RISE RESEARCH INNOVATION SCHOLARSHIP ENTREPRENEURSHIP

Submission ID: 542
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Breastfeeding and Childhood Health Outcomes

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Purpose

- Breastfeeding has been linked to cognitive and physical health benefits.
- The role of breastfeeding on body composition and IQ in 8–9-year-old children is unknown.
- Aim: examine the associations between breastfeeding, body composition, and cognitive function (IQ) in children.

Measures

Breastfeeding

- Retrospective Questionnaire by Parents: "Did you breastfeed, yes or no?"

Body Composition

Dual Energy X-ray Absorptiometry (DXA)
- Lean and fat mass
- Adjusted for total body mass

Intelligence Quotient (IQ)

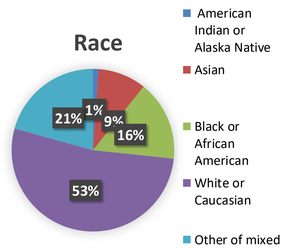
- KBIT
- KBIT2
- Woodcock Johnson

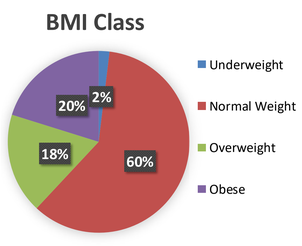
Preliminary Statistical Analyses

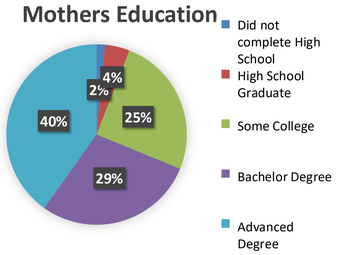
- Two-sided t-test
- Univariate analysis
  - Controlling for sex and mothers' education (proxy of SES)

Demographics

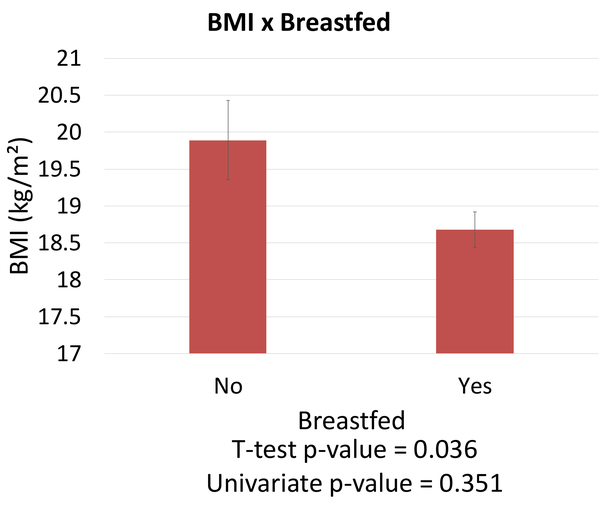
Variable	Mean (SE)
N	343
Breastfed, yes	282
Breastfed, No	61
Age, years	9.21 ± 0.88
Sex, female N, %	168, 49%

