

Department of nutrition and dietetics

# Gallstones and diet

## Information for patients, relatives and carers

### What are gallstones?

'Gall', also known as bile, is a liquid which is made by the liver to help us digest and absorb nutrients from the food we eat, particularly fat. The gallbladder is a pouch which sits below our liver. It stores bile between meals and releases it when we eat into our small bowel via the bile duct. Gallstones are solid lumps or stones that form in bile. They can cause pain for some people. Roughly two out of three people with gallstones have no symptoms and do not know they have them.

### Complications of gallstones

Gallstones can cause symptoms if the gallbladder becomes inflamed or if the stones travel into one of the bile ducts. These connect the liver, gallbladder and small bowel. Possible complications include:

- **biliary colic:** gallstones get stuck in the narrow neck of the gallbladder or the duct that drains the gall bladder. This can cause severe, cramping pain which can be felt either in the middle or just under the right-hand side of the ribs. This pain may follow a meal and is generally continuous but may come in waves
- **cholecystitis:** the stones may cause the gallbladder to become inflamed. This causes pain like biliary colic. However, it does not go away without medical intervention. The top right of the abdomen can also become painful to touch. People with cholecystitis can develop flu-like symptoms and even sepsis

### Managing your diet

Often people are told to remove fat from their diet due to symptoms of gallstones. However, for most people this is not needed and can be associated with some risks. A diet too low in fat may lead to not enough bile being produced, which leads to stones forming.

While having obesity is a risk factor for gallstones, so too is rapid weight loss. A very low-fat diet can result in rapid weight loss (greater than 1kg per week). This also increases your chance of forming gallstones. If you are trying to lose weight, aim to lose weight at a slow steady pace over a period of 6 months to reduce your risk of gallstones in the future.

If you are already underweight, or have had recent weight loss, a low-fat diet is probably not appropriate. Please discuss with your doctor or dietitian if you have any concerns.

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Eating a healthy balanced diet with moderate amounts of fat is in line with the UK government's 'Eatwell Guide'. Your diet should not be completely fat free. A small amount of fat is still needed by the body.

Some people may have symptoms after eating foods which are higher in fat. Follow the steps below to help avoid this.

## Tips to avoid high fat intake

- choose lower fat versions of products. For example, reduced-fat butter and mayonnaise
- reduce the amount of oil used during cooking. For example, use no more than 1tsp of oil per person
- switch from roasting or frying foods with oil to microwaving, steaming, poaching or boiling
- choose leaner cuts of meat or take the skin and visible fat off meat. Reduce processed meats such as burgers, sausages and salami
- food from takeaways or restaurants is often higher in fat. Avoid oily or greasy foods or limit portion sizes of these
- bulk out meals with beans, pulses, lentils, fruits, vegetables and salad items
- focus your diet on higher fibre foods such as more nuts, seeds, fruits, vegetables and wholegrains. Choose higher fibre carbohydrates such as wholemeal bread, wholegrain cereals, brown pasta or rice and potatoes with skin on. Higher intake of these foods has been shown to reduce the risk of gallstone disease
- swap full-fat dairy products to lower fat varieties, for example reduced-fat cheeses, low-fat yoghurts and semi-skimmed milk
- swap high-fat snacks such as cakes, biscuits, crisps and ice cream for lower fat alternatives such as: low-fat yoghurt with fruit, dried fruit, oat cakes, rice cakes with low fat hummus, sorbet, meringue and ice lollies
- if eating foods high in fat, such as pizza or lasagna, keep portion sizes small. Bulk out the meal with lower fat options such as green salad, vegetables and wholegrain carbohydrates

It is important to have regular meals because fasting can reduce gallbladder emptying. This increases the risks of stones forming. Avoid having long gaps between meals. Aim to eat breakfast soon after you wake. This means you will not have more than 12 hours fast between your evening meal and breakfast.

Physical activity is also important to reduce risk of gallstones. Current UK guidelines recommend 150 minutes a week of moderate intensity exercise. For example, fast-paced walking, dancing or jogging. You should do physical activity and muscle-strengthening activity, such as weight-lifting, swimming or hill walking at least 2 days a week.

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## Gallbladder removal (cholecystectomy)

After a gallbladder removal (cholecystectomy), most people do not have any problems with their digestion as the gallbladder is not essential. The liver will produce the same level of bile. This will just pass continuously into the bowel rather than being stored between meals. For some people, if their original symptoms persist after treatment, it is likely that these symptoms were not due to gallstones.

You do not need to follow a low-fat diet after gallbladder removal. There are no scientific studies that show this is needed. You should be able to go back to eating and drinking your normal diet and tolerate all foods in the future.

Around 13 in 100 people may develop symptoms of diarrhoea after gallbladder surgery. This could take up to 3 months to develop after the operation. This is known as bile acid diarrhoea (BAD) or bile acid malabsorption (BAM). It can be treatable once diagnosed. Discuss any symptoms with your doctor if you have any concerns.

## Contact your dietitian

<b>Hammersmith Hospital</b>	020 3313 3048
<b>Charing Cross</b>	020 3311 1445
<b>St Mary's Hospital</b>	020 3312 6398

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Email: [ICHC-tr.Complaints@nhs.net](mailto:ICHC-tr.Complaints@nhs.net)

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