

# Fibre and the Gluten-Free Diet

## What is dietary fibre?

Dietary fibre is the part of plant foods that our bodies can't fully digest and absorb. Fibre has many benefits and is needed for good health.

When you are on a gluten-free diet, it may be hard to get enough fibre. You can increase the fibre in your diet by eating high fibre foods every day.

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

**Soluble fibre** is a soft fibre that dissolves in water to form a gel. It helps to prevent constipation, lower blood cholesterol, and control blood sugars.

The best sources of soluble fibre are:

- apples
- citrus fruits
- chia and flax seeds
- legumes such as peas, beans and lentils
- oat bran, oatmeal (pure, uncontaminated)
- psyllium
- strawberries

**Insoluble fibre** doesn't dissolve in water. It helps prevent constipation and keeps the digestive system healthy, which may lower the risk of developing certain types of cancers and heart disease.

The best sources of insoluble fibre are:

- bran, gluten-free (corn, rice)
- nuts
- vegetables, fruit
- whole grain foods (such as gluten-free whole grain breads and cereals)



## How much fibre do we need?

Age (years)	Men (grams per day)	Women (grams per day)
1-3	19	19
4-8	25	25
9-13	31	26
14-18	38	26
19-50	38	25
51+	30	21
Pregnant and breastfeeding women		28-29

Gluten-free products are usually refined, lower in fibre and may not be enriched. (They may not have vitamins and minerals such as iron, thiamin, riboflavin and folate added). Check the label and choose grain foods that are enriched when you can.

## Use the tips below to increase your daily fibre intake

### Vegetables and fruits

- Choose vegetables or fruit at every meal and snack. Eat the skins or peels where possible.
- Add fresh fruit to cereal, yogurt, and baked goods.
- Use extra vegetables in casseroles or in soups and salads.
- Enjoy stir-fried vegetables.



## Grain foods

- Eat whole grain gluten-free breads, cereals, crackers, pasta, and brown rice.
- Choose higher fibre gluten-free cereals.
- Add 1 to 2 Tbsp (15 to 30 mL) of gluten-free high fibre cereal, psyllium, or ground flax seed, to yogurt, applesauce, puddings, salads, soups, casseroles, or ground meat products.
- Use higher fibre, whole grain gluten-free flours when cooking or baking at home (see below).

Flour	Grams of fibre per 1 cup (250 mL)
almond flour	8
amaranth	16
brown rice	8
bean (black or white)	16
buckwheat	9
chickpea	11
coconut flour	41
cornmeal	8
millet	4
nut flour (peanut)	10
oat flour	8
oat bran (pure, uncontaminated)	11
rice bran	26
sorghum	8
teff	8

## Protein foods

- Eat legumes such as peas, beans, and lentils often.
- Add kidney beans, chickpeas, and lentils to soups, casseroles, salads, and spaghetti sauce.
- Include small amounts of nuts, nut butters, and seeds (chia, flax) at meals and snacks.



## What if I have constipation?

Try to get the fibre that you need from food. You can get enough fibre by choosing high or very high fibre foods every day.

- Increase the fibre in your diet slowly to reduce gas and bloating.
- Eat regular meals and snacks to keep food moving through your bowel.
- Drink at least 9 to 12 cups (2.25 to 3 L) of fluid such as water, milk, soup, coffee or tea each day. Fibre holds fluid in the stool, which keeps stools soft.
- Get into a routine and give yourself enough time for bowel movements.
- Keep active. Physical activity helps food digest and keep it moving through the bowel.



## What about laxatives?




Laxatives are pills, liquids, and fibre supplements that can help when you are constipated.

- If you need to use a laxative read the label carefully to make sure that it is gluten-free.
- Follow the directions on the package when you start using a fibre supplement and gradually increase the dose. Drink extra fluids when you take these supplements.
- It is best not to use laxatives regularly as your bowel may start to depend on them to work well. Compared to other laxatives, fibre supplements containing psyllium, inulin, and methylcellulose such as (Metamucil® and plain Prodiem®) are safer for long term use.
- See your doctor if constipation continues to be a problem, or if you notice a change in your usual bowel pattern.

