

**HEALTH AND SCIENCE**

# Study finds blueberries beat cholesterol drug

Fruit has chemical that works better with fewer side effects

**BY LEE BOWMAN**

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A compound in blueberries appears to be as effective at lowering cholesterol as a commercial drug, with fewer side effects, according to a new study using cells from rat livers.

The compound, called pterostilbene, has the potential to be developed into a natural medicine for lowering cholesterol, particularly for people who don't respond well to conventional lipid-lowering drugs, said Agnes Rimando, a research chemist with the U.S. Department of Agriculture. She described the findings yesterday before the American Chemical Society's annual meeting in Philadelphia.

"We are excited to learn that blue-

berries, which are already known to be rich in healthy compounds, may also be a potent weapon in the battle against obesity and heart disease," said Rimando, who works in the Agricultural Research Service's National Products Utilization Research Unit in Oxford, Miss.

Blueberries have been getting high marks from food health researchers for some time now for being a top source of antioxidants, which inhibit cell damage, and for other chemicals known to have anti-cancer properties. Earlier research had indicated that high levels of a type of fiber called pectin help blueberries lower cholesterol. Other studies have suggested that the fruit may help preserve memory, too.

Rimando said that pterostilbene is similar to resveratrol, an antioxidant in grapes and red wine that's also a cholesterol-buster. Other researchers have found pterostilbene in grapes, but the new findings are the first to discover the compound in blueberries.

But until human studies can be done with the compound, Rimando said, "I can't say how many blueberries a person needs to eat to have a positive effect on their cholesterol." However, she noted that the fruit has long been touted as a folk medicine.

In laboratory studies done with colleagues at the University of Mississippi School of Pharmacy, Rimando exposed rat liver cells to four compounds found in blueberries. Of the four, pterostilbene showed the highest potency in activating a receptor that plays a role in reducing cholesterol and other fat in the bloodstream.

The compound was at least as effective as ciprofibrate, a drug used to reduce low-density (bad) cholesterol and triglycerides, and more effective than resveratrol. Ciprofibrate sometimes causes side effects such as muscle pain or nausea, however. The researchers believe that by targeting a specific cell receptor, the blueberry compound will have fewer side effects.