DSIP (Delta Sleep-Inducing Peptide)

Neuropeptide Studied for Sleep Regulation

What It Is & What It Does

DSIP is a nonapeptide first isolated from rabbit cerebral blood by Swiss researchers in 1977, named for its association with delta-wave (deep, restorative) sleep. It's been studied intermittently in humans since the late 1970s, with a genuinely mixed set of results worth laying out honestly rather than glossing over.

What The Research Shows

- Schneider-Helmert & Schoenenberger (1978): 6 middle-aged chronic insomniacs given IV DSIP (25 nmol/kg) showed longer sleep duration, higher sleep quality with fewer interruptions, and slightly more REM sleep, with no daytime sedation, lasting up to 6 hours.
- An earlier 1980 study in 6 healthy volunteers found that a morning IV DSIP infusion (25 nmol/kg) increased total sleep time by 59% (median) within 130 minutes, with no classic pharmacologic sedation on detailed behavioral/EEG analysis.
- An open trial gave 7 patients with severe insomnia a series of 10 DSIP injections; sleep normalized in 6 of 7 patients for 3-7 months of follow-up, with daytime mood and performance also improving.
- A separate 14-patient, placebo-controlled, 7-night trial found DSIP substantially improved night sleep with both the first and repeated doses, with the effect maintained on the first post-treatment night, and significantly increased daytime alertness and performance.
- Counterpoint worth including: a 16-patient double-blind, placebo-controlled study found DSIP improved sleep efficiency and latency on polysomnography, but concluded the effects were statistically weak and "not likely to be of major therapeutic benefit" for chronic insomnia short-term — a genuinely mixed result from a well-controlled trial, not a case for dismissing the compound outright.

Reported Side Effects

- Limited modern adverse event data; older literature reports occasional headache or dizziness
- Long-term safety in humans has not been systematically studied by current standards

Regulatory Status

Not FDA-approved for any indication. Not currently in active Western clinical trials. Research use only.

DSIP

2026 regulatory update — rejected

July 2026 FDA Advisory Vote — Not Recommended

On July 23-24, 2026, the FDA's Pharmacy Compounding Advisory Committee (PCAC) met to vote on whether seven previously-restricted peptides should be added to the Section 503A Bulk Drug Substances list -- the list that determines what compounding pharmacies can legally prepare from a prescription. This is separate from, and later than, the April 2026 reinstatement to FDA Category 1 covered elsewhere in this document.

DSIP (listed by FDA under the name Emideltide) was evaluated for opioid withdrawal, chronic insomnia, and narcolepsy. On July 24, 2026, PCAC voted 6-7 against recommending it for the 503A Bulks List -- the only rejection among the seven peptides reviewed that week; BPC-157, KPV, TB-500, MOTS-c, Semax, and Epitalon all received favorable votes.

This does not change DSIP's existing legal status (not FDA-approved, research use only), but it is worth knowing DSIP was specifically considered and turned down where its peers were not.