

Low irritant, high fibre diet

This information leaflet gives advice if you have been advised to alter your fibre intake during your course of radiotherapy treatment. If you have any further questions or concerns, please speak to your doctor or review radiographer.

Why do I need a low irritant, high fibre diet?

A low irritant, high fibre diet has been recommended to help you avoid foods that may irritate your bowel during your pelvic radiotherapy treatment. These foods may cause excessive wind, bloating or diarrhoea. The need for a low irritant, high fibre diet is usually temporary, to be followed during the radiotherapy treatment and for two weeks afterwards. It is still important to eat as wide a variety of food as possible to ensure good nutrition. When returning to a normal diet, remember to re-introduce things slowly to enable you to determine which item, if any, may cause you irritation.

If you have any concerns during this time please contact the Radiotherapy Department on the telephone number at the end of this leaflet and ask for your review radiographer.

What is fibre?

Dietary fibre (also known as roughage) is the part of food that cannot be easily digested. Fibre is not digested in our small intestine – it moves into our colon or large intestine, where some of it will be broken down. Fibre also helps our stools (poo) form a 'bulk' and makes them solid.

Different types of fibre

There are two main types of fibre: soluble and insoluble (irritant) fibre.

- **Soluble fibre** is easily digested in our large intestines / colon and dissolves with water to form a gel. For example:
 - o porridge oats
 - o the flesh of fruits, e.g. apples, pears, bananas
 - root vegetables
- Insoluble (irritant) fibre passes through our body without being broken down or absorbed. For example:
 - o the skins, pips and seeds of fruit and vegetables
 - o fibrous fruits and vegetables e.g. rhubarb, celery
 - raw or undercooked vegetables
 - vegetables that humans are unable to digest e.g. mushrooms, sweetcorn, lettuce and other salad leaves

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An example of the two different types of fibre can be seen in a tomato.

- **Soluble fibre** is the fleshy part of the tomato. This will dissolve in the large intestine and helps to add bulk to stools.
- **Insoluble (irritant) fibre** is the skin and seeds of the tomato. These are the parts that are not possible for your gut to digest.

What is a low irritant, high fibre diet?

The diet involves cutting out the insoluble (irritant) fibre from your diet, while eating foods that have good amounts of soluble fibre, are more easily digested and will soften and bulk your stools. This should help to improve your bowel symptoms.

The following information explains the types of foods to avoid and include.

How long will I need to follow this diet?

It is usually recommended that you make these changes to your diet for a short period of time, during your radiotherapy treatment if you are experiencing excessive wind, bloating or diarrhoea, and to continue it for two weeks after treatment.

What fruit and vegetables can I eat?

When you follow a low irritant high fibre diet, you need to avoid certain fruit and vegetables altogether. Others will be better peeled and without pips or seeds. It is important to still eat a high fibre diet. Aim to have five portions of fruit and / or vegetables every day. A portion is roughly 80 grams, or the equivalent of a handful.

Always choose from the 'foods to include' lists below.

What can I drink?

It is important to drink plenty of fluid each day to prevent dehydration. Try to drink at least eight glasses of fluid a day. This can include water, squash, juice and milk. Limit caffeinated drinks such as tea and coffee. Always try to choose unsweetened drinks. Avoid fizzy drinks as they may aggravate your symptoms.

Food type	Foods to INCLUDE ✓	Foods to AVOID *
Vegetables	All vegetables need to be	Asparagus
	well cooked	Baby corn
	Aubergine (peeled and	Bean sprouts
	deseeded)	Beetroot
	Avocado	Bok Choi
	Broccoli (no stalks)	Broad beans
	Butternut squash	Brussel sprouts
	Cabbage (white or green)	Beans (French, green, runner)
	Carrots	Celery
	Cauliflower (no stalks)	Chicory

