

Supplementary material 1-Participants' characteristics in the included trials on the effects of inorganic nitrate supplementation on blood pressure

Year	Researcher	Age (Young (<45))	Intervention	Intervention time	Remarks	Dose (mmol)	sample size		Systolic blood pressure (mmHg)		Diastolic blood pressure (mmHg)		24-hour ambulatory systolic blood pressure (mmHg)		24-hour ambulatory diastolic blood pressure (mmHg)		Mean arterial pressure (mmHg)	
							Experimental group	Control group	Experimental group	Control group	Experimental group	Control group	Experimental group	Control group	Experimental group	Control group	Experimental group	Control group
							n	n	mean±SD	mean±SD	mean±SD	mean±SD	mean±SD	mean±SD	mean±SD	mean±SD	mean±SD	mean±SD
2019	Jui-Lin Fein	Young	Oral sodium nitrate	1W		7.3	17	17	102±8.4	101.3±9.4	66.6±6.9	65.3±5.5						
2018	Aaron C	Old	Beetroot powder	4W		4.0	13	13	120±14.4	124±14.4	73±7.2	76±7.2					93±7.2	91±7.2
2017	Clare M. Eglin	Young	Nitrate-rich Beet Juice	1D		11.9		13	124±13	121±9	76±11	74±10					92±11	90±9
2017	Kyle Raubenheimer	Old	Nitrate-rich beet juice	1D		12.9	12	12	128.7±21	136.2±18	61.5±10.5	67.7±12.6					84.1±12.4	90.7±13
2016	Anthony L.	Young 16 Old 15	Nitrate-depleted beet juice	1W		11.9	31	31	112.8±9.8	114.9±7.9	73.2±8.7	73.5±8.0						
2014	Ann Ashworth	Young	High nitrate diet (vegetables)	1W		5.5	19	19	103±6	106±8	61±5	61±6					76±4	78±6
2013	Alex H. Liu	Old	Diet with nitrate	1D		3.54	26	26	113.4±11.2	118.8±10.2	65.4±6.1	66.8±5.1						
2012	Leah T Coles	Old	Beet juice with nitrate	1D		15.0	30	30	126.6±8.2	128.3±10.4	77.6±7.1	77.8±9.3						
2012	M. Bahra	Young	Oral potassium nitrate	1D		8.0	14	14	112±13.4	114.9±10.9	67.5±4.9	66.1±6.7						
2014	E. Turner	Young	Beet juice	2W		6.5	12	12	127±12.1	129.4±10.4	77.2±8.7	79.1±7.6						
2014	Catherine P Bondonno	21-75 years old	Spinach + Green leafy vegetables	1W		4.8	38	38	126.2±11.8	130±10.8	70.7±8.8	70.5±6.4	129.4±8.7	127.2±7.1	77.3±8.3	76.3±7		
2010	Tanja Sobko	Young	Nitrate-rich vegetables (Japanese diet)	10D		18.8	25	25			71.3±7.9	75.8±7.8						
2020	Michaela L Sundqvist	Old	Vegetable group: vegetable + placebo pill Pill group: low-nitrate vegetables + potassium nitrate pill	5W		4.8	76	78	131.9±9.6	133.9±10.2	88.2±7.2	88.9±8.6						
													4.8	77	78	135.2±11.1	90.3±8.1	
2015	Catherine P Bondonno	Old	Beet juice	1W		12.9	27	27	127.5±24.5	128±11.8	73±8.2	72.7±8.1	127.4±11.2	128.4±11.2	73.8±9.5	74.4±9.6		
2018	Conor P. Kerley	Old	Beet juice	1W		12.9	20	20					129±9	133±7	76±8	79±7		
2019	Ryan M. Broxterran	Old	Beet juice	1w		6.2	13	13	129±16	132±20	77±12	78±12						
													14	14	136±16	141±19	84±13	88±12
2020	Mario Siervo	Old	Beet juice + placebo capsules	60D		6.5	16	16	145.9±12.6	148.9±17	90.3±8.4	86.8±11.7	133.8±12.5	138.2±13.9	86.1±11.3	85.7±9.6		
2018	Lauren C Blekkenhorst	Old	High nitrate diet: 150mg/d Low nitrate diet: 22mg/d	4W		2.4	30	30	128.4±8.9	130±7.6	75.3±7.2	76.5±5.7	126.5±5.1	125.9±7	75.2±7.9	75.0±8.3		
																	0.4	
2021	Michaela L. Sundqvist	Old	Potassium nitrate	5W		4.8	77	78					127.10±11.1	130.5±10.1	78.9±7.1	78.9±7.7		