

## Supplementary Material

### *Body Composition and Body Fluid Status - Measurement*

Body composition and body fluid status were measured using a four-terminal portable impedance analyzer (Maltron Bioscan 920-II, Maltron International Ltd., Rayleigh, Essex, UK). Empirically derived formulas (the original manufacturer's software) were used to calculate the estimated Fat Free Mass% (FFM%), Fat% (Fat Mass%), Total Body Water% (TBW%), Extracellular Water% (ECW%), Intracellular Water% (ICW%), Plasma Fluid (PF), Interstitial Fluid (IF) and Body Density (kg/L).

### *Body composition and body fluid status - Results*

*Total study (CAD) population and Ch-CAD subgroup.* There was no significant difference in body composition and body fluid status after consumption of three n-3 PUFAs or regular hen eggs compared to initial measurements within the n-3 PUFAs or Control group.

*Ac-CAD subgroup.* There was no significant difference in body composition and body fluid status after consumption of three n-3 PUFAs enriched hen eggs compared to initial measurements within the n-3 PUFAs group. Consumption of regular hen eggs significantly increased fat free mass, total body water, plasma fluid and interstitial fluid, and decreased fat mass, while other measured parameters remained unchanged following regular eggs consumption compared to initial measurement in Control. All results are presented in Table S1, in paper supplement.

**Table S1. Body composition and body fluid status responses to regular (Control group) and n-3 PUFAs enriched hen eggs (n-3 PUFAs group) consumption in total study (CAD) population and in two subgroups (Ac-CAD patients and Ch-CAD patients)**

Parameter	Control			n-3 PUFAs			Between group effect (after) adjusted for baseline
	before	after	<i>P</i> value <sup>a</sup>	before	after	<i>P</i> value <sup>a</sup>	<i>P</i> value <sup>b</sup>
<b>Total study (CV) population</b>							
Fat Free Mass (%)	66.4 [60.5 - 71.3]	66.3 [61.1 - 71.3]	0.182	65.5 ± 10.3	65.3 ± 10.9	0.996	0.190
Fat (%)	33.6 [28.7 - 39.5]	33.7 [28.7 - 38.9]	0.182	34.5 ± 10.3	34.7 ± 10.9	0.996	0.196
Total Body Water (%)	48.9 [46.1 - 50.8]	48.7 [46.6 - 51.2]	0.312	50.6 ± 12.2	50.5 ± 12.9	0.855	0.173
Extracellular Water (%)	44.7 ± 2.9	44.9 ± 2.9	0.964	44.3 [42.6 - 46.2]	44.1 [43.6 - 45.5]	0.927	0.056
Intracellular Water (%)	55.3 ± 2.9	55.1 ± 2.9	0.964	55.7 [53.8 - 57.4]	55.9 [54.5 - 56.4]	0.927	0.055
Plasma Fluid (L)	4.25 ± 1.04	4.75 ± 2.30	0.312	4.09 ± 1.21	4.04 ± 0.94	0.741	0.824
Interstitial Fluid (L)	14.87 ± 3.63	15.04 ± 3.89	0.626	14.29 ± 4.24	14.16 ± 3.27	0.778	<b>0.024</b>
Body Density (kg/L)	1.024 [1.011 - 1.030]	1.023 [1.012 - 1.030]	0.463	1.030 [1.005 - 1.040]	1.030 [1.013 - 1.039]	0.846	0.263
<b>Acute CV patients (Ac-CV)</b>							
Fat Free Mass (%)	66.5 [60.3 - 71.6]	68.8 [60.9 - 73.5]	<b>0.044</b>	70.6 ± 5.9	69.7 ± 7.8	0.359	0.418

