## Supplementary Table 1.

		Entire cohort	НС	CHD	p-value
Vascular adhesion	N	34	11	23	
molecules	ICAM	148.6 (SD 79.7)	117.2 (SD 50.2)	163.7 (SD 87.5)	0.113
	VCAM	1124.9 (837.1;	965.5 (811.3;	1256.8 (997.4;	0.049*
		1396.0)	1104.4)	1495.5)	
	E-selectin	110958.6 (SD	108634.2 (SD	112070.2 (SD	0.842
		45825.7)	43544.0)	47792.7)	
	P-selectin	97.0 (SD 30.9)	101.7 (SD 29.2)	94.7 (SD 32.0)	0.547
Cytokines	N	33	11	22	
	TNF-alpha	0.05 (0; 1.33)	0	0.85 (0.05;	<0.001*
				1.71)	
	IL-6	1.59 (1.0; 2.3)	1.04 (0.9; 1.6)	1.82 (1.3; 2.8)	0.010*
	IL-8	0.58 (0; 1.6)	0.73 (0; 1.8)	0.51 (0; 1.5)	0.846
Vascular Growth	N	34	11	23	
Factors	VEGF-A	52.4 (SD 14.4)	57.5 (SD 12.5)	49.9 (SD 14.9)	0.152
	VEGF-C	28.2 (0; 85.8)	64.5 (29.8;	17.3 (0; 75.7)	0.041*
			139.6)		
	PIGF	10.6 (6.6; 21.7)	12.7 (6.6; 15.6)	10.0 (6.4; 29.8)	0.971
	VEGFR1	60.8 (SD 32.4)	75.8 (SD 25.9)	53.7 (SD 33.3)	0.062

Continuous variables with normal distribution are presented as means and standard deviations (SD) while variables with skewed distribution as medians with 25th and 75th percentile values. Group comparison for normally distributed, continuous variable was performed using t-test while comparison for skewed variables was performed using the Mann-Whitney. CKD= chronic kidney disease, HC= healthy controls, ICAM= intracellular adhesion molecule, IL= interleukin, PIGF= placental growth factor, TNF= tumour necrosis factor, VCAM= vascular cell adhesion molecule, VEGF= vascular endothelial growth factor, VEGFR1= VEGF receptor 1.\* indicates significance of p-value <0.05.

## Supplementary Table 2.

OH/ECW		r	p-value
MRI Sodium	N	20	
	Muscle	0.627	0.003*
	SC	0.627^	0.003*
Vascular adhesion	N	23	
molecules	ICAM	0.188	0.389
	VCAM	0.179	0.415
	E-selectin	-0.520	0.011*
	P-selectin	0.163	0.457
Cytokines	N	22	
	TNF-alpha	-0.011^	0.962
	IL-6	-0.089^	0.593
	IL-8	0.509^	0.016*
Vascular Growth Factors	N	23	
	VEGF-A	-0.125	0.578
	VEGF-C	0.158^	0.481
	PIGF	0.037^	0.868
	VEGFR1	-0.087	0.692

The relationship between variables was assessed using Pearson's correlation for normally distributed variables and Spearman's correlation when distribution was skewed. ECW= extracellular water, ICAM= intracellular adhesion molecule, IL= interleukin, MRI= magnetic resonance imaging, Na= Sodium, OH= overhydration index, PIGF= placental growth factor, SC= subcutaneous tissue, TNF= tumour necrosis factor, VCAM= vascular cell adhesion molecule, VEGF= vascular endothelial growth factor, VEGFR1= VEGF receptor 1. ^ denotes Spearman's correlation coefficient, \* indicates significance of p-value <0.05,

## **Supplementary Table 3.**

MRI-derived Na Muscle		r	p-value
Vascular adhesion	N	20	
molecules	ICAM	0.302	0.195
	VCAM	0.150	0.528
	E-selectin	-0.294	0.209
	P-selectin	-0.031	0.898
Cytokines	N	20	
	TNF-alpha	0.109^	0.648
	IL-6	-0.019^	0.937
	IL-8	0.025^	0.918
Vascular Growth Factors	N	20	
	VEGF-A	-0.081	0.763
	VEGF-C	-0.111^	0.640
	PIGF	-0.156^	0.510
	VEGFR1	-0.126	0.595

The relationship between variables was assessed using Pearson's correlation for normally distributed variables and Spearman's correlation when distribution was skewed. ICAM= intracellular adhesion molecule, IL= interleukin, MRI= magnetic resonance imaging, Na= sodium, PIGF= placental growth factor, TNF= tumour necrosis factor, VCAM= vascular cell adhesion molecule, VEGF= vascular endothelial growth factor, VEGFR1= VEGF receptor 1. ^ denotes Spearman's correlation coefficient, \* indicates significance of p-value <0.05,

## Supplementary Table 4.

MRI-derived Na SC		r	p-value
Vascular adhesion	N	20	
molecules	ICAM	0.535^	0.015*
	VCAM	0.278^	0.235
	E-selectin	-0.053^	0.826
	P-selectin	0.412^	0.071
Cytokines	N		
	TNF-alpha	0.186^	0.432
	IL-6	0.164^	0.489
	IL-8	0.195^	0.409
Vascular Growth Factors	N	20	
	VEGF-A	-0.002^	0.995
	VEGF-C	-0.320^	0.169
	PIGF	0.147^	0.535
	VEGFR1	0.132^	0.579

The relationship between variables was assessed using Pearson's correlation for normally distributed variables and Spearman's correlation when distribution was skewed. ICAM= intracellular adhesion molecule, IL= interleukin, MRI= magnetic resonance imaging, Na= Sodium, PIGF= placental growth factor, SC= subcutaneous tissue, TNF= tumour necrosis factor, VCAM= vascular cell adhesion molecule, VEGF= vascular endothelial growth factor, VEGFR1= VEGF receptor 1. ^ denotes Spearman's correlation coefficient, \* indicates significance of p-value <0.05.