

Supplementary material

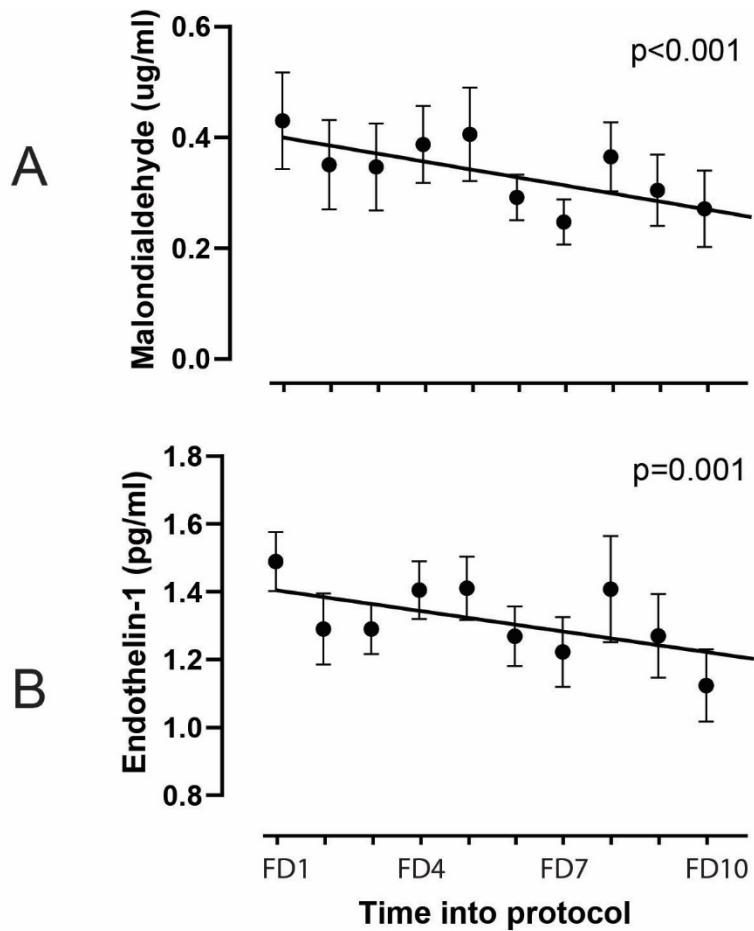
Supplementary Table I: Individual participant information, segregated by females and males

Females	S01	<u>S02</u>	<u>S03*</u>	<u>S04</u>	<u>S05</u>	<u>S06</u>	<u>S07</u>	<u>S08*</u>	<u>S09</u>	<u>S10*</u>	<u>S11*</u>
Age (years)	44	50	55	46	56	46	43	53	46	64	48
Body mass index (kg·m <sup>-2</sup> )	32.3	24.0	26.3	39.9	33.0	30.7	23.6	25.9	23.1	30.9	39.7
Resting Systolic BP (mmHg)	112	106	96	124	140	109	103	114	108	132	126
Resting Diastolic BP (mmHg)	69	43	61	59	77	65	63	61	56	77	63
Resting HR (bpm)	72	60	64	81	56	68	56	60	60	65	68
Fasting BG (mg/dL)	96	89	98	90	101	97	88	94	83	99	91
Hemoglobin (g/dL)	14.5	12.8	13.1	12.7	13.4	13.9	13.7	12.9	13.1	13.7	14.0
Hematocrit (%)	41.1	38.9	39.8	41.1	40.9	39.5	42	39.2	37.8	41.7	42.2
Plasma Sodium (mEq/L)	136	138	144	139	138	138	140	142	140	141	137
Plasma Potassium (mEq/L)	3.8	3.8	4.2	4.1	3.8	3.9	3.8	3.8	3.7	4.0	3.6
Plasma Chloride (mEq/L)	106	103	102	105	104	106	106	109	106	108	105
Plasma BUN (mg/dL)	11	16	14	16	13	7	7	7	11	11	11
Plasma Creatinine (mg/dL)	0.75	0.62	1.0	0.99	0.77	0.54	0.6	0.8	0.65	0.81	0.57
Plasma Calcium (mg/dL)	8.8	9.1	9.0	9.0	8.8	8.3	8.6	8.8	8.4	8.6	8.2

Males	<u>S01</u>	<u>S02</u>	<u>S03</u>	<u>S04</u>	<u>S05</u>	<u>S06</u>	<u>S07</u>	<u>S08</u>	<u>S09</u>	<u>S10</u>
Age (years)	53	41	56	54	63	57	52	64	62	48
Body mass index (kg·m <sup>-2</sup> )	25.9	24.3	18.2	25.1	24.0	39.9	25.1	25.2	24.4	31.7
Resting Systolic BP (mmHg)	114	129	108	140	124	129	127	139	130	131
Resting Diastolic BP (mmHg)	54	79	69	70	61	66	75	72	65	87
Resting HR (bpm)	47	56	47	52	56	69	63	58	57	75
Fasting BG (mg/dL)	94	96	92	91	91	95	85	100	86	102
Hemoglobin (g/dL)	14.6	15.5	13.9	16.2	14.4	15.7	15.1	14.6	13.9	15.8
Hematocrit (%)	41.8	43.6	41.1	48.4	41.2	45.2	44.4	44.3	43.5	44.3
Plasma Sodium (mEq/L)	142	141	141	140	140	136	140	142	141	140
Plasma Potassium (mEq/L)	4.3	3.8	4.0	4.4	4.3	3.9	3.7	4.7	4.0	3.9
Plasma Chloride (mEq/L)	110	107	109	106	107	103	103	109	106	108
Plasma BUN (mg/dL)	23	14	24	15	16	15	10	18	15	12
Plasma Creatinine (mg/dL)	0.98	0.76	0.91	0.88	0.86	1.05	1.02	0.87	0.85	0.72
Plasma Calcium (mg/dL)	8.5	9.6	9.2	8.6	8.4	8.5	8.5	8.8	9.0	8.8

BP: blood pressure, HR: Heart Rate; bpm: Beats per minute; BG: Blood Glucose; BUN: Blood urea nitrogen. \* signifies post-menopausal females. Italics signifies participants will complete L-FMC measurement. Underline signifies participants with complete blood biomarker data.

Supplementary Figure I. Effect of time into protocol on MDA and ET-1



Legend: MDA (Panel A) and ET-1 (Panel B) significantly decline across the 52-h circadian protocol possible as a result of the increased sleep opportunity, and controlled diet in the laboratory compared to free-living conditions. Solid line displays the model. Observed data are plotted as mean  $\pm$  SEM. FD = 'forced desynchrony day'.