

More Expensive Placebos Bring More Relief

By BENEDICT CAREY

In marketing as in medicine, perception can be everything. A higher price can create the impression of higher value, just as a placebo pill can reduce pain.

Now researchers have combined the two effects. A \$2.50 placebo, they have found, works better one that costs 10 cents.

The finding may explain the popularity of some high-cost drugs over cheaper alternatives, the authors conclude. It may also help account for patients' reports that generic drugs are less effective than brand-name ones, though their active ingredients are identical.

The research is being published on Wednesday in *The Journal of the American Medical Association*.

The investigators had 82 men and women rate the pain caused by electric shocks applied to their wrist, before and after taking a pill. Half the participants had read that the pill, described as a newly approved prescription pain reliever, was regularly priced at \$2.50 per dose. The other half read that it had been discounted to 10 cents. In fact, both were dummy pills.

The pills had a strong placebo effect in both groups. But 85 percent of those using the expensive pills reported significant pain relief, compared with 61 percent on the cheaper pills. The investigators corrected for each person's individual level of pain tolerance.

"It's a great finding," said Guy H. Montgomery, an associate professor of cancer prevention at the Mount Sinai School of Medicine who was not involved in the research. "Their manipulation of price affected expectancies of drug benefit, and pain is the ultimate mind-body phenomenon."

Previous studies have shown that pill size and color also affect people's perceptions of effectiveness. In one, people rated black and red capsules as "strongest" and white ones as "weakest." Other information like the country where the drugs were manufactured can also affect perceptions.

“It’s all about expectations,” said the lead researcher, Dan Ariely, a behavioral economist at Duke and the author of a new book, “Predictably Irrational: The Hidden Forces That Shape Our Decisions” (HarperCollins). His co-authors on the report were Rebecca Waber, Baba Shiv and Ziv Carmon.

“When you’re expecting pain relief, you’re secreting your own opioids,” Dr. Ariely added. “And when you get it on discount, you doubt it, and your body doesn’t react as well.”

Eric Nagourney contributed reporting.