

## Pre-pregnancy diet and risk of common complications in pregnancy

In Australia, 5-10% of women experience gestational diabetes or hypertensive disorders when pregnant. These complications can have serious and long-term consequences for mother and baby. ALSWH researchers have found that a Mediterranean-style diet prior to pregnancy may reduce a woman's risk of developing these complications.



A healthy approach to eating before pregnancy is an important investment in the health of mothers and their children.

### Hypertensive disorders

With hypertensive disorders such as pre-eclampsia, women are more likely to experience complications during pregnancy and delivery. High blood pressure in late pregnancy carries the risk of premature birth and emergency caesarean delivery, and if untreated can be life-threatening. Hypertensive disorders place mother and baby at risk of cardiovascular disease and type 2 diabetes.

### Gestational diabetes mellitus

Diabetes which develops during pregnancy increases the risk of premature birth or miscarriage. Infants may be large when born, making delivery more difficult, and their blood glucose levels may be low. More than 50% of women who develop gestational diabetes will develop type 2 diabetes in five to ten years. Their children are more likely to experience childhood obesity or early onset type 2 diabetes.

### Our research

Young women with a diet rich in Mediterranean elements before pregnancy were 44% less likely to develop gestational diabetes and 42% less likely to develop hypertensive disorders. These findings were based on analysis of 6,149 pregnancies from 3,582 women participating in ALSWH, along with nine years of follow up data on pregnancy outcomes.

### Mediterranean diet

A Mediterranean diet is rich in:

- Fish
- Vegetables
- Legumes
- Nuts
- Tofu
- Pasta
- Rice
- Rye bread
- Red wine

### Publications

Danielle AJM Schoenaker, Sabita S Soedamah-Muthu, Leonie K Callaway, Gita D Mishra.

Pre-pregnancy dietary patterns and risk of developing hypertensive disorders of pregnancy: results from the Australian Longitudinal Study on Women's Health. *American Journal of Clinical Nutrition* 2015;102:94-101.

Pre-pregnancy dietary patterns and risk of gestational diabetes mellitus: results from an Australian population-based prospective cohort study. *Diabetologia*, 2015; 58:2726-2735.