## **Economics**

Usually we think about material qualities when we think about the pleasure we will get from a product. When something costs a lot, we might think about all the fine work that went into it. But can price alone influence the pleasure we experience?

Researchers from the California Institute of Technology and the Stanford Graduate School of Business say yes.

Hilke Plassmann, John O'Doherty and Antonio Rangel at Caltech and Baba Shiv at Stanford did a study. They had twenty people taste different wines. Wine was chosen because it comes in many different qualities and prices, and because a lot of people enjoy tasting it.

The people were told they were tasting five different Cabernet Sauvignons. The wines were identified only by price: five, ten, thirty-five, forty-five and ninety dollars.

But in truth there were only three different wines, and two of them were presented twice, at a high price and a low price. For example, the wine that in fact cost ninety dollars a bottle was presented half the time as a ten dollar wine.

There were two important results from the study.

First, the individuals, on average, reported greater pleasure from drinking wine that they were told was higher in price. Brain images taken while the people tasted the wine supported this finding.

Activity, represented by blood-oxygen levels, increased in an area of the brain thought to process "experienced pleasantness." Experiments have shown that the medial orbitofrontal cortex processes the experience of enjoyment from smells, taste and music. The new findings will add to the limited knowledge of how marketing affects brain activity.

The second result has meaning for economists and marketers. The experiment appears to confirm that raising the price can increase how much a product is enjoyed. In other words, when it comes to expectations, it seems you really do get what you pay for.

The study is in the Proceedings of the National Academy of Sciences.

Finally, we want to update our recent story on the fight over next-generation DVD technology for high definition televisions. This week, the Toshiba company in Japan announced the end of its HD DVD business, crushed by Sony's Blu-ray format.