Anserine

Also called: beta-alanyl-N-methylhistidine; L-anserine; beta-alanyl-1-methyl-L-histidine

What it is

Anserine is a naturally occurring histidine dipeptide (beta-alanyl-N-methyl-L-histidine), the methylated cousin of carnosine, abundant in poultry and fish muscle. It buffers pH, is an antioxidant, and scavenges the glycation agent methylglyoxal (PMID 40107203). Randomized trials of a poultry-derived anserine/carnosine (3:1) supplement preserved verbal memory and brain perfusion in older adults (PMID 26682691). It is a dietary supplement, not an approved drug.

Approval status

Dietary Supplement. Not an approved drug: Drugs@FDA and the openFDA label endpoint hold no drug application or label, and FDA GSRS and ChEMBL hold no approved-drug record for anserine (searched November 7, 2026). It is a naturally occurring dietary dipeptide from meat, sold as a food supplement (often a poultry- or fish-derived anserine/carnosine extract). Human randomized trials of the anserine/carnosine combination support memory preservation in older adults.

Dosing, as printed in the page's Recommended Dosing box

Used in human trials

No manufacturer dose exists for this use: these are amounts given in published trials, not recommendations.

Protocol and source	Dose	Frequency	Duration	Route
Trial: verbal memory in healthy older adults **[Human study]** PMID 26682691	1.0 g anserine/carnosine (3:1 ratio)	Daily	3 months	Oral
Trial: mild cognitive impairment **[Human study]** PMID 31319510	750 mg anserine + 250 mg carnosine	Daily	12 weeks	Oral

Educational information, not medical advice. Each dose above is tagged with its source: an approved label, a published human study, animal data, or amounts reported by users. None is a recommendation for you. An unapproved compound has no established safe or effective human dose, and products sold for "research use only" are not made or tested for people. Talk to a doctor before acting on anything on this site, including before you start, stop or change any medicine or dose.

Key human evidence

The 2 human studies carded on the page (6 study cards in all):

• **Anserine/carnosine supplement preserves verbal memory in elderly (RCT)** (Human, 2016). In a double-blind randomized controlled trial, healthy older adults taking a poultry-derived anserine/carnosine (3:1) supplement for three months showed significant preservation of delayed-recall verbal memory versus placebo, with decreased inflammatory cytokines and, on MRI, suppression of the age-related decline in posterior-cingulate blood flow; a second RCT reproduced the memory benefit (human interventional evidence for the combination). **PMID 26682691**

• **Anserine/carnosine supplement in mild cognitive impairment (RCT)** (Human, 2019). A randomized, double-blind, placebo-controlled 12-week trial in people with mild cognitive impairment found that an anserine/carnosine supplement improved the global Clinical Dementia Rating versus placebo; benefit was clearest in APOE4-positive subjects (also on the Mini-Mental State Examination), while several other cognitive tests did not differ — a modest, subgroup-weighted human result. **PMID 31319510**

Interactions

A PubMed search for interaction studies of this compound with any drug (November 7, 2026, 8 records) found none in people. That is not evidence that it is safe to combine with anything.

Side effects and cautions

Reported side effects	Contraindications and cautions
• In the human cognition trials, the anserine/carnosine supplement was used without reported safety concerns, consistent with a well-tolerated dietary dipeptide (PMIDs 26682691, 31319510) • Like carnosine, orally taken anserine is partly broken down by carnosinase enzymes, which limits how much reaches tissues — a pharmacological consideration, not an adverse effect • The human cognitive benefit comes from an anserine/carnosine combination, so effects cannot be attributed to anserine alone, and some cognitive measures showed no change • It is a supplement, not a treatment; it should not replace medical care for cognitive or other conditions, and product quality is not standardised across sellers	• Not a drug: no FDA drug application or label, and no approval to treat any condition • Human dosing, interaction, pregnancy and long-term safety data are limited and come from small trials of an anserine/carnosine combination • People with medical conditions or on medications should consult a clinician before supplementing • Benefits reported are modest and partly subgroup-specific; it is not a substitute for medical care

Five questions to ask

1. Anserine is listed here as "Dietary Supplement". What does the evidence on this sheet mean for someone in my situation, and is there an approved treatment I should consider instead?
2. Here are the medicines and supplements I take. Do any of them interact with Anserine? This sheet records none published, which does not mean none exist.
3. Which side effects should make me stop and call you, for example in the human cognition trials?
4. Do any of the cautions on this sheet apply to me, such as: Not a drug: no FDA drug application or label, and no approval to treat any condition?
5. What should we check before I start and while I am on it (blood tests, blood pressure, weight), and how often?

Grey Peptides is a vendor-neutral encyclopedia: it sells nothing and names no seller. This sheet is educational, not medical advice, and is not a prescription.