Pressure group sues food agency for not adding salt

Washington A health-advocacy group is suing the US Food and Drug Administration (FDA) for failing to classify dietary salt as a food additive.

The Washington-based Center for Science in the Public Interest says there is scientific evidence that salt raises blood pressure and prematurely kills 150,000 Americans a year. But the FDA classifies dietary salt as "generally recognized as safe", giving the agency no authority to limit how much salt foods can contain. The advocacy group says it hopes the lawsuit will force the FDA to change salt's status.

Americans consume about 4 grams of salt a day — roughly twice the amount recommended in the US government's recent dietary advice (see *Nature* **433,** 794–799; 2005). Overindulgence occurs in other countries too. The UK government is currently waging a campaign to cut Britain's salt intake by one-third.

Sex changes seen in radio-collared voles

London The use of radio-transmitter collars to track and monitor animals has dramatically skewed the sex ratio of a population of endangered water voles, British ecologists have found. They fear the technology may be further endangering this population, and could have similar effects on other studied animals.

The scientists, led by wildlife researcher Tom Moorhouse of the University of Oxford, UK, began fitting a Norfolk population of *Arvicola terrestris* (pictured) with radio collars three years ago to study their migration and mating behaviour. Over the course of the project, they observed a 48% decline in the expected number of female offspring from tagged animals (T. P. Moorhouse and D. W. Macdonald, *J. Appl. Ecol.* **42,** 91–98; 2005). They think that stress may be responsible for the shift: voles raise more males in hard times, as they are more likely to survive.

A. HARRINGTON/ALAMY

Radio collars were thought to cause some stress, but few scientists believed that they would influence behaviour or reproduction. Moorhouse says he will stop using the collars after further investigating the effect.

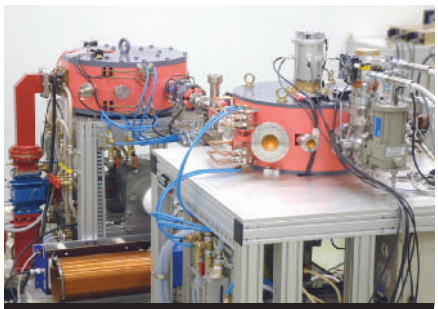
Future looks bright for table-top synchrotron

Tokyo A Japanese company has developed a synchrotron light source small enough to fit in a laboratory — although the handy technology comes at a hefty price.

Synchrotrons produce X-rays that can be used to probe the structure of materials. Their unwieldy size means that scientists must travel to large facilities and wait their turn to use the rays for their experiments.

Researchers have come up with theories on how to shrink the device (see *Nature* 428, 789; 2004), and now a working miniature is available for sale — the MIRRORCLE-6X, manufactured by the Photon Production Laboratory of Shiga, Japan. With a storage-ring diameter of 60 centimetres, the whole machine easily fits in a lab, and generates X-rays of up to a few mega-electronvolts using a novel electron-injection technology. Large facilities, whose synchrotrons are tens to hundreds of metres across, typically produce rays of about the same energy.

At roughly US$2.5 million a piece, the MIRRORCLE-6X is unlikely to find its way into most laboratories any time soon. But Hironari Yamada, who helped to develop the machine at the Ritsumeikan University in Shiga, says that private businesses — from semiconductor manufacturers to pharmaceuticals producers — are lining up to buy the device.



PHOTON PRODUCTION LAB

Downsized: the MIRRORCLE-6X weighs in at under half a tonne and easily fits in the lab.

Indian institute gets cash to aim for the top

New Delhi The Indian government has granted Rs1 billion (US$23 million) to the Bangalore-based Indian Institute of Science to help it to develop into a "world class university".

The surprise announcement was made by the finance minister Palaniappan Chidambaram while presenting India's annual budget on 28 February. He said the institute is the first of many that will receive huge funding increases in coming years, as the government works to boost India's international competitiveness.

"We were not expecting this generosity," the institute's director Goverdhan Mehta told *Nature*. "More than the money, what makes us really happy is the recognition that we deserve this."

Enzyme washing powder cleans up rogue prions

London A new way of decontaminating medical equipment might reduce the risk of prions being transmitted to patients during surgery.

Steel surgical instruments are usually sterilized by washing and heating. But studies have indicated that this does not remove prions — abnormal proteins thought to cause variant Creutzfeldt–Jakob disease, the human version of mad cow disease. The only method proven to rid instruments of prions is bathing them in corrosive chemicals. In the face of a tiny theoretical risk of prion transmission, the UK government in 2001 allowed surgeries to use tools that have been simply washed and heated.

Researchers at the UK Medical Research Council Prion Unit in London now say that using a biological washing powder, with added enzymes called proteases, does the trick (G. S. Jackson *et al., J. Gen. Virol.* 86, 869–878; 2005). The team hopes that a fine-tuned version of the process will be available for use in surgeries by the end of the year.

Launch success lifts Japan's space hopes

Tokyo Japan's space agency is celebrating the successful launch and deployment of a weather satellite last Saturday that has put it back in the Asian space race.

The launch success comes as a relief after a string of recent failures, including the loss of an Earth-observing satellite blasted by solar flares, two spy satellites that had to be blown up after a botched launch, and a mission to Mars that ran out of fuel. "We could not afford another failure," says science minister Naruaki Nakayama. The space agency says that improved reliability and reduced costs should help them compete with China for future commercial launches.

Japan's rocket programme is unusual in that it is not an offshoot of a military missile programme. But observers note that it is increasingly being seen to have potential military applications. The country is now moving to work with the United States on a missile defence programme.