

This (taste) bud's for you: Inside one of the body's sentinels.

tected all over the tongue . . . ; only the intensity varies.") She found a direct correlation between intensity of taste and the number of taste buds. About 20 percent of the volunteers had an unusually high number of taste buds and were extremely sensitive to sweet and sour tastes; another 20 percent had few taste buds and a dull sense of taste.

"The taste buds," writes Levenson, "can be understood as sentinels that stand at the body's gate, heralding helpful visitors and sounding alarms at signs of dangerous intruders. They frisk foods for signs of their basic intentions, then pass them along to the nose for further introductions. The flavors we find in chocolate, steak, or fine wine are largely olfactory labels. They are only fully sensed when specific chemicals flow through the retronasal passage at the back of the throat to the smell receptors in the nose. The taste buds themselves don't have time for long, complicated encounters, so they detect only [the] four basic flavors."

Bartoshuk found that women have a much sharper sense of taste than men do, Levenson says. More women are "supertasters," and the most sensitive of them are far more aware of sweet and bitter tastes than even highly sensitive men. Why should natural selection have made that so? Pregnant or nursing mothers, because they are eating for two, Bartoshuk pointed out, need an acute sense of taste to be able both to identify sources of calories and to avoid poisons.

Bad Bonzo

"To Catch a Colobus" by Craig B. Stanford, in *Natural History* (Jan. 1995), American Museum of Natural History, Central Park West at 79th St., New York, N.Y. 10024.

From Tarzan's Cheetah and Ronald Reagan's co-star in *Bedtime* for *Bonzo* (1951) to the more recent simian thespian Willie, who stole scenes from Matthew Broderick in the 1987 movie *Project X*, chimpanzees have long been looked upon as lovable, if mischievous, creatures. Even in the wild, they seldom were seen hunting other animals and, in fact, until the 1960s, were thought to be strict vegetar-

ians. Alas, it turns out that the chimps have a secret life, one that may tarnish their Hollywood image.

"We now know," writes Berkeley anthropologist Stanford, "that a small but regular portion of the diet of wild chimps consists of the meat of such mammals as bush pigs, small antelopes, and a variety of monkey species." In Tanzania's Gombe National Park (where anthropologist Jane Goodall first saw chimps eating meat) and its Mahale Mountains, and in the Taï Mountains of the Ivory Coast, chimpanzees "all regularly hunt red colobus monkeys."

"Gombe chimps use meat not only for nutrition," Stanford observes. "They also share it with their allies and withhold it from their rivals. Meat is . . . a social, political, and even reproductive tool." Males often kill prey to offer to female chimps who are in heat.

Because Stanford has studied both hunters and hunted, his research can at times be "a bit heart wrenching," he notes. In October 1992, for example, a party of 33 chimps encountered his main study group of red colobus. "The result was devastating from the monkeys' viewpoint. During the hourlong hunt, seven were killed; three were caught and torn apart in front of me. Nearly four hours later, the hunters were still sharing and eating the meat they had caught,

while I sat staring in disbelief at the remains of many of my study subjects."

The Costly War Against Death

" "The High Cost of Dying' Revisited" by Anne A. Scitovsky, in *The Milbank Quarterly* (No. 4, 1994), Blackwell Publishers, 238 Main St., Cambridge, Mass. 02142.

Health-care specialists have been worrying for years about the high cost of medical care given to dying patients. A 1984 study revealed that the six percent of Medicare enrollees who died in 1978 accounted for 28 percent of all Medicare expenditures. A powerful force behind the nation's soaring expenditures on health care (\$752 billion in 1991), concluded many analysts, was the expensive high-tech care being lavished on the critically ill in their final months. It's not so simple, warns Scitovsky, an emeritus senior staff scientist at the Research Institute of the Palo Alto Medical Foundation.

The costs of medical care in the last year of life are indeed great, she notes. Medicare payments in 1988 were about seven times higher for those who died than for those who survived: \$13,316 per per-

son-year compared with \$1,924. However, only about five percent of the deceased appear (from the fact that their Medicare payments amounted to \$40,000 or more) to have received aggressive, high-tech medical services, such as being put on a respirator or placed in intensive care.

Elderly patients who are given such care, it is important to note, do not all die soon after. Of those who had Medicare payments of \$40,000 or more in 1988, 73,000 died that year—but 70,000 survived. "It is easy enough in retrospect to regard those who died as terminal or dying patients," Scitovsky writes. "It is a different matter, however, to do so prospectively. Despite the enormous advances in medical technology (or possibly because of them), medical prognosis in most serious illnesses is still highly uncertain."

In the long run, Scitovsky believes, bringing health-care spending under control as the population ages is going to demand something even more difficult ethically than cutting back on high-tech care for the *critically* ill elderly in their final months. It will require deciding when to stop giving sustenance and ordinary care, such as antibiotics to fight infection, to *chronically* ill elderly patients in nursing homes. That, she says, will demand "a change in our expectations of what medical care can do for us, especially our attitude toward death."

ARTS & LETTERS

Broadway's Final Curtain

"Who Killed Broadway?" by Brooke Allen, in *City Journal* (Winter 1995), Manhattan Institute, 52 Vanderbilt Ave., New York, N.Y. 10017.

Despite competition from movies, home video, and cable TV, there is still an audience for live theater. But many theatergoers now go to Broadway only once or twice a year. They are put off by the outrageous ticket prices: at least \$55 to \$65 for a lavish production such as Les Misérables, and nearly \$50 even for Politically Incorrect, in which a lone comedian,

wearing an ordinary suit, performs in front of the barest of sets. Yet absurdly high as ticket prices have risen, observes Allen, who has written for stage and TV, the costs of production keep going up faster. The result, she argues, is the apparent end of Broadway as a place for original dramas, or even original comedies and musicals.

Just to stage a modest one-set, two-actor play—"the kind of show that, 30 or so years ago, used to open by the dozen every Broadway season"—now takes an initial investment of some \$800,000, Allen says. "Weekly running costs amount to at least \$135,000, which