SUPPLEMENTARY APPENDIX 4. ABSOLUTE BLOOD PRRSSURE PARAMETERS AT BASELINE AND END OF STUDY

Table 1: Absolute blood pressure parameters at baseline and end of study

	Placebo BRJ (n=65)	**Nitrate-rich BRJ (n=57)**	**p-value**
Baseline sBP (mmHg)	130 (120, 145)	135 (124, 152)	0.167
Baseline dBP (mmHg)	80 (74, 87)	82 (75, 88)	0.469
Baseline MAP (mmHg)	96 (90, 106)	100 (95, 107)	0.132
End of study sBP (mmHg)	139 (126, 150)	132 (121, 146)	*0.044
End of study dBP (mmHg)	80 (76, 87)	80 (75, 84)	0.052
End of study MAP (mmHg)	101 (95, 107)	98 (91, 103)	*0.015

TABLE LEGEND

Table 1. Absolute blood pressure parameters at baseline and end of study

Data shown are median (IQR). Data was not normally distributed thus between group analysis was undertaken with a Mann-Whitney U test. Blood pressure was assessed using an automated blood pressure monitor (Omron M6, Omron Healthcare Europe, Hoofddorp, Netherlands) at baseline and outcome visits after 10 minutes of seated rest, with an average of three values reported.

At baseline there was no statistical difference between baseline sBP, dBP and MAP between treatment conditions; p=0.167, p=0.469 and p=0.132 respectively. At end of study there was a

statistically significant difference between sBP and MAP between interventions; *p=0.044 and *p=0.015 respectively. There was no statistically significant difference in dBP; p = 0.052.

Abbreviations: sBP – systolic blood pressure; dBP – diastolic blood pressure; MAP – mean arterial pressure; BRJ – beetroot juice

