

# Akkermansia muciniphila supplementation

Akkermansia is a beneficial bacteria that lives in and feeds on the mucus layer of the human gut. When Akkermansia feeds on the gut mucus layer, short-chain fatty acids are produced, which causes the body to make more mucus. As a result, the gut barrier is constantly replenishing with fresh mucus to keep it healthy. Akkermansia has been shown to play an important role in gut health, immune system function, and metabolic health.

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**Did you know?** Having low levels of Akkermansia may cause the mucus lining of your gut to thin, which may weaken the overall strength of your gut barrier, potentially allowing harmful toxins inside.

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# Health benefits of *Akkermansia muciniphila*

- Helps strengthen the gut barrier
- Provides energy for microorganisms involved in immune system function
- Protects the epithelial cells of the gut (layer of cells that lines the internal surface of the intestines)

**Akkermansia may also be beneficial for certain metabolic and inflammatory diseases, such as:**

- Atopy (the predisposition to develop allergic diseases such as allergies, asthma, and eczema)
- Autism
- Inflammatory bowel diseases (IBD), including Crohn's disease and ulcerative colitis
- Obesity
- Type 2 diabetes

## How to increase *Akkermansia* levels

Supplementation and fasting have been shown to boost *Akkermansia* levels in the gut.

## Types of supplements

Supplementation and fasting have been shown to boost *Akkermansia* levels in the gut.

Type of supplement	Function
<b>Akkermansia probiotic</b>	Increases <i>Akkermansia</i> levels by replenishing the quantities that are depleted by a high-fat Western diet
<b>Cranberry extract</b>	Increases <i>Akkermansia</i> levels due to high polyphenol levels which stimulate the growth of beneficial gut bacteria
<b>Green tea extract</b>	Increases <i>Akkermansia</i> levels due to large quantity of bioactive ingredients which are used by gut microorganisms

## Fasting

Intermittent fasting, including alternate-day fasting and time-restricted eating, can increase *Akkermansia* levels in the gut. Studies show that this can positively affect gut microbiota levels (the community of microorganisms living in the gut), which improves insulin sensitivity (the body's ability to detect and use insulin properly to prevent disease) and increases metabolism (the production of energy from food sources in the body), protecting against weight gain. Consult your practitioner for guidance on how to fast safely.

Calorie restriction was also found to be more effective in encouraging weight loss in people with high *Akkermansia* levels because it promotes higher insulin sensitivity.

# References

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**This handout was developed and medically reviewed by Fullscript's Integrative Medical Advisory team.**

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