

Pregnancy Health: Lifestyle Interventions to Reduce the Risk of Gestational Diabetes

Summary of Community Preventive Services Task Force Recommendation

The Community Preventive Services Task Force (CPSTF) recommends lifestyle interventions delivered during the first two trimesters of pregnancy to reduce the risk of gestational diabetes.

The CPSTF finds strong evidence of effectiveness for lifestyle interventions that provide supervised exercise classes, either alone or in combination with other components. The CPSTF finds sufficient evidence of effectiveness for lifestyle interventions that provide education and counseling for diet or physical activity, diet activities, or a combination of these components.

Major Findings

The CPSTF recommendation is based on evidence from 29 studies identified in a systematic review published in 2016.¹

- Compared to usual care, lifestyle interventions reduced the overall risk of developing gestational diabetes by 32%.
 - o Interventions that provided supervised exercise classes alone or in combination with other lifestyle reduced the risk by 32%.
 - o Interventions that provided education and counseling for diet and physical activity reduced the risk by 31%.



Lifestyle interventions delivered during the first two trimesters of pregnancy aim to prevent gestational diabetes by actively encouraging women to eat a healthy diet and be physically active. Programs include one or more of the following components:

- Supervised exercise classes
- Diet education and counseling

- Physical activity education and counseling
- Diet activity (e.g., meal plan, food diary, individualized support)

Facts about Gestational Diabetes

- Every year, 6% to 9% of pregnancies in the United States are affected by gestational diabetes.²
- About half of all women who develop gestational diabetes are likely to develop type 2 diabetes later in life.³
- Babies whose mothers have gestational diabetes are at higher risk of being born early, having low blood sugar, and developing obesity later in life.³

Learn More

Summary of Evidence and CPSTF Finding

https://www.thecommunityguide.org/findings/pregnancy-health-lifestyle-interventions-reduce-risk-gestational-diabetes

CDC, Diabetes

https://www.cdc.gov/diabetes/

CDC, Division of Reproductive Health

https://www.cdc.gov/reproductivehealth/index.html

Established in 1996 by the U.S. Department of Health and Human Services, the Community Preventive Services Task Force (CPSTF) is an independent, nonfederal panel of public health and prevention experts whose members are appointed by the director of CDC. The CPSTF provides information for a wide range of decision makers on programs, services, and other interventions aimed at improving population health. Although CDC provides administrative, scientific, and technical support for the CPSTF, the recommendations developed are those of the CPSTF and do not undergo review or approval by CDC. Find more information at www.thecommunityguide.org.



¹ Song C, Li J, Leng J, Ma R C, and Yang X. Lifestyle intervention can reduce the risk of gestational diabetes: a meta-analysis of randomized controlled trials. Obesity Reviews 2016; 17: 960–9.

² Bardenheier BH, Imperatore G, Gilboa SM, Geiss LS, Saydah SH, et al. Trends in gestational diabetes among hospital deliveries in 19 U.S. states, 2000–2010. American Journal of Preventive Medicine 2015;49(1):12–9.

³ Diabetes Home. (2017, July 25). Retrieved March 29, 2018, from https://www.cdc.gov/diabetes/basics/gestational.html.