

# DSIP Comprehensive Dosage Guide

## (5 mg /10 mg Vials)

### I. Overview

DSIP (Delta Sleep-Inducing Peptide) is a naturally occurring nonapeptide (9 amino acids) first isolated and identified from rabbit brain tissue in 1977.

Research indicates that DSIP can promote delta-wave (slow-wave) sleep, modulate cortisol and ACTH levels, and exhibit stress-protective properties.

This guide covers dosage protocols for **5 mg** and **10 mg** vials of DSIP, both based on once-daily subcutaneous administration, intended for educational and research purposes.

### II. Dosage and Reconstitution Guidelines

#### 2.1 5 mg Vial

**Reconstitution:** Add **3.0 mL** bacteriostatic water → Concentration ≈ **1.67 mg/mL**

**U-100 Insulin Syringe Conversion:** 1 unit = 0.01 mL ≈ **16.7 mcg**

**Shelf Life After Reconstitution:** Approximately **4 weeks** when refrigerated (2–8°C)

**Standard/Gradual Protocol (Concentration 1.67 mg/mL):**

| Phase       | Weeks     | Daily Dose  | Injection Volume (mL) | Units       |
|-------------|-----------|-------------|-----------------------|-------------|
| Initial     | Week 1    | 100 mcg     | 0.06 mL               | 6 units     |
| Escalation  | Week 2    | 150 mcg     | 0.09 mL               | 9 units     |
| Escalation  | Week 3    | 200 mcg     | 0.12 mL               | 12 units    |
| Maintenance | Weeks 4–8 | 250–300 mcg | 0.15–0.18 mL          | 15–18 units |

**Injection Frequency:** Once daily subcutaneous injection, typically in the evening before bedtime.

**Cycle Length:** 4–8 weeks, extendable to 12 weeks if desired; a rest period between cycles is recommended.

**Note:** Doses exceeding 300 mcg are based on anecdotal reports; formal human studies have primarily used daily doses up to approximately 300 mcg. Use the minimum effective dose and increase only if needed.

#### 2.2 10 mg Vial

**Reconstitution:** Add **3.0 mL** bacteriostatic water → Concentration ≈ **3.33 mg/mL**

**U-100 Insulin Syringe Conversion:** 1 unit = 0.01 mL ≈ **33.3 mcg**

**Shelf Life After Reconstitution:** Store refrigerated; aliquoting is recommended; avoid freeze-thaw cycles.

**Standard/Gradual Protocol (Concentration 3.33 mg/mL):**

This dosage reference is for informational and research purposes only.  
It does not replace professional medical advice and is not for human consumption.

| Phase       | Weeks     | Daily Dose  | Injection Volume (mL) | Units     |
|-------------|-----------|-------------|-----------------------|-----------|
| Initial     | Week 1    | 100 mcg     | 0.03 mL               | 3 units   |
| Escalation  | Week 2    | 150 mcg     | 0.05 mL               | 5 units   |
| Escalation  | Week 3    | 200 mcg     | 0.06 mL               | 6 units   |
| Maintenance | Weeks 4–8 | 250–300 mcg | 0.08–0.09 mL          | 8–9 units |

**Injection Frequency:** Once daily subcutaneous injection, preferably **30–60 minutes before bedtime**.

**Cycle Length:** 4–8 weeks, extendable to 12 weeks if desired; a rest period between cycles is recommended.

**Note:** For injection volumes  $\leq 10$  units ( $\leq 0.10$  mL) – such as Weeks 1–2 for the 5 mg vial, and all recommended doses for the 10 mg vial – **using a 30- or 50-unit insulin syringe** is recommended for improved reading accuracy.

### III. Reconstitution Steps (General)

1. Draw **3.0 mL** of bacteriostatic water into a sterile syringe.
2. Inject slowly down the vial wall to avoid foaming or a direct stream onto the lyophilized powder.
3. Gently swirl/roll until the powder is completely dissolved (do not shake vigorously).
4. Label with the reconstitution date and concentration. Store refrigerated ( $2-8^{\circ}\text{C}$  /  $35.6-46.4^{\circ}\text{F}$ ), protected from light.
5. Use within the shelf life after reconstitution; discard if turbidity or particulate matter is observed.

### IV. Required Supplies

Plan based on an 8 to 12-week daily protocol with gradual dose adjustments.

