



DSIP: the peptide the sleeping brain makes.

DSIP, delta sleep-inducing peptide, is a nine-amino-acid peptide first found in 1977 in the blood of rabbits in deep sleep, by scientists asking what the sleeping brain was making. It is not a sedative. In small studies from the 1980s it nudged insomniacs toward longer, deeper sleep, and it has been tried for stress, chronic pain and withdrawal. Nearly fifty years on, its receptor is still unknown and the human trials are small and old. This guide explains what it does, what has actually been shown, and how people use it.

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THINK OF IT LIKE THIS

Falling asleep is not a switch, it is a negotiation. One side of your brain shouts to stay alert, driven by stress hormones and the excitatory signal glutamate; the other side tries to apply the brakes with GABA, the calming signal. DSIP appears to lean on the brake and take its hand off the accelerator: in lab work it strengthens GABA's calming current and dampens glutamate's excitatory one. It does not knock you out the way a sleeping pill does. It changes who wins the negotiation.

This may be for you if...

- You fall asleep exhausted but wake at 2 or 3am with your mind running, and you wake unrefreshed
- Stress is the thing keeping you up, not pain, not a breathing problem
- You have tried the basics: a dark cool room, no screens, no late caffeine, a fixed wake time
- You want something that is not a sedative and does not leave you groggy

This probably is not for you if...

- You are pregnant, breastfeeding, or under eighteen
- You snore heavily or stop breathing at night; that is sleep apnoea and it needs a sleep study, not a peptide
- You take sleeping pills, benzodiazepines, opioids or drink alcohol at night; the effects add up
- You have depression or bipolar disorder that is not under treatment; DSIP nudges stress hormones and mood in ways nobody has mapped

EVIDENCE AT A GLANCE



Small double-blind human studies from the 1980s in insomnia, pain and withdrawal, with weak and mixed results, plus animal and cell work on stress and oxidative damage. No receptor identified, no modern trial, no approval anywhere.

Nine amino acids, found by asking what the sleeping brain makes.

In 1977 two Swiss researchers took blood from the brains of rabbits that had been put into deep sleep and asked what was in it. They found a short peptide, nine amino acids long, that made other rabbits sleep more deeply when injected. They named it after the slow delta waves of deep sleep.

What it does is still argued about. In cell and animal work it strengthens GABA, the brain's calming signal, blunts glutamate, the excitatory one, and reduces the release of stress hormones. It also protects cells from oxidative stress. What it does not do is sedate: it does not hit the receptors that sleeping pills hit.

WHAT IT APPEARS TO DO, STEP BY STEP

STEP 1 · BRAKE

Strengthens the calming signal

In neurons, DSIP increases the current that GABA produces, so the brake pedal works harder.

STEP 2 · RELEASE

Eases off the accelerator

It reduces the response to glutamate, the signal an overworked, stressed brain is drowning in.

STEP 3 · SETTLE

Calms the stress axis

In animals it lowers stress-hormone release and oxidative damage, and sleep gets deeper and more stable.

NOT A SEDATIVE, AND THAT MATTERS

A sleeping pill forces the brakes on and holds them. DSIP, as far as anyone can tell, adjusts the balance so that sleep happens on its own, which is why the old studies reported no daytime grogginess. It is also why it is subtle: on a good night you may notice nothing except that you slept.

THREE THINGS WORTH KNOWING

- **It is fast.** In blood it is broken down within minutes, so timing matters: people dose right before bed.
- **The receptor is unknown.** Fifty years of research and nobody has found the lock this key fits, which is why the mechanism is a set of observations rather than a story.
- **It has been tried for more than sleep.** Small 1980s studies used it for chronic pain and for alcohol and opioid withdrawal, with mixed results.

DSIP NEXT TO WHAT PEOPLE USUALLY REACH FOR

	DSIP	MELATONIN	SLEEPING PILLS
How it works	Shifts the GABA and glutamate balance	Signals night-time to the body clock	Forces the GABA brake on
Human evidence	Small old trials, mixed	Many trials, modest effect	Large trials, approved
Next morning	No grogginess reported	Usually clear	Often groggy; dependence risk

PLAIN-ENGLISH NOTE

If you snore, gasp or stop breathing at night, no peptide will fix that. Get a sleep study first. DSIP is for the wired, stressed brain that cannot switch off, not for a blocked airway.

Small trials from the 1980s, and then the field went quiet.

DSIP was studied seriously for about a decade after its discovery, mostly in Switzerland and Germany, in groups of six to twenty people. The results were real but weak, funding moved on, and nobody has run a modern trial. Here is what exists.

16

chronic insomniacs in the main double-blind study

Given DSIP or placebo intravenously. Sleep efficiency rose and time to fall asleep fell, but the authors called the effects weak and possibly partly chance.

6

middle-aged insomniacs who slept longer

A small acute study: longer sleep, better quality, fewer interruptions and no daytime sedation. Six people, one night.

2

other uses tried in small trials

Chronic pain and withdrawal from alcohol and opioids, in the 1980s. Some patients improved; the studies were small and never repeated.

