



GUIDE TO THERAPEUTIC PEPTIDES

This document summarizes therapeutic peptides, organized alphabetically and by specific health benefits.

General Peptide Information

5-Amino-1MQ

- **What It Is** 5-Amino-1MQ (5-Amino-1-methylquinolinium) is a novel small molecule peptide classified as an NNMT inhibitor — meaning it blocks the activity of the enzyme nicotinamide N-methyltransferase (NNMT), which plays a key role in cellular energy metabolism, fat storage, and aging.
 - **Benefits:** Reduce fat cell size, Increase NAD⁺ levels (critical for energy and mitochondrial function), Enhance insulin sensitivity and metabolic efficiency.
 - **Side Effects:** Rare; potential mild irritation at injection sites.
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AOD-9604

- **What It Is:** A peptide fragment of human growth hormone used primarily for fat loss.
 - **Benefits:** Enhances lipolysis (fat breakdown), reduces lipogenesis (fat storage), and supports metabolism.
 - **Side Effects:** Minimal side effects reported, but mild injection site reactions and nausea can occur.
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ARA-290

- **What It Is:** A small peptide that modulates the innate repair receptor for anti-inflammatory and reparative benefits.
 - **Benefits:** Reduces neuropathic pain, inflammation, and tissue damage; may support diabetes complications.
 - **Side Effects:** Rare; potential mild irritation at injection sites.
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BPC-157

- **What It Is:** A synthetic peptide with regenerative and anti-inflammatory properties.
 - **Benefits:** Enhances tissue repair, wound healing, and supports gastrointestinal health.
 - **Side Effects:** Minimal; possible nausea or local irritation.
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CJC-1295

- **What It Is:** A growth hormone-releasing hormone (GHRH) analog that promotes increased growth hormone production.
 - **Benefits:** Supports muscle growth, fat loss, anti-aging effects, and improved recovery.
 - **Side Effects:** Mild flushing, headaches, or nausea.
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DSIP (Delta Sleep-Inducing Peptide)

- **What It Is:** A peptide that aids in sleep regulation and stress reduction.
 - **Benefits:** Improves sleep quality, reduces stress, and enhances recovery.
 - **Side Effects:** Rare; may include mild drowsiness or headaches.
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Epithalon

- **What It Is:** A synthetic peptide linked to telomere lengthening and anti-aging effects.
 - **Benefits:** Improves longevity, enhances sleep, and supports immune function.
 - **Side Effects:** Rare; may include mild nausea or injection site irritation.
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GHK-Cu

- **What It Is:** A copper peptide known for skin regeneration and anti-aging properties.
 - **Benefits:** Promotes collagen production, skin repair, and wound healing.
 - **Side Effects:** Minimal; potential for mild skin irritation.
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Glutathione

- **What It Is:** A powerful antioxidant naturally produced in the body.
 - **Benefits:** Reduces oxidative stress, detoxifies the liver, and supports skin health.
 - **Side Effects:** Rare; possible mild digestive discomfort or allergic reactions.
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AOD-9604

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IGF-1/LR-3

- **What It Is:** Modified IGF-1 with extended half-life.
 - **Benefits:** Muscle growth, fat loss, recovery, anti-aging.
 - **Side Effects:** Hypoglycemia, joint pain
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Ipamorelin

- **What It Is:** A selective GH secretagogue that enhances GH release without affecting appetite.
 - **Benefits:** Promotes muscle growth, fat loss, and improved recovery.
 - **Side Effects:** Mild flushing or irritation at injection sites.
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Kisspeptin

- **What It Is:** A peptide that regulates reproductive hormones and fertility.
 - **Benefits:** Supports reproductive health, increases fertility, and balances sex hormones.
 - **Side Effects:** Rare; mild irritation or hormonal fluctuations.
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KPV

- **What It Is:** A peptide with anti-inflammatory and wound-healing properties.
 - **Benefits:** Promotes skin repair, reduces inflammation, and supports gut health.
 - **Side Effects:** Minimal; rare local irritation.
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LL-37

- **What It Is:** An antimicrobial peptide that modulates the immune response.
 - **Benefits:** Treats infections, reduces inflammation, and supports wound healing.
 - **Side Effects:** Rare; potential irritation at the injection site.
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Melanotan 1 & 2

- **What They Are:** Synthetic peptides that stimulate melanin production.
 - **Benefits:** Provides skin tanning, reduces UV damage, and offers cosmetic benefits.
 - **Side Effects:** Nausea, appetite changes, and darkened moles or freckles.
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MOTS-c

- **What It Is:** A mitochondrial peptide that supports metabolism and reduces inflammation.
 - **Benefits:** Enhances weight loss, improves glucose regulation, and boosts physical performance.
 - **Side Effects:** Minimal; mild local irritation.
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NAD+

