

Recommendations

A healthy bowel pattern is different for everyone. Maintaining regular bowel movements helps to prevent constipation. Some individuals may have a bowel movement more frequently than others. The goal is to have a pattern that is consistent and painless.

Preventing and treating constipation can be achieved by:

- Eating a variety of foods from the four food groups in Canada's Food Guide.
- Eating small meals and snacks throughout the day.
- Consuming the recommended amounts of fibre each day.
- Drinking plenty of fluids each day.
- Engaging in regular physical activity.
- Responding to the urge to have a bowel movement.

Health Benefits

Following the recommendations above:

- Promotes a regular bowel pattern.
- May decrease the risk of colon cancer.¹

Key Questions

What is constipation?

Constipation is defined as abnormally delayed or infrequent passage of dry hardened stools,² and also as three or fewer spontaneous bowel movements per week.¹

Possible causes of constipation have not been systematically evaluated. Factors which may cause constipation are:³

- A lack of dietary fibre in some individuals
- A lack of exercise
- Irritable bowel syndrome
- Obesity
- Pregnancy
- Some diseases such as Parkinson's, multiple sclerosis, stroke, diabetes, lupus.
- Some medications
- Stress/depression/anxiety⁴

What lifestyle strategies may help prevent or treat constipation?³

- Eat enough fibre. See '*How much fibre is needed?*' section below. Types of fibre include cellulose, psyllium, inulin, and oligosaccharides. These sources of fibre are primarily found in the skins of fruits, vegetables, wheat and rice bran, and whole wheat.
- Increase fluid intake. See '*How much fluid is needed?*' below.
- Participate in daily physical activity.
- Eat a source of pro/prebiotic daily. Pregnant women should consult with their healthcare provider before starting pre/probiotics.
- Avoid stool retention and initiate bowel retraining if required.
- Consider use of bulk-forming supplements such as psyllium, or methylcellulose.

How much fibre is needed?

The recommendations for fibre intake are:⁵

Age (years)	Daily Recommendation for Fibre (g) for Males	Daily Recommendation for Fibre (g) for Females*
1-3	19	19
4-8	25	25
9-13	31	26
14-50	38	25
Over 50	30	21

*Pregnant women should aim for 28 grams of fibre daily; lactating women should aim for 29 grams of fibre daily.⁵

See '*How can fibre be increased in the diet?*' section below.

Refer to Guideline: Fibre

What types of fibre promote a healthy bowel pattern?

Fibre intake may be related to constipation as it contributes to fecal bulk and decreases in stool transit time.³

Many higher fibre foods contain both soluble and insoluble fibre.

Soluble fibre is a soft fibre that dissolves in water. It helps lower blood cholesterol and control blood sugars.¹ Soluble fibre can also be helpful in alleviating constipation.⁶

Nutrition Guideline

Constipation

For Professional Reference Only

Applicable to: Nurses, Physicians and Other Health Professionals

Best sources of soluble fibre are:

- oat bran
- oatmeal
- legumes such as beans and lentils
- barley
- psyllium husks (added to cereals such as All Bran Buds®)
- apples
- strawberries
- citrus fruits

Insoluble fibre does not dissolve in water. It helps prevent constipation, keeps the digestive system healthy and lowers the risk of certain cancers and heart disease.¹

Best sources of water insoluble fibre are:

- wheat bran
- whole grain foods such as whole grain breads and cereals
- vegetables and fruits (especially those with seeds and skins)
- legumes, such as peas, beans and lentils.

Refer to Guidelines: Fibre; Vegetable and Fruit Intake

How can fibre be increased in the diet?

It is important to meet the recommended amounts of fibre for gender and age. Individuals can increase fibre in the diet by:

- Increase fluid intake when increasing fibre intake.^{1,5} Refer to 'General Healthy Eating for Children and Adults' guideline for fluid requirements.
- Increase fibre intake slowly to allow the bowel time to adapt.¹
- Eating high fibre foods at each meal, such as: whole grains, whole grain breads and cereals, vegetables, fruit, legumes such as beans and peas.
- Reading food labels (especially the Nutrition Facts table) and choosing foods with 2 grams of fibre or more per serving.
- Adding 1 to 2 tablespoons of bran and/or wheat germ to recipes such as meatloaf, casseroles, baked goods and cereals.
- Adding vegetables and fruit to salads, casseroles, muffins and other baked goods.
- Eating small amounts of dried fruit like dates, raisins, and apricots. Caution should be practiced; too much dried fruit can cause cramping, bloating and gas.
- Adding prunes and prune juice to the diet on occasion. Prunes are a natural laxative that can help alleviate constipation. Using small amounts of prunes and prune juice at a time is recommended because too much can cause undesirable gastrointestinal symptoms.

