

Correlations with zBMI	R
Anthropometrics	
Arm circumference	0.86
Abdomen circumference	0.80
Hip circumference	0.78
Nutrition	
Foods	
Cow's milk *	0.18
Total fluid intake *	0.16
Food Groups	
Animal products total *	0.16
Animal products non-meat	0.18
Micronutrients	
Saturated fatty acids *	0.17
SES	
SES-rank *	-0.18
Both parents live in the same household *	- 0.19
Other	
BMI of father	0.28
BMI of mother	0.24

*Table 1 – Pearson correlations between zBMI and other collected variables, all listed correlations are significant ($p < 0.05$). Positive correlations indicate associations with a higher zBMI, negative correlations indicate an association with a lower zBMI. For normally distributed variables Pearsons's correlations were calculated, Spearman correlations were calculated for non-normally distributed variables and are marked with a *.*

Correlations with Flexibility Errors (t)	R
Cognition	
Flexibility - Overall performance index (t)	0.77
Flexibility - Speed-accuracy trade-off index (t)	0.71
Memory items Round 1	0.15
Memory items Round 2	0.18
Distractibility / Total errors (t)	0.19
Nutrition	
Foods	
Soft drinks per week	-0.17
Micronutrients	
Iodine	-0.17
Food Groups	
Plant-based components excluding whole carbohydrates	-0.26
All plant-based components including whole carbohydrates	-0.20
Nuts and legumes	-0.17
Oil, fat, butter lard	0.17
Other	
Cooking at home	0.17
Physical activity	
Total physical activity per day	-0.21
PAQ-C Score	-0.17
Other	
Age of mother	-0.23
Age of father	-0.17
Mother's education level	0.16

Table 2 - Spearman correlations between the T-values of errors in the flexibility task with other collected variables, all listed correlations are significant ($p < 0.05$). Positive correlations are associated with better performance.

Correlation median reaction time flexibility (t)	R
Cognition	
Flexibility - Overall performance index (t)	0.65
Flexibility - Speed-accuracy trade-off index (t)	-0.65
Nutrition	
Macronutrients	
Protein	-0.30
Fat	-0.35
Kilocalories	-0.30
Fat percentage	-0.22
Carbohydrates percentage *	0.20
Micronutrients	
Phenylalanine *	-0.24
Monounsaturated fatty acids	-0.23
Saturated fatty acids	-0.27
Polyunsaturated fatty acids *	-0.25
Sodium	-0.24
Salt *	-0.22
Phosphorous *	-0.18
Zinc *	-0.17
Cholesterol *	-0.21
Uric acid *	-0.17
Vitamin A Retinol *	-0.22
Vitamin B1 *	-0.17
Vitamin B12 *	-0.29
Vitamin B2 *	-0.23
Vitamin E – active *	-0.20
Food Groups	
Meat *	-0.24
Other	
BMI of father *	-0.20

Table 3 - Correlations between the T value of the reaction time during the flexibility task with other collected variables, all listed correlations are significant ($p < 0.05$). For normally distributed variables Pearsons's correlations were calculated, Spearman correlations were calculated for non-normally distributed variables and are marked with a *. Positive correlations are associated with better performance (i. e. shorter reaction times).

Correlations flexibility - overall performance index (t)	R
Cognition	
Flexibility - Errors (t) *	0.77
Flexibility - Median (t)	0.65
Flexibility - Speed-accuracy trade-off index (t)	0.13
Nutrition	
Macronutrients	
Kilocalories	-0.19
Protein	-0.22
Micronutrients	
Phenylalanine *	-0.18
Monounsaturated fatty acids	-0.18
Polyunsaturated fatty acids *	-0.20
Sodium	-0.20
Salt *	-0.19
Cholesterol *	-0.20
Vitamin B6 *	-0.17
Vitamin B12 *	-0.22
Vitamin B2 *	-0.24
Food Groups	
Plant based overall	-0.20
Soft drinks *	-0.23
Physical Activity	
PAQ-C Score *	-0.22
Other	
Mother's age *	-0.15
Father's age *	-0.20

Table 4 Correlations between the T-values of overall performance in the flexibility task with other collected variables, all listed correlations are significant ($p < 0.05$). For normally distributed variables Pearsons's correlations were calculated, Spearman correlations were calculated for non-normally distributed variables and are marked with a *. Positive correlations are associated with a better performance.

