



# Preventing Adolescent Diabetes: Educating Families on Obesity



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## PICOT Question

Are children who have obesity education compared to those without obesity education at a lower risk for developing diabetes in adolescence?

## Literature Review

### Databases Used:

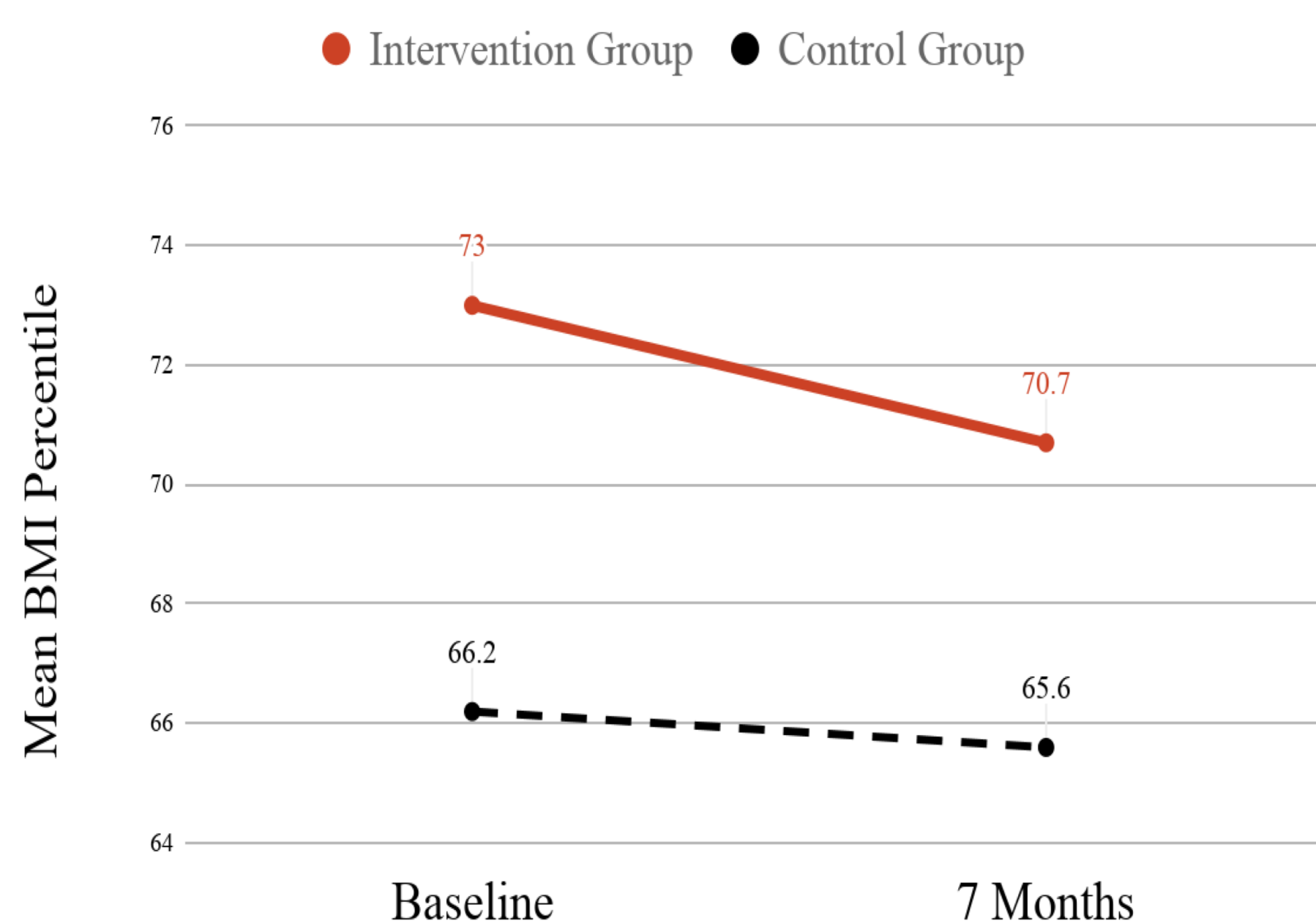
- CINAHL
- Ovid Nursing Database
- Pub Med
- Google Scholar

