

## The “Greenlight Study” - A New Approach to Reducing Toddler Overweight

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In a recently released article in *Pediatrics*, Dr. Lee Sanders and colleagues describe a unique cluster-randomized and controlled health literacy-guided obesity intervention trial for infants and toddlers ([10.1542/peds.2020-049866](https://doi.org/10.1542/peds.2020-049866)).

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In a recently released article in *Pediatrics*, Dr. Lee Sanders and colleagues describe a unique cluster-randomized and controlled health literacy-guided obesity intervention trial for infants and toddlers ([10.1542/peds.2020-049866](https://doi.org/10.1542/peds.2020-049866)). The “Greenlight Study” was conducted across 4 pediatric residency sites in Tennessee, North Carolina, Florida, and New York, and enrolled 459 intervention and 406 control dyads. This pragmatic trial used interventions tailored for low health literacy that were delivered

by pediatric residents as teachers. I would describe it as a “tour de force” of aligned scientific and organizational efforts – the authors and study team should be commended for designing and completing this extraordinary prospective trial. The study aim was to reduce obesity and overweight among toddlers, and the primary study outcome was proportion of children who were overweight (BMI >85 percentile) at age 24 months.

As background, the authors remind us that 1 of 5 toddlers in the US is overweight, with a consequent 5 times greater likelihood of becoming an overweight adult, as compared to those toddlers not overweight at age 24 months. Since 1 in 4 US parents has low literacy skills, this served as the Greenlight Study’s impetus for a health literacy focused intervention. Two of the 4 sites were (cluster) randomized to the obesity prevention intervention, delivered at well care visits from 2 months to 24 months, and the other two sites delivered an analogous intervention focused on child safety (The Injury Prevention Program, TIPP, designed by the AAP). Provider training and intervention fidelity checks, as well as the number of parent incentives and touchpoint frequency were the same for the obesity and control interventions. I loved the Greenlight Study’s kind and creative approach: for instance, at the 2 month well visit, in addition to content and guidance, parents in the obesity intervention arm received an infant onesie with the text: “I’m Sweet Enough. Please, No Juice!”

Even a quick look at the results and conclusion will inform you that although the intervention versus the control group resulted in lower weight gain through 18 months, this effect was not sustained at 24 months, and hence the primary objective was not met. However, there is so much to learn from this study: we need to understand what worked well and what needs to be augmented, for example, possibly the frequency or intensity of intervention beyond 15-18 months to sustain the effect. The authors provide a thoughtful discussion of this issue that I believe will stimulate your thinking on the topic. I wondered if as the toddler enters the wider world with out-of-home daycare and babysitting with other family members whether the Greenlight intervention needs to be widened or broadened to other caregivers too. There is so much to like about this study and so much to learn – I hope you will enjoy reading it as much as I did.

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