The STRONG Kids Initiative: A **Cells to Society Perspective on** the Early Determinants of Childhood Obesity Presentation for the Early Childhood Working Group

November 19, 2018

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Overview of Presentation

- How I became an obesity researcher
- Overview of the STRONG Kids
 Research Team
- Overview 6-Cs model of the determinants of early childhood obesity
- Overview SK I longitudinal Study
- Overview of SK II Birth Cohort Study
- Questions





Pour Some Sugar On Me:

Children, Television, and Nutrition

Kristen Harrison

Dept of Speech (

Dept of Speech Communication

University of Illinois



Synergistic Theory and Research on Obesity and Nutrition Group STRONG Kids

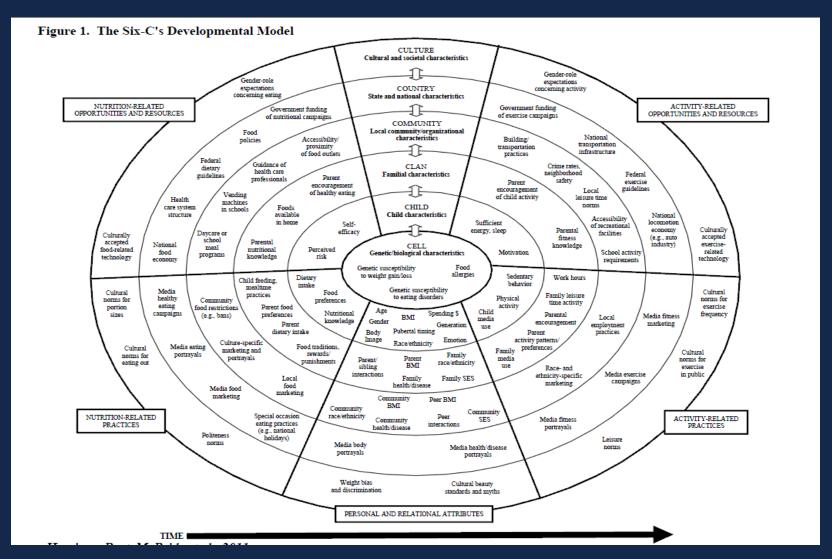
STRONG Kids Research Team

- Multiple disciplines represented
- Transdisciplinary team
- Multiple research paradigms represented



- Emphasis on combining research and education efforts
- SK 1 and SK 2

6-Cs Model – Determinant of Childhood Obesity





STRONG Kids I Longitudinal Study

- 300+ children aged 2
 - 36 centers in East Central Illinois
 - Yearly data collection
- **■** Followed Children 3 years
 - Antrhopometric data each year
 - BMI
 - Saliva samples genetic markers
- **■** Focus teachers in centers
 - Dr. Dev's dissertation data from these teachers



New Initiative STRONG Kids II

Family Resiliency Center college of Agricultural, Consumer & Environmental Sciences

- Birth cohort study
- Focus intersect of biology and family environments in promoting healthy eating habits
- Multiple data collection points
- Extensive data collection
- Naturally occurring
 experiment intent to breast feed
 during the first year of life



Preliminary Findings – SK II Data Early Childcare Attendance as a Risk Factor for Later Childhood Obesity

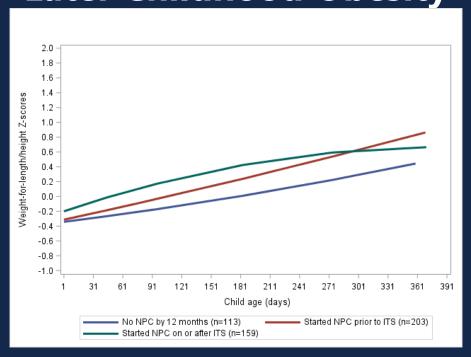
- Mixed results early childcare attendance & later obesity
- SK2 Participants 3 groups
- Growth curves calculated
- Significant findings
- Troublesome results

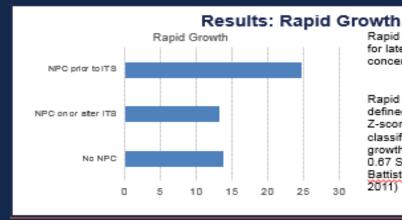


Preliminary Findings – SK Data

Early Childcare Attendance as a Risk Factor for

Later Childhood Obesity





Rapid growth is a major risk factor for later weight and health related concerns (Ong & Loos, 2006)

Rapid growth in the 1st year is defined by change in weight-for-age Z-scores from birth to 12 months and classified into 2 groups (1=rapid growth [>0.67 SD increase], 0=≤ 0.67 SD increase) (Mihrshahi, Battistutta, Magarey, & Daniels, 2011)



College of Agricultural, Consumer & Environmental Sciences

Funding Partners

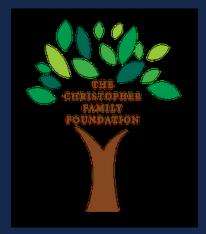


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Challenge for Early Childhood Working Group

Break Down Silo Approach

- Research, policy and practice



Questions