### Key Terms:

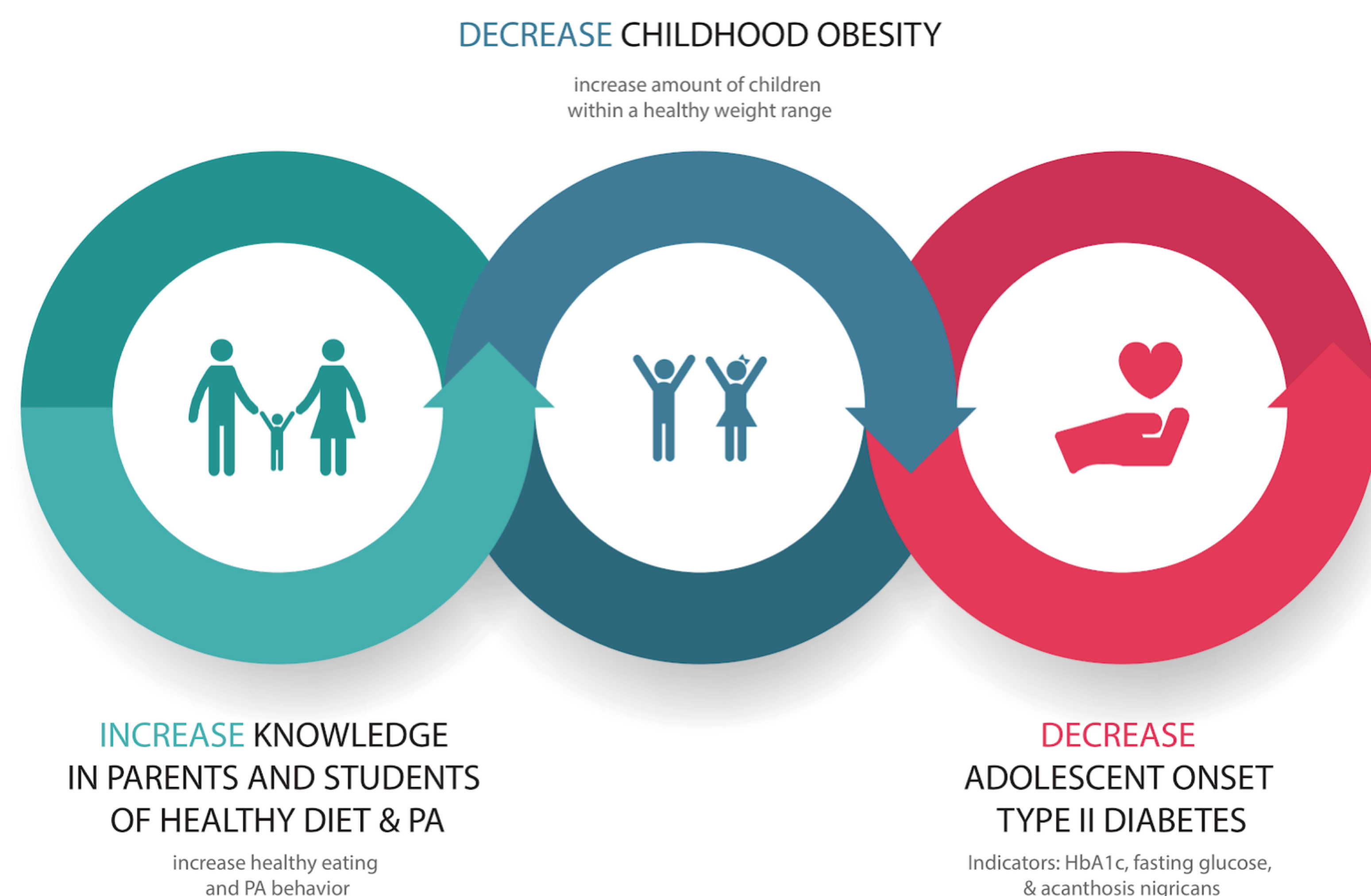
- Diabetes
- Obesity education
- Adolescents
- Childhood

