



<http://eaglefeather.org>

EAGLE FEATHER RESEARCH NEWSLETTER

VOL III, NO. 11, November, 2010

Welcome, Willkommen, Bienvenue, Bienvenidos, Benvenuto. Welcome to our November issue in which we discuss Genetic engineering in foods, Indian land rights, Medical news, U.S. Islamic views and historical bits.

GENETIC ENGINEERING IN THE FOOD CHAIN: WHAT ARE THE PROBLEMS?

- **Imprecise Technology**—A genetic engineer moves genes from one organism to another. A gene can be cut precisely from the DNA of an organism, but the insertion into the DNA of the target organism is basically random. As a consequence, there is a risk that it may disrupt the functioning of other genes essential to the life of that organism. (*Bergelson 1998*)
- **Side Effects**—Genetic engineering is like performing heart surgery with a shovel. Scientists do not yet understand living systems completely enough to perform DNA surgery without creating mutations which could be harmful to the environment and our health. They are experimenting with very delicate, yet powerful forces of nature, without full knowledge of the repercussions. (*Washington Times 1997, The Village Voice 1998*)
- **Widespread Crop Failure**—Genetic engineers intend to profit by patenting genetically engineered seeds. This means that, when a farmer plants genetically engineered seeds, all the seeds have identical genetic structure. As a result, if a fungus, a virus, or a pest develops which can attack this particular crop, there could be widespread crop failure. (*Robinson 1996*)
- **Threatens Our Entire Food Supply**—Insects, birds, and wind can carry genetically altered seeds into neighboring fields and beyond. Pollen from transgenic plants can cross-pollinate with genetically natural crops and wild relatives. All crops, organic and non-organic, are vulnerable to contamination from cross-pollination. (*Emberlin et al 1999*)

Health Hazards

- **No Long-Term Safety Testing**—Genetic engineering uses material from organisms that have never been part of the human food supply to change the fundamental nature of the food we eat. Without long-term testing no one knows if these foods are safe.
- **Toxins**—Genetic engineering can cause unexpected mutations in an organism, which can create new and higher levels of toxins in foods. (*Inose,1995*, Mayeno,1994)
- **Allergic Reactions**—Genetic engineering can also produce unforeseen and unknown allergens in foods. (*Nordlee,1996*)
- **Decreased Nutritional Value**—Transgenic foods may mislead consumers with counterfeit freshness. A luscious-looking, bright red genetically engineered tomato could be several weeks old and of little nutritional worth.
- **Antibiotic Resistant Bacteria**—Genetic engineers use antibiotic-resistance genes to mark genetically engineered cells. This means that genetically engineered crops contain genes which confer resistance to antibiotics. These genes may be picked up by bacteria which may infect us. (*NewScientist,1999*)
- **Problems Cannot Be Traced**—Without labels, our public health agencies are powerless to trace problems of any kind back to their source. The potential for tragedy is staggering.
- **Side Effects can Kill**—37 people died, 1500 were partially paralyzed, and 5000 more were temporarily disabled by a syndrome that was finally linked to tryptophan made by genetically-engineered bacteria. (*Mayeno 1994*)

Environmental Hazards

- **Increased use of Herbicides**—Scientists estimate that plants genetically engineered to be herbicide-resistant will greatly increase the amount of herbicide use. (*Benbrook 1999*) Farmers, knowing that their crops can tolerate the herbicides, will use them more liberally.
- **More Pesticides**—GE crops often manufacture their own pesticides and may be classified as pesticides by the EPA. This strategy will put more pesticides into our food and fields than ever before.
- **Ecology may be damaged**—The influence of a genetically engineered organism on the food chain may damage the local ecology. The new organism may compete successfully with wild relatives, causing unforeseen changes in the environment. (*Metz 1997*)
- **Gene Pollution Cannot Be Cleaned Up**—Once genetically engineered organisms, bacteria and viruses are released into the environment it is impossible to contain or recall them. Unlike chemical or nuclear contamination, negative effects are irreversible.

