



Defense Health Agency (DHA) Clinical Communities Speaker Series
Feb 2021 CCSS: Challenges in Women's and Infants' Health

S02: Select Nutritional Diagnoses in the Child Bearing Female: Clinical Implications

Resource List

[The Centers for Disease Control and Prevention \(2021\)](#) noted counting carbohydrates, or carbs includes keeping track of the carbs in all your meals, snacks, and drinks can help you match your activity level and medicines to the food you eat. Many people with diabetes and other medical diagnoses count carbs to make managing blood sugar easier, which aides in staying healthy longer and improving their overall quality of life. Counting carbs can prevent or delay diabetes complications such as kidney disease, eye disease, heart disease, and stroke.

As noted in the article [Maternal gestational diabetes and infant feeding, nutrition and growth: a systematic review and meta-analysis \(2020\)](#), Gestational Diabetes Mellitus (GDM) is a major health problem, with increased risks of obesity and diabetes in offspring. The article concluded that infants exposed to GDM, compared with those not exposed, had similar Body Mass Index at age 1–6 months and 7–12 months, reduced length at 1–6 and 7–12 months, increased whole-body fat at 1–6 months, higher rates of formula supplementation in hospital, shorter duration of breast-feeding, and decreased rates of continued breast-feeding at 12 months. Breast milk of women with GDM demonstrated lower protein content. There was no association between GDM and infant weight and skinfold thickness. Low- or very low-quality evidence suggests GDM is not associated with altered BMI in infancy, but is associated with increased fat mass, high rates of formula use, and decreased duration of breast-feeding.

Dietary modification is critical for the management of polycystic ovary syndrome (PCOS), yet few women with PCOS report receiving nutrition education. Nutrition knowledge may translate to dietary behaviors and diet quality, but nutrition knowledge among women with PCOS is unknown. The authors of the article [University students with PCOS demonstrate limited nutrition knowledge \(2021\)](#) used a descriptive design to assess the nutrition knowledge, diet quality, and eating disorder risk among university students with PCOS. Following clinical and biochemical analysis, 12 university students with PCOS were admitted to the study. The study concluded that close to majority of the participants were obese (75%), insulin resistant (58%), and consumed an unbalanced diet (41% carbohydrate, 43% fat). Bread or fruit were only avoided by 27.3%. Nutrition knowledge was poor (48% correct) and inversely related to fruit intake. Nearly half of the (41.6%) participants were also at increased risk for eating disorders

The [World Health Organization's Global nutrition targets 2025: policy brief series \(2020\)](#) recognized that accelerated global action is needed to address the pervasive and corrosive problem of the double burden of malnutrition. The World Health Assembly Resolution 65.6 endorsed a comprehensive implementation plan on maternal, infant, and young child nutrition, which specified a set of six global nutrition targets that by 2025 aim to achieve a 40% reduction in the number of children under-5 who are stunted; achieve a 50% reduction of anemia in women of reproductive age; achieve a 30% reduction in low birth weight; ensure that there is no increase in childhood overweight; increase the rate of exclusive breastfeeding in the first six months up to at least 50%; and reduce and maintain childhood wasting to less than 5%.



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References

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- Douglas, C. C., Jones, R., Green, R., Brown, K., Yount, G., & Williams, R. (2021). University students with PCOS demonstrate limited nutrition knowledge. *American Journal of Health Education*, 52(2), 80–91. <https://doi.org/10.1080/19325037.2021.1877218>
- Manerkar, K., Harding, J., Conlon, C., & McKinlay, C. (2020). Maternal gestational diabetes and infant feeding, nutrition and growth: A systematic review and meta-analysis. *British Journal of Nutrition*, 123(11), 1201–1215. <https://doi.org/10.1017/s0007114520000264>
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