

**Table S2** The full name and abbreviations of the methods for isolating, purifying, and identifying anti-aging peptides and amino acids.

Abbreviations	Full name	Abbreviations	Full name
AAA	Amino acid analyzer	MS	Mass spectrometry
AEC	Anion exchange chromatography	MS/MS	Mass spectrometry/Mass spectrometry
CF	Centrifugation	NMR	Nuclear magnetic resonance
CS	Chromatographic separation	RP-FCC	Reverse phase-Flash column chromatography
FT-IR	Fourier transform-Infrared absorption spectrum	RP-HILIC-HPLC	Reversed-phase-Hydrophilic interaction liquid chromatography-High-performance liquid chromatography
GFC	Gel filtration chromatography	RP-HPLC	Reversed phase-High-performance liquid chromatography
GPC	Gel permeation chromatography	RP-LC-MS/MS	Reversed phase-Liquid chromatography-Mass spectrometry/Mass spectrometry
HC	Hydrophobic chromatography	UF	Ultrafiltration
IEC	Ion exchange chromatography	UPLC-MS/MS	Ultra-performance liquid chromatography – Mass spectrometry/Mass spectrometry
LC-MS	Liquid chromatography-Mass spectrometry	UV	Ultraviolet absorption spectrum
LC-MS/MS	Liquid chromatography-Mass spectrometry/Mass spectrometry	UVAF	Ultrasonic and vacuum-assisted Filtration
MARC	Macroporous adsorption resin chromatography	VC	Vacuum concentration