

Preface

Prebiotics are compounds in food that foster growth or activity of beneficial microorganisms such as bacteria and fungi. The most common environment concerning their effects on human health is the gastrointestinal tract, where prebiotics can alter the composition of organisms in the gut microbiome. Dietary prebiotics are typically nondigestible fiber compounds that pass undigested through the upper part of the gastrointestinal tract and help growth or activity of advantageous bacteria in the colon by acting as substrates for them. They were first identified and named by Marcel Roberfroid in 1995. Depending on the jurisdiction, they may have regulatory scrutiny as food additives for the health claims made for marketing purposes. Common prebiotics used in food manufacturing include beta-glucan from oats, resistant starch from grains and beans, and inulin from chicory root.¹

In the present book, ten typical literatures about prebiotics published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on prebiotics. We hope this book can demonstrate advances in prebiotics as well as give references to the researchers, students and other related people.

The Editorial Board of Academic Archives
Scientific Research Publishing
November 28th, 2025

¹ [https://en.wikipedia.org/wiki/Prebiotic_\(nutrition\)](https://en.wikipedia.org/wiki/Prebiotic_(nutrition))