



MCT Diet

Information booklet for parents



Little Hearts Matter
Half a heart...not half a life

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INTRODUCTION

The MCT diet is a specialised diet which is sometimes required by children for a short period of time in hospital after surgery or for periods of time at home. If your child requires this diet, the medical staff at your child's hospital will advise you of the requirement, and the dietician will help you to understand how to follow the diet at home, and when to go back to your child's usual diet. The dietician will also provide recipes and food supplements as required. This booklet is designed to be used in conjunction with the information and recipes from your dietician, and aims to provide further recipe ideas, useful food ideas, and to encourage families at what can be a difficult time by providing practical information.

Please do not follow this diet unless you have been instructed to do so by your child's cardiology team.

The MCT (Medium Chain Triglycerides) diet is prescribed when a child or young person is experiencing problems with building up of fluid levels within their chest or abdomen.

Everyone has a collection of lymph vessels, which are similar to blood vessels. During cardiac surgery, a lymph vessel may get damaged which will cause its contents (lymph fluid) to leak into the chest space. Lymph fluid may also seep from the lymph system into the chest or abdomen due to differences in pressure within the circulation. The collection of lymph fluid in the chest is called a chylothorax.

To help reduce this fluid and allow the lymph vessels to heal, a diet that includes a reduced fat intake, the MCT diet, will be prescribed. Your child's medical team may also prescribe a low fluid intake.

It sounds quite daunting and does require some extra effort, but it is only for a fairly short period of time. Your child's dietician will be able to help you with any concerns you have, and other parents (who you can contact via Little Hearts Matter) may have ideas which worked for their child which could help you.

Foods allowed freely on the MCT diet need to have less than 0.2g fat per serving (not per 100g). In general terms, this includes most fruit and vegetables, skimmed milk products, water or fruit juice based drinks, and some foods you have made yourself using MCT oil which is a safe fat.

Your dietician will send you home with a supply of MCT oil, Liquigen and any calorie supplements or other prescription items you need.

| Allowed | Not Allowed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|-------------|-------|-----------|-----------|------|----|-------|-------|------|-------|----|-----|-----|-----|-----|---|----------|-------|-----|-----------|------|-----|-------|------|------|------|----|-----|----|----|----|
|  <p>Weight Watchers 5 Carrot cake slices</p> <p>Each Slice contains:</p> <table border="1"> <tr> <td>Calories</td> <td>Sugar</td> <td>Fat</td> <td>Saturates</td> <td>Salt</td> </tr> <tr> <td>84</td> <td>13.2g</td> <td>0.2g</td> <td>0.1g</td> <td>0.1g</td> </tr> <tr> <td>4%</td> <td>15%</td> <td><1%</td> <td><1%</td> <td><1%</td> </tr> </table> <p>of an adult's guideline daily amount Serving suggestion</p> <p>LOW FAT</p> | Calories | Sugar | Fat | Saturates | Salt | 84 | 13.2g | 0.2g | 0.1g | 0.1g | 4% | 15% | <1% | <1% | <1% |  <p>Weight Watchers Oat chocolate chip cookies</p> <p>Each serving (2 Cookies) contains:</p> <table border="1"> <tr> <td>Calories</td> <td>Sugar</td> <td>Fat</td> <td>Saturates</td> <td>Salt</td> </tr> <tr> <td>86</td> <td>3.6g</td> <td>3.5g</td> <td>0.8g</td> <td>0.1g</td> </tr> <tr> <td>4%</td> <td>4%</td> <td>5%</td> <td>4%</td> <td>2%</td> </tr> </table> <p>of an adult's guideline daily amount Serving suggestion</p> <p>9 PACKS OF 2 COOKIES 18 COOKIES PER PACK</p> | Calories | Sugar | Fat | Saturates | Salt | 86 | 3.6g | 3.5g | 0.8g | 0.1g | 4% | 4% | 5% | 4% | 2% |
| Calories | Sugar | Fat | Saturates | Salt | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 84 | 13.2g | 0.2g | 0.1g | 0.1g | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4% | 15% | <1% | <1% | <1% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calories | Sugar | Fat | Saturates | Salt | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 86 | 3.6g | 3.5g | 0.8g | 0.1g | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4% | 4% | 5% | 4% | 2% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  <p>TESCO 8 MERINGUE NESTS</p> <p>Each nest contains</p> <table border="1"> <tr> <td>Calories</td> <td>Sugar</td> <td>Fat</td> <td>Saturates</td> <td>Salt</td> </tr> <tr> <td>55</td> <td>12.1g</td> <td>trace</td> <td>0g</td> <td>trace</td> </tr> <tr> <td>3%</td> <td>13%</td> <td><1%</td> <td>0%</td> <td><1%</td> </tr> </table> <p>of your guideline daily amount</p> | Calories | Sugar | Fat | Saturates | Salt | 55 | 12.1g | trace | 0g | trace | 3% | 13% | <1% | 0% | <1% |  <p>TESCO INCREDBLY FRUITY raspberry & cranberry LOW FAT YOGURT</p> <p>Each pot contains:</p> <table border="1"> <tr> <td>Calories</td> <td>Sugar</td> <td>Fat</td> <td>Saturates</td> <td>Salt</td> </tr> <tr> <td>145</td> <td>24.5g</td> <td>1.5g</td> <td>0.2g</td> <td>0.1g</td> </tr> <tr> <td>7%</td> <td>27%</td> <td>2%</td> <td>0%</td> <td>0%</td> </tr> </table> | Calories | Sugar | Fat | Saturates | Salt | 145 | 24.5g | 1.5g | 0.2g | 0.1g | 7% | 27% | 2% | 0% | 0% |
| Calories | Sugar | Fat | Saturates | Salt | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 55 | 12.1g | trace | 0g | trace | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3% | 13% | <1% | 0% | <1% | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Calories | Sugar | Fat | Saturates | Salt | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 145 | 24.5g | 1.5g | 0.2g | 0.1g | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7% | 27% | 2% | 0% | 0% | | | | | | | | | | | | | | | | | | | | | | | | | | | |