- **What It Is:** A molecule essential for cellular energy production and anti-aging.
 - **Benefits:** Enhances energy, DNA repair, and cognitive function; reduces aging markers.
 - **Side Effects:** Nausea, headaches, and lightheadedness.
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Pinealon (Coming Soon)

- **What It Is:** Brain-supporting tripeptide.
 - **Benefits:** Cognitive enhancement, stress reduction, neuroprotection.
 - **Side Effects:** Mild headaches
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Retatrutide

- **What It Is:** A triple agonist peptide for weight loss and metabolic health.
 - **Benefits:** Significant weight reduction, improved glycemic control, and cardiovascular benefits.
 - **Side Effects:** GI issues, appetite changes, and rare gallbladder complications.
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Selank

- **What It Is:** A peptide for cognitive enhancement and anxiety reduction.
 - **Benefits:** Improves memory, reduces anxiety, and enhances immune function.
 - **Side Effects:** Mild headaches, nasal irritation, or mood swings.
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Semaglutide

- **What It Is:** A GLP-1 receptor agonist used for diabetes and weight loss.
 - **Benefits:** Reduces appetite, promotes weight loss, and improves glycemic control.
 - **Side Effects:** GI discomfort, nausea, and potential thyroid-related risks.
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Semax

- **What It Is:** A nootropic peptide derived from ACTH with cognitive and mood benefits.
 - **Benefits:** Enhances memory, mood, and neuroprotection.
 - **Side Effects:** Irritability, mild insomnia, and nasal irritation.
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Sermorelin

- **What It Is:** A GHRH analog that stimulates GH production naturally.
 - **Benefits:** Supports sleep, muscle growth, and overall well-being.
 - **Side Effects:** Mild headaches, flushing, and injection site reactions.
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SS-31

- **What It Is:** A mitochondrial peptide protecting against oxidative stress.
 - **Benefits:** Enhances energy, cardiovascular health, and neuroprotection.
 - **Side Effects:** Mild GI issues, headaches, or injection site reactions.
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TB-500

- **What It Is:** A synthetic version of Thymosin Beta-4 for tissue repair.
 - **Benefits:** Accelerates healing, reduces inflammation, and supports muscle repair.
 - **Side Effects:** Minimal; mild injection site reactions.
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Tesamorelin

- **What It Is:** A GHRH analog for fat reduction and muscle growth.
 - **Benefits:** Reduces visceral fat, improves cognition, and supports cardiovascular health.
 - **Side Effects:** Joint pain, blood sugar changes, and injection site irritation.
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Thymalin

- **What It Is:** Thymus peptide for immune modulation.
 - **Benefits:** Immune support, anti-inflammatory, tissue repair.
 - **Side Effects:** Rare allergic reactions.
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Thymosin Alpha-1

- **What It Is:** An immune-modulating peptide derived from the thymus gland.
 - **Benefits:** Enhances immune function, fights infections, and reduces inflammation.
 - **Side Effects:** Rare; mild fatigue, headaches, or injection site reactions.
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Tirzepatide

- **What It Is:** A dual GLP-1 and GIP receptor agonist for diabetes and weight loss.
- **Benefits:** Improves insulin sensitivity, promotes weight loss, and reduces appetite.
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- **Side Effects:** Nausea, potential thyroid risks, and GI discomfort.

Peptide Information Categorized by Health Benefit

Weight Loss & Metabolic Health

- **AOD-9604:** Fat loss through enhanced lipolysis.
 - **MOTS-c:** Supports weight reduction and metabolic balance.
 - **Retatrutide:** Triple receptor agonist for significant weight loss.
 - **Semaglutide:** GLP-1 receptor agonist for weight loss and glycemic control.
 - **Tirzepatide:** Dual GLP-1 and GIP agonist for weight loss and diabetes management.
 - **ARA-290:** Improves insulin sensitivity and metabolic health in diabetic neuropathy.
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Anti-Aging & Longevity

- **Epithalon:** Telomere support and anti-aging properties.
 - **GHK-Cu:** Collagen production and skin regeneration.
 - **NAD+:** Cellular energy production and anti-aging.
 - **SS-31:** Mitochondrial protection and cellular energy enhancement.
 - **ARA-290:** Reduces inflammation and oxidative stress, supporting longevity.
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Cognitive Enhancement & Neuroprotection

- **Semax:** Improves memory and neuroprotection.
 - **Selank:** Reduces anxiety and enhances cognitive function.
 - **Sermorelin:** Indirect cognitive benefits via growth hormone stimulation.
 - **ARA-290:** Promotes nerve repair and reduces inflammation, offering neuroprotection in conditions like neuropathy.
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Immune System Modulation

- **Thymosin Alpha-1:** Boosts immune function and balances inflammation.
- **LL-37:** Antimicrobial peptide with immune-modulating effects.
- **KPV:** Reduces inflammation and supports gut health.

