

# Don't overdo omega-6 fat consumption during pregnancy

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In Western societies, we are eating more omega 6 fats, particularly linoleic acid, which are present in foods such as potato chips and vegetable oil. Other research has shown that linoleic acid can promote

inflammation and may be associated with an increased risk of heart disease.

New research in *The Journal of Physiology* showed that eating a diet with three times the recommended daily intake of [linoleic acid](#) might be harmful in [pregnancy](#). They found three changes in rat mothers who ate a high linoleic acid diet: their liver had altered concentrations of inflammatory proteins, their circulating concentrations of a protein that can cause contraction of the uterus during pregnancy were increased, and a hormone that can regulate growth and development was decreased. These changes may result in an increased risk of pregnancy complications and poor development of the [babies](#).

If the effects of a high linoleic acid are the same in rats and humans, this would suggest that women of child-bearing age should consider reducing the amount of linoleic acid in their diet.

The researchers fed [rats](#) for 10 weeks on a diet with high linoleic acid, mated them and then investigated the effects of the diet on their pregnancy and developing babies. They specifically investigated any changes in the body and organ weights of the mothers and her babies, and concentrations of circulating and liver inflammatory proteins, cholesterol, and the hormone leptin. Rats typically give birth to multiple babies in each pregnancy. Rat mothers who ate a high linoleic acid diet had a reduced number of male babies.

It is important to note that when humans eat a diet rich in linoleic acid, the diet also tends to be high in fat, sugar and salt. However, in the study, the only change in the diet was higher linoleic acid, but no changes in fat, sugar or salt.

Deanne Skelly, senior author on the paper, said:

"It is important for [pregnant women](#) to consider their [diet](#), and our research is yet another example that potentially consuming too much of a certain type of nutrient can have a negative impact on the growing baby."

Provided by The Physiological Society

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