In addition, your child will be allowed a set number of daily portions of food which include 1g of fat. This may be referred to as a system of exchanges. A four-year old would typically be allowed three exchanges per day. These are usually either the protein part of the meal (e.g. a 30g portion of skinless chicken breast, a 100g portion of plain white fish such as cod) or a treat from a special list of permitted treats (e.g. a Jaffa Cake).



Many foods will have to be excluded completely from the child's diet for this time, in particular many types of meat (unless given in extremely small portions and counted as an exchange), sausages, normal cheese, nuts, egg yolk or foods containing whole eggs, potato products such as oven chips or waffles, chocolate, most biscuits and cakes.

However, with some imagination and careful shopping, and plenty of patience in the kitchen, it should be possible to offer your child reasonable alternatives for some of their favourite foods. For example, although the child is not allowed chocolate, they could have a hot chocolate milk drink made with skimmed milk and chocolate flavouring (liquid flavouring or essence from the baking section of the supermarket, not chocolate powder). You might find it helpful to involve your child with the shopping and cooking.

Try not to worry about your child's weight whilst they are on the MCT diet. Your dietician will support you with calorie supplements as required.



MEAL IDEAS

The following pages contain some ideas for different meals of the day, which are suitable for a child following the MCT diet. This section is followed by some recipe ideas, showing children's meals and also foods which can be used for the whole family. **Please always check the fat content of the foods you are using, as products change over time.** Further information and ideas can be provided by your dietician or by Little Hearts Matter.

Please do contact LHM if you are looking for a particular type of food, for example recipes for Christmas or for a birthday.

Breakfast

| | Free | Exchanges | Recipe |
|--|------|------------|---------|
| Rice Krispies/Frosties/Ricicles with MCT milk | ✓ | | |
| 1/2 Weetabix with MCT milk | ✓ | | |
| 2 Weetabix with MCT milk | | 1 exchange | |
| 2 slices toast with MCT spread | | 1 exchange | |
| 2 slices toast with jam / Marmite / honey only (no butter) | | 1 exchange | |
| MCT omelette | ✓ | | Page 21 |

Snacks

| | Free | Exchanges | Recipe |
|-------------------------|------|-----------|-------------|
| Fresh fruit | ✓ | | |
| Cheese straws | ✓ | | Page 23 |
| Homemade cakes/biscuits | ✓ | | Pages 39-45 |

Snacks continued

| | Free | Exchanges | Recipe |
|--|------|------------|--------|
| Apple crisps (check packet) | ✓ | | |
| One sponge finger | ✓ | | |
| Dried apricots and raisins (plain, not coated) | ✓ | | |
| 1/2 packet M&S Count on Us salt and vinegar fries | ✓ | | |
| M&S Count on Us baked crisps | | 1 exchange | |
| Sainsbury's be good to yourself crisps | | 1 exchange | |
| Weight Watchers Lightly Salted Hoops have 0.3g fat per pack, so 2/3 packet is free. | ✓ | | |
| Weight Watchers Cheese Puffs have 1.9g fat per pack, so 1/2 packet is 1 exchange. | | 1 exchange | |
| Tesco Light Choices Mini Pretzels have 0.6 or 0.7g fat per pack | | 1 exchange | |
| Tesco Light Choices Potato Thins have 0.4 or 0.5g fat per pack, so 1/2 pack is free. | ✓ | | |
| 1 Jaffa cake | | 1 exchange | |
| 1 Light rich tea biscuit | | 1 exchange | |
| Seafood sticks (fat content varies by brand). Usually 1 stick contains less than 0.2g fat. 4 - 5 sticks would be 1 exchange. | | 1 exchange | |

