Does L-glutamine work for IBS?

L-glutamine is a non-essential amino acid that is often simply called glutamine. It is produced by the body and is also found in food.

The body requires 20 essential and nonessential amino acids that work to create various proteins. Being able to get adequate protein is critical for people's health.

Usually, a person produces enough L-glutamine themselves to meet all of the body's needs. However, sometimes there is a shortfall of L-glutamine, leading to a deficiency, or there may be benefits to increasing intake of L-glutamine for health reasons.

Does it work for IBS?

A person needs sufficient proteins to function optimally, and amino acids are the basic building blocks of proteins.

L-glutamine is the most plentiful amino acid in the body and supports intestinal health. L-glutamine may work for those with IBS because of this role.

The tissues found in the intestine use L-glutamine as a fuel source to function at their best. L-glutamine is also thought to help maintain proper barriers within the intestine.

What is IBS?

IBS or <u>irritable bowel syndrome</u> affects a person's digestive system and can cause the following symptoms:

- bloating
- · cramping in the abdomen
- constipation
- diarrhea
- severe upset stomach
- white mucus after a bowel movement

It is possible that some cases of IBS occur due to an L-glutamine deficiency, and those who increase their intake of L-glutamine may notice a reduction or disappearance of their symptoms.

L-glutamine deficiency

Some of the reasons a person might experience L-glutamine deficiency are:

- shock or extreme <u>stress</u>
- trauma
- major infections
- intense exercise
- radiotherapy
- chemotherapy
- immune disorders, such as <u>HIV</u> or <u>AIDS</u>
- chronic gastrointestinal disorders, such as <u>Crohn's disease</u>,
 eosinophilic <u>esophagitis</u> (EoE), or inflammatory bowel disease

lack of L-glutamine in the diet

L-glutamine helps people with IBS by working to protect the mucous membrane of the esophagus and intestines. The mucous membrane blocks bacterial infiltration during digestion.

L-glutamine can also boost immune cell activity in the gut, helping prevent infection and <u>inflammation</u>, as well as soothing the intestinal tissue.

Because L-glutamine is used for energy production, it can support the reduction of intestinal spasms.

People with stress-related IBS may also find that increasing their intake of L-glutamine reduces symptoms.

This benefit is due to the body releasing cortisol when it is stressed, which can lower the levels of L-glutamine stored in the muscle tissue.

Side effects

While L-glutamine supplementation is usually considered safe for most people, there are some who should avoid it.

People with kidney disease, liver disease or Reye's syndrome, a severe condition that can cause swelling of the liver and brain, should avoid taking L-glutamine supplements.

There have also been some studies showing that certain types of <u>tumor</u> cells feed off L-glutamine and multiply.

Hence, people with <u>cancer</u>, or those who have a high risk of cancer, may be advised to avoid L-glutamine supplements.

Some people have an allergic reaction to L-glutamine. If an allergic reaction occurs they may experience:

- nausea
- vomiting
- joint pain
- hives

Immediate medical attention is needed if any of the above reactions occur after someone has taken L-glutamine supplements.

A person can change their diet to increase their L-glutamine as well.

Good sources of L-glutamine can be found in certain foods, including:

- chicken
- fish
- cabbage
- spinach
- dairy
- tofu
- lentils
- beans
- beets
- peas

Making sure that the recommended dosage guidelines are followed is crucial. Taking too much L-glutamine in supplement form may also result in adverse side effects.

Other supplements for IBS?

Other supplements that might be beneficial for people with IBS include digestive enzymes. These can help the body to break down food into smaller molecules so that they can be absorbed more easily.

Examples of digestive enzymes a person with IBS might take include:

- Amylase: This enzyme helps to break apart complex sugars in food.
- Pepsin: Proteins found in meat, eggs, and dairy products are simplified by pepsin.
- Lipase: Complex fats molecules are broken down with lipase.
- Lactase: This enzyme breaks down lactose.
- Trypsin: Several proteins are broken down by trypsin to form amino acids.

What is the overall scientific consensus?

At present, there is not enough scientific research to prove that L-glutamine improves the symptoms of IBS.

However, a <u>recent review</u> emphasizes the theory that L-glutamine is beneficial to intestinal or gut permeability and may help to prevent unwanted toxins entering the digestive system.

This could point towards supporting the idea that L-glutamine might help to improve IBS, as the condition is sometimes thought to occur due to compromised intestinal permeability.

Takeaway

More research is needed to prove that L-glutamine can help people with IBS.

L-glutamine is considered a safe supplement and is <u>available to buy online</u>. By consulting a doctor and ensuring dosage guidelines are followed, a person can avoid any adverse side effects, and positive benefits, such as a reduction in symptoms of IBS, may be experienced.