### Article Selection Criteria:

- Peer reviewed journal articles
- Published articles from 2013-2018



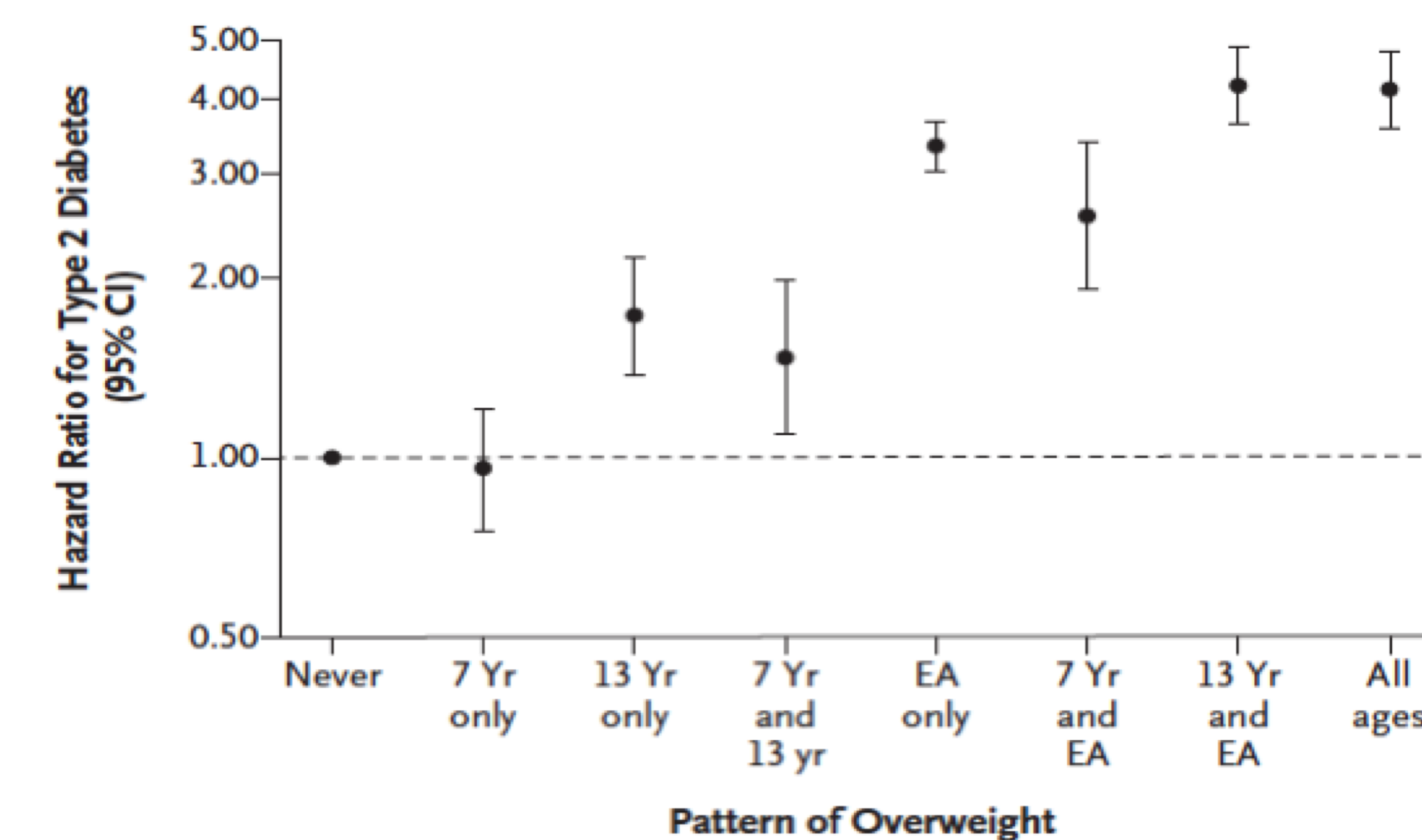
**Figure 1.** School nurse lead obesity intervention effects on mean BMI of elementary students<sup>8</sup>



**Figure 2.** Evaluation

## Synthesis of Research

- There is a direct correlation between childhood obesity and an increase risk of diabetes in adolescents.<sup>1, 2, 3,</sup>
- While obesity is a risk factor for the development of diabetes, the severity of a child's obesity can indicate the speed at which diabetes develops.<sup>4, 5</sup>
- Evidence supports that school-based interventions with children between the ages of 6-12 is most effective and should be the focal point in preventing childhood obesity.<sup>3, 6, 7, 8, 9, 10</sup>
- Parental involvement along with obesity education interventions were more effective in reducing obesity in teenagers and young adults.<sup>11, 12, 13</sup>
- Parents perceive health care providers in a community setting e.g. MD, NP, RN, etc. as a credible source for obesity information.<sup>8, 14</sup>
- Independent of weight loss, physical activity (PA) is correlated with increased glucose regulation in obese children.<sup>1</sup>



**Figure 3.** Patterns of overweight at 7 years of age, 13 years of age, and early adulthood (EA)<sup>4</sup>

## Decision to Change Practice

- School nurses receive a standardized obesity prevention education certification every three years
- Implement an elementary school obesity prevention education program on healthy eating & PA
  - Parents: Health education session during school orientation & monthly electronic newsletter
  - Students: Monthly education sessions & posters
- Parent survey of child's eating habits & PA
- School nurse conducts annual growth weight & height measurements on students

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