Snacks continued

| | Free | Exchanges | Recipe |
|--|------|---|--------|
| <p>Examples of snack bars at time of printing</p> <p>Tesco Light Choices Forest Fruit and Raisin bars (0.7g fat per bar)</p> <p>Tesco Light Choices Raisin Crispy Slices (0.6g fat per biscuit)</p> <p>Weight Watchers Caramel Mallows (0.4g fat per mallow). 2 mallows</p> <p>Be careful not to choose cereal bars with cranberries in as this may affect your child's Warfarin levels.</p> | | <p>1 exchange</p> <p>1 exchange</p> <p>1 exchange</p> | |
| Weight Watchers Coconut Cake Slices contain 0.9g fat per cake slice | | 1 exchange | |
| Weight Watchers Blueberry Cake Slices contain 0.6g fat per cake slice | | 1 exchange | |
| Weight Watchers Carrot Cake Slices contain 0.2g per cake slice | ✓ | | |
| Tesco Light Choices Carrot and Orange Cake Slices contain 0.3g fat per slice. 2/3 of slice is free | ✓ | | |
| Tesco Light Choices Date and Walnut Cake Slices contain 0.3g fat per slice. 2/3 of slice is free | ✓ | | |

Many of the above crisps and cakes can only be found in larger supermarkets, and come in multi-packs.

Lunch

| | Free | Exchanges | Recipe |
|--|------|------------|---------|
| Seafood sticks (fat content varies by brand). Usually 1 stick contains less than 0.2g fat. 4 - 5 sticks would be 1 exchange. | | 1 exchange | |
| Jacket potato with baked beans / tinned spaghetti / small portion Weight Watchers cheese | | 1 exchange | |
| Bacon sandwich (made with smoked turkey rashers) | | 1 exchange | |
| Cheese spread sandwich made with Laughing Cow Extra Light (0.3g fat per triangle). 1 triangle plus 2 slices of bread | | 1 exchange | |
| MCT omelette | | | Page 21 |
| <p><i>Accompaniment</i></p> <p>Carrot/celery/pepper/cucumber sticks plus 2 Tesco mini bread sticks with dip. Cherry tomatoes.</p> <p>Seafood sticks (see above)</p> <p>Home made potato wedges.</p> <p>Dips can be made from zero fat natural yoghurt (many supermarkets do an own brand virtually fat free natural yoghurt e.g Tesco Healthy Living which has 0.1g fat per serving. Also Total 0% Greek natural yoghurt is completely fat free.</p> | | 1 exchange | Page 28 |

Lunch continued

| | Free | Exchanges | Recipe |
|--------------------------------|------|------------|---------|
| Pizza | | 1 exchange | Page 24 |
| Mushroom risotto (use MCT oil) | ✓ | | |

Dinner

| | Free | Exchanges | Recipe |
|--|------|------------|---------|
| Turkey pie | | 1 exchange | Page 27 |
| Pasta with sauce | ✓ | | Page 32 |
| Kedgeriee | | 1 exchange | |
| 1 Skinny Lizzie sausage with mash (made with MCT milk) and beans or vegetables | | 1 exchange | |
| Mushroom Risotto (use MCT oil) | ✓ | | |
| Fruity vegetable curry | ✓ | | Page 36 |
| Turkey breast burgers | | 1 exchange | Page 25 |
| Roast chicken with vegetables roasted in MCT oil (30g portion of chicken breast, do not baste during cooking, take skin back before cooking and cover with foil) | | 1 exchange | |
| Fish pie (cod or haddock, sauce made from skimmed milk, mash made with skimmed milk) | | 1 exchange | |

See recipe pages for more ideas. Vegetarian meals are more likely to be 'free' than those containing meat or fish.



Puddings

| | Free | Exchanges | Recipe |
|---|------|-----------|---------|
| Fresh or tinned fruit | ✓ | | |
| Muller Light yoghurts - there are some 'smooth' yoghurts, so do check if your child prefers ones without bits (check label) | ✓ | | |
| Jelly (or fruit in jelly) | ✓ | | |
| Meringue nests with fruit (and zero fat fromage frais instead of cream, if necessary mixed with jam to sweeten) | ✓ | | |
| Custard made from custard powder such as Bird's and using MCT milk | ✓ | | |
| Rice pudding made with MCT milk (home-made, not tinned) | ✓ | | |
| Fairy cakes | ✓ | | Page 40 |
| Eton Mess made with strawberries or other fruit, meringues and fat free natural yoghurt | ✓ | | |

Drinks

| | Free | Exchanges | Recipe |
|----------|------|-----------|--------|
| Water | ✓ | | |
| MCT milk | ✓ | | |

Drinks continued

| | Free | Exchanges | Recipe |
|--|------|------------|--------|
| Squash (you may wish to not choose sugar free drinks whilst your child is on the MCT diet so that they are getting as many calories as possible, however good teeth cleaning will be extremely important) | ✓ | | |
| Some drinking yoghurt e.g. Actimel 0.1% (has 0.1g fat per small bottle) or Tesco low fat Probiotic | ✓ | | |
| Some fruit smoothies (or home-made smoothies, made with zero fat natural or vanilla yoghurt plus fruit) e.g. Innocent smoothies have 0.2g fat per carton | ✓ | | |
| Pure fruit juices e.g. apple juice | ✓ | | |
| Some powdered milkshakes are OK, made with MCT milk, but check the labels carefully. Nesquick strawberry and banana powders can be added to MCT milk, but their chocolate version contains too much fat so cannot be used. | ✓ | | |
| Weight Watchers hot chocolate drink | | 1 exchange | |
| Crusha milkshake mix or Quick milk magic sippers, made with MCT milk | ✓ | | |

