

DESIGN	INTERVENTION	% NAD+ INCREASE	NOTABLE OUTCOMES	STUDY REFERENCE
Randomized, double-blind, crossover study (12 healthy participants)	NR (Nicotinamide Riboside) oral Single dose 100mg, 300mg, 1000mg	100mg = 48% 300mg = 59% 1000mg = 92% (AUC increase from baseline) Measured in peripheral blood mononuclear cells (PBMCs)	NR safe and well tolerated	1
Non-randomised, open-label, non-placebo controlled study (8 healthy participants)	NR oral Dose-escalation 8 days 250 mg (Day 1, 2), 500 mg (Day 3, 4), 1000 mg (Day 5, 6), and 2000 mg (Day 7, 8)	35-168% (lowest vs. highest responder. Measurement taken on day 9 after final dose of 2000mg NR) Measured in whole blood	NR safe and well tolerated	2
Randomized, double-blind, placebo-controlled, crossover study (24 healthy participants)	NR oral 6 weeks 1000mg (2 x 500mg/day) Crossover with placebo	60% (compared to baseline) Measured in PBMCs	Non-significant trend towards lower systolic blood pressure and reduced arterial stiffness amongst participants	3
Randomized, placebo-controlled, double-blinded study (115 healthy participants)	Oral NR + Pterostilbene (PT) 8 weeks Placebo or 250 mg NR + 50 mg PT or 500 mg NR + 100mg PT.	250mg NR + 50mg PT= 40% 500mg NR + 100mg PT = 90% (dropping to 55% at 60 days) (compared to placebo and baseline) Measured in whole blood	Total and LDL cholesterol levels were increased in NR+PT treated group	4
Randomized, placebo-controlled, double-blinded study	NR oral 8 weeks Placebo 100mg or	100mg = 22% 300mg = 51% 1000mg = 142	NR did not increase LDL cholesterol	5

(133 healthy/overweight participants)	300mg or 1000mg	(compared to baseline measured after 2 weeks) Measured in whole blood		
Randomized, double-blind, placebo-controlled, crossover study (12 healthy participants)	NR oral 3 weeks 1000mg (2x500mg/day) Crossover with placebo	Whole blood = 128% Skeletal muscle = no change detected (compared to placebo)	No change to mitochondrial bioenergetics Reduction in circulating inflammatory cytokines	6
Randomized, double-blind, placebo-controlled study (40 obese/insulin resistant participants)	NR oral 12 weeks Placebo or 2000mg (2x1000mg/day)	Skeletal muscle = no change detected	No change to mitochondrial bioenergetics 14% decrease in NAMPT protein	7
Randomized, double-blind, placebo-controlled, crossover study (13 obese participants)	NR oral 6weeks 1000mg/day Crossover with placebo	Skeletal muscle = no change detected	No improvement to insulin sensitivity Small but significant improvements to body composition, sleeping metabolic rate, skeletal muscle and acetylcarnitine concentrations	8
Non-randomised, open-label, non-placebo controlled study (4 stage D heart failure participants)	NR oral Dose-escalation 250mg twice a day (day 1), 500mg twice a day (day 2), 1000mg twice a day (from day 3 for 5 to 9 days dependent on patient health)	55-161% (lowest vs. highest responder, compared to baseline) Measured in whole blood	Improved PBMC respiration Reduced proinflammatory cytokine gene expression	9
Randomized, double-blind, placebo-controlled study (8 healthy participants)	NR oral 7 days Placebo or 1000mg	Skeletal muscle= no change detected	No change in mitochondrial adaptation to endurance exercise	10

Supplemental References

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