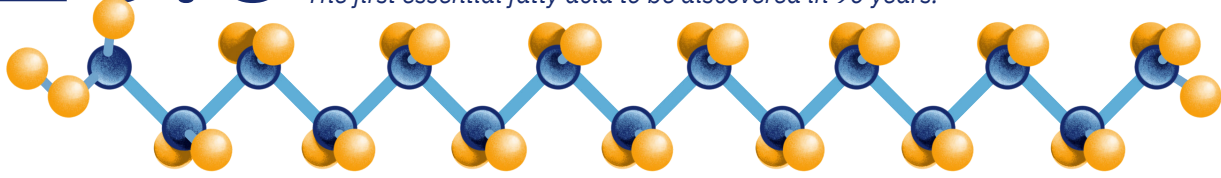


C15:0

The first essential fatty acid to be discovered in 90 years.



(Pentadecanoic Acid)

Mechanism Fact Sheet

What is C15:0 (pentadecanoic acid)?

C15:0 is a nutrient that can help support your long-term health and wellness. C15:0 (pronounced see-fifteen) is the first essential fatty acid to be discovered since omega-3 and omega-6, which was over 90 years ago.



Targeted Receptors

By naturally targeting receptors throughout our bodies, C15:0 has been shown to:

- Activate PPAR alpha-delta receptors that regulate metabolism, immunity, mood, appetite, and sleep.
- Activate the AMPK pathway which maintains cellular homeostasis.
- Inhibit HDAC-6, which can reduce cancer cell proliferation.
- Inhibit MAPK and JAK-STAT signaling, which reduces inflammation.



Lowered Drivers of Chronic Disease

C15:0 has been shown to lower clinically-relevant biomarkers of chronic disease, including:

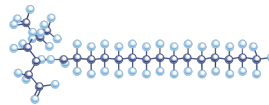
- Lower proinflammatory cytokines, including IL-6, MCP-1, VCAM-1, and PAI-1.
- Decrease proliferation of cancer cells.
- Decrease proliferation of fibroblasts to help slow or stop tissue fibrosis.
- Treat multiple human cell disease systems mimicking inflammation, cardiovascular disease, liver cirrhosis, autoimmune disease, and allergies.



Reversed Hallmarks of Aging

C15:0 reverses multiple drivers of aging and has been shown to:

- Improve cellular resilience against premature breakdown.
- Repair mitochondrial function.
- Improve cellular signaling.
- Inhibit HDAC, which can help to repair DNA and prevent epigenetic methylation.



Produced Active Metabolites

Our bodies use C15:0 to make a metabolite called pentadecanoylcarnitine (or PDC), which has been shown to:

- Activate CB1 and CB2 receptors that regulate mood, sleep, inflammation, and pain.
- Activate 5-HT1A and 5-HT1B receptors that help to lower stress.
- Inhibit H1 and H2 histamine receptors, which helps to treat allergy symptoms.

Learn more at [DiscoverC15.com](https://www.discoverc15.com)