0

modern randomised trials

Nothing controlled has been published in decades, and no regulator has reviewed it.

What we know

- In small double-blind studies, DSIP modestly improved sleep efficiency and time to fall asleep in chronic insomniacs
- No daytime sedation or hangover was reported in those studies
- In cells and animals it strengthens GABA signalling, dampens glutamate, and reduces stress-hormone release and oxidative damage
- It is broken down in blood within minutes, so any effect comes from dosing close to bedtime

What we are still learning

- What it binds to; the receptor has never been identified
- Whether the small 1980s effects would survive a modern, larger trial
- The right dose and course; the 100 to 300 microgram protocols come from forums, not from studies
- What long courses do to stress-hormone rhythms or mood

WHAT THE HUMAN STUDIES ACTUALLY LOOKED LIKE

STUDY	WHO	WHAT THEY DID	RESULT
Double-blind insomnia trial, 1992	16 chronic insomniacs	Intravenous DSIP or placebo	Better sleep efficiency and faster onset; effects weak
Acute insomnia study, 1980s	6 middle-aged insomniacs	One intravenous dose	Longer, better sleep with fewer wakes; no daytime sedation
Pain and withdrawal, 1984	Small groups of patients	Repeated doses	Some improvement in pain and withdrawal; never repeated
Animal and cell work, ongoing	Rodents; neurons in a dish	Stress, oxidative damage, GABA currents	Calmer signalling, less damage, deeper sleep

MY HONEST TAKE

I find DSIP interesting for the reason it was discovered: the sleeping brain makes it. But I have to be plain that the human evidence is forty years old, small, and described as weak by the people who ran it. The upside is a gentler kind of sleep with no hangover; the honest expectation is subtle. Treat it as a short experiment with a log, not a cure.

Short courses, dosed right before bed, with a sleep log.

There is no modern dosing study. The protocols below are what the research community has settled on, built around one fact from the science: DSIP is broken down within minutes, so it is dosed close to bedtime. It is sold as a lyophilised vial; the guide assumes 5 mg vials, so check the size on any listing and adjust the maths if yours differ.

COURSE	DOSE	WHAT YOU NEED	WHAT TO EXPECT
Starter 2 weeks	100 micrograms under the skin, 30 minutes before bed, nightly	1 × 5 mg vial	Enough to learn how you respond. Most notice nothing the first nights; some report deeper sleep and vivid dreams within the first week.
Standard 4 weeks	200 micrograms nightly, 30 minutes before bed	2 × 5 mg vials	The most common course. Judge it with the log on page 7: time to fall asleep, night wakes, and how you feel at 10am.
Full course 6 weeks	250 micrograms nightly, then two weeks off	3 × 5 mg vials	The longest run that makes sense before a break. The two weeks off tell you what was the peptide and what was the routine.

Which one? Start with the starter unless you have used it before. The effect, if you get one, is subtle, so the log is not optional. Do not raise the dose to chase a feeling; there is no data that more is better, and the 1980s trials used a single modest dose.

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HOW TO USE IT, IN FOUR STEPS

- Mix.** Add 2 mL of bacteriostatic water to a 5 mg vial, slowly, down the side of the glass. Swirl, never shake. That gives 2.5 mg per mL, so 100 micrograms is 4 units on an insulin syringe.
- Inject.** Under the skin of the belly or thigh, 30 minutes before you turn the lights off. Rotate sites. A brief sting is normal.
- Time it.** Always at night. It is cleared from blood in minutes, so a morning dose does nothing for sleep and a very late one just delays you.
- Store.** Sealed vials in the fridge or freezer. A mixed vial in the fridge, used within four weeks. Clear is right; cloudy means discard it.

DOSE TO UNITS

DOSE	DRAW
100 mcg	4 units
200 mcg	8 units
250 mcg	10 units

At 2.5 mg per mL, a 5 mg vial mixed with 2 mL of water. With 1 mL of water every draw halves: 200 micrograms becomes 4 units.

COMMON QUESTIONS

Will it knock me out?

No. It is not a sedative and the old studies reported no grogginess. If you feel drugged the next morning, something else is going on: stop and reassess.

Can I take it with melatonin?

People do. They work by different routes and no interaction is known, but there is no study of the pair either. Add one thing at a time so you know what did what.

Can I take it with my sleeping pills?

Not without your prescriber. Both lean on the GABA system and the combination has never been studied.

No modern dosing trial exists. These regimens reflect research-market practice, not a clinical protocol. Not a prescription. Talk to your doctor first, especially if you take anything sedating.

Read this page before you order anything.

In the old human studies DSIP was well tolerated, with no sedation and no notable side effects. The caution is about what has not been studied: long courses, combinations with other sedatives, and people whose stress hormones or mood are already out of balance. Read both lists honestly.

Do not use this if...

- You are pregnant, breastfeeding, trying to conceive, or under eighteen
- You take sleeping pills, benzodiazepines or opioids, or drink alcohol at night, unless your prescriber agrees
- You snore heavily or stop breathing in your sleep and have not had a sleep study
- You have untreated depression, bipolar disorder or a psychotic illness
- You cannot get a certificate showing identity by mass spectrometry for the vial in your hand

Be cautious, and talk to your doctor first, if...

