# ASHA VAHISHTA THE ULTIMATE TRUTH KNOWLEDGE

Truly the knowledge derived By the good mind Never before known Among the wise and in the universe With it make good rules and never waning Increasing righteousness Leading us towards Perfection

ZARATHUSHTRA - Yasna Ha 28.3 (FR)

#### **AGING OF EARTH**

In 1640 James Ussher, Archbishop pf Armagh, Ireland, used biblical chronology to pin down the date of the Earth's creation; October 23, 4004 B.C. In 1748 French philosopher Benoit de Maillet came up with an estimate of 2 billion years based on the assumption that the sea levels have been dropping steadily since Noah's flood. By close of the 20<sup>th</sup> century, analysis of radioactive isotopes provided a supremely accurate dating tool and proved that the oldest meteorites are 4.56 billion years old, setting an upper limit for Earth's antiquity. -Eric Powell- Discovery June 2001

#### **Healthy Nuts**

Nuts, once derided as noxious blobs of fat, could be the secret of a healthy heart. Nutritionist Penny Kris-Etherton of Penn State reviewed 16 clinical and epidemiological studies found that eating one ounce of mixed nuts five times a week reduces risk of coronary heart disease by 25 to 39 percent - probably due to a mix of cholesterol-lowering unsaturated fatty acids, antioxidant vitamins, minerals, and fiber. "Nuts are a high fat food, but they contain good fat," she says. They even contain resveratrol, an anticancer compound found in red wine. -Josie Glausiusz Discover Sept, 2001

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#### AT LAST A GOOD USE FOR AIRPLANE FOOD

In a pilot project launched this spring, the Los Angeles International Airport and the City of Los Angeles Department of Public Works have begun collecting uneaten portions of air travelers' meals and converting them into fuel. Leftovers are pulverized, mixed with water, and heated to accelerate decomposition. Bacteria break down the food and liberate methane gas, which is piped to a power generation plant; the airport currently dumps 8000 tons of wasted food each year. - Discover October 2001

## HOT DIAPERS AND COLD FERTILITY

Could plastic diapers be responsible for the reported rise in testicular cancer rates and the decline in male fertility? A team of German researchers thinks so. "Anybody who has ever used the plastic-lined variety knows it can get incredibly hot in there, especially during feverish episodes," says Carl-Joachim Partsch, a paediatrician at the University of Kiel. "They are more leak proof, but that means a lot less ventilation, not to mention more infrequent changes." The heat might wreak havoc on developing testes.

To find out how hot babies get, Partsch and his colleagues measured scrotal skin temperatures of 48 baby boys wearing either disposable diapers or traditional cotton. Not only was it significantly more torrid under the plastic, but scrotal temperatures there often rose as high as body temperatures. "The testicles were designed to be 2 to 4 degrees cooler than the body. If you close that gap in adults for even the length of a sauna, sperm counts drop significantly for up to a week," says Partsch. Kids who grew up wearing disposables may now be feeling the heat. *by Jocelyn Selim* 

### FAT KILLS

Combating obesity in childhood could prevent up to four million cancer cases a year worldwide, said researchers at the 11th European Congress on Obesity, held in Vienna in May. About 30 to 40 percent of all cancer cases stem from excessive weight. Obesity, which can also cause heart disease and diabetes, leads to 300,000 deaths annually in the U.S., second only to the 400,000 who die from tobacco use. It also accounts for 5.5 to 7 percent of U.S. health care costs, more than double that of other developed countries, such as Australia (2 percent), France (2 percent) and Canada (2.4 percent). One cause is the variety of foods

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available, which keeps the taste buds from getting tired of the same food and makes overeating more likely. In reviewing 39 dietary studies, scientists from the University of Buffalo found that people offered different choices in multi-course meals ate 44 percent more than those who ate the same food for each course. The review appears in the May Psychological Bulletin.

August 2001 Scientific America --Philip Yam

## MOUSE MODIFIED TO PRODUCE VACCINE IN ITS MILK

WASHINGTON - Scientists may have found an alternative to massproducing vaccines in manufacturing plants: transgenic mice that secrete the drug in their milk.

Researchers at the U.S. National Institute of Allergy and Infectious Diseases created the mouse by adding a gene from a parasite that causes malaria to the rodent's genetic code.

The gene produces a protein found on the surface of the parasite and is designed so that cells in mammary glands activate the gene. The protein can then be extracted from the mice's milk.

The protein was then purified from the mouse milk and tested it in monkeys as a vaccine for malaria. Only one of the five vaccinated monkeys contracted malaria when exposed to the parasite, compared to six out of seven monkeys who were not vaccinated.

The researchers hope to adapt the technology to a larger animal, such as a goat or a cow, to produce large quantities of the vaccine.

They say the animals could be bred in poor countries, where the need for a malaria vaccine is the greatest and where a large manufacturing facility would be too expensive to build.

The study appears in Tuesday's edition of the Proceeding of the National Academy of Sciences. *Web Posted Mon Dec 17 17:33:36 2001* Written by CBC News Online staff

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