

An AI characterised functional ingredient derived from rice inhibits TNF- α and significantly improves physical strength in an inflammaging population

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Supplementary Materials

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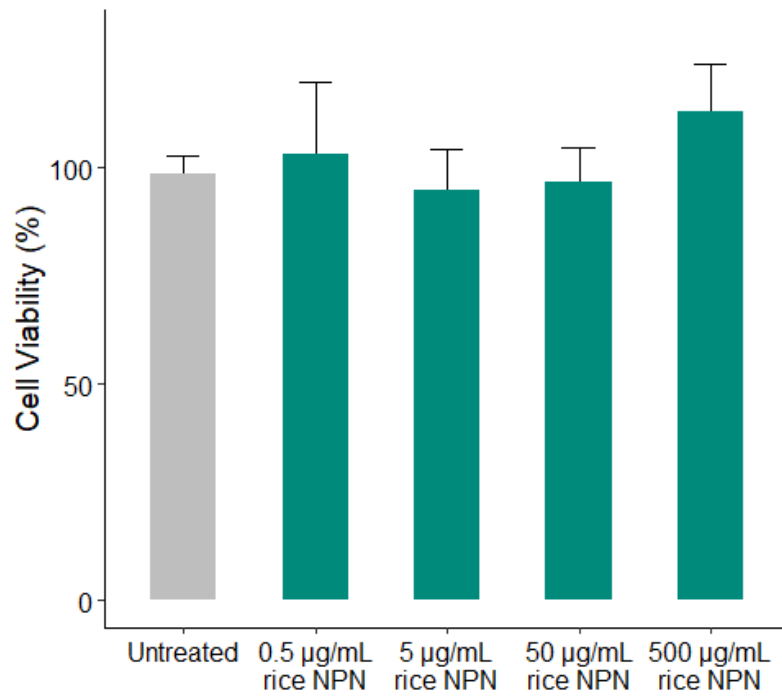


Figure S1. Cell viability following rice NPN treatment. Percentage viability of Thp-1 cells with increasing concentrations of rice NPN. Data presented are the mean \pm SEM of at least 2 individual experiments carried out in at least triplicate.

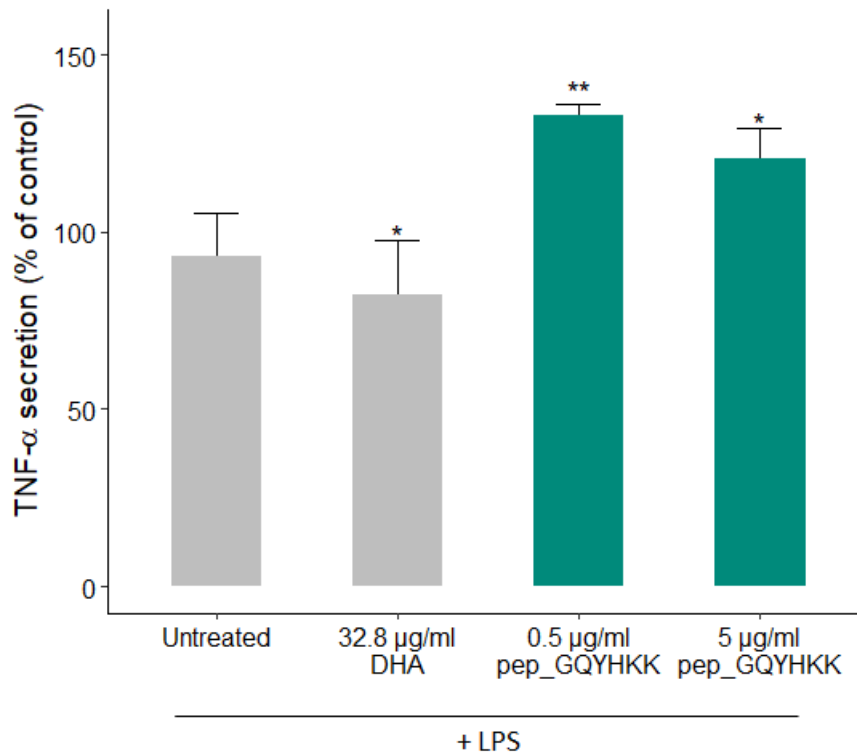


Figure S3: Predicted peptide did not reduce LPS induced TNF- α secretion. Treatment with constituent peptide, pep_GQYHKK, did not reduce the secretion of TNF- α in THP-1 differentiated macrophages after treatment with LPS. THP-1 macrophages were treated with predicted peptide (0.5 - 5 μ g/mL) for 24 hours before treating with 100 ng/mL of LPS for 24 hours. The secretion of TNF- α was quantified by ELISA. Data presented are the mean \pm SEM of 1 independent experiment in triplicate (*P <0.05 **P <0.0

