

# Fruit Ingredient Fights Head, Neck Cancer

By Tan Ee Lyn, Reuters - Posted: 2007-10-16 13:40:09 Filed Under: [Health News](#)

HONG KONG (Oct. 16) - Lupeol, a compound in fruits like mangoes, grapes and strawberries, appears to be effective in killing and curbing the spread of cancer cells in the head and neck, a study in Hong Kong has found.

An experiment with mice showed lupeol worked most effectively with chemotherapy drugs and had almost no side effects, scientists at the University of Hong Kong said in a report published in the September issue of the journal *Cancer Research*.

"It can suppress the movement of cancer cells and suppress their growth and it is found to be even more effective than conventional drugs (eg. cisplatin)," said Anthony Yuen, a professor at the University of Hong Kong's surgery department.

"It's even more effective if we combine it with chemotherapy drugs, and has very little side effects," he said.

The team plans another round of animal test and hopes to proceed eventually to human clinical trials, though it would not commit itself to a timeframe.

Head and neck cancers involve cancers of the nose, oral cavity, throat, voice box, thyroid and salivary glands and they more commonly afflict Asians than Westerners.

Some of the risk factors include smoking, excessive alcohol consumption, chewing betel nut and diets rich in preserved foods, like salted fish.

Such cancers are difficult to treat. Fifty percent of victims are typically diagnosed in advanced stages, when cure rates would be so low they would be considered inoperable.

Surgeries on the head and neck are always difficult because they involve the removal of large areas of diseased skin and soft tissues and surgeons need to first figure out how to cover up these open wounds before they can try to excise the tumors.

Yuen said lupeol - also found in vegetables, olive seed, figs and saw palmeto - appeared to block a natural protein NFkB, which helps cells repair and grow, even cancer cells. In the experiment, lupeol was given to mice infected with malignant head and neck cancer cells.

"From the animal models, not only did it suppress the spread, the tumor got smaller. Compared to conventional drugs, lupeol reduced the size of the tumor far faster," said Terence Lee, another member of the research team.

"Conventional drugs made the mice a lot thinner, but lupeol mice retained their bulk." Emaciation is usually viewed as a bad sign in the fight against cancer. Yuen hopes lupeol can be applied to other cancers that are similarly dependent on the NFkB protein to grow and spread.

"It may be possible to use (lupeol) in other cancers because it is able to suppress the NFkB protien, which is activated in many cancers like prostate cancer, breast cancer, liver cancer," Yuen said.