

# Serum iron parameters, HFE C282Y genotype, and cognitive performance in older adults: results from the FACIT study

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**TABLE 3**

Associations between iron parameters and cognitive performance at baseline in healthy older adults\*

Cognitive performance indices	<i>n</i>	Standardized regression coefficient ( $\beta$ )					
		Serum iron	<i>p</i>	Ferritin	<i>p</i>	Non-transferrin bound iron	<i>p</i>
Memory	794	-0.019	0.807	0.002	0.951	0.070	0.362
Sensorimotor speed	789	-0.185	0.012	-0.073	0.033	0.141	0.054
Complex speed	788	-0.081	0.296	-0.077	0.019	0.081	0.266
Information processing speed	791	-0.109	0.141	-0.069	0.046	0.078	0.291
Word fluency	794	-0.050	0.519	-0.062	0.092	0.057	0.462

\* Adjusted for the covariates age, sex, level of education, alcohol consumption, smoking, body mass index, physical activity, *APOE* E4 carrier status, serum C-reactive protein, and hemoglobin concentration in hierarchical linear regression analyses.

**TABLE 4**

Longitudinal associations between iron parameters and cognitive performance over 3 years of follow-up in healthy older adults\*

Cognitive performance indices	<i>n</i>	Parameter estimate for longitudinal effect					
		Serum iron	<i>p</i>	Ferritin	<i>p</i>	Non-transferrin bound iron <sup>†</sup>	<i>p</i>
Memory	800	0.002	0.307	-0.001	0.292	0.000	0.965
Sensorimotor speed	799	0.001	0.396	0.000	0.806	0.001	0.925
Complex speed	798	-0.002	0.086	-0.001	0.221	-0.016	0.052
Information processing speed	799	0.001	0.501	0.000	0.578	-0.005	0.446
Word fluency	800	0.002	0.215	0.000	0.991	0.018	0.121

\* Adjusted for the covariates age, sex, level of education, alcohol consumption, smoking, body mass index, physical activity, *APOE* E4 carrier status, serum C-reactive protein, and hemoglobin concentration in linear mixed models.

<sup>†</sup> Non-transferrin bound iron was measured at baseline only. Memory, *n*=794; sensorimotor speed, *n*=793; complex speed, *n*=792; information processing speed, *n*=793; word fluency, *n*=794.

**TABLE 5 [optional]**

Cross-sectional and longitudinal (3-year) associations between the *HFE* C282Y mutation and cognitive performance in healthy older adults\*

Cognitive performance indices	Cross-sectional analyses			Longitudinal analyses	
	<i>n</i>	Standardized regression coefficient ( $\beta$ )	<i>p</i>	Parameter estimate for longitudinal effect	<i>p</i>
Memory	753	-0.033	0.332	-0.005	0.845
Sensorimotor speed	748	-0.003	0.930	-0.024	0.183
Complex speed	748	0.029	0.389	-0.022	0.343
Information processing speed	750	-0.010	0.772	-0.009	0.659
Word fluency	753	-0.003	0.943	-0.031	0.376

\* Displayed are the standardized regression coefficients ( $\beta$ ) for the *HFE* C282Y mutation (0=wildtype, 1=C282Y homozygous/heterozygous) in hierarchical linear regression analyses and the parameter estimates for the longitudinal effect of the *HFE* C282Y mutation in linear mixed models. Cross-sectional and longitudinal associations were adjusted for the covariates age, sex, level of education, alcohol consumption, smoking, body mass index, physical activity, *APOE* E4 carrier status, serum C-reactive protein, and hemoglobin concentration.