

Modified fibre diet for the prevention of bowel obstruction

What is fibre?

Fibre is the part of the plant that humans cannot digest. It passes through the bowels mostly undigested, giving bulk to the stool. It can also act as a sponge to help absorb fluid and soften the stool.

Why modify fibre intake?

For most people, a high fibre diet is good for keeping the bowels healthy. However, in people who have areas in their bowel that have become narrowed from strictures or other causes, a high fibre diet (particularly insoluble fibre) increases bulk in the bowel and can make symptoms worse. Reducing the amount of fibre passing through narrowed parts of the bowel may help reduce the risk of food causing a bowel obstruction and improve symptoms such as pain, abdominal cramping, gas or feeling of fullness.

Different types of fibre

1. Soluble fibre: dissolves in water to form a thick gel in your bowels and softens the stool.

Examples include:

- Bananas
- Oats and oat bran
- Barley
- Chia seeds
- Legumes and pulses (e.g. kidney beans, chickpeas)
- Okra, eggplant

2. Insoluble fibre: found in the rough, hard part of the plant, for example skins, grains and seeds. It does not dissolve in water and adds bulk to the stool.

Examples include:

- Fruit (skin and seeds have the most fibre)
- Vegetables (skin and seeds)
- Whole-grain products e.g. breads, pasta, brown rice, quinoa
- Nuts and seeds
- Wheat and rice bran

How to modify fibre intake?

- Remove stalks, stems, pips, seeds and skins from fruit and vegetables.
- Chop and cook vegetables well.
- Reduce tough, fibrous fruit and vegetables – chop these foods finely where possible (e.g. celery, mango)

- Avoid dried fruits, nuts & seeds.
- Strain fruit and vegetable juices and soups.
- Avoid wholegrain, high fibre breads and cereals. Use white varieties where possible.

How to prevent constipation on a modified fibre diet?

- Have fruit and vegetables with stalks, stems, pips, seeds and skins removed. Pureed or soft/well-cooked fruit and vegetables may be better tolerated.
- Drink plenty of water. Ask your dietitian how much you should be drinking a day. Most people need around 8-10 glasses of fluids per day.
- If still constipated, discuss with your doctor regarding use of laxatives (e.g. Coloxyl or Lactulose).

General hints

- Follow a diet low in fibre, particularly low **insoluble** fibre.
- Chew all food well. If a food cannot be chewed thoroughly, it should be avoided.
- Eat slowly in a relaxed setting.
- Cook your food well – this can make some foods easier to chew.

- Avoid any food that is tough or stringy (e.g. tough gristly meat).
- Some people find they need to have soft/puree foods to limit symptoms.
- During times when symptoms increase, resting the bowel by taking fluids for a short period of time may help improve symptoms.
- Read food labels and avoid foods stating they are high in fibre.
- Eat small and regular meals.
- It is still important to have a variety of foods in your diet. Aim to maintain a balanced diet by including food from the following groups:
 - Refined breads, cereals, rice and pasta
 - Vegetables
 - Fruit
 - Dairy (milk, yoghurt, cheese)
 - Meat, fish, poultry, eggs

FOOD GROUP	INCLUDE (low in total fibre)	INCLUDE MODERATE AMOUNTS of soluble fibre as desired	LIMIT (high insoluble and total fibre)
Bread, cereals, rice, pasta, noodles	<ul style="list-style-type: none"> White bread, crumpets, scones, English muffins White pita bread Refined breakfast cereals e.g. <i>Rice Bubbles, Cornflakes</i> White rice, pasta, sago, tapioca, semolina White flour, cornflour Plain sweet and savoury biscuits or cakes 	<ul style="list-style-type: none"> Oats/oatmeal, instant, ½ cup cooked Breakfast biscuits e.g. <i>2 BelVita</i> Barley, ¼ cup cooked Chia seeds, 1 teaspoon Sourdough bread, 2 slices Light rye bread, 1 slice 	<ul style="list-style-type: none"> Wholemeal or wholegrain bread Bread containing intact grains, nuts, seeds, coconut or dried fruit Oat bran - unprocessed, raw Wholegrain breakfast cereals or any with dried fruit, nuts or coconut e.g. <i>Muesli, All-Bran, Weetbix</i> Wild rice, brown rice, brown pasta Wholemeal flour, wheatgerm Sweet and savoury biscuits or cakes made with seeds, nuts, dried fruit or coconut
Dairy foods	<ul style="list-style-type: none"> All varieties of milk Plain yoghurt, custard, vanilla <i>Fruche</i>, plain cheese, plain or flavoured ice cream 	<ul style="list-style-type: none"> Desserts containing peeled and stewed fruit Nutritional supplements with fibres 	<ul style="list-style-type: none"> Desserts containing dried fruit, chunky fruit pieces, nuts, seeds or coconut Milkshakes made with whole fruits, seeds and high fibre cereals
Meat, fish, poultry, eggs, nuts, legumes	<ul style="list-style-type: none"> Any tender, soft meat, chicken and fish Tofu Eggs and soy products 	<ul style="list-style-type: none"> Smooth nut butters, 1 tablespoon Legumes e.g. baked beans, kidney beans, 2 tablespoons 	<ul style="list-style-type: none"> Nuts & seeds Crunchy nuts or seed butters (e.g. peanut butter, tahini)

