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 creativity Leading us towards Perfection

ZARATHUSHTRA -Yasna Ha 28.3 (FR)

VOHU MANA in Action

ELIXIR OF SPIDER SPIT

At the State University of New York at Buffalo, biophysicists Fres Sachs and Thomas Suchyna discovered that a protein in the venom of the Chile Rose tarantula could prevent death from heart attacks. The protein blocks the action of stretch activated channels, pores in cell membranes that respond to touch, muscle contraction and blood pressure. During a heart attack, these channels open and unleash chemical signals that disrupt the rhythm of the heart. Often the resulting fibrillation - not the initial attack- is what kills. The spider venom protein might prevent this lethal fibrillation.

Josie Glausiusz- Discover Magazine September 2000

GROWING PLASTIC

It is now technologically possible to make plastic using green plants rather than fossil fuel. Over 80 million tons of crude oil is used every year in US alone to create plastic. Plant derived plastic involves processing corn and other plants to yield sugar. The sugar is fermented into plastic

inside a bacteria. Then the bacteria cells are opened the plastic separated, concentrated and dried. The only catch is that the process consumes lot of energy, which, has to be provided by fossil fuel.

Extracted from Scientific America Aug.2000

Turning Back the Clock of Age

Researchers now claim to have developed a compound that might rejuvenate hearts and muscles - by breaking the stiff sugar-protein binds that accumulate, as we get older.

Anthony Cerami of Kenneth s. Warren Laboratories in Tarrytown, N.Y., suspected some 30 years ago that sugar affects how the body ages, based on observation of diabetics, who age rapidly. Sugars are an essential source of energy, but once in circulation they can act as molecular glue, attaching themselves to the amino group in tissue proteins and cross-linking them into hard yellow-brown compounds known as advanced glycation end products, or AGEs.

Indeed, after years of bread, noodles and cake, human tissues inevitably become rigid and yellow with pigmented AGE deposits. Glucose forms tight bonds with the long-lived protein collagen, the result is a constellation of changes, including thickened arteries, stiff joints, feeble muscles and failing organs - the hallmark of frail old age. (Diabetics age prematurely because sugar-driven damage acquires breakneck speed. raising their level of AGE-infused collagen to those of elderly people.)

Cerami's quest has been to find an "inhibitor" - a compound that by tying up reactive glucose might keep it away from susceptible proteins. To his surprise, the food industry had the answer. Since 1912 chemists have known that in the heat of the oven sugar and amino acids form tight chemical bonds - a reaction that turns roasted turkey, toast and coffee to tasty golden brown. This Millard chemistry, as it is known in food circles, is the same sugar-protein bonding that stiffens our tissues. Crucially, food chemists also discovered that adding sulfites prevents browning and hardening and keeps food and beverages looking fresh.

Exploiting this culinary knowledge, Cerami's team showed in the mid 1980's that amino guanidine could keep the tissues of diabetic rats and other old animals as elastic as those of the young control subjects. It IRAN ZAMIN

boosted their cardiovascular function and improved other age-related disorders. Further studies showed that amino guanidine lowered diabetics' urine albumin- and indicator of kidney malfunction- and delayed AGE-related damage to the retina. Perhaps more exciting is Cerami's recent discovery of a molecular "breaker" a drug that may actually reverse the AGING process by cracking sugar-protein links once they form. " Instead of looking for prevention, we can now administer a compound to reduce the stiffness we see in diabetics and AGING.

Lisa Melton- Scientific American July 2000

NATURAL MODELS

Using ants and other social insects as models, computer scientists have created software agents that cooperate to solve complex problems, such as the rerouting of traffic in a busy telecom network.

Recently a growing community of researchers has been devising new ways of applying swarm intelligence (collective behaviour) to diverse tasks. The foraging of ants has led to novel methods for rerouting network traffic in busy telecommunications systems. The cooperative interaction of ants working to transport a large food item may lead to more effective algorithms for robots. The way in which insects cluster their colony's dead and sort their larvae can aid in analyzing banking data. And the division of labour among honeybees could help streamline assembly lines in factories.

Swarm Intelligence: From Natural to Artificial System. Eric Bonabeau, Marco Dorigo and Guy Theraulaz. Oxford University Press 1999.

AHRI MANA in Action

Ahri Mana is in action when we use our mind in the wrong way, so to say when we use our mind to **"Convert Stone into Bread ".**

Chickens are raised by the tens of thousands, in giant buildings where they never see the light of day. They are kept in cages where they cannot move, with conveyer belts bringing them food and water and carrying away their waste. When they do move about, they often slide around on their breasts, as some modern breeds grow too fast for their legs to support them. They are constantly sprayed and their food doused with chemicals, hormones, and medicine. Attempts also are being made to breed featherless chickens.

Pigs are also raised in cages, without ever seeing daylight. Such conditions are particularly cruel for pigs, which are close to dogs in intelligence and sensitivity. Drugs are used to reduce the activity of animals, save feed and increase their weight. A steer grows to produce 1200 pounds of beef in as little as four months. Cattle feeders use a variety of hormones and other additives to promote rapid weight gain in their animals.

Garrynull.com - Get Healthy Now -Garry Null -PhD.

CAFFEINE

Caffeine is an addictive stimulant that we have come to depend on daily. Once you're hooked, it's hard to go a day without it because of the symptoms of withdrawal that start to appear - moodiness, headaches, fatigue, and sometimes cramps. It also contributes to the body's loss of a number of important minerals, such as calcium, magnesium, and potassium. (Get Healthy Now -Garry Null PhD.)

Can there any other reason but to addict children to their products that soft drink producers add caffeine to their drinks? Thereby creating more wealth for themselves at the expense of the health of children.

It is the extra amount of Caffeine available in some famous brands of coffee that makes them famous. Thus the winner it is addiction not taste.

Number of milligrams of caffeine in eight ounces of:

Brewed drip coffee	100
Starbucks coffee	200
Espresso	320
Brewed Tea	40
Green tea	33
Pepsi-Cola	25
Coca Cola Classic	31

Scientific America Aug.2000

US Food & Drug Admn; International Food Information Council; PepsiCo; Coca-Cola Co.

TV VIEWED AS PUBLIC HEALTH THREAT

During 1999 the American Academy of Pediatrics recommended that children younger than two should not be allowed to watch television for fear that it will stunt the development of their brains. The intellectual and emotional development of young children depends upon interaction with adults, and children watching TV are unlikely to receive the active attention they need from adults, the Academy said.

The Academy also urged parents, once again, to limit all children's exposure to TV to 1 to 2 hours of "quality programming" per day. (The Academy has issued a series of similar recommendations, based on its concern about youth violence and TV, since 1984.) The national average for all children is now more than 3 hours of TV per day, the Academy said. In other words, children now spend about 20% of their waking hours glued to the tube. This does not include time spent watching movies on videotape, watching music videos, playing computer or video games, or surfing the Internet for recreational purposes. "Time spent with media often displaces involvement in creative, active, or social pursuits," the Academy said. By age 70, typical American children will have spent 7 to 10 years of their lives watching TV, the Academy said

Scientific American - www.sciam.com

P: S:

In (Ancient) Iran children were not allowed to see or hear anything bad. (The Persian Expedition - Xenophon - Penguin Books)