- **ARA-290:** Regulates inflammation and improves immune response, particularly in chronic conditions.
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Tissue Repair & Recovery

- **BPC-157:** Accelerates tissue healing, reduces inflammation, and promotes collagen production.
 - **TB-500:** Enhances wound healing, tissue repair, and angiogenesis.
 - **Hexarelin:** Supports muscle and tissue repair by stimulating GH release.
 - **Ipamorelin:** Aids in tissue recovery and repair via growth hormone pathways.
 - **CJC-1295:** Stimulates growth hormone release, enhancing tissue regeneration and repair.
 - **Sermorelin:** Encourages natural GH secretion, supporting tissue and wound healing.
 - **Tesamorelin:** Promotes tissue regeneration through increased GH and IGF-1 levels.
 - **LL-37:** Promotes wound healing, reduces infection risk, and supports tissue regeneration.
 - **GHK-Cu:** Stimulates collagen production and overall tissue regeneration.
 - **DSIP (Delta Sleep-Inducing Peptide):** Enhances recovery indirectly by improving sleep, crucial for tissue repair.
 - **ARA-290:** Reduces inflammation and supports repair of damaged tissues, including nerves and skin.
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Skin Health & Regeneration

- **GHK-Cu:** Stimulates collagen production, improves skin elasticity, and accelerates wound healing.
 - **LL-37:** Supports skin regeneration, reduces infections, and promotes healthy tissue remodeling.
 - **BPC-157:** Enhances wound healing and supports skin recovery through anti-inflammatory properties.
 - **CJC-1295:** Boosts growth hormone, promoting collagen synthesis and skin rejuvenation.
 - **Tesamorelin:** Increases IGF-1 levels, supporting collagen production and skin health.
 - **Sermorelin:** Encourages natural GH release for improved skin elasticity and healing.
 - **Hexarelin:** Supports skin and tissue repair through growth hormone pathways.
 - **Ipamorelin:** Promotes skin healing and regeneration via GH release.
 - **ARA-290:** Reduces inflammation, aids in healing skin injuries, and enhances overall tissue repair.
 - **Melanotan 1 and 2:** They contribute to skin protection by reducing UV damage. Also provides cosmetic enhancements by stimulating melanin production.
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Muscle Growth and Physical Performance

- **CJC-1295:** Stimulates prolonged growth hormone release for muscle growth, fat loss, and recovery.
 - **Tesamorelin:** Increases lean body mass, reduces visceral fat, and enhances protein synthesis.
 - **Sermorelin:** Mimics growth hormone-releasing hormone (GHRH) to promote natural GH secretion.
 - **Hexarelin:** A potent GH secretagogue that supports muscle repair and endurance.
 - **Ipamorelin:** Stimulates GH release with minimal side effects, aiding in muscle recovery.
 - **DSIP:** Indirectly supports recovery by improving sleep quality.
 - **AOD-9604:** A GH fragment focused on fat loss, not muscle growth, but complements GH peptides.
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Sleep & Stress Management

- **DSIP (Delta Sleep-Inducing Peptide):** Improves sleep quality and reduces stress.
 - **Semax:** May reduce mental fatigue and enhance stress resilience.
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Cardiovascular Health

- **SS-31:** Supports heart function and vascular health.
 - **Tesamorelin:** Improves cholesterol and reduces visceral fat, impacting cardiovascular health.
 - **ARA-290:** Enhances endothelial function, reducing vascular inflammation and improving blood flow.
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Gastrointestinal & Gut Health

- **BPC-157 (Oral):** Supports gastrointestinal healing.
 - **KPV:** Improves gut immune barrier and reduces gut inflammation.
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Antimicrobial & Infection Control

- **LL-37:** Antimicrobial peptide for infections.
 - **Thymosin Alpha-1:** Supports immune defense against infections.
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Eye & Vision Health

- **Semax:** Potential benefits for optic nerve health.
 - **SS-31:** Protects retinal cells against oxidative stress.
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Sexual Health & Fertility

- **Kisspeptin:** Regulates reproductive hormones, enhances fertility, and supports hormonal balance in men and women.
- **Melanotan 2:** May increase sexual arousal and libido in addition to its tanning effects.
- **Gonadorelin:** Stimulates the release of luteinizing hormone (LH) and follicle-stimulating hormone (FSH), supporting ovulation in women and testosterone production in men, enhancing fertility.
- **Thymosin Alpha-1:** Supports immune modulation, which can indirectly benefit reproductive health by reducing inflammation.
- **Tesamorelin:** Improves hormonal balance, which can contribute to enhanced fertility and overall reproductive health.