

# Move over Hormones, Peptides are Here

As a greater understanding of the underlying mechanisms of aging and chronic illness occurs, new safe and effective interventions are being developed. Seemingly simple peptides are found to be involved with and regulate most every known process and system in the body in a tissue specific manner. Thus, increasing numbers of peptides are becoming clinically available that can safely improve, optimize or normalize specific functions of the body.

While hormone therapy and optimization were a mainstay of antiaging medicine, it is being understood that regulatory peptides are the master controllers of many functions of the body, including hormone production, so there is a much greater potential for safe and effective interventions and therapies compared to hormones and synthetic medications.

The body uses a vast array of highly specific signaling peptides to regulate different parts and functions of tissues throughout the body. Thus, peptide therapy offers the potential to achieve specific responses of select tissues rather than less precise and broad effects of hormone therapy or trying to achieve a desired effect by altering physiologic processes with synthetic medications.

Currently, peptides are available that are shown to safely and effectively improve and modulate specific parts of hormone production, immune function, the sleep cycle, the production of inflammatory mediators, DNA replication, cell division and renewal, cancer cell destruction and apoptosis, libido and sexual arousal, tissue healing and specific biological functioning of the brain, skin, eyes and urinary and reproductive systems.

Condition	Go to Hormone
CFS/FM/ME/Lyme/Chronic Infection	Thymosin Alpha-1, Thymosin Beta 4, Semax, Selank, LL-37, Thymulin, BPC 157
Cognitive Dysfunction/Neuro Damage	Semax, Selank, Cerebrolysin, Epithalon and Thymosin Beta4
Aging/Preventive Medicine	Epithalon, Thymosin Beta 4, Thymulin, BPC 157, Semax, Selank
Sleep	Epithalon, DISP
Weight Loss	Follistatin, GH FRAG 176-191
Libido/ED	PT-141, Melanotan , Semax
Anxiety/Depression	Semax, Cerebrolysin, Selank, DISP



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National Academy of Hypothyroidism and Integrative Sciences

[NAHypo.org](http://NAHypo.org)

# Peptide Usage Overview

Holthorf, Kent: National Academy of Hypothyroidism and Integrated Sciences (NAHS)

	Class	Pain	Immunity	Inflammation	Libido	Anti-aging	Weight Loss	Cognitive	Antioxidant	Sleep	Dose (1)	Conditions
<b>GH FRAG 176-191</b>	Truncated GH		+	+		+	+	+		+	150-500 mcg qd (pulse)	Healing, body fat, rejuvenation
<b>Semax</b>	Nootropic	+	+	++	+	+++		+++	++	+	300-1000 mcg/day	Cognitive dysfunction, memory, stroke, dementia, depression, TBI, ADHD
<b>Cerebrolysin</b>	Nootropic		+	++		++		+++	++	+	200-1000 mg qAM	Cognitive dysfunction, memory, stroke, dementia, depression, TBI, ADHD
<b>Selank</b>	Nootropic		+			+		++		+	250-1500 mcg/day	Cognitive dysfunction, memory, stroke, dementia, depression, TBI, ADHD, anxiety, depression
<b>CJC 1295 + Ipamorelin</b>	GHRH/GHRP		+			+	+	+		+	200/200-500 /500 qd (pulse)(lb)	Growth hormone stimulation
<b>Follistatin</b>	Myostatin Blocker		++	++			+++				100-200mcg 1-2 x/ week	Weight loss, muscle building
<b>Melanotan II</b>	MSH Analog				++		++				200 mcg q 1-2 weeks	Tanning, weight loss, libido
<b>PT 141/Bremelanotide</b>	MSH Analog				+++		+				1-2 mg q 1-3 days prn	Libido, weight loss, tanning
<b>Thymosin Alpha 1</b>	TH1 Stimulation		+++	+		+		+	+		300-1000 mcg qd	Immune boosting for chronic infection, cancer
<b>Thymulin</b>	TH1-TH2 Balance	++	+++	+++		+++		++	++	+	500-1000 mcg/day	Immune modulation, cancer, rejuvenation, neurorejuvenation, muscle pain
<b>Thymosin Beta 4</b>	TH1-TH2 Balance	++	+++	+++		++		++	++	+	300-1000 mcg qd	Immune modulation, cancer, rejuvenation, neurorejuvenation, muscle pain
<b>BCP 157</b>	Reduce TH2 (Inflammation)		++	+++		++		+	+		500 mcg qd to q week oral, 200-1000 mcg qd - q week	Systemic or GI inflammation, healing, rejuvenation
<b>DISP</b>	Sleep Peptide	++				+			++	+++	300-1000 mcg/day (may increase to 3000 mcg/day)	Sleep
<b>Epithalon</b>	Pineal Gland Peptide		+			+++		++	++	++	300-1000 mcg/day	Immunity, cancer, sleep, anti-aging, telomere lengthening, DNA repair
<b>LL-37</b>	Anti-Microbial Peptide		++	+					+		200-1000 cmg/day	Anti-biofilm, chronic infections, Lyme, anti-bacterial, anti-viral, anti-parasitic
<b>MGF</b>	Sarcopenic IGF--1	+				+	+	+			200-500 mcg/day	Muscle pain, muscle building

(1) Above dosing is based on the medical literature and what we have found safe and effective at Holthorf Medical Group; dosing given for SQ delivery (other options potentially available).  
 \*\*Dosing are suggested guidelines; clinical and laboratory assessment is required

\*\*\*Start low and titrate up in prudent manner  
 (1b) Pulsing suggested 5 days on 2 days off and 4 weeks on and one week off;