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Effect of Food Selectivity on Dyslipidemia in Autism Spectrum Disorder

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Background

- Autism spectrum disorder patients labelled “picky eaters”
 - poor intake of fruits, vegetables, dairy
 - preference for ultra-processed carbs^[1,2,3]
- Processed food consumption linked to cardiovascular disease risk^[4,5,6,7]

Methods

- 5-question Food Selectivity Questionnaire w/ Likert scale
 - adapted from Swedish Eating Assessment for Autism spectrum disorders^[8]
 - focus on sensory component of selectivity
- Recruited subjects with ASD diagnosis and recent lipid labs
 - excluded patients on medications and special diets (e.g., ketogenic)
 - 15 subjects analyzed
- Linear regression to determine effect of self-reported selectivity on lipid values

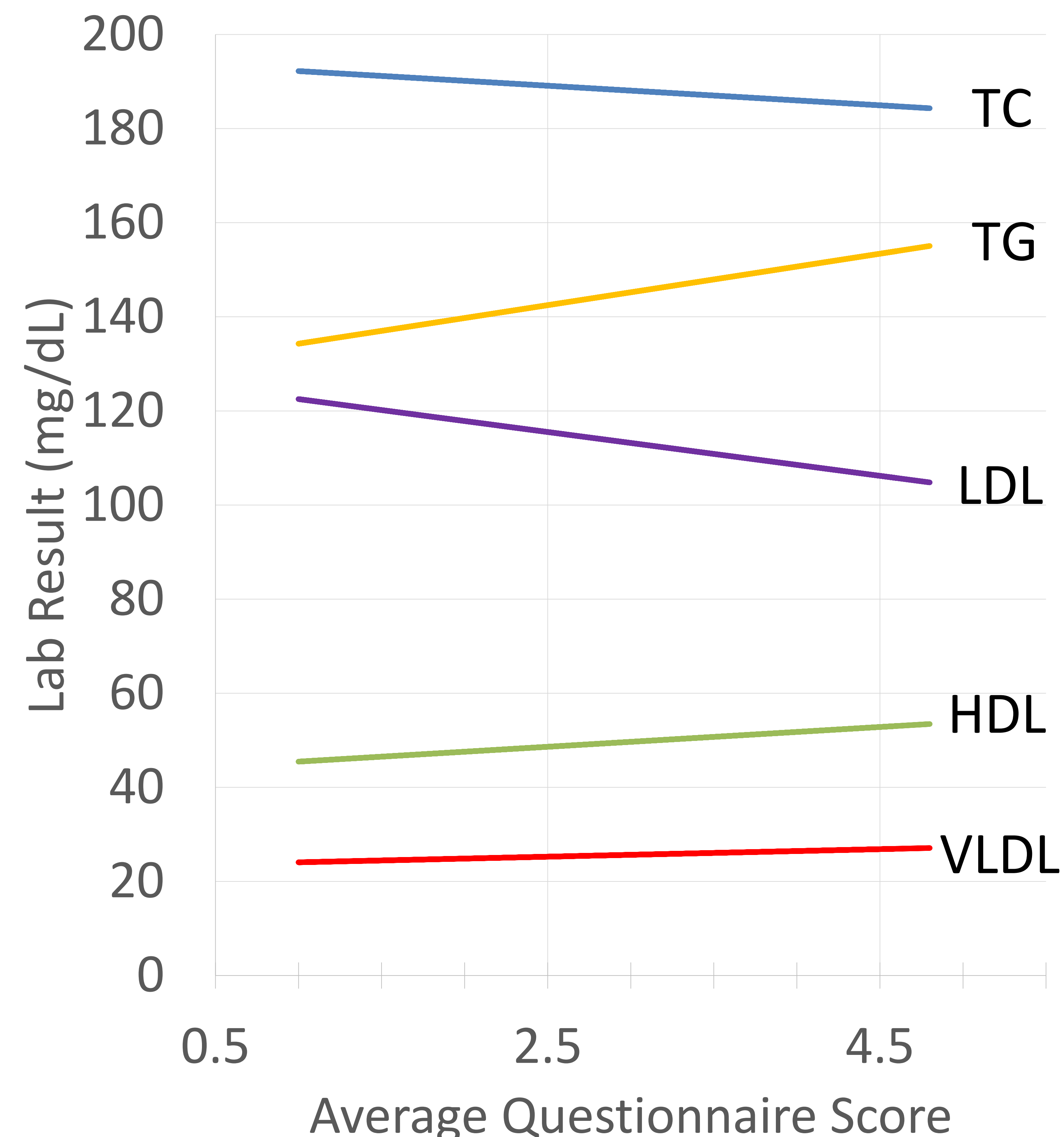
Results

Multivariable Multiple Regression in SPSS

- All Qs had weak and statistically insignificant model and between-subject effects

Linear Regression in Excel

- R² values near zero for average questionnaire score vs each lipid value
- Slopes not statistically different from 0



Discussion

- Heart disease a multibillion-dollar healthcare cost^[9]
 - Coronary artery disease the biggest subset in the US
- No correlation found between food selectivity and blood lipid levels in this study
- Variability of lipid levels may be due to
 - severity of selectivity
 - caretaker influence on diet
 - exercise habits
 - genetic tendency for hyperlipidemia

Limitations

- small sample
- lack of control for specific food habits and demographics

Future Work

- Expand questionnaire
 - food diaries
 - preferred brands
 - track over time



Scan for references.

Please direct questions to raoank95@rowan.edu