DNA is actually not well understood. 97% of human DNA is called ³junk² because scientists do not know its function. The workings of a single cell are so complex, no one knows the whole of it. (*San Diego Union-Tribune 2000*) Yet the biotech companies have already planted millions of acres with genetically engineered crops, and they intend to engineer every crop in the world.

The concerns above arise from an appreciation of the fundamental role DNA plays in life, the gaps in our understanding of it, and the vast scale of application of the little we do know. Even the scientists in the Food and Drug administration have expressed concerns. (*Alliance for Biointegrity*)

LAND RIGHTS: AMERICAN INDIANS V. THE U.S. GOVERNMENT

Dr. Gavin Clarkson, an associate professor at the University of Houston Law Center and the nation's leading scholar on tribal finance, has worked with all three Texas tribes on economic development, including the Alabama-Coushatta. Prof. Clarkson contends that we live in a nation where a trillion dollars can be earmarked for Iraq and Afghanistan, and hundreds of billions of dollars can be quickly approved for bank bailouts, it's easy to miss a federal settlement involving “only” \$3.4 billion. But last month's landmark settlement of the *Cobell v. Salazar* case is significant for two reasons. First, it represents the largest class-action award to American Indians and helps correct what a federal judge declared was “fiscal and governmental irresponsibility in its purest form.” And second, it may prompt Congress to do the right thing and end seven years of stonewalling that has hurt a tribe with legitimate claim to land that was developed into The Woodlands, Conroe and other Texas communities. While the Alabama-Coushatta tribe in Texas may have had reason to smile (not because the tribe with the largest reservation in Texas will share in any proceeds from the case it was not party to the suit.), its tribal leaders in Texas saw the *Cobell* decision as a hopeful sign that Congress may finally act on a federal court's recommendation and write a long-delayed check for \$270.6 million to the Alabama-Coushatta for oil and natural gas production, timber harvesting and trespassing on ancestral lands by non-Indian settlers. The *Cobell* case centered on claims that the U.S. government had deprived Indians throughout the United States of royalties for mineral and grazing leases on land held in trust for members of various tribes. After seven years, settling these long-delayed claims of the Alabama-Coushatta tribe has arrived for the Texas delegation to promote the fair treatment of the largest tribe in their home state. Congress has chosen to disregard the decision of the Court of Claims — something that almost never happens — and continue to ignore the Alabama-Coushatta. As 2009 came to a close, the tribe had yet to see a single buffalo nickel of that judicial award. The seven-year delay bewilders not only the tribe but also some members of the Texas congressional delegation. But there are members of the Texas delegation who scoff at Indian claims by likening them to “reparations” for slavery.

The comparison is fundamentally flawed and disparages the findings of a federal court. In the first place, these Indian claims involve money owed to a tribal government that exists today — not to any long-dead victims of a sordid chapter of American history. And secondly, the money owed to the Texas tribe can be tracked, traced and quantified. Rather than compensating Indians for “pain and suffering” at the hands of the government, the \$270.6 million owed to the Texas tribe has been fairly calculated based on demonstrable facts, including the accrued value of key parcels of land that are now home to thriving Texas communities such as Conroe and The Woodlands. The tribe still holds aboriginal title to these parcels, and the federal court endorsed this claim in its 2002 decision. In light of the \$3.4 billion settlement in *Cobell*, the \$270.6 million owed to the Alabama-Coushatta looks like a relative bargain for the now highly lucrative and upscale malls located on the outskirts of Houston.