MCT DIET ALTERNATIVES

| 'Normal' Diet | MCT Diet suggested alternative (Always check labels as these products may change over time) |
|---|---|
| <p>Cheese</p>  | <p>At the time of printing, only a very small portion size of specialist low fat cheeses would be permitted on this diet, and would count as one exchange. However, it is worth checking the labels again, as in the past a much larger portion size was permitted.</p> <ul style="list-style-type: none"> • Weight Watchers Low Fat Mature Cheese. A 10g portion would count as one exchange. • Some supermarkets do an own brand low fat mature cheese. At the time of printing, these would not be suitable for the MCT diet, but please check the labels when your child needs this diet. |
| <p>Bacon</p>  | <ul style="list-style-type: none"> • Turkey Rashers e.g. Tesco Healthy Living Range or Mattessons Original Turkey Rasher - 2 rashers have 0.3g fat (rashers are quite large - these taste better fried in MCT oil, not grilled!) - you could use a serving of one to one and a half rashers without needing to count towards the daily exchange allowance. • Tesco also do a Health Living Back Bacon, where 1 small rasher has 1g fat, which could count as one exchange. |
| <p>Burgers</p> | <ul style="list-style-type: none"> • Ostrich Burgers - available from farmers' markets - 1/4lb burger contains 1.4g fat - to make it count as one exchange, cut the bottom off the burger so that it is about 3/4 of its original size, but still looks like a burger. • Home-made turkey breast burgers (see recipes). |

| 'Normal' Diet | MCT Diet suggested alternative (Always check labels as these products may change over time) |
|--|--|
| Sausages | <ul style="list-style-type: none"> • Skinny Lizzie low fat pork sausages have 0.9g fat per sausage, so a child could have 1 sausage as part of a meal and count it as one exchange. |
| Pizza | <ul style="list-style-type: none"> • Home-made vegetable pizza made with a small portion of Weight Watchers cheese (see recipes). |
| Chocolate  | <p>Chocolate flavouring/essence for milk drinks, home-made chocolate cake or biscuits (see recipes) or Weight Watchers hot chocolate drink - 1 sachet would be one exchange. It is especially important to check the labels of chocolate substitute products, to make sure that the fat content isn't too high, and to see whether a portion needs to be counted as an exchange.</p> |
| Crisps  | <ul style="list-style-type: none"> • Various brands of apple crisps e.g. Whitworth's, Snapz (usually up to 0.1g fat per packet, so can be eaten freely). • M&S Count on Us range. • Sainsbury's be good to yourself range. • Tesco Light Choices range. <p>Think about how best to use your child's daily exchange allowance. Some of these packets of crisps contain 0.4g fat per bag so you could give half a packet as a snack, without it needing to count towards their exchanges. Others contain 0.6 or 0.7g fat per packet so may need to count as one exchange. Check labels very carefully.</p> |



SHS

Liquigen® 250 ml e

A HIGH ENERGY MEDIUM CHAIN TRIGLYCERIDE (MCT) EMULSION

For the dietary management of patients with fat malabsorption or for use in the ketogenic diet. A food for special medical purposes.

Important Notice: Use under medical supervision. Suitable for infants, children and adults. Does not contain vitamins, minerals or proteins and is therefore not suitable for use as a sole source of nutrition. Not for parenteral use.

Emulsione lipídica (percepción de tipo de Tricigliceridi e Medio Cadena MCT)

Indicado per a regime alimentar de pacients de malabsorció lipídica a sola font de energia per a dieta cetogènica. Alimento dietètic especial mèdic.

Liquigen pot haver estat utilitzat nella dieta cetogènica.

AVVERTENZE IMPORTANTI: Da utilizzare sotto stretto controllo medico. Adatto per bambini e adulti. Non contiene vitamine, minerali o proteine. Non adatto come unica fonte nutrizionale. Non utilizzarlo per uso parenterale.

SHS

MCT OIL

MCT Oil Maltile is a mixture of triglycerides containing mainly caprylic (C₈) and capric (C₁₀) acids. A food for special medical purposes. For the dietary management of patients with fat malabsorption and other proven malabsorption syndromes.

Important Notice: Use under medical supervision. Suitable for infants, children and adults. Not suitable for use as a sole source of nutrition. Not for parenteral use.

Precautions: Large amounts of MCT OIL taken at one time can cause nausea or diarrhea.

ACEITE MCT SHS

Mixtura emulsional de triciglicerids del sistema mitjà (MCT), amb l'acció principalment dels àcids grassos caprícs i caprícs.

Alimento dietètic destinat a usos mèdics especials. Útil per al tractament dietètic de pacients que requireixen un aliment sense hidrats de carboni i sense que malabsorció severa o intolerància digestiva a grassos. També està indicat en la elaboració de dietes cetogèniques per a l'epilepsia.

