5g protein	Cereals / porridge Cakes Yoghurt
<p>Nuts</p>	1 tablespoon (15g)	95kcal 3.7g protein	Milkshakes Bread: toast, bagels, sandwiches Crackers / biscuits Fruits (eg: apple slices, bananas)

<p>Nut butter</p>  <p>Whole nuts</p> 	<p>30g</p>	<p>166kcal 6.4g protein</p>	<p>Cakes Soups Porridge Milkshakes Yoghurt</p>
<p>Avocado</p> 	<p>1 medium avocado (80g)</p>	<p>158kcal 1.5g protein</p>	<p>Toast / bagel Sandwiches Wraps Dips Smoothies</p>
<p>Pesto</p> 	<p>1 tablespoon (15g)</p>	<p>80kcal 1.0g protein</p>	<p>Pasta Sauces Sandwiches Soups Pizza</p>
<p>Hummus</p> 	<p>1 tablespoon (15g)</p>	<p>35kcal 1.0g protein</p>	<p>Toast / bagel Sandwiches Wraps Dips Pasta</p>
<p>Tahini (sesame paste)</p> 	<p>1 tablespoon (15g)</p>	<p>90kcal 3.0g protein</p>	<p>Hummus Bread: toast, bagels, sandwiches Wraps</p>

Fortified milk recipe

Full-fat milk (whole milk) is rich in calories, protein, and calcium. To boost its nutritional value even further, you can add milk powder to full-fat milk:

Ingredients	Instructions	Where to use
<p>1 pint (568ml) full-fat (whole) milk – 375kcal, 20.0g protein</p> <p>4 heaped tablespoon dried skimmed milk powder – 205kcal, 21.0g protein</p> <div style="display: flex; justify-content: space-around;">   </div> <p>Total: 580kcal, 41.0g protein</p>	<p>Make a paste with a small amount of milk and milk powder together.</p> <p>Mix the milk paste with the rest of the milk.</p>	<p>Hot chocolate</p> <p>Milkshakes / smoothies</p> <p>Soups</p> <p>Sauces / gravies</p> <p>Cereals / porridge</p> <p>Milky puddings – e.g. custard, rice pudding, Angel Delight</p>

Note: Dried skimmed milk powder is recommended as it contains more protein than dried full cream milk powder.

Snack Ideas

Below are some examples of snacks to offer in between meals:



Cheese and crackers



Peanut butter sandwich



Breadsticks / crackers / vegetable sticks and hummus



Yoghurt



Rice pudding



Custard



Apple slices with peanut butter



Strawberries and cream



Banana and custard



Brioche



Croissant



Pancakes



Hot chocolate



Milkshakes



Fruit smoothies