

Nutrition Therapy in Managing Pregnant Women With Gestational Diabetes Mellitus: A Literature Review.

Abstract

Objective: Gestational diabetes mellitus is the most common metabolic and endocrine perinatal complication and is a growing health problem worldwide. Considering the fetal programming and its contribution as one of the evolutionary origins of human diseases, it is very important to improve the glucose metabolism in pregnant women, determination of other nutrients, preventing excessive accumulation of fetal fats, emphasis on weight loss measures before pregnancy, dietary intake with low-fat healthy food and prevention of abundant weight loss. In this paper, we have provided a brief review on dietary intake and dietary interventions in GDM from the perspective of nutrition science attending the physiopathology and etiology of the disease.

Materials and methods: Electronic search for English and Persian articles has been performed in databases, including Google Scholar, PubMed, Scopus, Cochrane central, Science direct, ISC, SID, Magiran, Iran Medex, and Med Libby key words: gestational diabetes, gestational diabetes mellitus, nutrition, macronutrient, micronutrient, Diabetes. All available articles (cross-sectional, descriptive-analytic, and clinical studies with desirable design and review quality studies) were used. Reference books including Krause's Food and the Nutrition Care, The Williams Obstetrics editions of the 14th (2017) and the 24th edition (2014) were also reviewed.

Results: Nutrition therapy and physical activity are the initial treatment of GDM. Proper and flexible methods of nutrition therapy that successfully regulate maternal glycaemia while improving expected fetal growth have extensive concepts. Meanwhile, dietary supplements with proven beneficial effects can play an important role in improving deficiencies and improving the metabolic profile of patients.

Conclusion: Nutritional management is the main treatment for gestational diabetes mellitus and overweight/obesity is the principal contest in patient counseling and interventions during pregnancy. Despite extensive researches carried out, this field is an active research area and requires more clinical research to minimize maternal and fetal complications.