AVISO IMPORTANTE: Utilitzar sota best supervisió mèdica. Adequat per a lactants, nens i adults. Utilitzar sota en tractament per malabsorció severa o intolerància digestiva a grassos. No utilitzar com a única font de nutrients. No utilitzar per via parenteral.

PRECAUCIONES: Se recomienda introducir ACEITE MCT SHS progresivamente en la dieta. No administrar grandes cantidades de ACEITE MCT SHS en una sola toma, ya que podría provocar náuseas o diarrea.

500 ml e

Be very careful when you are reading labels, as there are lots of different labelling systems, some of which are quite confusing. Some foods are described as 'Low Fat' but are definitely not suitable for this diet. Others (especially diet products) may draw attention to a relatively low amount of saturated fat, but the total fat content may still be too high. Percentages of fat are sometimes quoted, which could be confusing - just ignore percentages.

There is also lots of publicity about 'good' fat e.g. Omega 3 fats found in fish such as salmon or in nuts, or trans-fats - remember that these are still not suitable for an MCT diet - the only 'good' fat for this diet is where you have cooked something yourself using MCT oil or Liquegen. (You will be given an initial supply of these products when you leave hospital, and will be given help with ordering repeat prescriptions).

You may also need to supplement your child's diet using calorie supplements such as Maxijul (usually added to milk, water or squash) if they have lost a lot of weight during hospitalisation. Once they have finished their MCT diet, your dietician may help you with continued use of supplements or prescribed high energy milkshakes.

Babies may also be prescribed the MCT diet. They would then be given a special milk such as Monogen, which can be supplemented if needed. It might be given via a nasogastric tube, or could be made more palatable using a flavouring such as Crusha milkshake mix.

We suggest your child does not eat out or eat at other people's houses for the duration of the diet; it will be much safer to provide your child's meal knowing that it is right for them – unless you have very understanding and adaptable hosts!

RECIPES

Some children like to eat the same as the rest of the family so they don't feel they are missing out, whilst others really enjoy having their own special portion. Ideas for both approaches are given in many of these recipes.

Bread maker bread recipe

If you have a bread maker, or know someone who has, the fat content of the flour means this loaf has about 7-8g fat in total, which makes each slice of bread less than half the fat content of bought sliced bread.

350 mls water

1 tablespoon MCT oil

2 tablespoons skimmed milk powder

1 1/2 tablespoons sugar

540g bread flour (mix of strong white and brown works well)

2 teaspoons dried yeast

Choose programme according to your machine.



Butter substitute ¹

serve on bread or toast as a substitute for butter.

30 mls (1 fl oz) water

30g (1 oz) dried skimmed milk powder

30 mls (1 fl oz) MCT oil

1 - 2 drops yellow food colouring

1. Add water to milk powder and mix well to form a smooth cream.
2. Using an electric mixer or whisk gradually add the oil.
3. Add colouring to resemble butter.
4. Chill to thicken.

Omelette

(makes 1 child portion)

serve with carrot / celery / pepper / cucumber sticks for lunch.



1. Fry two chopped mushrooms plus one chopped tomato in MCT oil.
2. Mix 2 egg whites with a few drops yellow colouring and whisk well with a fork.
3. Add to pan and cook through.



Cheese Straws



This recipe makes around 20 small shapes or 12 large shapes, so if your child only has one small shape as a snack, there is no need to count it towards their daily 'exchange' allowance as one small shape would have 0.2g fat. Instead they could have five small shapes and count it as one exchange.

100g self raising flour

4 tablespoons Liquigen

1 tablespoon skimmed milk powder

Approximately 3 teaspoons cold water

40g Weight Watchers low fat mature cheese, grated

1. Mix flour and milk powder, then add Liquigen, stirring with a knife.
2. Gradually add water, 1 teaspoon at a time - you may not need all of it.
3. Stir in grated cheese, and bring together to form a ball.
4. Roll out on a floured surface and cut into strips, or use small cutters to make shapes (if you have a helper!).
5. Bake on gas mark 6 or 200°C for 10 - 15 minutes.

Pizza

(makes 1 child portion)

One
exchange

Pizza need not be off limits when on the MCT diet, but you need to make it yourself and choose toppings carefully.

50g self-raising flour

1 tablespoon MCT oil

1 tablespoon skimmed milk powder

1-2 tablespoons skimmed milk

Suitable toppings

1. Mix flour with oil. Add milk gradually - you may not need all of it. Roll out to just under 1cm thick.
2. Add suitable toppings e.g tinned chopped tomatoes, thin slices of mushroom, onion, pepper, pineapple. Small amounts of lean ham or a small amount of grated Weight Watchers cheese could be added, so long as you keep an eye on the overall fat content - this would make it count as one exchange. (10g Weight Watchers cheese with one slice of Sainsbury's ham would make the pizza count as one exchange).
3. Bake for 10 - 15 minutes at gas mark 7 or 220°C.



