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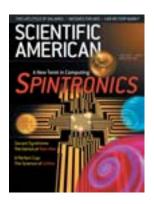
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Letters

EDITORS @ SCIAM.COM

"AS A PERSON WHO ENJOYS Turkish coffee habitually, I was aghast to read in the otherwise excellent 'The Complexity of Coffee,' by Ernesto Illy [June 2002], that Turkish coffee is made in a special pot called an ibrik." Apparently that term is used only in the West, according to Selim Kusefoglu, chair of the chemistry department at the University of Bogazici in Istanbul. "An ibrik is used in a Turkish bath, another delightful custom, and is a metal container for holding water and should never be heated. Coffee, on the other hand, is made in a pot called a cezve, which has a straight, long handle and a side spout, a humble example of which, along with a few days' supply of Turkish coffee, is included with my letter. Illy's recipe is excellent,



so please follow it. I hope you enjoy your Turkish coffee!" We found it to be a fine beverage choice for reading letters about the June 2002 issue, presented on the following pages.

MORE COFFEE TALK

Coffee is consumed especially by scientists, and Ernesto Illy is in a long tradition of researchers who turn their attention to the drink that literally stimulates them. One of the first and most eloquent was Benjamin Thompson, Count Rumford, who in 1812 wrote "On the Excellent Qualities of Coffee and the Art of Making It in the Highest Perfection." This essay is excerpted in But the Crackling Is Superb, an anthology by members of the Royal Society of Great Britain that is recommended reading for anyone who enjoys science with their eating and drinking.

> Bruce Bayly Tucson, Ariz.

THE MATH ON FALSE POSITIVES

"Lifting the Screen," by Alison McCook [News Scan], on screening for ovarian cancer, did not make the point clearly. The following should have been explicitly stated: despite the test's perfect sensitivity (all cases of ovarian cancer are detected) and its apparently high specificity of 95 percent (only 5 percent of women who do not have ovarian cancer will test positive), the specificity is still far too low considering that only one in 2,500 American women older than 35 have the disease. This is because for every 2,500 women tested, the one with cancer will test positive, and 5 percent of 2,500, or 125, women who do not have cancer will also test positive. That is, for every 126 women who test positive, only one will actually have cancer. Therefore, any individual positive test has less than a 1 percent chance of being correct.

> Mark Herman Shepherd, Mich.

BRING BACK DDT?

In a recent Wall Street Journal article, I was interested to read that "Malaria Strikes Growing Number of U.S. Travelers." I recalled the SA Perspectives "A Death Every 30 Seconds." Coincidentally or by design, in the same issue, in 50, 100 & 150 Years Ago, "Malaria, Italian-Style" notes the eradication of malaria in Italy with DDT and related insecticides. Although I am aware of the impact DDT had on wildlife and particularly on raptors, I think it's time to take it out of the closet and distribute it to these countries that are suffering such huge human and economic losses.

> J. W. Heidacher Hilton Head, S.C.

THOUGHTS ON AGING

I am puzzled by the contention in the essay "No Truth to the Fountain of Youth," by S. Jay Olshansky, Leonard Hayflick and Bruce A. Carnes, that there is no genetic component to aging. Why then do other sophisticated mammals have radically different life spans than humans do? My dog, for example, has an expected life span of 15 years with the best medical care that I can provide him. I will outlive him by a factor of five, even

though we are both exposed to roughly the same environmental conditions.

James E. Lake Tacoma, Wash.

I disagree with the assertion that "evolution is totally blind to the consequences of gene action (whether good, bad or indifferent) after reproduction is achieved." This may be true in the case of most earthly organisms, but in social mammals such as humans the course of aging of the elderly members of the community has a direct and significant impact on their descendants, whose lives they share on a daily basis. The elderly can enhance the group's chances of survival with the help of experience and information that they've gained in their own long lives. They can also decrease the group's chances by consuming too many of the available resources. I think it's likely that the aging members of a community of humans (and probably of chimpanzees, dogs, hyenas and others) considerably affect the reproductive success of their own direct descendants-and the continuation of the genes they gave them.

> P. Rhiannon Griffith Albuquerque, N.M.

The authors argue that genetic alterations to various model organisms—including fruit flies, whose average life span increased—did not affect the exponential increase in the risk of dying during adulthood. This is an important point, because the exponential increase in mortality is one of the widely accepted measures of aging in experimental research. In 1996 we and our colleague T. J. Nusbaum published an analysis of this parameter in genetically longer-lived fruit flies, finding that it was indeed altered in the way required by Olshansky et al. Presumably they will now be slightly more optimistic about the prospects for anti-aging medicine?

Michael R. Rose
Laurence D. Mueller
Department of Ecology and
Evolutionary Biology
University of California, Irvine

The claim that "the primary goal of biomedical research and efforts to slow aging should not be the mere extension of life. It should be to prolong the duration of *healthy* life" must really warm the hearts of old people who have chronic illnesses but nonetheless have the temerity to find their lives well worth living ... and prolonging.

Felicia Ackerman
Department of Philosophy
Brown University



ANTI-AGING REMEDIES: So far they're ineffective.

The authors warn against anti-aging fads, and their efforts are laudable. Nevertheless, is it not inevitable that in some future era our biological clock will be localized, characterized and turned off? Immortality! Many eagerly await that, but not I. A life without end would be a life of terminal ennui. Death is Tolkien's "gift of Iluvatar" that gives life its meaning.

Charles J. Savoca Venice, Fla.

OLSHANSKY, HAYFLICK AND CARNES REPLY: Lake and Griffith fail to consider the critical distinction that must be made between the processes that cause aging and those that determine a species' longevity. The differences in the longevity of species are driven by the genes that determine growth and development, which influence longevity indirectly. That is why breeds of dogs larger than those of Lake, which also enjoy the same good care, will age and die well before 15 years. Once Lake and his dog reached sexual maturation, the molecular fidelity that both achieved during their genetically driven development began to succumb to random losses in the

chemical energy necessary to maintain that fidelity. In an analogous fashion, our cars require a blueprint (the equivalent of genes in organisms) for their construction but do not require instructions on how to age.

As Griffith asserts, older members of social species can and do influence the survival of younger members. There is no evidence, however, that on an evolutionary timescale, assistance from older members leads to progressive increases in a species' longevity.

The point made by Rose and Mueller applies to actuarial aging (as measured by the rate of increase in the death rate by age); it has not been shown to apply to biological aging. As such, we are not "more optimistic about anti-aging medicine," because we do not think that humans come close to being the biological equivalent of big fruit flies.

Ackerman misunderstood our commitment to the health and wel-

fare of the elderly. Our emphasis on quality of life, rather than length of life, is motivated by a deep concern for the toll that the nonfatal chronic conditions of aging take on mental and physical health as well as the economic consequences that are accompanying our rapidly expanding population of older people.

ERRATUM In "Divide and Vitrify," by Steven Ashley [News Scan], Mark A. Gilbertson is misidentified as director of the U.S. Department of Energy's Office of Environmental Management. His correct title is director of the Office of Basic and Applied Research in the Office of Environmental Management.