



Prebiotic Guide

Make the connection between
beneficial gut species and the prebiotics
that nurture them.



Associated with good health

Species name	Prebiotics to Increase Growth
<i>Agathobacter faecis</i>	FOS AX RS
<i>Agathobacter rectalis</i>	FOS INULIN AX RS
<i>Akkermansia muciniphila</i>	FOS PAC
<i>Anaerostipes hadrus</i>	FOS INULIN
<i>Bifidobacterium adolescentis</i>	FOS INULIN GOS PECTIN AX
<i>Bifidobacterium angulatum</i>	FOS GOS
<i>Bifidobacterium animalis</i>	FOS INULIN
<i>Bifidobacterium bifidum</i>	FOS INULIN GOS
<i>Bifidobacterium breve</i>	FOS INULIN GOS PECTIN AX RS
<i>Bifidobacterium catenulatum</i>	FOS GOS
<i>Bifidobacterium infantis</i>	FOS INULIN GOS AX
<i>Bifidobacterium longum</i>	FOS INULIN GOS PECTIN
<i>Bifidobacterium pseudocatenulatum</i>	GOS
<i>Coprococcus_B comes</i>	FOS INULIN
<i>Coprococcus eutactus</i>	FOS INULIN
<i>Faecalibacterium prausnitzii_A</i>	FOS INULIN PECTIN
<i>Faecalibacterium prausnitzii_C</i>	FOS INULIN PECTIN
<i>Lactobacillus gasseri</i>	GOS PECTIN
<i>Roseburia hominis</i>	FOS AX
<i>Roseburia intestinalis</i>	FOS AX RS
<i>Roseburia inulinivorans</i>	FOS INULIN RS
<i>Ruminococcus_E bromii</i>	GOS RS

FOS

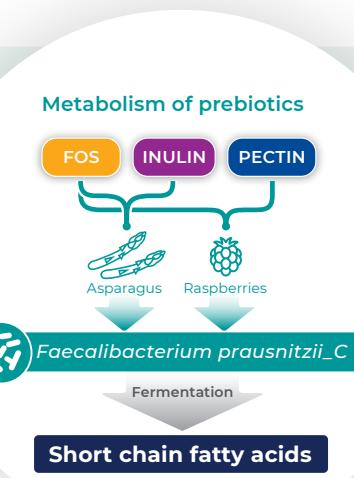
Fructooligosaccharides

Asparagus	■ ■
Beetroots	■ ■ ■
Blueberries	■ ■ ■
Bran, wheat	■ ■ ■ ■ ■
Bread, pumpernickel	■ ■ ■ ■
Bread, wholemeal	■ ■ ■ ■ ■
Breakfast cereals (bran-based)	■ ■ ■ ■
Brussels sprouts	■
Butter beans	■ ■
Cashews	■ ■ ■
Chicory root	■ ■
Fennel bulb	■
Garlic	■ ■
Leeks	■ ■
Lentils, red	■ ■
Mulberries	■
Nectarines	■
Onions	■ ■
Pistachios	■ ■ ■
Raspberries	■ ■
Red kidney beans	■ ■ ■
Rye	■ ■ ■ ■ ■
Rye crispbreads e.g Ryvita	■ ■ ■
Shallots (little onions)	■ ■
Snow peas	■
Spring onions (green and white)	■
Watermelons	■

Associated with poor health

Species name	Prebiotics and dietary changes to inhibit growth
<i>Bilophila wadsworthia</i>	INULIN, REDUCE SATURATED FAT
<i>Fusobacterium nucleatum</i>	FLAVONOIDS

