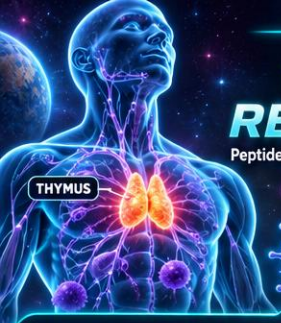
PEPTIDE PERSPECTIVES

THE IMMUNE RESILIENCE STACK

Peptides, Vitamins & Supplements That Influence Immune Function

Immune Support • Stacking & Synergy Series





IMMUNE RESILIENCE ≠ IMMUNE STIMULATION

- Healthy immunity means appropriate responses, not just stronger responses.
- Barriers, innate defense, adaptive memory, and nutrition all matter.
- None of the stacks below is a clinically validated immune-support regimen.

FOUR LAYERS OF DEFENSE

THYMUS & T-CELL DEVELOPMENT

- T-cell maturation
- Immune coordination
- Age-related thymic involution

INNATE BARRIERS

- Skin and mucosa
- Macrophages
- Neutrophils
- Antimicrobial peptides

ADAPTIVE IMMUNITY & MEMORY

- B cells
- Antibodies
- T cells
- Vaccine response

NUTRITION, METABOLISM & RECOVERY

- Protein (immune building blocks)
- Vitamin D, zinc, vitamin C, selenium
- Sleep (immune regulation & repair)
- Energy supply (metabolic support)

6 RESEARCH STACKS & DOSING CONTEXT

1. THYMOSIN ALPHA-1 + THYMOGEN

Mechanism: Broader thymic immunomodulation + short-chain immune-regulatory signaling.

DOSING (COMPONENT-STUDY / COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED STACK PROTOCOL):

- **Thymosin Alpha-1:** 1.6 mg SC, 2x/week (human-studied component)
- **Thymogen:** 50–100 mcg/day or BID intranasal; often 10–20 day courses (reported)

EVIDENCE: Combination untested

2. THYMOSIN ALPHA-1 + VILON

Mechanism: Immune-cell communication + short-chain bioregulator signaling.

DOSING (COMPONENT-STUDY / COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED STACK PROTOCOL):

- **Thymosin Alpha-1:** 1.6 mg SC, 2x/week
- **Vilon:** 100–200 mcg/day for 10–20 days (reported)

EVIDENCE: Largely theoretical

3. THYMOSIN ALPHA-1 + LL-37

Mechanism: Adaptive immune regulation + innate antimicrobial signaling.

DOSING (COMPONENT-STUDY / COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED STACK PROTOCOL):

- **Thymosin Alpha-1:** 1.6 mg SC, 2x/week
- **LL-37:** 50–100 mcg/day start; some reported ramps to 200 mcg/day

EVIDENCE: Higher concern

⚠ Immune activation may become inflammatory.

4. THYMOGEN + VILON

Mechanism: Two short-chain thymic bioregulators.

DOSING (COMPONENT-STUDY / COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED STACK PROTOCOL):

- **Thymogen:** 50–100 mcg/day; 10–20 day courses
- **Vilon:** 100–200 mcg/day; 10–20 day courses

EVIDENCE: Very limited evidence

5. THYMOSIN ALPHA-1 + THYMULIN

Mechanism: Contrasting thymus-associated signals.

DOSING (COMPONENT-STUDY / COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED STACK PROTOCOL):

- **Thymosin Alpha-1:** 1.6 mg SC, 2x/week
- **Thymulin:** No established human dose

EVIDENCE: Research comparator

6. THYMOSIN ALPHA-1 + NUTRITIONAL REPLETION

Mechanism: Experimental immune signaling + correction of real nutrient gaps.

DOSING (COMPONENT-STUDY / COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED STACK PROTOCOL):

- **Thymosin Alpha-1:** 1.6 mg SC, 2x/week
- **Nutritional correction:** Based on verified deficiency

EVIDENCE: Best rationale for deficiency correction

COMPLEMENTARY VITAMINS, MINERALS & SUPPORTS

Vitamin D3	1,000–2,000 IU/day maintenance; deficiency correction individualized
Zinc	15–30 mg/day short term; avoid chronic high-dose excess
Vitamin C	500–1,000 mg/day
Selenium	100–200 mcg/day
Probiotics	~1–10 billion CFU/day; strain-specific
Beta-glucans	250–500 mg/day
Protein	~1.2–1.6 g/kg/day when intake is inadequate
B12 / Folate / Iron	Replace only when deficient or clinically indicated

⚠ **ZINC EXCESS:** Chronic high doses can impair copper status and immune function.

⚠ **SELENIUM TOXICITY:** Dose-dependent risk (e.g., GI, hair/nail changes, neurologic symptoms).

⚠ **PROBIOTIC CAUTION:** Use caution in severely immunocompromised patients (e.g., transplants, intensive immunosuppression, major illness).

WHAT GOOD STUDIES SHOULD MEASURE



- Fewer infections
- Better vaccine response
- Shorter illness duration / less severity
- Hospitalization and recovery outcomes
- Safety, tolerability, and immune over-activation risk

SPECIAL OVERLAP RISKS



- Overlapping immune effects may be additive, neutral, or harmful.
- LL-37 can be context-dependent and may promote inflammation in some settings.
- Extra caution with autoimmune disease, transplants, immunosuppressants, pregnancy, cancer care, or diagnosed immune deficiency.
- Research-market peptide purity and identity may vary.

⚠ **EXPERIMENTAL STACKS DO NOT EQUAL PROVEN IMMUNE PROTECTION. DOSING SHOWN = STUDIED COMPONENT OR COMMUNITY-REPORTED CONTEXT, NOT A VALIDATED COMBINATION PROTOCOL.**