



Missing M
Genes



Information Sheet No.1

Food for Thought

Information sheet on nutrition

The best diet for anyone, regardless of whether or not you have CGD, is a healthy diet.

We all know that that means including lots of different types of food in our diets, including five portions of fruit and vegetables each day!

Some children and adults with CGD will find that it is difficult for them to maintain their weight and for children this can mean that they are slow to grow. For these people a few additional calories can be required. Adding high calorie foods, such as butter and cream, can be sufficient but some people may need a little extra help from dietary supplements that usually come in the form of milkshake-type drinks. Dietary changes such as these should only be undertaken on the advice of your nurse, doctor or dietician.

No appetite but need to eat more?

In this instance it is probably better to eat small frequent meals rather than try and persuade yourself to eat one large meal. Don't skip meals – try for three small manageable meals a day and snacks (like plain biscuits, milky drinks, fruit or yoghurt) at 'coffee time', teatime and bedtime. Making meals presentable and not overloading the plate makes the food much more appealing.

Tummy troubles

People with gut problems associated with CGD may find that particular foods cause problems such as abdominal pain or diarrhoea. In this case such a food can generally be eliminated from the diet if it is a single food such as peas or chocolate. However any major changes to the diet, for example cutting out dairy products, should be done under the guidance of a dietician.

You may have come into contact with a dietician through your local surgery or hospital. A dietician gives advice on nutrition and explains how to put theory into practice. Referrals to a dietician are made by the doctor or specialist, so if you would like to see one you will need to talk to your doctor about it.

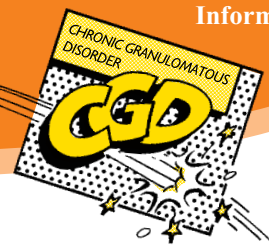
Do people with CGD need to follow a special diet?

No – there is no particular diet recommended except for a standard healthy diet.





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Food Facts

There are **5** main food groups:

- 1) Fruit and vegetables
- 2) Bread, cereals, potatoes, rice etc.
- 3) Meat, fish and alternatives such as pulses
- 4) Milk and dairy foods
- 5) Foods containing fat or sugar

At each meal, the largest proportion of the meal should be made up of groups **1** and **2**. Use food from group **2** to 'fill-up'. Those from group **3** provide the major sources of protein –which we need for growing and healing.

Milk and dairy products (group **4**) provide protein and B vitamins. They are key sources of calcium which is needed for strong bones and teeth. (People of all ages, especially women, need to have good intakes of calcium.)

Group **5** is the smallest group. It is important to include sugar in the diet as part of the main meal rather than in the form of sugary drinks and snacks. This is particularly important for dental health as sugar taken in this way is less likely to cause damage to teeth. Damaged decaying teeth represent a significant infection risk for anyone with CGD.

Both adults and children with CGD are likely to benefit from a standard and mineral supplement as it may be harder for them to absorb all the nutrients from their diet, although it is best to avoid supplements containing iron. A one-a-day vitamin/mineral supplement is adequate and it is not advisable to take large amounts of any vitamin or mineral supplement. Take the advice of your doctor or pharmacist.

It is important to incorporate iron-containing vegetables, chicken and pulses. Iron is absorbed better if eaten with vitamin C. Having a tomato in a salad will help you to absorb the iron from the leafy green vegetables in the salad!

Fats

Fat comes in 3 different types – saturated, mono-unsaturated and poly-unsaturates. It is saturates that are responsible for raising blood cholesterol levels, which is a risk factor in heart disease. Saturates are usually the hard fats, which are found mainly in pies, biscuits, cakes, butter and cheese. It is a good idea to cut down on saturated fats in the diet and many of these fats can be replaced with mono or poly-unsaturated fats that come in the softer fats and oils. Common sources are olive oil, vegetable oil, rapeseed oil and some spreads. Use olive or vegetable oil for cooking rather than hard fats. Fish such as herring, salmon and mackerel are also good sources and may serve to protect against heart disease.





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For people with CGD it is sensible to make these healthy changes to your diet – but if you have difficulty maintaining your weight you need calories and so don't be tempted to cut down too much. **'All things in moderation' is a good motto!**

Everyone needs to eat plenty of fruit and vegetables

Fruit and vegetables contain many different vitamins and minerals that help to keep you healthy. Try to eat five portions a day. Eating some at each main meal and using fruit as snacks will help you achieve this. Vitamins and minerals are lost from fruit and vegetables by cooking and storing.

Don't soak vegetables in water as this will 'dissolve away' the vitamins/minerals. Use as little water as possible to cook them. Start with boiling water from all vegetables and cover tightly to keep in the steam and speed up cooking.

You can use the cooking water to make sauces and gravies and hold on to these vitamins and minerals!

So what is a portion of fruit and vegetables?

