

The Weekly Newsmagazine of Science

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Cover: Most people savor nuts but worry about the heavy load of fat that they pack. Such nutritional concerns may be misplaced, based on a spate of new clinical trials indicating that these fatty treats can bring about healthy changes in cholesterol and other blood lipids. **Page 328** (Photo: David Hills, The International Nut Council)

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Letters

The shorter the better?

In "For longer life, give her a choice" (SN: 9/12/98, p. 168). Susan Milius reports that Promislow has shown that, given the opportunity, female fruit flies select mates to produce longer-lived offspring. While extended lifespan may indeed constitute "better heredity" in some cases, that analysis may be missing an important point.

In isolated environments, it may be that occasionally severe environmental stresses arise wherein particular females cannot find more than a single prospective mate.

In such a case, it would seem that Promislow's results indicate a striking genetic feedback mechanism to relatively restrict the lifespan of progeny. If (and this is a big if) reduced lifespan is correlated with an increasing reproductive frequency, then it naturally increases the rate of turnover of genetic material within the local population, maximizing the possibility that mutations and/or the inherent breadth of the genetic heritage is utilized to adapt to the environmental stress.

To the extent that certain natural popula-

tions are isolated, even temporarily, and especially if the lifespan effect scales to some degree smoothly with the number of choices that a female has, Promislow's results may be an indicator of an important genetic mechanism.

Mike Roberts Waikoloa, Hawaii

The high command skipped it

"Jet would skitter across the globe in 2 hours" (SN: 9/19/98, p. 182) says the idea of an atmosphere-skipping space plane has been around for 20 years. But Eugene Sanger, Wernher von Braun's arch rival, proposed the concept to the German high command in 1935.

Sanger's Silverbird, or Amerika Bomber, would have circled the globe and dropped a 4-ton bomb on New York along the way. It would have been launched on a rocket sled to Mach 1.5, then burned 90 tons of fuel to reach a speed of Mach 10 and an altitude of 282 kilometers (174 miles). It would then have begun a skipping trajectory like that of HyperSoar, starting its first upward arch at 41 kilometers (25 miles) altitude. Each succeeding skip

would reach a lower maximum altitude than the previous, ultimately resulting in a glide back to its launch site.

Static engine tests were conducted. But by 1941, when Hitler invaded Russia, development was expected to require 5 to 8 years more. The Amerika Bomber was shelved in favor of yon Braun's V-2.

Robert Kirkman South Miami. Fla.

Is light to fight fright right?

In regard to "Does Light Have a Dark Side?" (SN: 10/17/98, p. 248), it was interesting that very low light levels apparently had a significant impact on melatonin production. It would be interesting to see if a child's nightlight reduces bedtime fears and perhaps nightmares because it inhibits melatonin production. A "cool" nightlight I bought recently emits a green-colored light very similar to the melatonin-inhibiting color shown in your article. I also wonder if a nightlight might affect the progression of childhood cancer.

Edward Batutis Newton, Mass.

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