Chilli (fresh) Celeriac Coleslaw Chilli purée Courgette (peeled) Edamame Cucumber (peeled and Fennel deseeded) Garlic (whole, raw or undercooked) Daikon (Asian radish) **Gherkins** Ginger Garlic purée Gem squash Globe artichokes Ginger purée Jerusalem artichokes Horseradish purée Kohlrabi Lemongrass purée Leeks Marrow (peeled) Lemongrass Onion (well-cooked) Lettuce **Parsnips** Mangetout Patty pan (peeled) Mushrooms Peppers (peeled and Okra deseeded) Olives Potatoes (peeled) Onions (whole, raw or undercooked) Pak choi **Pumpkin** Shallots (well cooked) Peas Spinach (well cooked) Pickled onions Swede Radish Sweet potatoes (peeled) Rocket Tomato passata Salad leaves Tomatoes (peeled and Shallots (whole, raw or undercooked) deseeded) Skins of jacket potatoes **Turnips** Soya beans Smooth vegetable soups Spinach (raw) (made with allowed vegetables) Spring greens Yams, peeled Spring onions Sugar snap peas Sweetcorn Tomatoes (whole, with skins and pips) Watercress Other All skins, pips and seeds Tough stalks of vegetables e.g. cauliflower, broccoli Raw vegetables

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Soup with whole vegetables, e.g. minestrone

Food type	Foods to INCLUDE ✓	Foods to AVOID *
Fruit	Apples (peeled)	Blackberries
	Apricots (fresh, peeled)	Blackcurrants
	Bananas	Blueberries
	Mango	Cherries
	Melon	Clementines
	Nectarines (peeled)	Coconut
	Papaya	Cranberries (fresh and dried)
	Pears (Peeled)	Dates
	Peaches (peeled)	Dried apricots
	Plums (peeled)	Figs
	Watermelon (no pips)	Gooseberries
		Grapefruit
	Other	Grapes
	Fruit juice (no bits)	Kiwi
	Puréed, stewed or cooked fruit	Mandarins
	(without skins, pips or stones)	Oranges
	Tinned fruit	Passion fruit
	Fruit sauces and coulis with	Pineapple
	pips removed e.g. sieved	Pomegranate
	raspberry coulis, apple sauce	Prunes
		Raisins
		Raspberries
		Redcurrants
		Rhubarb
		Satsumas
		Strawberries
		Sultanas
		Other
		Fruit juice with bits
		All dried fruit
		Smoothies

Food type	Foods to INCLUDE ✓	Foods to AVOID *
Breakfast Cereals	Coco pops® Cheerios® Cornflakes® Frosties® Oats Porridge (plain) Ready Brek® Rice Krispies® Special K® (without berries)	Cereals containing dried fruit, seeds or nuts All Bran® Bran flakes® Crunchy Nut Cornflakes® Fruit n Fibre® Granola Muesli Porridge with berries Special K with berries Sultana Bran® Wholemeal, wholegrain and bran cereals Weetabix®
Bread	White, 50/50 and wholemeal bread Bagels Brioche Cheese scones Crackers (without seeds and grains) Crispbreads Croissants Crumpets Melba toast, Muffins (without berries) Oat cakes Pitta bread Rice cakes Scotch pancakes Tortilla wraps White bread, rolls, baguettes Wholemeal bread, rolls, baguettes	Wholegrain, granary, rye, seeded Crackers (wholegrain) Crispbreads (wholegrain or seeded) Granary bread, rolls, baguettes, pitta bread Malted bread, e.g. Soreen® Muffins (with berries or made with wholegrain flour) Multigrain bread Rye bread Seeded bread Wholegrain bread, rolls, baguettes, pitta bread, tortilla wraps
Flour	Chickpea flour Cornflour Cornmeal Gram flour Rice flour Potato flour White flour Wholemeal flour	Bran Granary flour Wholegrain flour

