

The Low-FODMAP Diet

What is the low-FODMAP diet?

The low-FODMAP diet is a dietary intervention that restricts foods containing highly **F**ermentable **O**ligosaccharides, **D**isaccharides, **M**onosaccharides, **A**nd **P**olyols. These short-chain carbohydrates and polyols are poorly absorbed in the digestive tract and reach the colon where they are fermented by bacteria, a process that may result in certain gastrointestinal symptoms. Limiting dietary intake of FODMAPs may lower intestinal water content, as well as reduce fermentation and gas production in the colon.

What are the health benefits of the low-FODMAP diet?

While FODMAPs are always poorly digested, healthy individuals may not experience any adverse gastrointestinal symptoms. Research has shown that the low-FODMAP diet may benefit individuals with certain conditions, including:

- Celiac disease (CD)
- Healthy athletes who experience gastrointestinal issues during training
- Inflammatory bowel disease (IBD)
- Irritable bowel syndrome (IBS)
- Non-celiac gluten sensitivity



Following the low-FODMAP diet

The low-FODMAP diet generally consists of three phases:

1. **Restriction**, where all FODMAPs are restricted from the diet for a period of four to six weeks.
2. **Re-challenge**, where high-FODMAP foods are reintroduced by each FODMAP component to identify personal triggers and tolerance levels.
3. **Personalization**, where individuals follow an individualized long-term low-FODMAP diet based on their personal tolerance.

High-FODMAP foods to limit

Dietary FODMAPs, their gastrointestinal effects, and common food sources are outlined in the table below.

Component	Effects	Common food sources
Oligosaccharides (e.g., fructans, galactooligosaccharides (GOS))	No human enzymes for digestion Highly fermentable; produces gas, bloating, and abdominal pain	Artichokes Certain fruits (e.g., ripe bananas, dates, dried apricots) Garlic Legumes (e.g., beans, lentils) Nuts Onions Rye Wheat
Disaccharides (e.g., lactose)	Malabsorption occurs if transport proteins are altered or if the individual is enzyme-deficient (e.g., lactase deficiency resulting in lactose intolerance) Unabsorbed components are fermented in the large intestine; may result in gas and bloating	Dairy (e.g., butter, cheese, cream, milk)
Monosaccharides (e.g., fructose)	Draws water into the bowel contents Leads to pain, bloating, distension of the small intestine May result in diarrhea	Certain fruits (e.g., apples, cherries, figs, mangoes, pears, watermelon) Certain vegetables (e.g., beets, sugar snap peas) High-fructose corn syrup Honey
Polyols (e.g., mannitol, sorbitol)	Passive absorption only Likely to draw water into the bowel Leads to pain, bloating, distension of the small intestine May result in diarrhea	Apples Artificial sweeteners (e.g., chewing gum, mints) Cauliflower Mushrooms Pears Snow peas Stone fruit

Consider using the [Monash University FODMAP Diet app](#) for support on the low-FODMAP diet.

References

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