Fat (%)	33.5 [28.5 - 39.7]	31.2 [26.6 - 39.3]	<b>0.044</b>	29.4 ± 5.9	30.3 ± 7.8	0.359	0.451
Total Body Water (%)	48.2 [45.1 - 51.7]	49.0 [45.7 - 56.4]	<b>0.039</b>	57.4 ± 12.9	56.5 ± 14.5	0.317	0.943
Extracellular Water (%)	44.4 ± 3.9	44.9 ± 3.7	0.402	45.4 ± 2.4	43.9 ± 1.6	0.164	0.230
Intracellular Water (%)	55.6 ± 3.9	55.1 ± 3.7	0.402	54.6 [52.2 - 56.4]	56.1 [54.6 - 56.5]	0.164	<b>0.042</b>
Plasma Fluid (L)	4.02 [3.29 - 4.75]	4.42 [3.41 - 6.25]	<b>0.045</b>	4.80 ± 1.27	4.48 ± 1.01	0.063	0.937
Interstitial Fluid (L)	14.07 [11.49 - 16.60]	14.77 [11.94 - 18.83]	<b>0.039</b>	16.80 ± 4.47	15.71 ± 3.51	0.075	0.155
Body Density (kg/L)	1.025 [1.012 - 1.031]	1.027 [1.008 - 1.039]	0.297	1.034 ± 0.012	1.032 ± 0.017	0.280	0.173
<b>Chronic CV patients (Ch-CV)</b>							
Fat Free Mass (%)	66.4 [60.3 - 71.2]	66.0 [61.0 - 69.8]	1.000	60.3 ± 11.3	61.1 ± 12.1	0.494	0.088
Fat (%)	33.6 [28.8 - 39.7]	34.0 [30.2 - 39.0]	1.000	39.7 ± 11.3	38.9 ± 12.1	0.494	0.087
Total Body Water (%)	50.3 [46.5 - 51.3]	48.7 [47.1 - 50.4]	0.625	43.8 ± 6.8	44.5 ± 8.0	0.575	0.063
Extracellular Water (%)	45.1 ± 1.5	44.7 ± 2.2	0.432	43.3 [41.8 - 45.0]	45.0 [43.4 - 46.0]	0.232	0.207
Intracellular Water (%)	54.9 ± 1.5	55.3 ± 2.2	0.432	56.7 [55.0 - 58.2]	54.0 ± 5.2	0.232	0.207
Plasma Fluid (L)	4.15 ± 0.46	3.99 ± 0.61	0.169	3.37 ± 0.57	3.60 ± 0.64	0.207	0.294
Interstitial Fluid (L)	14.52 ± 1.62	13.97 ± 2.13	0.168	11.78 ± 1.99	12.61 ± 2.23	0.206	0.296
Body Density (kg/L)	1.024 [1.011 - 1.031]	1.023 [1.012 - 1.030]	0.813	1.016 [0.988 - 1.030]	1.022 [0.980 - 1.030]	0.625	0.073

Data are presented as mean ± standard deviation (SD) (normally distributed data) or as median and interquartile range (not normally distributed data)

Total study population: Control N=20 (women N=3, men N=17) and n-3 PUFAs N=20 (women N=6, men N=14)

Acute CAD patients (Ac-CAD): Control N=10 (women N=1, men N=9) and n-3 PUFAs N=10 (women N=1, men N=9)

Chronic CAD patients (Ch-CAD) : Control N=10 (women N=2, men N=8) and n-3 PUFAs N=10 (women N=5, men N=5)

n-3 PUFAs- n-3 polyunsaturated fatty acids; CAD- coronary artery disease.

<sup>a</sup> analysis of difference between before and after within the group (paired t-test or Wilcoxon Signed Rank Test)

<sup>b</sup> analysis of covariance (ANCOVA) model included baseline value as covariate

Laboratory reference range for measured biochemical parameters is listed in Table S2.

**Table S2. Laboratory reference range for measured biochemical parameters from venous blood samples**

Parameter	lab reference range
erythrocytes (x10E12/L)	4.34 - 5.72
hemoglobin (g/L)	138 - 175
hematocrit (%)	41.5 - 53

leukocytes (x10E9/L)	3.4 - 9.7
thrombocytes (x10E9/L)	158 - 424
vWf	0.50 - 1.50
urea (mmol/L)	2.8 - 8.3
creatinine (μmol/l)	64 - 104
urates (μmol/l)	182 - 403
sodium (mmol/l)	137 - 146
potassium (mmol/l)	3.9 - 5.1
calcium (mmol/l)	2.14 - 2.53
iron (μmol/l)	11.0 - 32.0
transferrin (g/l)	2.0 - 3.6
glucose (mmol/L)	4.4 - 6.4
hsCRP (mg/L)	< 5
cholesterol (mmol/L)	< 5
triglycerides (mmol/L)	< 1.7
HDL cholesterol (mmol/L)	> 1
LDL cholesterol (mmol/L)	< 2.62

hsCRP- high sensitivity C reactive protein