

TABLE 2 Correlations among plasma irisin, leptin, adiponectin, ghrelin and TNF-alpha at baseline (T0) and at follow-up (T2) with risk factors of insulin resistance at baseline (T0) and at follow-up (T2) in the cohort 2 (n=73) ¶

Insulin resistance risk factors	Spearman's Rho correlation coefficients										
		Baseline (T0)					Follow-up (T2)				
		Irisin (ng/mL)	Leptin (ng/mL)	Adiponectin (ng/mL)	Ghrelin (pg/mL)	TNFalpha (pg/mL)	Irisin (ng/mL)	Leptin (ng/mL)	Adiponectin (ng/mL)	Ghrelin (pg/mL)	TNFalpha (pg/mL)
Body weight (kg)	T0	-0.01	-0.12	-0.38[†]	-0.13	0.15	-0.03	0.09	-0.45[†]	-0.24*	0.24*
	T2	-0.01	-0.12	-0.35*	-0.12	0.11	0.05	0.18	-0.43[†]	-0.29*	0.17
BMI	T0	-0.08	0.39*	-0.01	-0.05	0.09	-0.05	0.53[†]	-0.16	-0.28*	0.25*
	T2	-0.05	0.35*	-0.01	-0.08	0.07	0.07	0.62[†]	-0.16	-0.33*	0.20[‡]
Waist circumference (cm)	T0	0.09	-0.02	-0.25*	-0.27*	0.20[‡]	0.08	0.10	-0.34[†]	-0.40[†]	0.18
	T2	0.10	-0.02	-0.22[‡]	-0.22	0.14	0.15	0.24*	-0.30[†]	-0.46[†]	0.09
Fat mass (kg)	T0	-0.03	0.42[†]	-0.02	-0.07	0.11	-0.03	0.54[†]	-0.18	-0.26*	0.19
	T2	-0.04	0.48[†]	0.06	-0.07	0.11	0.08	0.70[†]	-0.12	-0.25*	0.16
Fat free mass (kg)	T0	0.02	-0.50[†]	-0.53[†]	-0.18	0.11	-0.01	-0.30*	-0.50[†]	-0.18	0.11
	T2	0.04	-0.50[†]	-0.53[†]	-0.15	0.11	0.01	-0.23*	-0.50[†]	-0.20	0.11
Fat mass (%)	T0	-0.08	0.72[†]	0.32[†]	0.07	0.01	-0.02	0.70[†]	0.17	-0.08	0.08
	T2	-0.05	0.75[†]	0.37[†]	0.01	0.04	0.08	0.77[†]	0.19[‡]	-0.13	0.07
Fat free mass (%)	T0	0.08	-0.71[†]	-0.32[†]	-0.07	0.00	0.02	-0.70[†]	-0.17	0.08	-0.08
	T2	0.05	-0.75[†]	-0.38[†]	-0.01	-0.04	-0.07	-0.77[†]	-0.21[‡]	0.12	-0.07

(Continued)

Table 2 (continued)

Insulin resistance risk factors	Spearman's Rho correlation coefficients										
		Baseline (T0)					Follow-up (T2)				
		Irisin (ng/mL)	Leptin (ng/mL)	Adiponectin (ng/mL)	Ghrelin (pg/mL)	TNFalpha (pg/mL)	Irisin (ng/mL)	Leptin (ng/mL)	Adiponectin (ng/mL)	Ghrelin (pg/mL)	TNFalpha (pg/mL)
Glucose (mg/dL)	T0	0.12	0.03	-0.17	-0.11	-0.04	0.04	0.10	-0.15	-0.20	-0.08
	T2	0.09	0.08	-0.19	-0.02	0.02	0.11	0.12	-0.09	-0.02	-0.26*
Insulin (μU/mL)	T0	0.20‡	0.01	-0.49†	-0.09	0.12	0.19	0.09	-0.45†	-0.03	0.10
	T2	0.24*	0.19	-0.22	-0.03	0.04	0.26†	0.47†	-0.30†	-0.17	-0.02
Triacylglycerides (mg/dL)	T0	0.32†	0.02	-0.39†	-0.10	0.29*	0.36†	0.05	-0.44†	0.17	0.16
	T2	0.29*	0.05	-0.28*	-0.02	0.17	0.42†	0.25†	-0.31†	0.11	0.13
HOMA-IR	T0	0.24*	0.04	-0.47†	-0.08	0.06	0.22*	0.12	-0.45†	-0.06	0.06
	T2	0.23*	0.16	-0.23	0.03	0.04	0.26†	0.45†	-0.28†	-0.14	-0.05
Irisin (ng/mL)	T0	1.00	-0.08	-0.02	-0.28*	-0.08	0.77†	-0.10	-0.05	-0.18	-0.22‡
	T2	0.77†	0.08	0.03	-0.18	0.01	1.00	0.09	-0.05	-0.20	-0.12
Leptin (ng/mL)	T0	-0.08	1.00	0.16	0.17	0.09	0.08	0.79†	0.02	0.20	0.11
	T2	-0.10	0.79†	0.04	0.19	0.16	0.09	1.00	-0.08	0.05	0.18
Adiponectin (ng/mL)	T0	-0.02	0.16	1.00	-0.23‡	-0.06	0.03	0.04	0.78†	-0.31*	-0.03
	T2	-0.05	0.02	0.78†	-0.24‡	-0.06	-0.05	-0.08	1.00	-0.36†	-0.17
Ghrelin (pg/mL)	T0	-0.28*	0.17	-0.23‡	1.00	-0.20	-0.18	0.19	-0.24‡	0.68†	-0.08
	T2	-0.18	0.20	-0.31*	0.68†	-0.15	-0.20	0.05	-0.36†	1.00	-0.12
TNFalpha (pg/mL)	T0	-0.08	0.09	-0.06	-0.20	1.00	0.01	0.16	-0.06	-0.15	0.62†
	T2	-0.22‡	0.11	-0.03	-0.08	0.62†	-0.12	0.18	-0.17	-0.12	1.00
Weight loss (%)		-0.06	0.21‡	0.06	-0.14	0.08	0.18	0.38†	0.03	-0.22	0.04
Weight regain (%)		-0.02	-0.09	-0.16	0.09	0.06	0.19	0.29†	-0.21‡	-0.08	-0.05

(¶) Data denote the Spearman's rho correlation coefficient. Statistically significant correlations are shown in bold. (*) p<0.05, (†) p<0.01 and (‡) p<0.10, statistically significant associations.