Remember to increase fibre gradually, as the body needs time to adjust to higher intakes of fibre. Too much fibre at once can cause cramping, bloating and gas.

Refer to Guideline: Fibre

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How much fluid is needed?

The relationship between fibre and fluid is not completely understood. There are some studies that indicate high fibre diets increase fecal water loss significantly.⁷

The Academy of Nutrition and Dietetics (formerly the American Dietetic Association) recommends that individuals increase fluid intake when increasing fibre intake to replace the fecal fluid losses that occur with higher stool weight.¹ Individuals should meet at least the minimum daily fluid requirements for their age group (see below).

The recommendations for fluids are:⁸

Gender	Age (years)	Daily Recommendations (mL) ^{a,b}	Daily Recommendations (cups) ^{a,b}
Female	2-3	1000	4
	4-8	1400	5
	9-13	1700	7
	14-18	1800	7
	Over 19	2200	9
	Pregnancy - all ages	2400	10
	Lactation – all ages	3000	12
Male	2-3	1000	4
	4-8	1400	5
	9-13	1900	8
	14-18	2600	10
	Over 19	3000	12

^a Refers to total amount of fluids from caloric and non-caloric beverages. Juice should be limited to ½ cup per day. For children 4 to 13 years, milk intake from 'all fluids' should equal 2 cups per day. For youth 14 to 18 years, milk intake from 'all fluids' should equal 3 cups per day.

^b Amounts listed are the adequate intakes for fluid, minus the water content in food eaten. Water content of food accounts for about 20% of total water intake.⁸

Refer to Guideline: Food and Drinks High in Calories, Fat, Sugar or Salt

How much physical activity is recommended?

Individuals should engage in regular physical activity that is enjoyable and consistent. The Public Health Agency of Canada (PHAC) has detailed information and recommendations about physical activity for all ages. The Agency's resources and handouts are available from: <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/04paap-eng.php>

Should individuals take fibre supplements or laxatives?

The best way for an individual to get the fibre needed in their diet is from fibre-containing foods.¹ Although some fibre supplements may be helpful, few have been studied for physiological effectiveness. Also, fibre supplements and laxatives lack many nutrients found in higher fibre foods.

Fibre can be helpful in alleviating constipation.⁶ It is safe to use concentrated fibre sources such as Metamucil®, plain Prodiem®, or inulin powders such as Benefibre®. (For more information about inulin see 'Are there other sources of dietary fibre?' section in *Fibre* guideline.) Starting with a half or a quarter of the regular dose and increasing slowly is recommended. It is important to drink lots of fluid when taking a fibre supplement.

Commercial laxatives should not be used long-term. If constipation is an ongoing problem, a physician should be consulted.

Refer to Guideline: Fibre

When is constipation a more serious concern?

Usually constipation itself is not a problem. Sometimes, however, it is a symptom of a more serious condition.

If any of the symptoms listed below are present, a physician should be consulted:

- Constipation that does not resolve after a few weeks of increased fibre and liquid intake
- Constipation alternating with episodes of diarrhea
- Rectal bleeding
- Mucus and/or blood in stool
- Abdominal pain
- Weight loss
- Loss of appetite

What is chronic constipation?

Chronic constipation is defined as unsatisfactory defecation, and is characterized by infrequent stools, difficult stool passage, or both. In order to be deemed chronic, these symptoms must be present for at least 3 months in a year.⁹

How is chronic constipation managed?

Chronic constipation may be a symptom of other medical conditions or chronic diseases and requires consultation with a healthcare professional, such as a physician, nurse and/or Registered Dietitian.

Are there any handouts on constipation I can use with my clients?

Refer to approved provincial Alberta Health Services nutrition handouts to support patient education. For more information, contact Nutrition.Resources@albertahealthservices.ca

References

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