Turkey Breast Burgers

(makes 12 burgers)



It is really important to get turkey breast mince as other turkey mince products have a much higher fat content. These are great served with mini white pitta breads and salad.

500g pack turkey breast mince (e.g. Tesco Healthy Living)

1 small sweet potato (grated)

1 small onion (chopped finely - you may prefer to fry this in MCT oil before making the burger mixture)

1 egg white

Seasoning and mixed herbs to taste

MCT oil

1. Combine all ingredients in a bowl. Make individual burger shapes with flour on your hands and on a plate to help with shaping.
2. Fry in MCT oil for around 5 minutes on one side, followed by around 3 minutes on the other side with the pan lid on to keep it moist, then another couple of minutes without the lid.

One burger served with a mini pitta bread would count as one exchange. Two burgers with no bread would also be one exchange.

You could make a batch of the mixture, then freeze it raw in burger shapes, separated by greaseproof paper, so you can get burgers out as you need them. Defrost in fridge before cooking.





Turkey Pie

(serves 4)



Your child can have up to one quarter of the pie, and it would count as one exchange.

400g (just under 1/2 pack) Tesco Value turkey pieces - or similar product with fat content of around 0.9g per 100g

1 leek

3 - 4 cooking apples (peeled and chopped)

1/2 pint stock (vegetable or chicken)

Tarragon (optional)

Potatoes plus skimmed milk

1. Boil the potatoes to make mash (remember to use skimmed milk and no butter).
2. Chop and fry leek gently in MCT oil.
3. Chop and fry turkey pieces in MCT oil. As you have to fry things quite slowly in MCT oil, you might want to do these in separate pans at the same time, then combine everything again with the apples.
4. Add stock and tarragon and simmer gently while you prepare apples. Add apples and simmer for a few minutes.
5. Put in large ovenproof dish with mash on top.
6. Cook at gas mark 5, 190°C for 35 - 45 minutes until piping hot throughout and browned on top.

Fish Fingers

(1 child portion)



150g cod/haddock fillet

Egg white

Breadcrumbs (homemade)

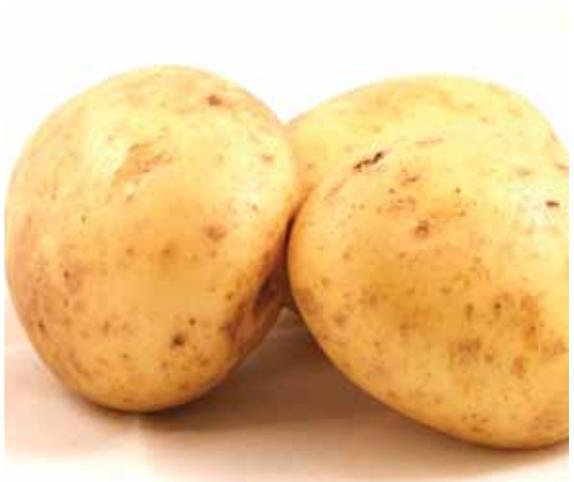
MCT oil

1. Cut the fish into strips.
2. To make the breadcrumbs simply put a slice of bread into a food processor - you can make a batch of these and freeze them, so that you can quickly get out what you need for a new meal.
3. Dip then fish into the egg white and then dip in the breadcrumbs - make sure they get a good covering.
4. Shallow fry them in a frying pan with MCT oil on a medium heat until golden.
5. Make sure the fish is cooked through completely before serving.

Chips/potato wedges/cubed potatoes

1. Cut potatoes into desired shape.
2. Par boil them for 5 minutes and dry them.
3. Shallow fry in MCT oil - be careful not to heat the oil too much as it can take on a bitter taste.
4. Add herbs (e.g. mixed herbs) for extra flavour.

See if you can borrow an Actifry from someone – this is a special fryer you can use to make home-made chips with MCT oil.



Chicken Nuggets

(1 child portion)



This recipe also works well with turkey breast and as turkey is lower in fat the portion size of meat is greater at 50g.

30g chicken breast

Egg white

Breadcrumbs (need to be homemade)

MCT oil

1. Chop the chicken into bite size chunks.
2. To make the breadcrumbs simply put a slice of bread into a food processor - you can make a batch of these and freeze them, so that you can quickly get out what you need for a new meal.
3. Dip the chicken chunks into the egg white.
4. Then dip them in the breadcrumbs - make sure they get a good covering.
5. Shallow fry them in a frying pan with MCT oil on a medium heat until golden.
6. Make sure the chicken is cooked through completely before serving.

Bolognese Sauce

(makes 5 portions, 1 exchange each)



This recipe also works well with turkey breast mince and as turkey is lower in fat the portion size of meat is greater (do check the label).