the *bacterial species* with their *prebiotic*



ic source

AX	Arabinoxylan	RS	Resistant starch	PAC	Proanthocyanidin
Almonds	■ ■	Bananas, slightly green	■ ■	Almonds	■ ■
Bamboo shoots	■ ■	Barley	■ ■ ■	Blueberries	■ ■ ■ ■ ■
Barley	■ ■ ■ ■	Barleymax	■ ■ ■	Chocolate dark (min 80% cocoa solids)	■ ■
Barleymax	■ ■ ■ ■	Bread, pumpernickel	■ ■ ■ ■	Cinnamon	■ ■
Bran, wheat	■ ■ ■ ■ ■ ■	Bread, rye	■ ■ ■ ■ ■ ■	Cranberries	■ ■
Bread, rye	■ ■ ■ ■ ■ ■	Bread, whole grain	■ ■ ■ ■ ■ ■	Hazelnuts	■ ■ ■ ■
Bread, whole grain	■ ■ ■ ■ ■ ■	Bread, wholemeal	■ ■ ■ ■ ■ ■	Peanuts	■ ■
Bread, wholemeal	■ ■ ■ ■ ■ ■	Breakfast cereals (corn-based)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Pecans	■ ■
Breakfast cereals (bran-based)	■ ■ ■ ■ ■ ■	Cashews	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Pistachios	■ ■ ■ ■ ■ ■
Breakfast cereals (corn-based)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Cassava root	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Plums	■ ■ ■ ■ ■ ■
Breakfast cereals (mixed-grain)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Chickpeas	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Sorghum	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
Breakfast cereals (wholegrain wheat)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Lentils, green	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Strawberries	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
Flaxseed (linseed)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Pasta salad e.g. (cooked & cooled overnight)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Pasta salad e.g. (cooked & cooled overnight)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Potato salad e.g. (cooked & cooled overnight)	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Pasta, whole wheat	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Plantains	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Quick oats	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Red kidney beans	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Rice, brown	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Rice, brown	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Rice, white	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Rolled oats	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Rolled oats	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Rye	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Rye	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Sorghum	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Rye crispbreads e.g Ryvita	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Sweet potatoes	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Sorghum	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	Taro root	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
Whole wheat	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	White beans	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		
		Whole wheat	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■		

PAC 5%
 RS 27%
 PEC 27%
 AX 32%
 GOS 45%
 INU 59%
FOS 86%

FOS
 are the most
 common
 prebiotic fuel
 sources for
 the majority
 of beneficial
 species.


MICROBA
 Discover your patient's
 unique prebiotic food
 sources. Explore how their
 gut microbiome may be
 affecting their health with
 the **Microba Insight™** gut
 microbiome analysis.





Research indicates that diets supporting low fibre consumption and excess protein consumption can shift the proportion of the gut microbiome to be in favour of protein-digesting species^{1,2}. In some cases, these species can release pro-inflammatory compounds, such as lipopolysaccharides¹, which promote negative health effects, including gut inflammation and chronic health issues.

The gut microbiome contains both fibre and protein-digesting microbial species. This prebiotic guide will help make the connection between beneficial microbes and the prebiotics which encourage their growth to best produce health-promoting SCFAs.

To maintain a healthy balance of microbial species and production of inflammation-suppressing compounds, such as short chain fatty acids (SCFAs)³, a high intake of prebiotics and plant-based fibres is shown to be the best course of action.

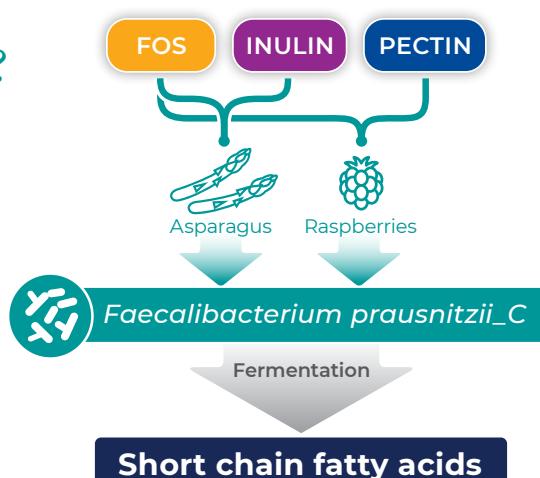
What's on the menu for *Faecalibacterium prausnitzii_C*?

FOS (Fructooligosaccharides): Pistachios, Pumpernickle Bread, Red Lentils

INULIN: Barley, Whole Wheat Pasta, Ripe Bananas

PECTIN: Butternut Pumpkin, Green Peas, Sweet Potatoes

Metabolism of prebiotics



1. Vich Vila, A. Imhann, F. Jankipersadsing, S.A. Gurry, T., Mujadic, Z. Gut microbiota composition and functional changes in inflammatory bowel disease and irritable bowel syndrome. *Science Translational Medicine*, 10 (472)(2018). Doi:10. 1126/scitranslmed.aap8914
2. He, Q., Gao, Y., Jie, Z., Yu, X., Laursen, J.M. Two distinct metacommunities characterize the gut microbiota in Crohn's disease patients.
3. Singh, R. K. et al. Influence of diet on the gut microbiome and implications for human health. *J. Transl. Med.* 15, 73 (2017).



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