



Western Sydney Nutrition & Dietetics Newsletter

Diet During Pregnancy: Reducing Obstetric Complications

Meta-Analysis Overview

Obesity is a global epidemic; a cumbersome burden to our healthcare system. The clinical implications of excessive gestational weight gain and associated adverse obstetric outcomes have been thoroughly noted¹.

A meta-analysis conducted by Thangaratinam S, et al, 2012¹, looked at the effect of dietary and other lifestyle interventions during pregnancy and their impact on pregnancy outcomes, namely; gestational weight gain, pre-eclampsia, shoulder dystocia and gestational diabetes.

This emerging research has shown that **up to 40% of expectant mothers gain weight in excess of the recommended ranges** identified by the Institute Of Medicine Guidelines¹. Guidelines are developed for healthy weight, overweight and obese women, based on their pre-pregnancy BMI².

The study also found that dietary interventions resulted in the largest reduction of maternal gestational weight gain (between 2.45kg to 5.22kg)¹.

Compared to control, dietary interventions showed a 33% decrease in risk of pre-eclampsia, 61% reduced risk of gestational diabetes, as well as a significant reduction in gestational hypertension and pre-term delivery. Trends were also noted towards reduction in intra-uterine death, birth trauma, hyperbilirubinaemia¹. There was also no adverse effect from the interventions on increased risk of babies small for gestational age¹.

The dietary interventions which were used in the noted studies, followed a diet based around 18-24kJ/kg body weight, low GI foods, unprocessed whole grains, fruits, legumes and vegetables¹. During the antenatal period, the expectant mother has close contact with a plethora of health professionals; this would be an ideal time to motivate mothers to monitor antenatal weight gain, increase knowledge regarding IOM recommendations for weight gain during pregnancy² as well as risks associated with excessive weight gain, and develop a balanced diet reflective of the mothers nutritional requirements.

The study also identified that the provision of regular input from dietetic teams has the potential to improve gestational outcomes¹. The dietary management options offered at Western Sydney Nutrition and Dietetics involves creating a sustainable eating program, tailored to individual requirements, focusing on optimizing outcomes for both mother and child, as well as monitoring nutritional adequacy of the diet and gestational weight gain.

References:

1. Thangaratinam S, Rogozinska E, Jolly K, Glinkowski S, Roseboom T, Tomlinson J W, Kunz R, Mol B W, Coomarasamy A, Kahn K S; 2012; Effects of interventions in pregnancy on maternal weight and obstetric outcomes; meta-analysis of randomised evidence. *BMJ* 2012;344:e2088
2. Institute Of Medicine (IOM); 2009; 2010 Guidelines of Institute of Medicine. Weight gain during pregnancy: Re-examining the guidelines. Accessed on 29 February 2012. Available from: www.iom.edu/CMS/3788/48191/68004.aspx

Please do not hesitate to contact us if you have any queries or if we can assist you in any way.

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