100g lean mince beef

1 small onion chopped

1 courgette chopped

Approx 100g mushrooms sliced

1 small red pepper chopped (can be green/yellow or a mix)

1 tin chopped tomatoes

Garlic 1 clove crushed

Herbs to taste (e.g. oregano/basil/mixed herbs)

MCT oil

Tomato puree

Water

1. Shallow fry the onion in MCT oil on a very low heat for as long as you can. Try to avoid stirring.
2. In a separate pan fry off the mince beef and discard any excess fat.
3. Add the onions to the beef, add garlic and fry for 5 minutes.
4. Add the chopped tomatoes and other vegetables and herbs.
5. Bring to bubbling point then turn down to a simmer for approximately 20 minutes or until the vegetables are cooked through.
6. If the sauce needs more juice add a teaspoon of tomato puree and some water.
7. Divide into 5 equal portions - can be frozen when cool.

Pasta Sauce

(serves 4)

Boil pasta plus two diced carrots whilst making this sauce, the carrots cook to soft with the pasta and it pads out the pasta and reduces the fat content of the whole meal. Provided your child has less than one quarter of the sauce, this would be a 'free' meal.

1/2 red onion

1 stick of celery

6 smoked turkey rashers

10 -15 small sliced mushrooms

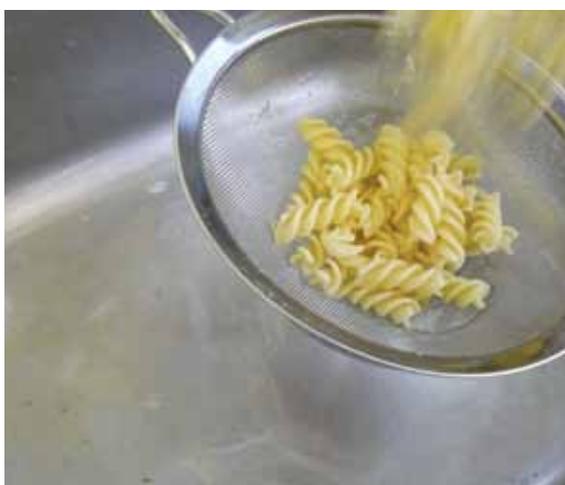
1 large courgette (diced)

1 tin chopped tomatoes

1/2 tbsp fresh herbs (oregano, mixed herbs, or basil)

or 1/2 tsp dried herbs (as above) - to taste

1. Fry the onion and celery until soft in 1 tablespoon MCT oil, using a low heat to avoid the oil burning.
2. Add the smoked turkey rashers, chopped into small pieces (instead of bacon!) cooking for about 5 minutes, stirring from time to time.
3. Add the mushrooms and courgette and cook for about 5 - 7 minutes on a medium heat.
4. Add the tin of tomatoes and herbs. You could also add a splash of red wine here.
5. Cook for 3 - 5 minutes until tomatoes come to the boil.





Smoked Haddock and Spinach Bake (serves 4)



This one pot recipe would be suitable for the whole family to eat.

- 1 large smoked haddock fillet (or 2 small fillets) - around 200g
- 4 peppercorns
- 2 bay leaves
- 300ml skimmed milk
- 25g cornflour (mixed with approx 1 tbsp cold water)
- 1/2 pack spinach (baby spinach if possible)
- 1/2 tbsp chopped chives
- Rice (white long grain)
- 20g Weight Watchers low fat mature cheese

1. Cook rice according to cooking instructions.
2. Place fish in large frying pan with peppercorns, bay leaves and milk. Bring to boil, then turn off heat and turn fish over in milk. Leave for 5 minutes.
3. Flake fish off skin into ovenproof dish (or individual dishes).
4. Strain milk then bring to boil slowly, adding cornflour/water mixture to thicken. Simmer for 2 minutes, then add spinach and cook for 2 - 3 minutes.
5. Add cooked rice to dish and pour sauce over fish and rice and sprinkle over chives.
6. **Top with grated Weight Watchers cheese (your child could have up to a quarter of the dish and the meal would count as one exchange). Or separate out the MCT portion and top with 5g Weight Watchers cheese and top the rest with a mix of grated cheddar and pamesan.**
7. Place under the grill for around 5 minutes until golden brown.

Fruity Vegetable Curry

This dish can be served with basmati rice and chutney (do check fat content). You could also make a raita using zero fat natural yoghurt, cucumber and mint.

1 small onion

Curry powder to taste (or separate spices if you prefer) - 1 tsp mild curry powder makes a very mild curry

Large handful sultanas

Handful chopped dried apricots

Mixture of vegetables (e.g. carrots, frozen broadbeans, cauliflower, broccoli) according to your family's tastes

Between 1/2 and 1 pint vegetable stock, depending on total quantity of vegetables

1 - 2 tsps cornflour, mixed with small amount cold water

1. Gently fry onion in MCT oil.
2. Once softened, add curry powder and fry over low heat for 1 - 2 minutes.
3. Add vegetables one at a time, starting with those which take longest to cook e.g. carrots, leaving some time between vegetables.
4. Add dried fruit and stock.
5. Bring to boil then simmer for around 10 minutes.
6. Add cornflour/water mixture to thicken if necessary.
7. Before serving, you could add a couple of large tablespoons of zero fat natural yoghurt if you wish (once curry has been taken off heat).



Cottage Pie

(makes 5 portions)



If you have suitable small ovenproof containers, you can make five mini cottage pies which can be frozen when cool, each of them will be one exchange.

