

FIBRE HANDOUT



WHAT IS FIBRE?

A type of carbohydrate from plant foods that cannot be digested or absorbed in the stomach or small intestine. Fibre adds bulk to foods without increasing caloric content, helping you feel fuller for longer.

WHY IS FIBRE IMPORTANT FOR WEIGHT MANAGEMENT?

- Fibrous foods often take longer to chew which helps with feeling full earlier in a meal (5, 6)
- Soluble fibre attracts water, forming a gel that increases in volume in the stomach (4)
- Ingestion of fibre also results in delayed rises of hormones that trigger hunger (ghrelin) (5)
- Energy dilution: fibre helps increase volume of foods to make them less energy dense but also more filling (2)
- Fibre causes a delay in gastric emptying which causes prolonged feelings of fullness (5, 6)
- Fibre helps lower blood cholesterol and control blood glucose (1)
- Fibre promotes bowel regularity (5)

1. Food Sources of Fibre. In: Practice-based Evidence in Nutrition (PEN). (2016). Accessed November 8, 2018.
2. Government of Canada (2017). Fibre. Accessed November 8, 2018 from <https://www.canada.ca/en/health-canada/services/nutrients/fibre.html>
3. Healthline Editorial Team (2015). What's the best fiber supplement? Accessed November 9, 2018 from <https://www.healthline.com/health/digestive-health/whats-the-best-fiber-supplement>
4. Howarth, N.C., Saltzman, E., Roberts, S.B. (2001). Dietary fiber and weight regulation. *Nutrition Reviews*, 59(5), 129-139.
5. Lyon, M.R., Kacinik, V. (2012). Is there a place for dietary fiber supplements in weight management? *Obesity Treatment*, 1(2), 59-67.
6. Wanders, A.J. et al. (2011). Effects of dietary fibre on subjective appetite, energy intake and body weight: a systematic review of randomized controlled trials. *Obesity Reviews*, 12(9), 724-739.

CATEGORIES OF FIBRE: SOLUBLE VS INSOLUBLE

Insoluble fibre helps promote regularity and a healthy digestive system.

- This type of fibre is found in wheat bran, whole grains, and some vegetables (1)

Soluble fibre helps lower blood cholesterol levels and control blood sugar levels. This is the type of fibre that attracts water to form a gel in the stomach (which helps you feel full for longer).

- This type of fibre is found in oats, barley, psyllium, oranges (1)

Both types help promote satiety and add bulk to foods – this helps with appetite and weight control!

CANADIAN GUIDELINES- WHAT ARE THE TARGETS?

	19-50 YRS	51 YRS +
WOMEN	25 g	21 g
MEN	38 g	30 g

- There is no upper limit to how much fibre you can consume!
- Most Canadians meet less than half of their daily fibre targets (1)

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FOOD SOURCES OF FIBRE

- **Fruits** (eg. avocado, pear, berries, oranges) (1, 2)
- **Legumes** (eg. dried beans, lentils, peas, soybeans) (2)
- **Nuts and seeds** (eg. almonds, pumpkin seeds, sunflower seeds, pistachio, chia seeds) (1, 2)
- **Vegetables** (eg. artichoke, kohlrabi, carrots, spinach, yam) (1, 2)
- **Whole grains** (eg. whole grain breads, cereals, crackers and pasta, brown rice, hulled barley, oats) (2)

DIETARY SUPPLEMENTS OF FIBRE

- **Psyllium (Metamucil)** – 70% soluble fibre product that increases fullness and slows digestion
- **Wheat dextrin (Benefiber)** – Soluble fibre product that is tasteless and can dissolve in both hot and cold liquids. It can be used in cooking and doesn't thicken.
- **Methylcellulose (Citrucel)** – 100% soluble fibre made from cellulose. In powder form, it is used as a thickener and emulsifier, however it is non-fermentable.
- **Inulin (Fibre Choice)** – A prebiotic fibre (which causes favourable changes to colon health). Healthy gut and digestive bacteria aid in weight management by influencing appetite hormones and nutrient absorption. (3)

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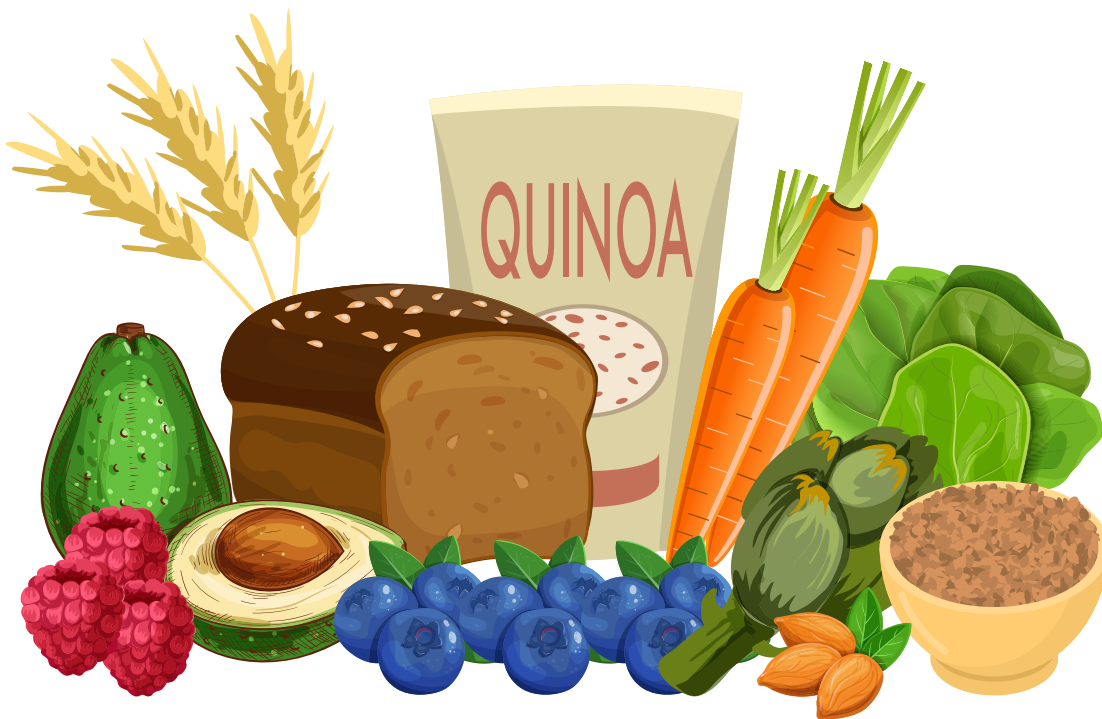
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HOW TO INCREASE DIETARY INTAKE OF FIBRE

- Increase your fibre intake slowly (your body needs to adapt) (1)
- **Drink more fluids as your fibre intake increases.** Your fibre intake will be more effective and will help prevent uncomfortable side effects such as gas, bloating and diarrhea. (1)
- Choose whole grains (like multigrain bread or pasta, brown rice) over refined grains
- Include vegetables in meals and eat them first
- Take a fibre supplement (like the ones listed above)
- Leave the peels and skins on apples, pears, cucumbers, and potatoes



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