High protein diets ups risk of kidney disease

The Dukan and Paleo diets might promote high protein intake for weight loss, but Spanish researchers warn your risk of developing kidney stones and renal diseases is much higher if you eat too much protein.

Scientists at the University of Granada in Spain fed a group of rats a high protein diet using supplements and compared their kidney health with rats that were fed a normal protein diet.

After three months, the rats on the high-protein diet had lost 10 per cent of their body weight, however their kidney weight had increased by 22 per cent, their urinary pH was 15 per cent more acidic and the network of capillaries that filter blood in the kidneys had reduced by 13 per cent.

Urinary citrate, which helps bind calcium in urine, was 88 per cent lower.

These factors dramatically increase the amount of urinary calcium, which can lead to kidney stones.

Study author Dr Virginia Aparicio said people should seek regular medical advice if they are following a high protein diet, as it could have serious health implications.

She said one of the big problems with high protein diets is that they often lead people to eat meat and eggs instead of fruit and vegetables which puts further stress on the kidneys.

"Eating large amounts of fruit and vegetables reduces the risk of kidney stones forming – probably due to their high potassium and magnesium content, which compensates for the acidity of the high-protein diet," Dr Aparicio said.

The recommended daily intake of protein is 46g a day for women and 64g a day for men.

The study was published in the journal Nutricion Hospitalaria.