#### 4.1 5 mg Vial

**Peptide Vials (DSIP, 5 mg per vial):**

- 8 weeks at  $\sim 200$  mcg/day avg  $\approx 2-3$  vials
- 12 weeks at  $\sim 200$  mcg/day avg  $\approx 3-4$  vials
- 12 weeks at  $\sim 300$  mcg/day avg  $\approx 5-6$  vials

**Insulin Syringes (U-100):**

- Per week: 7 syringes (1/day)
- 8 weeks: 56 syringes
- 12 weeks: 84 syringes

**Bacteriostatic Water (10 mL vials):** Use  $\sim 3.0$  mL per vial for reconstitution.

- 3 vials: 9 mL  $\rightarrow 1 \times 10$  mL vial
- 5 vials: 15 mL  $\rightarrow 2 \times 10$  mL vials
- 6 vials: 18 mL  $\rightarrow 2 \times 10$  mL vials

**Alcohol Swabs:** One for the vial stopper + one for the injection site each day.

- Per week: 14 swabs (2/day)
- 8 weeks: 112 swabs  $\rightarrow$  Recommend 2 x 100-count boxes
- 12 weeks: 168 swabs  $\rightarrow$  Recommend 2 x 100-count boxes

#### 4.2 10 mg Vial

**Peptide Vials (DSIP, 10 mg per vial):**

- 8 weeks  $\approx 1$  vial (10 mg supports  $\sim 33-100$  doses at 100–300 mcg)

This dosage reference is for informational and research purposes only.  
It does not replace professional medical advice and is not for human consumption.

12 weeks  $\approx$  2 vials

**Insulin Syringes (30- or 50-unit recommended for small volumes):**

Per week: 7 syringes (1/day)

8 weeks: 56 syringes

12 weeks: 84 syringes

**Bacteriostatic Water (10 mL vials):** Use 3.0 mL per vial for reconstitution.

8 weeks (1 vial): 3 mL  $\rightarrow$  1 x 10 mL vial

12 weeks (2 vials): 6 mL  $\rightarrow$  1 x 10 mL vial

**Alcohol Swabs:** One for the vial stopper + one for the injection site each day.

Per week: 14 swabs (2/day)

8 weeks: 112 swabs  $\rightarrow$  Recommend 2 x 100-count boxes

12 weeks: 168 swabs  $\rightarrow$  Recommend 2 x 100-count boxes

## V. Protocol Overview

A concise summary of the once-daily evening regimen.

**Goal:** Support healthy sleep architecture and long-term stress modulation. **Schedule:** Daily subcutaneous injections for 4–8 weeks (extendable to 12 weeks).

**Dose Range:** 100–300 mcg daily with gradual titration; advanced up to 500 mcg.

**Reconstitution:** 3.0 mL per 5 mg vial ( $\sim$ 1.67 mg/mL) for accurate unit measurements.

**Storage:** Lyophilized frozen; reconstituted refrigerated; avoid repeated freeze-thaw.

## VI. Dosage Protocol

Suggested nightly titration approach.

**Starting Dose:** 100 mcg nightly; increase by  $\sim$ 50 mcg every 1–2 weeks as tolerated.

**Target:** 250–300 mcg nightly by Weeks 4–8.

**Frequency:** Once daily (subcutaneous), 30–60 minutes before bedtime.

**Cycle Length:** 8–12 weeks; consider a break after the cycle.

**Timing:** Evening dosing to align with natural sleep onset; rotate injection sites.

## VII. Storage Instructions

Proper storage preserves peptide quality.

**Lyophilized:** Store at  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) in dry, dark conditions; minimize moisture exposure.

**Reconstituted:** Refrigerate at  $2-8^{\circ}\text{C}$  ( $35.6-46.4^{\circ}\text{F}$ ); use within  $\sim$ 4 weeks; avoid freeze-thaw.

Allow vials to reach room temperature before opening to reduce condensation uptake.

## VIII. Important Notes

Practical considerations for consistency and safety.

Use new sterile insulin syringes; dispose in a sharps container.

Rotate injection sites (abdomen, thighs, upper arms) to reduce local irritation.

Inject slowly; wait a few seconds before withdrawing the needle.

Record daily dose and site rotation to maintain consistency.

Some research suggests DSIP effects may persist for multiple nights after dosing [2]; adjust frequency as needed.

## IX. Potential Benefits & Side Effects

**Potential Benefits:**

**Sleep Improvement:** May promote deeper, more restorative slow-wave sleep and improve subjective sleep quality [3][6].

**Stress Modulation:** Demonstrates stress-protective and anxiolytic-like effects through HPA axis modulation [4][13].

**No Tolerance:** Some studies indicate DSIP does not induce pharmacological tolerance with continued use [2].

This dosage reference is for informational and research purposes only.  
It does not replace professional medical advice and is not for human consumption.

**Safety:** Animal studies found no lethal dose even at extremely high doses; human studies report only mild, transient side effects [1][13].

**Common Side Effects:**

Generally well tolerated in human studies; occasional mild injection-site reactions (redness, itching) may occur with subcutaneous administration.

A few individuals report transient headache or nausea.

## X. Injection Technique

General subcutaneous guidance from clinical best-practice resources.

Clean the vial stopper and skin with alcohol; allow to dry.

Pinch a skinfold; insert the needle at a 45–90° angle into subcutaneous tissue.

Do not aspirate for subcutaneous injections; inject slowly and steadily.

Systematically rotate sites (abdomen at least 2 inches from navel, thighs, upper arms) to avoid lipohypertrophy.

**Important Disclaimer:** This document is for educational and research purposes only and does not constitute medical advice, diagnosis, or treatment. DSIP is an investigational compound and is not approved by regulatory agencies for routine human therapy. Please consult a qualified healthcare professional before use.