

## ONLINE EXCLUSIVE

# How should you manage an overweight breastfed infant?

## Evidence-based answer

There are several steps you can take. Monitor the growth of exclusively breastfed babies by plotting routine weights and lengths on the World Health Organization (WHO) growth curve (strength of recommendation [SOR]: **A**, systematic reviews). Reassure parents that higher-than-normal weight gain in infants who are breastfeeding easily without supplementation has no known adverse

effects. Advise parents to change behaviors that result in overfeeding or insufficient physical activity (SOR: **C**, expert opinion). Refer parents to a lactation consultant to manage large volumes of milk that exceed the infant's need. In the rare case of an infant who exhibits lack of satiety or dysmorphia, consider an overgrowth syndrome and seek an endocrinology and genetics consult (SOR: **C**, expert opinion).

## Clinical commentary

### Avoid comfort feeding, stress activity

I often see breastfeeding mothers who are concerned about their chubby babies, who have both a high success rate with breastfeeding and a high rate of type 2 diabetes as adults. When talking to these mothers, I first stress the importance of focusing primarily on nutritional feeding, not "comfort feeding." I point out that evidence suggests that exclusive breastfeeding helps prevent adult obesity.

It's also important to recognize that

the epidemiologic shift toward increased obesity and diabetes has to do with the activity habits of children and adults, as well as their eating habits. As children grow, our advice should focus on encouraging activity, limiting "screen time," and eliminating juices and other high-calorie dietary additions once an infant is no longer exclusively breastfed.

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## Evidence summary

An estimated 9.5% of infants and children younger than 2 years of age are considered overweight—that is, their weight is at or above the 95th percentile of weight-for-recumbent length on the sex-specific growth charts from the Centers for Disease Control and Prevention (CDC).<sup>1</sup> The prevalence is unknown for infants who are exclusively breast-

fed<sup>2</sup> or fed only human milk without any supplementation (except recommended vitamins, minerals, and medication) for the first 6 months of life.

### Exclusively breastfed babies have a different growth curve

Because comparison growth studies demonstrate that healthy breastfed infants have a different growth curve than formu-

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## FAST TRACK

**Use the WHO growth curves instead of the CDC charts to monitor growth of exclusively breastfed babies.**

## FAST TRACK

Once an infant is no longer exclusively breastfed, our advice should focus on encouraging activity and avoiding juices.

la or mix-fed babies,<sup>3</sup> the WHO growth curves (<http://www.who.int/childgrowth/standards/en/>), rather than the CDC charts, should be used to monitor the growth of exclusively breastfed babies.<sup>4</sup> The WHO Working Group on Infant Growth studied infants whose sole nourishment was breast milk until 4 months of age.<sup>3</sup> The CDC charts reflect a heavier and shorter sample of infants. Moreover, the WHO charts are based on shorter measurement intervals and may therefore be a better tool for measuring rapidly changing rates of growth.<sup>4</sup>

### Exclusive breastfeeding reduces risk of overweight later in life

A meta-analysis showed a dose-dependent relationship between longer duration of breastfeeding and decreased risk of overweight in later life (<1 month of breastfeeding: odds ratio [OR]=1.0; 95% confidence interval [CI], 0.65-1.55; 1-3 months: OR=0.81; 95% CI, 0.74-0.88; 4-6 months: OR=0.76; 95% CI, 0.67-0.86; 7-9 months: OR=0.67; 95% CI, 0.55-0.82; >9 months: OR=0.68; 95% CI, 0.50-0.91).<sup>5</sup> Because overweight has no known adverse health outcomes for exclusively breastfed infants, lactation experts don't advise mothers to reduce feeding for these babies.<sup>6</sup>

### Is overfeeding an issue?

Overfeeding may contribute to higher-than-normal weight gain in both breastfed and formula-fed infants.<sup>7</sup> Maternal behavior changes that may taper unusual weight gains include cuddling rather than breastfeeding in response to all distress signals and encouraging movement and crawling.<sup>8</sup>

Expressing breast milk to increase infant intake increases weight gain ( $r=0.59$ ); this effect gets stronger as the infant gets older ( $r=0.58$ ).<sup>9</sup> Referral to a lactation consultant is recommended to manage large volumes of milk that exceed infant need.<sup>7</sup> For the rare infant who exhibits hypoglycemia, lack of satiety, or dysmorphia, consider early macrosomia or an overgrowth

syndrome, such as Beckwith-Wiedemann syndrome, and seek an endocrinology or genetics consult.<sup>10</sup>

### Recommendations

Exclusive breastfeeding for approximately the first 6 months of life is recommended by the American Academy of Family Physicians (AAFP), American College of Obstetricians and Gynecologists, American Academy of Pediatrics, Academy of Breastfeeding Medicine, WHO, United Nations Children's Fund, and other organizations. The AAFP recommends that physicians help prevent and manage overweight in childhood to reduce the risk of obesity and chronic disease in later life.<sup>11</sup> ■

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