Figure 1: Absolute blood pressure parameters at baseline and end of study

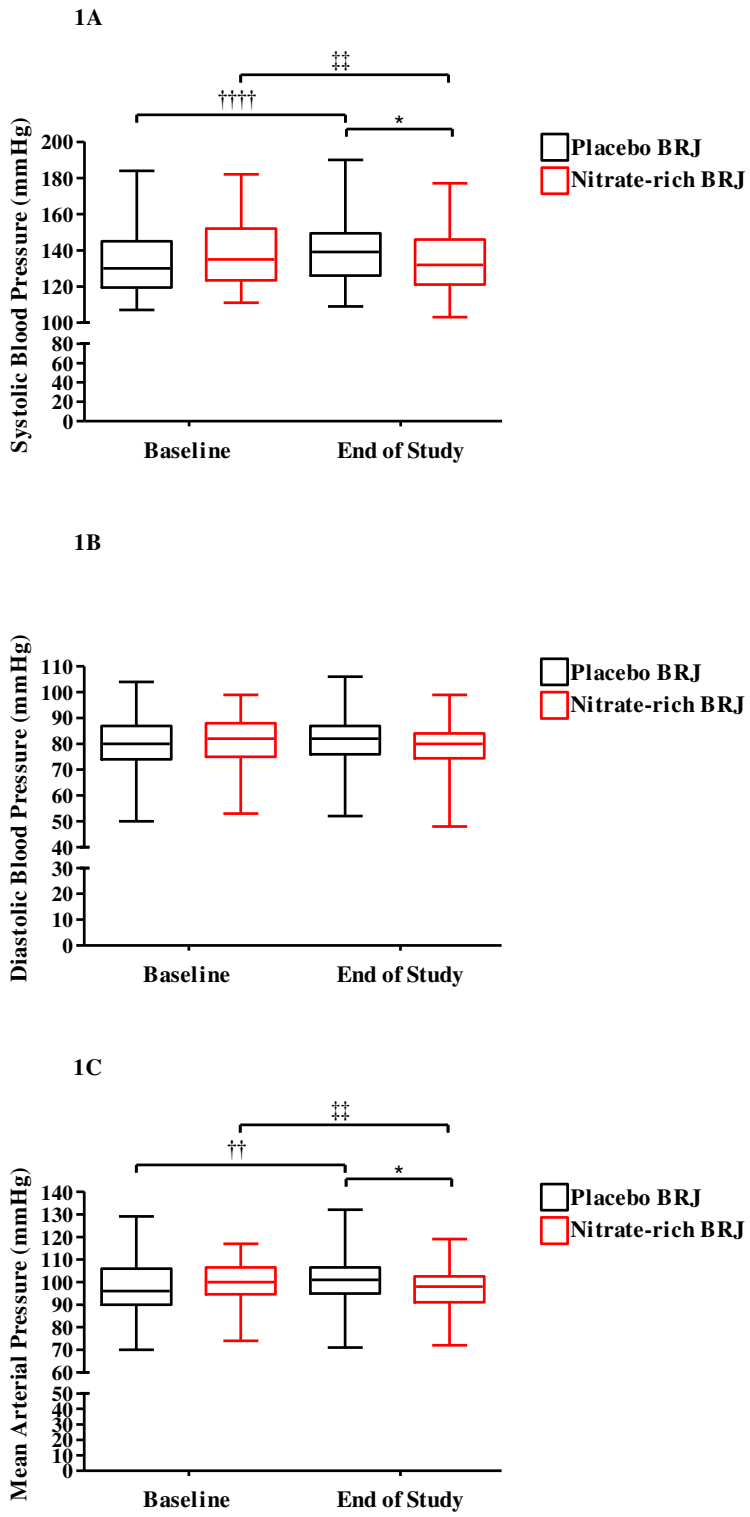

FIGURE LEGEND

Figure 1. Absolute blood pressure parameters at baseline and end of study

Absolute blood pressure parameters (mmHg) at baseline and end of study in either placebo BRJ (black) or nitrate-rich BRJ (red). Data are presented as 25^{th}-75^{th} percentile with the solid line representing the median value, and the whiskers the minimum to maximum values. Data was not normally distributed thus between group analysis was undertaken with a Mann-Whitney U test. Within group analysis was undertaken with a Wilcoxon Signed Rank test. Blood pressure was assessed using an automated blood pressure monitor (Omron M6, Omron Healthcare Europe, Hoofddorp, Netherlands) at baseline and outcome visits after 10 minutes of seated rest, with an average of three values reported.

1A. Absolute systolic blood pressure

Between treatment conditions there was no difference between baseline absolute sBP; nitrate-rich BRJ sBP 135 mmHg (124, 152) vs placebo BRJ 130 mmHg (120, 145), p = 0.167. Between treatment conditions at end of study there was a statistically significant difference in absolute sBP; nitrate-rich BRJ 132 mmHg (121, 146) vs placebo BRJ 139 mmHg (126, 150), * p = 0.044. Data described Median (IQR). Mann-Whitney U test.

Within the treatment conditions in the nitrate-rich BRJ group there was a statistically significant reduction in absolute sBP; 135 mmHg (124, 152) to 132 mmHg (121, 146), ‡‡ p=0.005. There was a statistically significant increase in absolute sBP in the placebo BRJ group; sBP 130 mmHg (120, 145) to 139 mmHg (126, 150) †††† p=0.000075. Data described median (IQR). Wilcoxon Signed rank test.

1B. Absolute diastolic blood pressure

Between treatment conditions there was no difference between baseline absolute dBP; nitrate-rich BRJ dBP 82 mmHg (75, 88) vs placebo BRJ 80 mmHg (74, 87), p = 0.469. Between treatment conditions at end of study the difference in dBP approached significance; nitrate-rich BRJ 80 mmHg (75, 84) vs placebo BRJ 80 mmHg (76, 87), p = 0.052. Data shown Median (IQR). Data described Median (IQR). Mann-Whitney U test.

Within the treatment conditions in the nitrate-rich BRJ group dBP approached a statistical significant reduction; 82 mmHg (75, 88) to 80 mmHg (75, 84), p=0.059. Within the placebo BRJ group there was no difference in baseline and post intervention dBP 80 (74, 87) mmHg and 80 (76, 87) mmHg p = 0.085. Data described median (IQR). Wilcoxon Signed rank test.

1C. Absolute mean arterial blood pressure

Between treatment conditions there was no difference between baseline absolute MAP; nitrate-rich BRJ MAP 100 mmHg (95, 107) vs placebo BRJ 96 mmHg (90, 106), p = 0.132. Between treatment conditions at end of study there was a statistically significant difference in MAP; nitrate-rich BRJ 98 mmHg (91, 103) vs placebo BRJ 101 mmHg (95, 107), p = 0.015. Data shown Median (IQR). Data described Median (IQR). Mann-Whitney U test.

Within the treatment conditions in the nitrate-rich BRJ group there was a statistically significant reduction in MAP 100 mmHg (95, 107) to 98 mmHg (91, 103) mmHg, ‡‡ p=0.002. Within the placebo BRJ group there was a statistically significant increase in MAP; MAP 96 mmHg (90, 106) to 101 mmHg (95, 107), †† p= 0.003. Data described median (IQR). Wilcoxon Signed rank test.

Abbreviations: sBP – systolic blood pressure; dBP – diastolic blood pressure; MAP – mean arterial pressure; BRJ – beetroot juice