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Effect of Food Selectivity on Dyslipidemia in Autism Spectrum Disorder

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Food Selectivity and 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

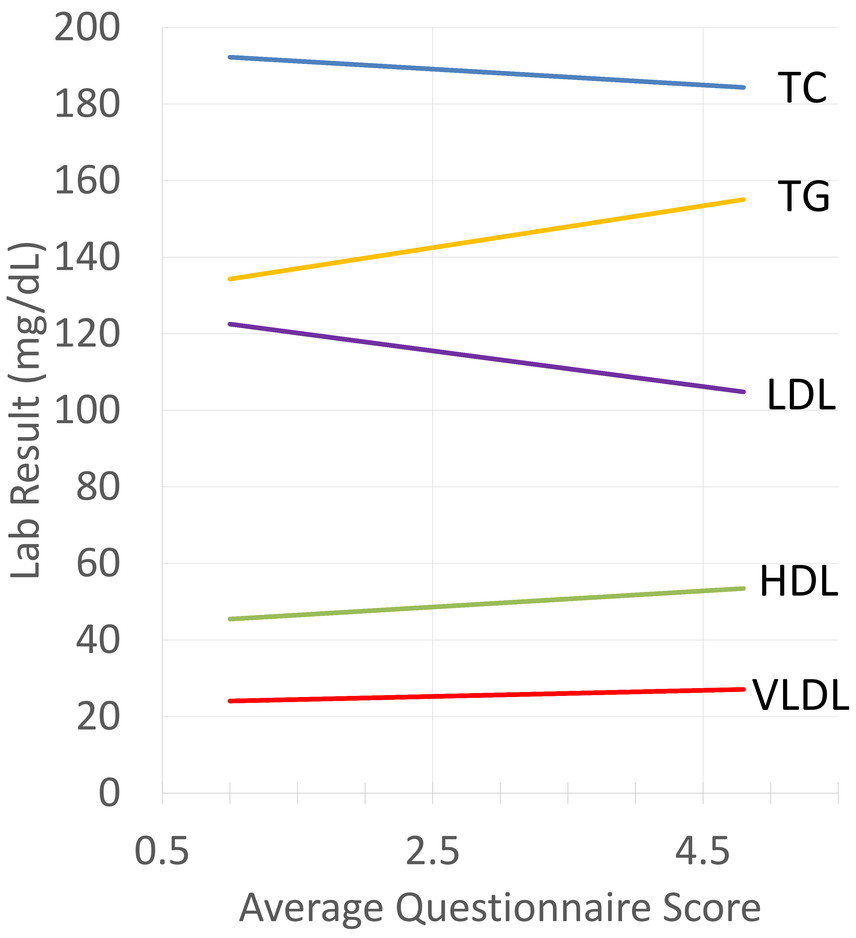
Results

Multivariable Multiple Regression in SPSS

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

Linear Regression in Excel

- R^2 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