



**Figure S 1.** Flow chart of the study population.

**Table S 1.** Sequences of qRT-PCR-Primers.

human SUPT20H (forward)	AAC TTT TGC TTG AGA GCC AGC
human SUPT20H (reverse)	TTG CTG CCG ATT CAG AGA GG
human SIRT1 (forward)	CAA CTT GTA CGA CGA AGA C
human SIRT1 (reverse)	TCA TCA CCG AAC AGA AGG
human SIRT3 (forward)	CAG TCT GCC AAA GAC CCT TC
human SIRT3 (reverse)	AAA TCA ACC ACA TGC AGC AA
human SIRT4 (forward)	GCT GTG AGA GAA TGA AGA TGA GC
human SIRT4 (reverse)	CTT GGA AAG GGT GAT GAA GCG
human SIRT5 (forward)	AGT GGT GTT CCG ACC TTC AG
human SIRT5 (reverse)	CAT CGA TGT TCT GGG TGA TG

**Table S 2.** Correlations of SIRT-activities with different parameters.

Sirtuin	Correlation with	p-value
SIRT1	Coffee	0.238
	Flavonoids	0.352
	Polyphenols	0.324
	Vitamin B <sub>12</sub> in serum	0.411
	Active vitamin B <sub>12</sub>	0.433
	Glucose	0.416
	Insulin	0.305
	Calories	0.603
	W/kg body weight	0.979
SIRT3	Coffee	0.190
	Flavonoids	0.196
	Polyphenols	0.146
	Vitamine B <sub>12</sub>	0.349
	Active vitamin B <sub>12</sub>	0.140
	Glucose	0.377
	Insulin	0.090
	Calories	0.897
	W/kg body weight	0.627
SIRT5	Coffee	0.388
	Flavonoids	0.067
	Polyphenols	0.382
	Vitamine B <sub>12</sub>	0.214
	Active vitamin B <sub>12</sub>	0.075
	Glucose	0.274
	Insulin	0.111
	Calories	0.704
	W/kg body weight	0.623

Statistical analyses were conducted with the Spearman correlation test.