### Caution: For children under 4 years:

Some foods can cause choking. Foods like hard vegetables can be grated, cut into small pieces, or cooked to make them safe. Don't give foods such as whole nuts or seeds, popcorn, and dried fruit to children under 4 years.

## Choose higher fibre foods

Fibre source	Very high source 6 grams or more of fibre per serving	High source 4 grams or more of fibre per serving	Source 2 grams or more of fibre per serving
<b>Vegetables and fruits</b> 	<ul style="list-style-type: none"> <li>avocado, ½ medium</li> <li>pear with skin, medium</li> <li>peas, ½ cup (125 mL)</li> </ul>	<ul style="list-style-type: none"> <li>apple, medium</li> <li>artichoke, cooked, medium</li> <li>blackberries, raspberries ½ cup (125 mL)</li> <li>potato, baked with skin, medium ½ cup (125 mL)</li> <li>strawberries, slices, ½ cup (125 mL)</li> <li>sweet potato, mashed, ½ cup (125 mL)</li> </ul>	<ul style="list-style-type: none"> <li>apricots, fresh (3)</li> <li>banana, nectarine, orange, fresh, medium</li> <li>blueberries ½ cup (125 mL)</li> <li>broccoli, Brussels sprouts, carrots, corn, green beans, okra, parsnip, Swiss chard, turnip, winter squash, ½ cup (125 mL)</li> <li>dried fruit: apricots, dates, figs, prunes, ¼ cup (60 mL)</li> <li>grapefruit, papaya, ½ medium</li> <li>rhubarb, cooked, ½ cup (125 mL)</li> <li>kiwi, 1 large</li> </ul>
<b>Grain foods</b> 	<ul style="list-style-type: none"> <li><b>flours:</b> almond, amaranth, brown rice, bean, buckwheat, coconut, corn, nut, oat, oat bran, rice bran, sorghum, teff, 1 cup (250 mL)</li> <li>psyllium husks, 2 Tbsp (30 mL)</li> </ul>	<ul style="list-style-type: none"> <li>amaranth, millet, teff, cooked, ¾ cup (175 mL)</li> <li>flour: millet, 1 cup (250 mL)</li> </ul>	<ul style="list-style-type: none"> <li>bread, whole grain, gluten-free, 1 slice</li> <li>brown rice, medium grain, or wild rice cooked ½ cup (125 mL)</li> <li>buckwheat, groats, cooked ¾ cup (175 mL)</li> <li>oat bran, (pure, uncontaminated) cooked, ¾ cup (175 mL)</li> <li>popcorn, air-popped, 2 cups (500 mL)</li> <li>quinoa, cooked, ½ cup (125 mL)</li> </ul>
<b>Protein foods</b> 	<ul style="list-style-type: none"> <li>beans or lentils, cooked, ¾ cup (175 mL)</li> <li>chickpeas, cooked, ¾ cup (175 mL)</li> <li>chia seeds, whole flax seeds, 2 Tbsp (30 mL)</li> <li>edamame (green soybeans), cooked, ¾ cup (175 mL)</li> </ul>	<ul style="list-style-type: none"> <li>almonds, macadamia, sesame and sunflower seeds, ¼ cup (60 mL)</li> <li>ground flax seeds, 2 Tbsp (30 mL)</li> <li>hummus, ¼ cup (60 mL)</li> <li>split peas, cooked, ¾ cup (175 mL)</li> </ul>	<ul style="list-style-type: none"> <li>Brazil nuts, hazelnuts, pumpkin, peanuts, pecans, pistachios, walnuts, ¼ cup (60 mL)</li> <li>peanut butter, 2 Tbsp (30 mL)</li> </ul>

Fibre amounts from Canadian Nutrient File, 2015