Table S1 Subject Anthropometric Data

	All	Male	Female
Gender n (%)	40 (100%)	15 (37.5%)	25 (62.5%)
Age (years) (Mean \pm S.E.)	68.49 \pm 0.51	69.34 \pm 0.86	67.99 \pm 0.62
Weight (Kg) (Mean \pm S.E.)	74.42 \pm 1.71	80.74 \pm 2.73	71.2 \pm 1.79
Height (m) (Mean \pm S.E.)	1.67 \pm 0.01	1.73 \pm 0.01	1.63 \pm 0.01
BMI (Kg/m ²) (Mean \pm S.E.)	26.65 \pm 0.42	26.87 \pm 0.67	26.52 \pm 0.56
Respiratory Rate (Mean \pm S.E.)	16.85 \pm 0.31	17.2 \pm 0.48	16.63 \pm 0.4
Blood pressure (Mean \pm S.E.)			
Diastolic	80.48 \pm 1.56	81.8 \pm 3.2	79.68 \pm 1.65
Systolic	131.0 \pm 2.52	132.6 \pm 4.05	130.04 \pm 3.27
		Treatment	Placebo
Adverse events	Nausea and loose stool	3	0
	Indigestion	1	1
	Constipation	1	0
	Rash / Joint Pain	0	1
Serious Adverse Events		None	None

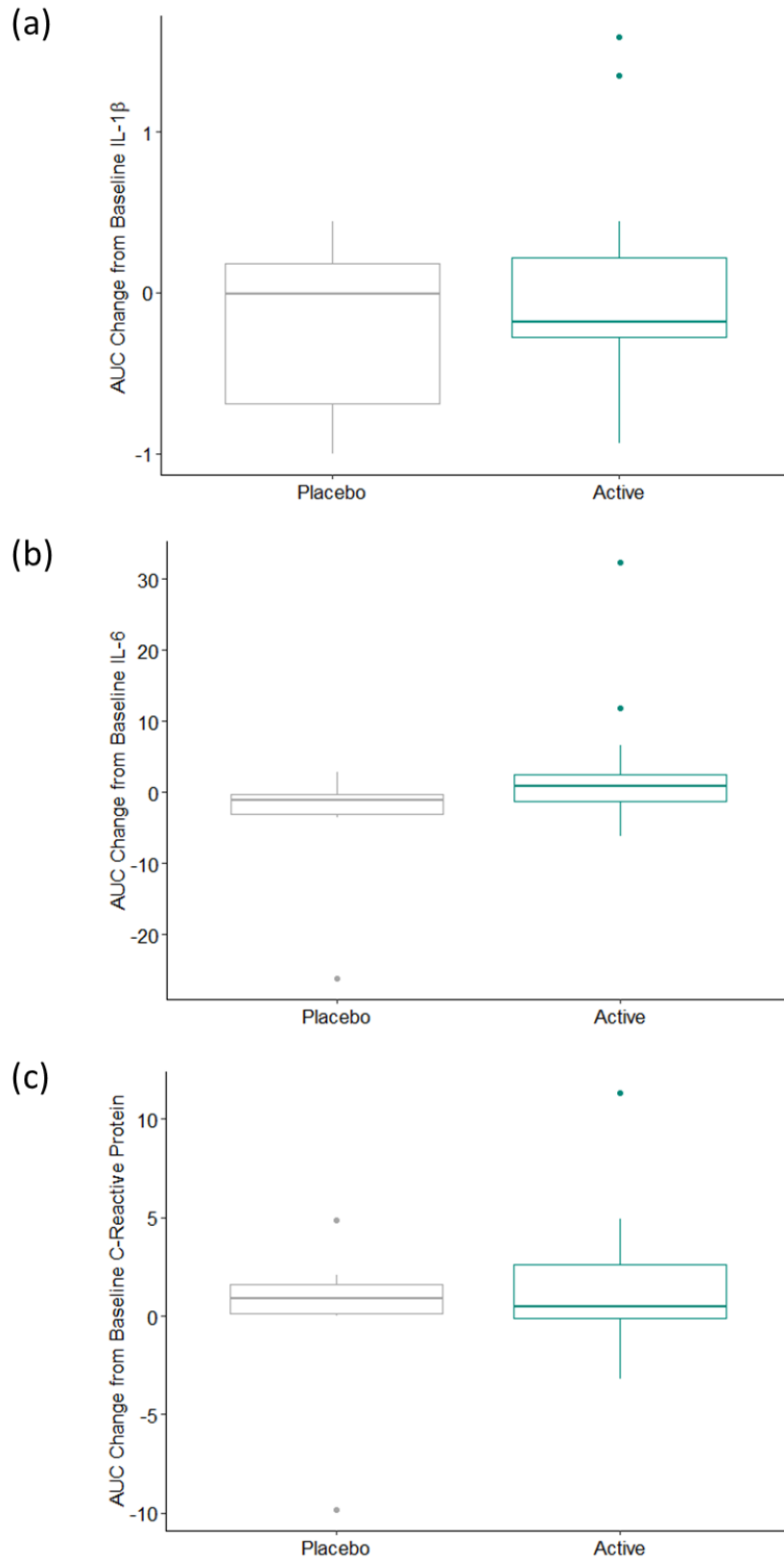


Figure S4: AUC change from baseline for (a) IL-1 β , (b) IL-6 and (c) C-Reactive Protein.