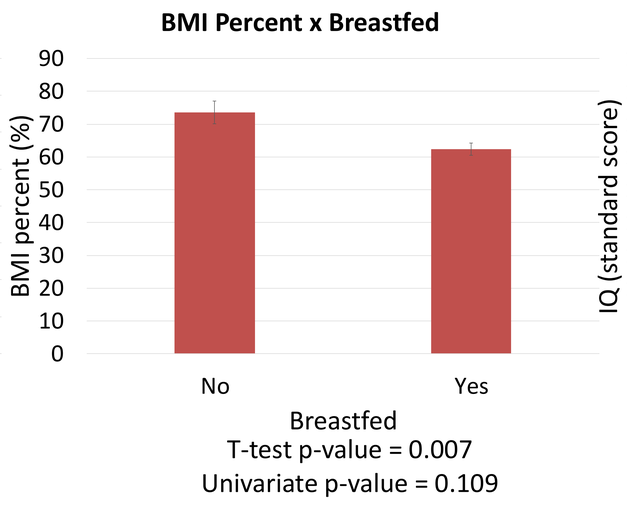


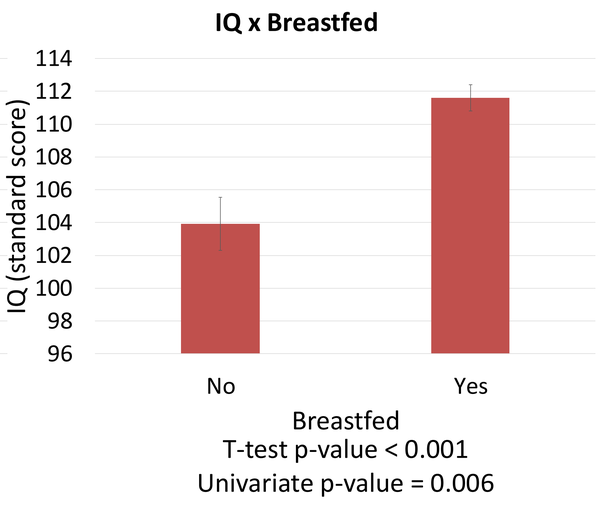


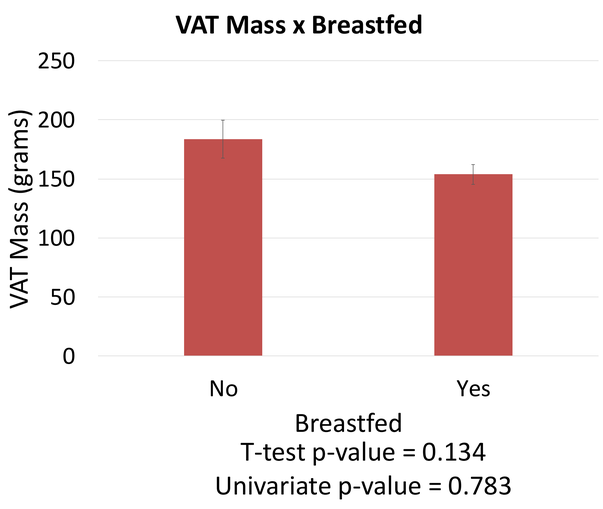


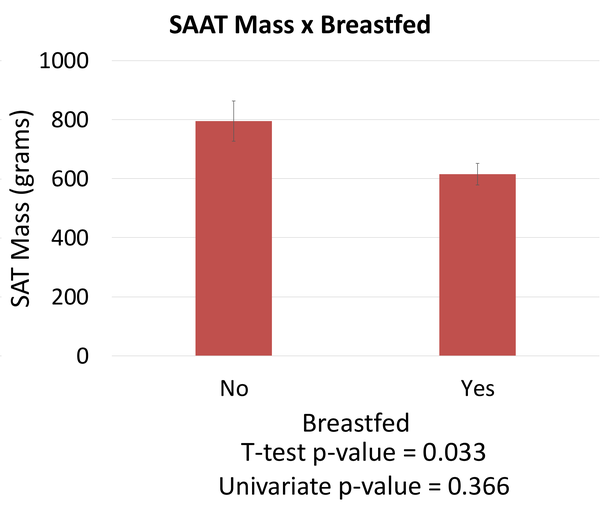
Results

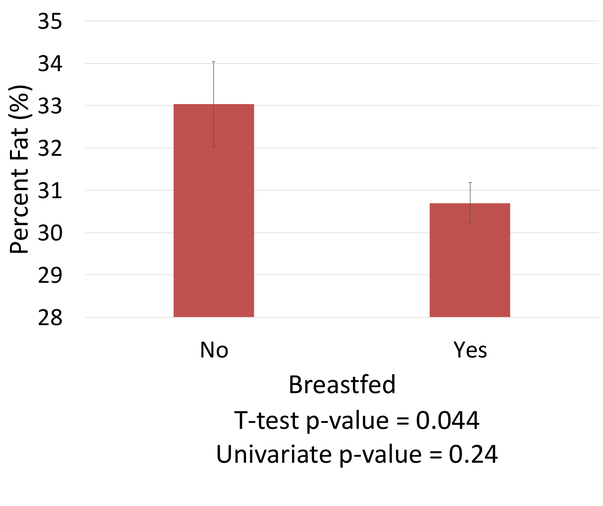


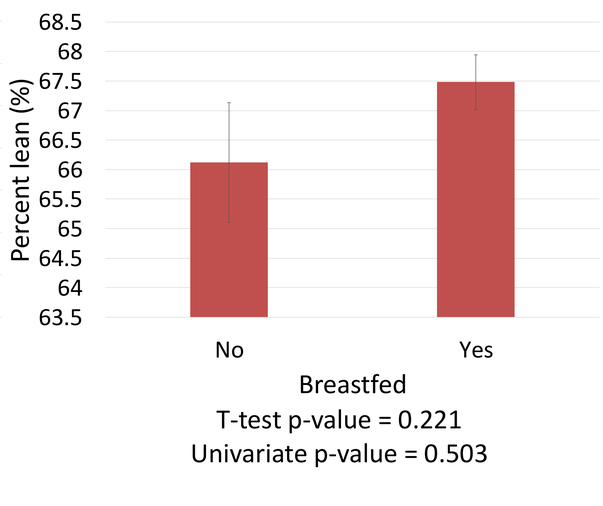






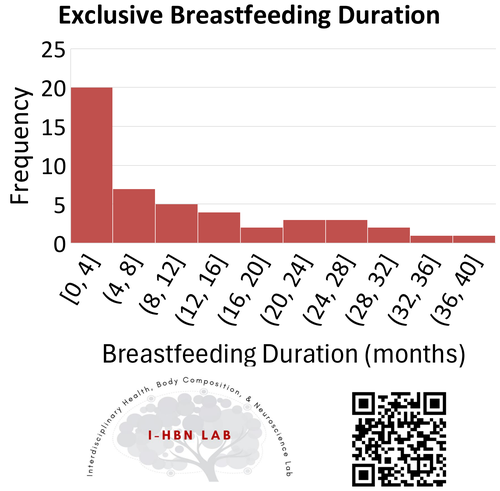






Conclusions and Future Directions

- Breastfeeding is associated with higher IQ scores even after adjustments.
- Associations with body composition (BMI, fat mass) appear weaker when adjusting for covariates.
- Thus, breastfeeding on its own may not account for differences in body composition in later childhood.
- Future investigations should examine breastfeeding duration.



R01 HD094054 (NICHD, NIH); R01 HD055352 (NICHD, NIH); R01 HD069381 (NICHD, NIH)