100g lean mince beef

1 small onion chopped

1 large carrot chopped

Approx 100g mushrooms chopped

Frozen peas

3/4 pint beef gravy (made using gravy granules)

MCT oil

Mashed potato

1. Shallow fry the onion in the MCT oil on a very low heat for as long as you can. Try to avoid stirring.
2. In a separate pan fry off the mince beef and discard any excess fat.
3. Add the onions to the beef.
4. Add the other vegetables.
5. Slowly pour in 1/2 pint of the gravy.
6. Bring to bubbling point then turn down to a simmer for approx 20 minutes or until vegetables are cooked through.
7. Add more gravy if required.
8. Make mashed potato using MCT butter substitute and skimmed milk while meat sauce is cooking.
9. Put the meat sauce in an ovenproof casserole dish, layer the mash potato on top and either finish under the grill or in the oven until the mash starts to brown.

Shortbread Biscuits ¹

180g (6oz) self-raising flour (or 3oz wholemeal with 3oz self-raising flour)

120g (4oz) sugar

160mls, (8 tbsps) MCT oil

1. Knead all the ingredients together, form into 8 balls and flatten.
2. Place on an MCT oil greased tray and prick with a fork.
3. Bake in oven for 10 - 15 minutes at 220°C, gas mark 7.

Orange Biscuits ¹

Other flavours can be used e.g. lemon, mixed spice, ginger or cocoa (although please check the quantities of cocoa your child can have).

100g plain flour

75ml Liquigen

50g sugar

1 level tsp baking powder

Rind of 1 orange - grated

1. Mix dry ingredients and rind of orange in a bowl.
2. Mix in Liquigen with a fork until it forms a soft dough.
3. Roll small pieces into a ball, place on a baking tray (greased with Liquigen or MCT oil) and press down with a fork.
4. Bake in a moderate oven, gas mark 5 - 6, 190°C for 20 - 25 minutes. (See photo on page 41).

Rice Krispie Cakes ²

Children love making this recipe.

2 tbsps golden syrup

2 tbsps caster sugar

60g rice krispies

1. Heat sugar and syrup until sugar dissolves.
2. Stir in rice krispies.
3. Spoon into paper cake cases and leave to cool.

Fairy Cakes

These can be decorated with jelly tots or similar fat free sweets.

3 egg whites

90g (3oz) caster sugar

90g (3oz) self raising flour

1. Whisk the egg whites with the caster sugar using an electric mixer until they start to look creamy.
2. Fold in the flour.
3. Put in bun cases and bake on gas mark 5, 190°C for 12 - 15 minutes. When cool, ice using icing sugar and hot water mix.





Chocolate Cake ¹

One
exchange

This cake improves if kept for one day in an airtight tin before cutting - if your child lets you!

120g (4oz) plain flour
2 tsps baking powder
120g (4oz) caster sugar
1/4 tsp salt
2 tsps water
2 tsps skimmed milk
30g cocoa
6 1/2 tsps MCT oil
2 egg whites

1. Brush the base and sides of a 20cm (8") sandwich tin with a little MCT oil and line the base with greaseproof paper.
2. Sift the flour, baking powder, caster sugar and salt together.
3. Add the water to the milk, bring to the boil and pour onto the cocoa. Stir until cocoa dissolves.
4. Allow to cool slightly, then mix in the oil and egg whites thoroughly.
5. Stir this mixture into the dry ingredients.
6. Turn into prepared tin and bake for 35 - 40 minutes at gas mark 4, 180°C.
7. Cool on a wire tray.

Because of the cocoa powder, one portion of this cake would count as one exchange.

If you would like to ice the cake, keep back one teaspoon of the measured out cocoa powder to add to icing sugar and hot water mix.

Fruity Crunch Bars

These are best eaten within a day or two of making them.

75g rice krispies

65g flour

1/2 tsp mixed spice

100g brown sugar

170g dried fruit (sultanas and dried apple works well - wash and dry fruit on kitchen roll before use to remove some of oil coating)

1 egg white

50ml MCT oil

Zest of 1 orange

1 tsp vanilla extract

2 large spoonfuls golden syrup

1. Grease a square baking tin with MCT oil.
2. Mix all dry ingredients.
3. Separately whisk together the egg white, oil, orange zest, vanilla and syrup. Add to dry ingredients, and mix carefully.
4. Spread in tin and bake at gas mark 4, 180°C for approximately 30 minutes.
5. Cut into bar shapes while still warm (also run knife round edge of tin), but leave in tin to cool.



ACKNOWLEDGEMENTS

- Written by: Isabel Baumber
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- Disclosure: Joanne Bartleman has no conflict of interest.

We would like to say a big thank you to Archie Harris, Matthew Baumber and Rachel Baumber for modelling for the photographs.

References are available from the LHM office on request.

Footnotes

- 1 Recipes marked ¹ are reproduced with kind permission from SHS International
- 2 Recipes marked ² are reproduced with kind permission from Birmingham Children's Hospital



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LHM MCTB 0412

Review date 0414