Correlations for flexibility - speed-accuracy trade-off index (t)	R
Cognition	
Distractibility / Total errors (t) *	0.14
Flexibility - Errors (t) *	0.71
Memory items round 2 *	0.13
Flexibility - Median (t)	-0.65
Flexibility - Overall performance index (t)	0.13
Nutrition	
Macronutrients	
Protein	0.21
Fat	0.32
Kilocalories	0.23
Fat percentage	0.25
Carbohydrates percentage *	-0.21
Micronutrients	
Saturated fatty acids	0.24
Food Groups	
Plant based overall	-0.21
Animal based non-meat	0.18
Animal based total *	0.22
Plant based total excluding whole carbohydrates *	-0.21

Table 5 - Correlations between the T-values of the speed-accuracy index in the flexibility task with other collected variables, all listed correlations are significant ($p < 0.05$). For normally distributed variables Pearsons's correlations were calculated, Spearman correlations were calculated for non-normally distributed variables and are marked with a *. Positive correlations are associated with the strategy prioritizing performance (less errors) over speed.

Correlations with Distractibility / Total Errors (t)	R
Cognition	
Omission Difference *	-0.19
Flexibility - Errors (t) *	0.18
Flexibility - Speed-Accuracy Trade-Off Index (t)	0.20
Nutrition	
Soft Drink Consumption *	-0.19

Table 6 - Correlations between distractibility total number of errors T-value with other collected variables, all listed correlations are significant ($p < 0.05$). For normally distributed variables Pearson's correlations were calculated, Spearman correlations were calculated for non-normally distributed variables and are marked with a *. Positive correlations are associated with a better performance.

Correlations with Distractibility Omission Difference	R
Cognition	
Memory Items Round 2	-0.15
Distractibility / Total Errors (t)	-0.19
Nutrition	
Foods	
Soft Drinks	0.18
Water	-0.18
Food Groups	
Oil, fat, butter lard	-0.19

Table 7 – Spearman correlations with Omission Difference, all listed correlations are significant ($p < 0.05$). Positive correlations indicate a higher number of errors, when an additional distractor was present.

Correlation With Forgetfulness	R
Cognition	
Memory items Round 1	0.22
Memory items Round 2	-0.52
Nutrition	
Micronutrients	
Calcium	-0.22
Sodium	-0.19
Retinol (Vitamin A)	-0.20
Food Groups	
Oil, fat, butter lard	-0.21
Animal products total	-0.21
Animal products excl. meat	-0.22
Other	
Age of mother	-0.15

Table 8- Spearman correlations between the number of items forgotten between round 1 and round 2; all listed correlations are significant ($p < 0.05$). Positive correlation indicates more items forgotten between the two rounds.

Correlations with Memory Items Round 1	R
Cognition	
Memory Items Round 2	0.60
Forgetfulness	0.22
Flexibility Errors (t)	0.15
Nutrition	
Food	
Plant based overall	0.19
Micronutrients	
Iron	0.17
Potassium	0.21
Phosphorus	0.17
Vitamin B2	0.18
Vitamin K	0.17
Food Groups	
Carbohydrate-rich foods	0.20
Meat and fish	-0.17
Animal products total	-0.21
Animal products non-meat	-0.22

Table 9 - Spearman correlations between the number of items remembered in round 1; all listed correlations are significant ($p < 0.05$).

Correlations with Memory Items Round 2	R
Cognition	
Memory Items Round 1	0.60
Forgetfulness	-0.52
Flexibility - Errors (t)	0.18
Flexibility – overall performance index (t)	0.13
Flexibility – speed-accuracy trade-off	0.13
Distractibility – omission difference	-0.15
Nutrition	
Foods	
Non sugar sweetened beverage portions	-0.18
Micronutrients	
Iron	0.24
Potassium	0.22
Folate (Total Folic Acid)	0.22
Vitamin B2	0.19
Phosphorous	0.19
Retinol (Vitamin A)	0.17
Food Groups	
Oil, fat, butter lard	0.24
Carbohydrate rich foods	0.25

Table 10 - Spearman correlations between the number of items remembered in round 2; all listed correlations are significant ($p < 0.05$).