

## 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   |
|--|---|---|
| <b>Oligosaccharides</b><br>(e.g., fructans, galactooligosaccharides (GOS)) | No human enzymes for digestion<br><br>Highly fermentable; produces gas, bloating, and abdominal pain  | Artichokes<br>Certain fruits (e.g., ripe bananas, dates, dried apricots)<br>Garlic<br>Legumes (e.g., beans, lentils)<br>Nuts<br>Onions<br>Rye<br>Wheat              |
| <b>Disaccharides</b><br>(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)<br><br>Unabsorbed components are fermented in the large intestine; may result in gas and bloating | Dairy (e.g., butter, cheese, cream, milk)   |
| <b>Monosaccharides</b><br>(e.g., fructose)                                 | Draws water into the bowel contents<br><br>Leads to pain, bloating, distension of the small intestine<br><br>May result in diarrhea   | Certain fruits (e.g., apples, cherries, figs, mangoes, pears, watermelon)<br>Certain vegetables (e.g., beets, sugar snap peas)<br>High-fructose corn syrup<br>Honey |
| <b>Polyols</b><br>(e.g., mannitol, sorbitol)                               | Passive absorption only<br><br>Likely to draw water into the bowel<br><br>Leads to pain, bloating, distension of the small intestine<br><br>May result in diarrhea  | Apples<br>Artificial sweeteners (e.g., chewing gum, mints)<br>Cauliflower<br>Mushrooms<br>Pears<br>Snow peas<br>Stone fruit   |

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

## References

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