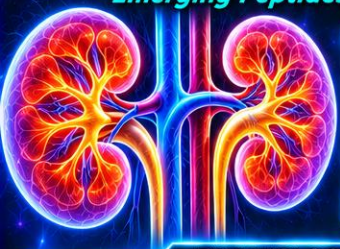
Peptide Perspectives™

THE KIDNEY PROTECTION STACK

Emerging Peptides & Nutritional Strategies for Renal Health



KIDNEYS DO MORE THAN FILTER

- **Filtration** – Removes waste, toxins, and excess fluid from the blood.
- **Fluid & Electrolyte Balance** – Regulates water, sodium, potassium, and acid–base levels.
- **Blood Pressure Regulation** – Helps control blood pressure (renin–angiotensin system).
- **Red-Blood-Cell Signaling** – Produces erythropoietin (EPO) to stimulate RBC production.
- **Renal Energy** – High mitochondrial demand to keep kidney cells functioning and protective.

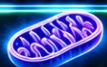


FIVE BIOLOGICAL TARGETS FOR KIDNEY PROTECTION



Glomerular Pressure & Leakage

Support healthy glomerular function and may help reduce albumin leakage (UACR).



Tubular ATP & Mitochondria

Support mitochondrial function and cellular energy (ATP) in kidney tubule cells.



Oxidative Stress

Help reduce reactive oxygen species (ROS) and support cellular resilience.



Inflammation & Fibrosis

May influence inflammatory signaling and fibrotic pathways that can contribute to long-term kidney damage.



Glucose & Metabolic Regulation

May support insulin sensitivity, metabolic health, and kidney stress related to obesity and type 2 diabetes.

FIVE EXPERIMENTAL STACKS & COMMUNITY DOSING CONTEXT

ARA-290 + SS-31



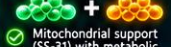
- Explores anti-inflammatory signaling (ARA-290) with mitochondrial support (SS-31).
- Aims to reduce kidney cell stress and support tissue resilience.

COMMUNITY REPORTS / OTHER-INDICATION RESEARCH (NOT VALIDATED RENAL DOSES)

ARA-290	2 – 4 mg SC daily (4 mg daily × 28 days was studied for neuropathy, NOT kidney disease)
SS-31	5 – 10 mg SC daily (some reports; lower doses also reported)

⚠ NO VALIDATED HUMAN KIDNEY STACK DOSE.

SS-31 + MOTS-C



- Mitochondrial support (SS-31) with metabolic signaling (MOTS-C).
- Explores cellular energy and metabolic stress pathways in the kidneys.

COMMUNITY REPORTS / OTHER-INDICATION RESEARCH (NOT VALIDATED RENAL DOSES)

SS-31	5 – 10 mg SC daily (some reports; conflicting lower doses exist)
MOTS-C	5 mg SC 2 – 3×/week or 10 mg twice weekly (community reports)

⚠ NO VALIDATED HUMAN KIDNEY STACK DOSE.

ARA-290 + MOTS-C



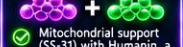
- Combines anti-inflammatory (ARA-290) and metabolic (MOTS-C) pathways.
- Investigational approach for reducing kidney stress and supporting cellular metabolism.

COMMUNITY REPORTS / OTHER-INDICATION RESEARCH (NOT VALIDATED RENAL DOSES)

ARA-290	2 – 4 mg SC daily (4 mg daily × 28 days studied for neuropathy, NOT kidney disease)
MOTS-C	5 mg SC 2 – 3×/week or 10 mg twice weekly (community reports)

⚠ NO VALIDATED HUMAN KIDNEY STACK DOSE.

SS-31 + HUMANIN



- Mitochondrial support (SS-31) with Humanin, a cell-protective peptide in preclinical research.
- Explores stress resistance and cellular survival pathways in the kidneys.

COMMUNITY REPORTS / OTHER-INDICATION RESEARCH (NOT VALIDATED RENAL DOSES)

SS-31	5 – 10 mg SC daily (some reports; lower doses also reported)
Humanin	0.5 – 5 mg (varies by frequency in online reports)

⚠ NO VALIDATED HUMAN KIDNEY STACK DOSE.

MOTS-C + HUMANIN



- Combines metabolic signaling (MOTS-C) with Humanin's cell-protective pathways.
- Investigational approach for mitochondrial function and long-term cellular resilience.

COMMUNITY REPORTS / OTHER-INDICATION RESEARCH (NOT VALIDATED RENAL DOSES)

MOTS-C	5 mg SC 2 – 3×/week or 10 mg twice weekly (community reports)
Humanin	0.5 – 5 mg (varies by frequency in online reports)

⚠ NO VALIDATED HUMAN KIDNEY STACK DOSE.

BEST-PROVEN RENAL CARE

(ESTABLISHED MEDICATIONS)



SGLT2 Inhibitors
(e.g., empagliflozin)
Slow kidney function decline, reduce albuminuria, and lower risk of kidney failure (large trials).



ACE Inhibitors / ARBs
(when indicated)
• Reduce pressure in the glomerulus and lower albuminuria (standard care).



Semaglutide
(in appropriate adults with type 2 diabetes + CKD)
Improves metabolic health and has kidney-protective outcomes in large clinical trials.

These are established, guideline-supported therapies and are distinct from experimental peptide stacks.

SUPPORTIVE NUTRITION

(COMPLEMENTARY STRATEGIES)



Omega-3 (EPA+ DHA)
~ 1 – 2 g/day in selected studies (not proven to protect kidneys).



CoQ10
~ 100 – 200 mg/day in small studies (not proven for kidney outcomes).



Vitamin D
Use only based on deficiency and CKD lab results (e.g., 25-OH vitamin D).



Protein
Amount should be individualized based on CKD stage, body size, and clinical guidance.



Sodium Reduction
Aim for a lower-sodium diet (often < 2,300 mg/day, or as advised by your healthcare provider).

READ THE LABS

(KEY KIDNEY MARKERS)



Creatinine – Can reflect muscle mass, recent exercise, dehydration, and creatine supplements.



eGFR – Estimates how well the kidneys are filtering blood.



UACR – Measures albumin leak (a marker of kidney damage):
- A1: < 30 mg/g (normal to mildly ↑)
- A2: 30 – 300 mg/g (moderately ↑)
- A3: > 300 mg/g (severely ↑)



Cystatin C – Can help clarify kidney function when creatinine-based eGFR is uncertain (e.g., higher muscle mass, high/low body weight, or other variables).

MEASURE TRUE OUTCOMES

- **Sustained eGFR** (change over time, not a single value).
- **UACR (albuminuria)** (reduction or stabilization).
- **Blood Pressure** (consistent, well-controlled levels).
- **Kidney Failure / Dialysis** (avoidance or delay of advanced kidney disease).
- **Safety & Electrolytes** (monitor kidney function, electrolytes, and overall tolerability).

⚠ EXPERIMENTAL PEPTIDE STACKS HAVE NO PROVEN HUMAN KIDNEY-PROTECTION BENEFIT. COMMUNITY DOSING IS NOT A SAFE TREATMENT PROTOCOL.

Educational / research overview | November 2026 | Not medical advice