<http://www.chron.com/disp/story.mpl/editorial/outlook/6795860.html>

MEDICAL NEWS: ANTIBIOTICS IN MEAT AND OSTEOPOROSIS IN MEN

Recently, a farmer was gored a burley pig, received a strep infection that spread, threatening his life and baffling doctors. Two months of multiple antibiotics did virtually nothing. The answer was to surface later when it was determined that the animal has been receiving low doses of penicillin, spawning a strain of strep that was resistant to other antibiotics. That drug resistant germ in the animal was passed on to the farmer. The issue is not only national but worldwide. This plague of drug resistant infections has killed more than 65,000 people in the U.S. last year, more than prostate and breast cancer combined. As a nation, it used about 35 million pounds of antibiotics last year—70% of the drugs went to pigs, chickens and cows. Worldwide it is 50%. The World Health Organization concluded this year that surging antibiotic resistance is one of the leading threats to human health. Unfortunately, money is more important than health in today's world and pharmaceutical companies have spent \$135 million lobbying this year and agribusiness companies another 70 million. John Hopkins University Professor Ellen Silbergeld states categorically that drug use in animals is “a major driver of antimicrobial resistance worldwide.” Each year farmers increase the antibiotic use by 8%; however, 13% was fed to healthy animals to make them grow faster. The developing germs immune to drugs blow into neighboring communities in dust clouds, run off into lakes and rivers during heavy rains, and are sliced into roasts, chops and hocks and sent out to our dinner tables. Antibiotic-resistant microbial organisms generated from the gut of the animal, tragically, do not stay on the farm.

OSTEOPOROSIS: WHAT TO ELIMINATE

Currently, there are 2 million men with the disease and millions more that are under-diagnosed and under-treated. Breaking a bone as a result of osteoporosis may be more serious for men than for women. Men are more likely than women to die within a year of breaking a hip. There are some dangers to be aware of: certain medications e.g. steroids, chronic disease of the kidneys, lungs, or intestines; smoking or drinking alcohol excessively and a sedentary lifestyle. If you are into any of the aforementioned categories, talk to your doctor about getting a bone-mineral density test.

ISLAM: RELIGIOUS U.S. PREJUDICE?

Recently, a survey by the Gallup Center for Muslim Studies found 53% of Americans view Islam negatively while other religions are viewed favorably: 91% for Christianity, 71 percent for Judaism and 58 % for Buddhism. What is incredible is that 63% of Americans admit that they do not know anything of Islam or know very little about the religion. Researchers also found a link between prejudice against Jews and Muslims; Americans who acknowledged “a great deal” of bias toward Jews were much more likely to feel the same about Muslims. Another misconception held by Americans is that Islamic terrorists are described as representatives of their religion. When a terrorists commits an act of violence in the name of Islam, it is often framed as being devoted to the faith rather than being deviant of the faith. Anyone who has studied the *Koran* understands that it is against violence and that *Jihad* has its link to missionary work and not terrorist-military activity. Using the faith to further your own

interests, be they power or imperialism is not new; Christian armies called the *Crusades* used it for 200 years in their invasions of the Middle East. Historically they were the first to create the model currently misused known as the *Jihad*.

DID YOU KNOW....?

- The George Washington/Valley Forge story is riddled with myth. The story repeated is that the soldiers there nearly froze and starved to death and the men were so naked they left their bloody footprints in the white snow. Washington warns Congress of this awful deprivation and the dangers of the army “dissolving” or “dispersing”. The myth is that the winter was less severe than other winters and that there was considerable food in December, January and February. The army was supplied each month with a million pounds of flour and a million pounds of meat and fish; thus, each soldier was allotted 3 pounds of flour and 3 pounds of meat or fish per day. The idea that they went “naked” stems from a misunderstanding of the eighteenth century use of the term. Then it meant not going without proper clothing. Washington clearly orchestrated this fabricated propaganda to get more money from Congress.
- The town meeting is also seen as a brand of early democracy in Colonial America. The town meeting was for the few selectmen, not for women, blacks, Indians or even white men without sufficient property and certainly not for members of other religions. These were called by and for the powerful property owners who represented the elite. These were not monthly meetings; the most they met were twice a year to set taxes etc. Elections were held annually and selectmen often remained in office as much as 30 years. By the 1660’s a man needed to have 80 lbs of taxable estate; only 25% of the adult males could meet this standard. Thus, there was no representative government, universal suffrage or tolerance. Later the descendents of the Pilgrims changed the “dictatorship of the holy and regenerate” only to become beset with bickering fights between breakaway precincts and factions leading ultimately to debating attorneys that took over meetings discouraging others to participate

Happy and Insightful Reading:

Arnoldo Carlos Vento, Ph.D