**Iron intake during pregnancy linked to birthweight**

Published Friday 4th March 11

Women who don’t get enough iron during early pregnancy tend to have babies with lower birthweight, according to new research led by the University of Leeds.

A study of 1,300 pregnant women in Leeds, published in *Human Reproduction,* found that the higher total iron intake from food and supplements during the first trimester of pregnancy, the more likely it is for a woman to have a bigger baby.

This relationship was stronger in women with an adequate intake of vitamin C, which is known to enhance iron absorption from non-meat sources.

Lead author Dr Nisreen Alwan, from the Nutritional Epidemiology Group at the University of Leeds, said: "Pregnancy places stress on the body and women may need to make changes to their diet to meet the increased demand for iron.

Our study shows that the majority of pregnant women are not meeting the iron intake recommendations for women of childbearing age in the UK.

"Our study shows that expectant mums with higher intake of iron in early pregnancy tended to have bigger babies.

This relationship was stronger in women with higher intakes of vitamin C.

Foods rich in iron are particularly important for vegetarians, who do not eat any of the readily-absorbed form of iron found in meat."

Iron deficiency is a common problem during pregnancy globally, even in developed countries.

It has been linked to a number of unwanted outcomes such as low birth-weight, premature birth and impaired neurological development.

Low birth-weight has been linked to risk of cardiovascular disease in later life.

Dietary iron comes in two forms: haem, and non-haem.

Around 95% of iron in the average British diet is non-haem, from sources such as vegetables, beans and pulses, but this is less readily absorbed by the body than the haem iron, found in meat and fish.

The absorption of non-haem iron can, however, be potentially enhanced or inhibited by other foods, so food combinations at mealtimes are important.

"Conflicting information about which foods to eat can be confusing so it's really important that pregnant women are given clear messages.

They need to be told not only about the best sources of dietary iron, but also how they can maximise the benefits by eating a varied diet including vitamin C-rich fruit and vegetables so they can make informed choices."

"Drinking a glass of fresh orange juice alongside your beans on toast is one example of how you can increase the amount of iron absorbed."

The research was funded by the Food Standards Agency and the Wellcome Trust.

A list of foods rich in haem and non-haem iron can be found below along with which foods can enhance or inhibit absorption.

**Non-haem iron-rich foods**

* Lentils
* Beans, such as canned beans, black beans and soybeans
* Dark green leafy vegetables such as spinach
* Fortified bread and breakfast cereals
* Pumpkin seeds
* Tofu

**Vitamin C rich foods that may help iron absorption**

* Most fresh fruits and vegetables, such as citrus fruits

**Haem-iron rich foods**

* Meats, in particular red meat and prawns