FOOD GROUP	INCLUDE (low in total fibre)	INCLUDE MODERATE AMOUNTS of soluble fibre as desired	LIMIT (high insoluble and total fibre)
Vegetables	<p>Ensure vegetables are <u>peeled</u> and <u>well-cooked</u> where able:</p> <ul style="list-style-type: none"> • Potato • Pumpkin • Zucchini • Cauliflower and broccoli florets • Mushrooms <p>Suitable salad vegetables are:</p> <ul style="list-style-type: none"> • Tomato and cucumber with skins and seeds removed • Shredded lettuce • Capsicum, 1 cup cooked • Well strained vegetable juice • Tomato puree or paste 	<ul style="list-style-type: none"> • Eggplant, 1 cup • Sweet potato, no skin, ¼ cup • Carrot, peeled, ¼ cup • Turnip, cooked, 3 slices • Spring onion/onion, cooked, ½ cup • Okra, cooked, ½ cup 	<ul style="list-style-type: none"> • Raw vegetables • Vegetables with small seeds (e.g. cucumber) • Stringy vegetables (e.g. celery, broccoli stems, bean sprouts, asparagus) • Vegetables with tough skins (e.g. peas, corn) • Avoid all other vegetables not listed in foods to include.
Fruit	<ul style="list-style-type: none"> • Melons (no seeds) • Seedless grapes • Well-cooked fruit no skin/pips • Canned fruits except pineapple • Fruit juice – no pulp 	<ul style="list-style-type: none"> • Banana, 1 small • Apple, no skin, 1 small • Cherries, 1 cup • Oranges, pip removed, 1 small • Pawpaw/papaya, 2/3 cup • Grapefruit, 1 small • Peeled peaches & nectarine, 1 medium • Blueberries, ½ cup 	<ul style="list-style-type: none"> • Fruit with skin, pips or of a very “fibrous” texture - e.g. pears, pineapple • Dried fruit • Fruit with small seeds (e.g. kiwi fruit, figs, dates, pomegranate) • Raspberries • Blackberries • Juice with pulp
Other	<ul style="list-style-type: none"> • All fats including butter, margarine, mayonnaise, oils • Sugar, honey, syrups • Boiled lollies, jubes, chocolate with no fruit, nuts or coconut • Spreads without seeds or skin • Soup made from allowed ingredients, <i>Bonox</i> • Desserts made from allowed foods (jelly, ice-cream, custard) • Gravy, salt, pepper, dried herbs & spices 		<ul style="list-style-type: none"> • Popcorn • Coconut • Chocolate with nuts and fruit • Chutney and pickles • Jams or pastes with nuts and seeds

Suggested meal plan

BREAKFAST
1 Glass strained fruit juice Rice bubbles / 1/2 cup cooked oats with milk White toast / sourdough bread / crumpets with margarine / butter / honey / jam (no seeds) / vegemite Egg / cheese if desired
LUNCH
Tender meat / chicken / fish / egg / cheese White bread with margarine / butter Tinned fruit / 1x fresh banana / 1x peeled peach / 1/2 cup blueberries with custard or yoghurt Cup of tea / coffee
DINNER
Soup (made with allowed ingredients) Tender meat / chicken / fish / egg / cheese Potato (peeled) / white rice / pasta / 1/4 cup cooked barley / 1 tsp of chia seeds sprinkled Allowed vegetables – peeled and well cooked Bowl of plain ice cream Cup of tea / coffee
SNACKS
Melons, tinned fruit, 1x small banana, 1/2 cup blueberries, 1x peeled nectarine, 1x peeled peach, yoghurt, milk, cheese & low-fibre crackers

For further information contact your dietitian: _____