Breastfed infants are less likely to have overweight, but this benefit is reduced if breast milk is fed from a bottle or supplemented with formula, according to a new study.

While breastfeeding has been linked to a reduction in numerous diseases and conditions, its ties to obesity are less certain. Researchers set out to look more closely at the relationship by studying feeding reports and 12-month body mass index (BMI) measurements for 2,553 infants from the Canadian Healthy Infant Longitudinal Development cohort. About 97% started breastfeeding, and the median duration was 10 months.

The Academy and the World Health Organization (WHO) recommend breastfeeding exclusively for six months followed by a combination of breastfeeding and complementary foods.

Researchers found infants' BMI lined up with WHO standards when they exclusively breastfed for six months and was higher when they did not.

For those who stopped breastfeeding before six months, the risk of overweight was three times higher than for infants who exclusively breastfed, according to "Infant Feeding and Weight Gain: Separating Breast Milk From Breastfeeding and Formula From Food" (Azad MB, et al. Pediatrics. Sept. 24, 2018, https://doi.org/10.1542/peds.2018-1092).

Expressed breast milk wasn't quite as beneficial for keeping BMI in check as direct breastfeeding, possibly due to its bioactive components being altered in the process, according to the study. However, it was better than partial or no breastfeeding.

Researchers also found infants' risk of overweight at 12 months was twice as high when they were fed a combination of breast milk and formula at six months compared to exclusive breastfeeding for six months.

There was no significant link between overweight and a combination of breast milk and solid foods.

"This is a noteworthy finding because recent evidence indicates that introducing certain 'allergenic' foods before 6 months may be beneficial for allergy prevention," authors wrote.

They said their findings about the benefits of breast milk on BMI compared to formula may be due to differences in macronutrients and effects on gut microbiota. Those who bottle feed also may not learn to regulate their food intake the way babies who breastfeed do. The team called for more research on whether the links it saw between feeding style and BMI persist past a year and the impact of different formulas.

"These future directions are essential to inform and optimize infant feeding guidelines and develop effective early-life interventions for obesity prevention, including initiatives to support breastfeeding and alternative solutions for those who cannot be breastfed," according to the study.

Unlike Canada and other developed countries, U.S. laws do not guarantee mothers paid maternity leave, making it more difficult to breastfeed, Alison Volpe Holmes, M.D., M.P.H., FAAP, noted in a related commentary.

"With this report, and more to come, pediatricians have new and better evidence to advocate for family leave and workplace support policies that protect breastfeeding mothers and infants, and improve public health," Dr. Holmes wrote.
Resources

- AAP policy on breastfeeding
- Breastfeeding content, including practice tools and educational materials for pediatricians and parents
- Information for parents from HealthyChildren.org on breastfeeding