

# SUGAR ME. DEAD



Let's Talk about Sugar...

Sugar Me Dead (SMD)

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## Washington State Initiative:

### Sugar Specific Nutrition Education for Expecting Parents

“While moms and dads have become very aware of the dangers that can arise when kids are exposed to too much sugar, there is new data suggesting the need to cut back much earlier, ideally at the onset of pregnancy.”<sup>1</sup>

Initiative: Following the onset of pregnancy, expecting parents should receive sugar specific nutrition education as early as possible, ideally within the first trimester.

### Impact of Excess Sugar Intake in Pregnant Women, Current Research Findings:

- Maternal diet during pregnancy is thought to influence the health outcomes of a child later in life, including adiposity (body fat) levels.<sup>2,3</sup> Currently, children show more cardiovascular disease risk factors, more obesity, and more fatty liver problems at a younger age when compared to children 30 years ago.<sup>1,4</sup>
- Maternal consumption of sugar, particularly in the form of sugar sweetened beverages (SSBs) is associated with increased risk for elevated blood sugar levels during pregnancy (also known as Gestational Diabetes Mellitus (GDM)) and negative health outcomes for children born to mothers with GDM.<sup>6</sup>
- In 2017, Gilman et al. examined beverage intake during pregnancy and childhood adiposity, and concluded that higher SSB intake during the second trimester of pregnancy was associated with greater adiposity in midchildhood.<sup>5</sup>
- A study by Zhu et al. (2017) found that a maternal diet high in refined-grains during pregnancy was significantly related to higher risk of overweight or obesity at age 7 among children born to pregnancies complicated by GDM.<sup>2</sup>
- A 2018 study assessing sugar consumption in the maternal diet found significant negative cognitive impacts in early childhood associated with maternal consumption of full sugar and diet (zero sugar) beverages.<sup>6</sup>
- In Project Viva, dietary data of more than 1,000 pregnant women from 1999 to 2002 was assessed, finding that moms' higher intake of sugar during pregnancy, especially from soda or fruit drinks, was associated with poorer childhood cognition, including non-verbal abilities to solve novel problems and poorer verbal memory.<sup>6</sup>
- The Queen Mary University of London found that mothers' sugar intake was associated with an increased risk of their children developing asthma and allergies (where the child was diagnosed with asthma and had positive skin tests to allergens).<sup>7</sup>
- Most recently, a 2019 study by Geurtsen et al., found that higher than normal maternal blood sugar was associated with increased risk of delivering a large-for-gestational-age infant, prolonged labor, postpartum hemorrhage, shoulder dystocia, and birth trauma.<sup>8</sup>

### Lifestyle Interventions to Improve Maternal Blood Sugar, Current Research Findings:

- In 2019, Guo XY et al. conducted a meta-analysis and meta-regression of prevention strategies for GDM. Forty-seven randomized control trials (RCTs) were evaluated, involving 15,745 participants that showed diet and exercise during pregnancy helped prevent GDM.<sup>11</sup>
- A 2016 study by Koivusalo SB et al. concluded that moderate lifestyle intervention (dietary counseling by dietitian and nurses) could reduce the incidence of GDM by 39% in high-risk pregnant women.<sup>12</sup>
- Wang et al. (2015) conducted a cluster randomized control study involving 1,664 pregnancies; results showed a standardized lifestyle intervention resulted in lower blood sugar during pregnancy and reduced weight gain in the intervention group versus the control.<sup>13</sup>

### Proposed Initiative in Washington State:

- Introduce sugar specific nutrition education at the onset of pregnancy as part of the standard of care for pregnant women.
- OBGYN or Primary Care Physician will generate referral to Registered Dietitian Nutritionist or a qualified medical healthcare provider to provide standardized sugar specific nutrition education to expecting parents.

### Conclusion:

- The current standard of prenatal care in Washington does not require that sugar specific nutrition education be provided to expecting parents.
- Emerging data suggest harmful outcomes for mothers and their children who had high blood sugar during pregnancy.
- Lifestyle interventions, to include dietary and nutrition counseling, have shown to reduce blood sugar levels in pregnant women.
- Sugar Me Dead (SMD) is advocating that new parents receive sugar specific nutrition education as early as possible, ideally within the first trimester.

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