<i>Vegetables, raw/cooked/frozen</i>	<i>2 tablespoonfuls</i>
<i>Salad</i>	<i>1 dessert bowl</i>
<i>Apples, bananas, oranges, (half a grapefruit)</i>	<i>1 fruit</i>
<i>Plums and fruit of similar size</i>	<i>2 fruit</i>
<i>Grapes, cherries and berries</i>	<i>1 cupful</i>
<i>Dried fruit e.g. raisins, apricots, etc</i>	<i>1/2 - 1 tablespoonful</i>
<i>Fruit juice</i>	<i>1 glass (150 ml)</i>

Fruit and Vegetable Drinks

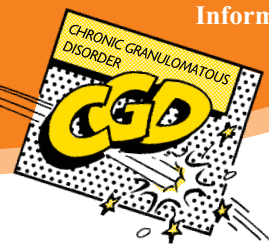
Have you tried Louise's drinks? Smoothies are a delicious blend of banana or strawberry, milk, yoghurt and ice-cream.

Louise's Smoothies - quantities for four:	
<i>1 banana or 2oz (60g) mashed/puree fruit</i>	
<i>90ml milk</i>	
<i>3 oz (90 ml) yoghurt</i>	
<i>4 ice cubes</i>	
Daiquiries - Blend strawberries, pineapple juice, orange juice and ice cubes.	





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Give me Five Week

Tropical Fruit Smoothy – Louise’s Special Recipe (serves 4):

1 250g tin of pineapple chunks

1 250g tin of Mango slices

1 large banana (optional for thickness of consistency)

1 large carton of apple juice

Place mangoes & pineapple into food blender and process until fruit consistency is smooth and paste-like. Add banana at this stage. This will add volume and thickness to the mixture – continue to blend all three fruits together. Slowly fold apple juice to the mixture increasing the quantity to thickness of smoothy required.

Pour into a chilled tall glass & drink.

* For a milkshake version of this recipe, omit apple juice and replace with 2 scoops of vanilla ice-cream and $\frac{1}{2}$ pint of milk (full fat or semi-skimmed)

For extra variety why not add 3 large tablespoons of chilled coconut water to this shake.

The taste of the tropics in one glass!

Food And Children!

Children may need some praise for what they do manage to eat. As a parent it can be very worrying when your child doesn’t eat as well or as much as you feel they should. It is worth remembering that children with CGD may have small appetites and may feel that they are eating as much as they can. Extra calories may need to be disguised to encourage their intake and little ‘treats’ can be useful sources of extra calories.

Aim for one pint of milk each day. Children under two years must be given full fat milk only. After two years they can have semi-skinned milk provided they are growing well and gaining weight. Other good sources of calcium, which is needed for healthy development of bones and teeth, are:

- Yoghurt, which makes a good snack and can be eaten with fruit, (also fromage frais)
- Cheese can be added grated to potatoes, soups and sauces or used in sandwiches

These foods can be used to replace some of the pint of milk a day. Good ways of adding milk to the diet are on favourite cereals or in sauces or puddings.

Don’t be tempted to cut down on fat for children under two years of age – they need the calories for growing. For children between two and five years old the main thing is





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that they get enough calories and as much variety in their diet as they can be persuaded to take! After five years it is safe to introduce some low fat alternatives to their diet and introduce them to a standard healthy diet. However – remember that in CGD the children may need more calories than their contemporaries; the most important thing still is that they are growing.

Healthy Snacks for children or adults

- Yoghurt or fromage frais
- Small sandwiches or filled pitta pockets
- Crackers or plain biscuits
- Smoothies or fruit juice
- Low-fat dips or salsa and vegetable pieces
- Fresh or dried fruit
- Cheese cubes or sticks
- Milk or milkshake
- A bowl of cereal
- Popcorn

Getting fruit and vegetables into any child with or without CGD can be a problem! Here are some ideas for increasing the amount of fruit and vegetables children eat.

Also useful for adults!

- Use fresh fruit, fruit juice or yoghurt to make colourful and tasty smoothies
- Add finely chopped vegetables or portions of dried fruit – many supermarkets now sell these lunchbox-sized child-friendly packets
- Serve vegetable soup – this can be blended to remove obvious ‘lumps’
- Add extra vegetable to shop bought pizzas
- Serve burgers with small portions of salad – add an interesting dressing
- Serve fruit with ice-cream and ‘fun’ sauces
- Cherries and grapes are easy to eat and popular

Important note: If you have any concerns about your/your child's' diet or weight then please discuss this with your nurse, health visitor or doctor. These people can refer you to a dietician for further help. It is important not to make major changes to your diet without seeking the appropriate advice.

Important Note:
The information contained in this document is intended only as a guideline, not as a substitute for medical advice. Always consult your doctor if you or your child has any CGD symptoms or concerns.

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