

Acetyl-L-Carnitine

Also called ALC or ALCAR | Amino Acids And Related Compounds

What Is It?

Acetyl-L-carnitine is a substance your body makes naturally. It helps your cells turn fat into energy. It is also sold as a supplement, often promoted for nerve pain, memory and energy. Research does not clearly support all of these advertised benefits. [1,2]

Why People Take It - And How Strong the Research Is

Nerve pain caused by diabetes | BENEFIT UNCERTAIN. Some studies suggest it may help. But a 2019 review by Cochrane, a research organization, found that the studies were not reliable enough to know whether it reduces pain or improves how nerves work. This does not mean it never helps; it means we cannot be sure. [2]

Memory and thinking problems | RESULTS ARE MIXED. Some studies found improvements and others did not. The research summarized by the National Institutes of Health (NIH) does not support routinely using it to treat dementia, an illness that affects memory and thinking. [1]

More energy or better exercise performance | NOT ENOUGH EVIDENCE. Helping cells make energy does not necessarily mean that taking extra will make you feel more energetic. Research on other types of carnitine does not necessarily apply to this type. [1]

What these labels mean: They describe how much we can trust the research for each use. They do not tell you whether it will help you personally or whether it is safe for you.

Side Effects And Important Safety Concerns

Cancer treatment warning: Acetyl-L-carnitine can make nerve damage from chemotherapy worse. Do not take it to prevent this problem. If you are receiving cancer treatment, talk with your cancer care team before using it. [3]

Carnitine supplements can cause an upset stomach, diarrhea, headache or an unusual body odor. Talk with your doctor first if you have seizures or kidney disease. Ask a pharmacist to check whether it could affect any of your medicines, especially blood thinners such as warfarin. Other medicine problems are possible too. [1,3]

Questions To Ask Your Doctor Or Pharmacist

Could this help with my symptoms? Is it safe with my health conditions and medicines? If I try it, how much should I take and for how long? What improvement should I look for? When should I stop?

Where To Find Additional Information

1. [NIH Office of Dietary Supplements - Carnitine](#)
2. [Cochrane - Acetyl-L-carnitine for diabetic neuropathy \(2019\)](#)
3. [Memorial Sloan Kettering - Carnitine: benefits, risks and interactions](#)

Updated October 17, 2026; sources checked October 15, 2026. This guide is for learning, not for diagnosing or treating an illness. Talk with your healthcare provider before changing prescribed treatment.