

# Grape Seeds Can Kill Cancer Cells

Love grapes? Now grape seeds are said to make leukaemia cells commit suicide.

Within 24 hours, 76% of leukaemia cells exposed to the extract were killed off, while healthy cells were unharmed, Clinical Cancer Research reports.

The study raises the possibility of new cancer treatments, but scientists said it was too early to recommend that people eat grapes to ward off cancer. Grape seeds contain a number of antioxidants, including resveratrol, which is known to have anti-cancer properties, as well as positive effect on the heart.

Previous research has shown grape seed extract has an effect on skin, breast, bowel, lung, stomach and prostate cancer cells in the laboratory.

It can also reduce the size of breast tumours in rats and skin tumours in mice.

However, the University of Kentucky study is the first to test its impact on a blood cancer.

Lead researcher Professor Xianglin Shi said: "These results could have implications for the incorporation of agents such as grape seed extract into prevention or treatment of haematological (blood) malignancies and possibly other cancers.

"What everyone seeks is an agent that has an effect on cancer cells but leaves normal cells alone, and this shows that grape seed extract fits into this category."

The researchers exposed leukaemia cells to grape extract in a range of different doses.

## Apoptosis

One of the higher doses produced a marked effect, causing large numbers of the cells to commit suicide in a process known as apoptosis.

This is a natural method of getting rid of damaged and potentially dangerous cells.

When the mechanism behind apoptosis breaks down, cancerous cells can survive and multiply.

The researchers found grape seed extract activates a protein called JNK which helps to regulate apoptosis.

When they exposed the leukaemia cells to an agent that inhibits JNK, the grape seed extract effect was cancelled out.

Silencing the gene that makes JNK also blocked the extract's ability to kill cancer cells.

Kat Arney, Cancer Research UK's senior cancer information officer, warned against jumping to firm conclusions.

She said: "This is yet another story highlighting the potential cancer-fighting properties of naturally-occurring chemicals.

"Although interesting, it's still a long way from being a treatment that we can give to patients." Source: BBC News