- You have epilepsy; it shifts the balance of brain signalling and nobody has studied that in seizures
- You have low blood pressure or faint easily; report any dizziness after a dose
- You take antidepressants; the stress-hormone effects are not mapped alongside them
- You drive or operate machinery early; do not dose late at night
- You are a shift worker; the timing rules above assume a normal night

Stop and get medical help if...

- Grogginess, confusion or slowed thinking the next day
- A drop in mood, unusual anxiety or agitation
- Hives, swelling of the face or throat, or trouble breathing
- Spreading redness, heat or a hard lump at an injection site
- A persistent headache or nausea that arrived with the peptide

Common, and usually mild

- A sting or small red spot at the injection site; rotate sites
- Vivid dreams in the first week
- A mild headache the first nights, usually gone by day three
- Nothing at all. Subtle is normal, which is why the log matters

BEFORE YOU START

- ☐ Log a baseline week first: time to fall asleep, night wakes, and how you feel at 10am
- ☐ Fix the basics the peptide cannot: dark cool room, no screens for an hour, a fixed wake time
- ☐ Tell your doctor if you take anything sedating, and agree how you will combine them, or not
- ☐ Read the certificate: identity by mass spectrometry and purity above 98 percent
- ☐ Decide the course length before you start, and put the end date in your calendar

These lists are drawn from the old human studies, the animal work on stress signalling, and case reports from the research community, because no modern trial exists. They are not complete, and they are not a substitute for a conversation with your own doctor.

Sources and alternatives.

My vendor does not carry DSIP, and I would not send you elsewhere for a compound with forty-year-old evidence. What I can do is show you how to check any vendor that sells it, and point you to two options for sleep that have real trials behind them and cost almost nothing.

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- 01 Open the link or scan the code, and create the free account.
- 02 If you buy DSIP elsewhere, run the five-point check below on that vendor first, and insist on the identity line.
- 03 Whatever you choose, match the lot number to the certificate before you use it.



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Glycine · 3 grams before bed

An amino acid from any supplement shop. In small human trials it improved sleep quality and next-day alertness, with no hangover. Cheap, oral, and better studied than DSIP.

EVIDENCE: SMALL HUMAN TRIALS

Any supplement shop

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The mineral most of us run low on. Human trials in older adults with insomnia improved sleep onset and quality. Take it with dinner.

EVIDENCE: SMALL HUMAN TRIALS

Any pharmacy

A sleep study

If you snore, gasp, or wake unrefreshed no matter what, this is the purchase. A doctor can order it, it often happens at home, and it is the only thing on this page with lifespan data.

EVIDENCE: THE STRONGEST HERE

Ask your doctor for it by name.

HOW TO CHECK ANY VENDOR, IN FIVE POINTS

- **A certificate for your exact batch**, with a lot number you can match to the vial in your hand. "We test" is not a certificate.
- **A named, independent lab**. Janoshik and MZ Biolabs are the ones the community trusts. An unnamed in-house lab is a red flag.
- **The right tests**: identity (is it the right molecule), quantity (how much is really in the vial), and endotoxin (is it clean). Purity alone is not enough.
- **Sensible pricing**. Far below market usually means the corner was cut inside the vial.
- **A reputation you checked yourself**, on the big peptide forums and on finnricks.com, an independent site that publishes test results and sells nothing.

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06 DSIP · 6-WEEK SLEEP LOG

You will not feel this working. Log it.

Fill in one row per week, using the average of your nights. **Onset:** minutes to fall asleep, your best guess. **Wakes:** how many times you woke on a typical night. **Sleep:** 1 broken · 3 normal · 5 the best it has been. **10am:** how you feel mid-morning, 1 foggy · 5 sharp. Print this, or screenshot it and mark it up on your phone.

Week 0

Baseline week, before the first dose. This row is the whole point: without it you cannot tell what changed.

Week 2

Starter course ends. Compare onset and wakes with week 0, not with memory.

Week 4

Standard course ends. Decide from the numbers: continue to six weeks, or stop and take the two weeks off.

Week 6

Full course ends. Two weeks off, then compare the off-weeks with the on-weeks. That comparison is the whole answer.

WK	DATE	DOSE + TIME	ONSET MIN	WAKES	SLEEP 1-5	10AM 1-5	NOTES
0							Baseline week, no peptide. Lot number: _____
1							First doses. Vivid dreams? Headache?
2							Starter ends. Compare with week 0.
3							
4							Standard ends. Continue or stop?
5							
6							Full course ends. Two weeks off from here.
7							Off week 1.
8							Off week 2. Compare on and off.

NOTES: WHAT ELSE CHANGED THIS WEEK (CAFFEINE, ALCOHOL, STRESS, SCREENS)



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A one-point wobble is noise. Falling asleep ten minutes faster for two weeks running, or one fewer wake most nights, is signal. Write down anything else you changed at the same time, because caffeine, alcohol, a late workout and a new pillow all move the same needles.