

## Have you ever heard of Gestational Diabetes?



## GESTATIONAL DIABETES?

We have already written about the correlation between sugar & diabetes. Today, The Food Experts of Asia will venture further about the sweet killer known as diabetes and talk about something you might not have heard off before, Gestational Diabetes.

Gestational diabetes is the onset or first recognition of high blood sugar levels during pregnancy. Like other types of diabetes, gestational diabetes affects how your cells use sugar (glucose) where by blood sugar levels would start to increase midway through pregnancy. Women who develop gestational diabetes have high blood sugar levels that are above the ideal limit for the health of both the baby and the mother (Mpondo et al., 2015). The occurrence of gestational diabetes is being closely linked to undue weight gain associated with factors such as diet, obesity, family history and ethnicity. Gestational Diabetes Mellitus might promote immediate risks to the newborn as diabetes in pregnancy is associated with increased delivery of glucose and amino acids to the fetus via the maternal circulation (Brett et al., 2014).

According to a 2014 analysis by the Center for Disease Control and Prevention, the prevalence of Gestational Diabetes is as high as 9.2% amongst pregnant women (American Diabetes Association, 2013). Gestational Diabetes starts when the body of a pregnant woman is unable to produce and utilize all of the insulin it needs for pregnancy. Without adequate insulin, sugar cannot leave the blood and be used for energy, resulting in a high and unhealthy sugar build up—hence the term Hyperglycemia. Gestational diabetes usually goes away after the baby is born, however, it increases the risk of the infant developing obesity and amplifying the chance of both mother and child developing Type 2 Diabetes later on in life. (Silva-Zolezzi, 2017).



## Gestational Diabetes

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### Maternal Nutrition for Pregnancy

Apart from genetic and environmental factors, maternal obesity and nutritional deficiencies also contribute to the development of Gestational Diabetes Mellitus. Studies have demonstrated that a proper diet and a healthy lifestyle are inter-related and could cause a consistent reduction in gestational weight

gain. Pregnant mothers can adopt a low glycemic index diet along with consuming a low carbohydrate diet to enhance their health during pregnancy (Silva-Zolezzi, 2017).

According to Maresch et al. (2017), a maternal diet that consists of foods with a high glycemic index (Hi GI) increases the tendency of fetal overgrowth and infant body fat mass. Hence, it should be a priority for pregnant mothers, to try to adopt a diet that consists of foods with a low GI as it would result in a healthier pregnancy with less insulin resistance.

Here is a little breakdown on two of our chosen natural sweeteners that have a minimal effect on blood sugar levels:

### **Palatinose**

Palatinose is a slow releasing carbohydrate that is naturally sourced from sugar beets. Upon consumption, Palatinose slowly releases energy over a longer period of time, as compared to conventional sugar that almost instantly spikes sugar levels. This is beneficial to pregnant mothers as it promotes a slower and overall lower rise in the blood sugar levels. Palatinose comes with mild and natural sweetness that is 50% of sucrose's. It can be used as a sugar replacer to reduce sugar usage in maternal diets. Palatinose is able to replace sucrose or other high glycemic carbohydrates on a gram-to-gram basis (Beneo, 2013) as the glycaemic index (GI) of Palatinose is only at 32 whereas that of sucrose is much higher at 72 (Atkinson, et al., 2008). These unique characteristic enables the mother to enjoy a better balanced energy supply as well as promote a better health for both of the mother and baby (Beneo, 2016).



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### **Oligofructose**

With at-least 30% of the sweetness of sucrose, Oligofructose adds a mild sweet taste into a maternal diet. It can also be used in combination with other sweeteners to create a more balanced and sugar-like palate without any aftertaste (Beneo, 2013).

The European Commission authorized Article 13/5 which connects the chicory-root-fiber Oligofructose with improved blood glucose levels by replacing at least 30% of the sugar content in foods and beverages. This recent health claim proves that Oligofructose contributes to a better blood glucose management as it supports a lower rise in blood glucose response. Replacing high glycaemic ingredients with Oligofructose will not result in a high glycaemic reaction and lowers the blood sugar response of the final product (Beneo, 2016).



The fact is, gestational diabetes is a growing health concern. Pregnancy is naturally associated with a certain degree of insulin resistance, the body's response to ensure appropriate nutrient supply to the fetus. Hence, a balanced and nutritious maternal diet is crucial to promote a healthy pregnancy as well as a healthy growing baby.

If you have followed some of our past articles, you would notice a trend in our closing advice, adopting a healthy diet. Although consumers are increasingly becoming more educated on the importance of eating healthy, there is still a fine line between knowing and doing. Hopefully we have managed to convince some of you. If no, stay tuned for our next article on Healthy Fats where we will talk about the different kinds of Fats and their benefits on the human body and continue to convince you to adopt a healthier lifestyle.

You may also be interested in [Vitamins for Healthy Pregnancy](#).

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