

Fibers – A special category of carbohydrates



Composition Function & Metabolism

- According to the CODEX alimentarius definition, **fibers** are carbohydrate polymers with ten or more monosaccharide units¹ from plants that humans **do not have the ability to digest**.
- Fibers have a wide range of benefits on:
 - Bowel function
 - Gut health
 - Immune system
 - Blood glucose control
 - Serum lipid levels
- Fibers provide up to **2 kcal/g** (nutritional labeling requirement may differ across markets)
- Fibers can be soluble or insoluble
 - **Soluble fibers** (e.g. the **prebiotics** fructo-oligosaccharides (FOS) & inulin) are readily fermentable by bacteria in the colon. Once fermented, they encourage the growth of beneficial bacteria already present in the colon.
 - **Insoluble fibers** are either not or only partially digested by bacteria in the colon. It contributes to the normalization of bowel function in cases of diarrhea or constipation, with adequate water intake.
- Note: even if fibers are carbohydrate polymers, in some markets they are counted separately in the nutritional information table.

¹ Decision on whether to include carbohydrates from 3 to 9 monosaccharide units is left to national authorities.