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Food type	Foods to INCLUDE ✓	Foods to AVOID *
Rice and Pasta	Buckwheat Hash browns (plain) Millet Noodles (egg, rice, vermicelli, udon) Pasta (white, brown, wholemeal) Pastry (white, wholemeal) Pearl barley Potatoes (peeled) Rice pudding Rice (white, wholemeal) Sweet potatoes (peeled) Tapioca, sago, semolina Waffles White couscous Yorkshire pudding	Barley Hash browns (made with onion) Spelt Whole wheat couscous Wild rice
Meat, Fish, Eggs	All types of fish, meat and meat products (fresh, frozen, tinned) Eggs Quorn products Smooth paté or liver sausage Soya mince Tofu	Coarse paté made with onions Convenience items which contain whole grains and vegetables e.g. onions, peppers Skin and bones of fish
Pulses, nut and seeds	Ground nuts Ground seeds Marzipan Smooth peanut butter and other nut butters Smooth houmous	All beans e.g. black, borlotti, cannellini, kidney, soya, baked beans, broad beans All pulses e.g. lentils, chickpeas All seeds e.g. sunflower, pumpkin, sesame, poppy, chia All whole nuts Crunchy nut butters Houmous with whole chickpeas
Dairy	Butter, margarine, spread Cheese (without dried fruit and nuts) Cream, crème fraîche Custard Milk (almond, buttermilk, cow's, goat's, sheep's, soya, rice, oat) Yoghurt (natural and with 'allowed' fruit) Ice cream and sorbet (no nuts and seeds)	Any dairy products containing 'avoid' fruits, nuts, seeds or cereals.

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Food type	Foods to INCLUDE ✓	Foods to AVOID *
Desserts	Boiled or jelly sweets Biscuits (rich tea, custard creams, digestives, malted milk, bourbon creams, Nice®, ginger nuts, shortbread) Cakes made with white or wholemeal flour (without dried fruit or nuts) Chocolate (without dried fruit and nuts) Flapjacks (without dried fruit or nuts) Jelly or milk jelly (without fruit) Marshmallows Pancakes Scones (plain) Toffee, fudge	Biscuits containing dried fruit (fig rolls, Garibaldi®) Cakes made with dried fruit and nuts Cereal bars containing dried fruit and nuts Chocolate with nuts, seeds and dried fruit Fruit scones Hot cross buns Jelly made with 'avoid' fruit Nougat Tea cakes Wholegrain biscuits e.g. Hobnobs®
Savoury treats	Cheese biscuits (mini cheddars, Ritz®, TUC® sandwich biscuits) Cheese scones Cheese straws Crisps, tortilla chips Plain bread sticks Smooth dips (taramasalata, smooth guacamole)	Bombay Mix Dips that contain whole tomatoes, cucumbers, onions (e.g. salsa, tzatziki) Nuts Popcorn
Condiments	Barbecue sauce Bovril® Brown sauce Dried herbs Ginger, garlic, lemongrass, horseradish purée Golden syrup Gravy (no onions) Honey Lemon curd Maple syrup Marmite® Mayonnaise Nutella®, hazelnut spread Powdered spices Salad cream Salt and pepper Seedless jam or marmalade	Chutney (with fruit) Jam with seeds Marmalade with peel Pickles and relishes Salad dressing made with wholegrain mustard Stalks and leaves of fresh herbs Wholegrain mustard

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Smooth nut butters (e.g. almond,
hazelnut, peanut)
Smooth chutneys
Smooth mustard
Soy sauce
Tabasco® sauce
Tomato ketchup
Treacle
Worcester sauce
Vegemite®

Tips for following a low irritant, high fibre diet

- Plan your meals in advance so that you have the right ingredients in the fridge / cupboard.
- Preparing the vegetables takes a little more time, so build this in to your day.
- Buy large beef tomatoes these have more flesh and are easier to skin and de-seed.
- When cooking stews and casseroles, use whole onions to flavour the gravy / sauce. These can then be removed before serving.
- Peel and chop 'allowed' fruits to make a fruit salad. You can eat a portion as a snack to ensure you are getting adequate fibre.
- Chew food slowly and thoroughly.
- Introduce new foods one at a time. This will enable you to rule out foods that upset your system.
- When returning to a normal diet remember to re-introduce things slowly to enable you to determine which item, if any, may cause irritation.

Contacting us

Radiotherapy Department 0118 322 7872 Radiotherapy Review Radiographers 0118 322 8869 E-mail:ReviewRadiographers@royalberkshire.nhs.uk

Adapted from 'Low irritant, high fibre diet' with kind permission from the Nutrition and Dietetics department at The Royal Surrey NHS Foundation Trust.

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

Authors: Lisa Revans, Allison Hopkins. RBFT Berkshire Cancer Centre, December 2023

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