Eating grapefruit every day could raise the risk of developing breast cancer by almost a third, US scientists say. A study of 50,000 post-menopausal women found eating just a quarter of a grapefruit daily raised the risk by up to 30%.

The fruit is thought to boost levels of oestrogen - the hormone associated with a higher risk of the disease, the British Journal of Cancer reported.

But the researchers and other experts said more research was still needed.

"This is an interesting study, but is simply a piece of the jigsaw that will eventually help us to understand how our diets affect our health"

Dr Joanne Lunn

The women had to fill in questionnaires saying how often they ate grapefruit and how big their portions were.

Oestrogen important

The researchers, at the universities of South California and Hawaii, found that women who ate one quarter of a grapefruit or more every day had a higher risk of breast cancer than those who did not eat the fruit at all.

Previous studies have shown that a molecule called cytochrome P450 3A4 (CYP3A4) is involved in metabolising oestrogen hormones.

And grapefruit may boost blood oestrogen levels by inhibiting this molecule, allowing the hormones to build up.

The researchers found that in women who ate at least a quarter of a grapefruit daily, levels of oestrogen were higher.

They said: "It is well established that oestrogen is associated with
breast cancer risk.

"Therefore, if grapefruit intake affects oestrogen metabolism leading to higher circulating levels, then it is biologically plausible that regular intake of grapefruit would increase a woman's risk of breast cancer."

**More research**

And they said this was the first time a commonly eaten food had been linked to an increased risk of breast cancer in older women.

However, they warned that more research was needed to confirm the findings which may have been affected because they only took into account intake of the fruit, but not grapefruit juice.

Breast cancer accounts for almost a third of all cancers in women, and previous lifestyle factors linked to the disease include drinking alcohol and being overweight.

Dr Joanne Lunn, a nutrition scientist at the British Nutrition Foundation said: "This is an interesting study of a large group of post-menopausal women whose diet and health have been followed for many years.

"However, this study is simply a piece of the jigsaw that will eventually help us to understand how our diets affect our health.

"Although we are beginning to get a better awareness of how our diets can modify the risk of diseases such as cancer, we are still a long way from identifying particular foods that might specifically increase or decrease risk."

However, she said that some dietary patterns are associated with a reduced risk of certain cancers and that a diet rich in a variety of different fruits and vegetables could help reduce the risk of heart disease and some cancers.