

Everything the MEAT and DAIRY industries don't want you to know

The VivaVegie Society, Inc. November/December 1997: Vol. 6, No. 5

BURGER RECALL

Much of the infamous 25 million pounds had already been consumed

n outbreak of potentially deadly E. coli bacteria that sickened 17 Coloradans last July, sending five to the hospital, led to the largest recall of meat products in U.S. history. On August 21, Hudson Foods Co. shut down its Columbus, Nebraska, plant and extended its recall of ground-beef patties processed there to 25 million pounds. These actions came after federal investigators said that poor records and the industrywide practice of mixing meat from different days put all the patties produced after June 4 at risk for contamination. By mid-September, Hudson and U.S. Department of Agriculture officials determined that about 19 million of the 25 million pounds of recalled beef had either been eaten or thrown away.

The recall and the shutdown sent shock waves through America's meatindustrial complex. Burger King, the nation's second-largest fast-food chain, continued on page 9 • Bovine Victims

THE VIVAVEGIE SOCIETY TAKES VEGETARIAN ADVOCACY TO THE STREETS. MISSION: DISTRIBUTE, FOR DONATION, AS MANY COPIES AS POSSIBLE OF THE FLYER "101 REASONS WHY I'M A VEGETARIAN"—THE MIGHTY CONVINCER FOR A VEGETARIAN DIET.



Free-range: What does it really mean for livestock? page 14

North Korea: Starving nation delivers poultry feed to Japan ▶ page 8

Fecal slumgullion: Farmers feed chicken manure and other waste to their cattle...by the ton page 3

A vegetarian class-action suit? Antibiotic abuse in the meat industry hurts plant eaters, too page 4

Vegan chef Laurie Jordan prompts the curious to ask that question she loves to answer.

BIOSECURITY DOWN ON THE FACTORY FARM

The constant battle with microbes makes you wonder, are you on a farm or in a hospital quarantine ward?

BY PAMELA RICE

orrying about diseases infecting their flocks surely must keep many modern poultry producers up at night. Of course, they raise their birds in conditions that could not be any more unnatural. Species that in the wild normally live in the jungle or in woodland areas, in relatively small flocks, are forced by these producers to live confined indoors, by the millions—drugged up, overbred and chronically immunodeficient. It's no mystery why you have epidemics affecting millions of birds at any one time, spanning entire regions.

Most people couldn't begin to imagine what chicken or turkey growers need to go through to avoid infectious diseases on their farms. To reduce risk, strict systems of flock isolation must be adhered to; traffic into and out of poultry plants must be monitored; and surface areas must be regularly scraped, scrubbed and disinfected.

According to Don Bell, the editor of the *California Poultry Letter*, "Anything we bring into the [poultry] house needs to be clean and disinfected and free of potential contamination." Chicken factories can be infected by workers or visitors, dust, poultry litter, water, air, feed, vaccines, insects, wild animals,

continued on page 2 • Bird Factories

Subscribe to The VivaVine. See page 15

BIOSECURITY: COVER STORY, CONT.

Bird Factories: Disease, vaccines and quarantines

continued from page 1

bird droppings, parasites and delivery trucks, as well as by the birds themselves—both dead and alive. Entranceways to poultry plants must be kept locked to prevent potential carriers of disease from coming in. Visitors to many chicken plants must shower and dress in company-supplied garments before getting near the birds. Even vehicles regularly need to be sanitized before approaching poultry houses.

It should be emphasized that such rigorous measures were unheard-of before the current era of in-

door, intensive livestock farming. On the farm of old, animal immunity came from exercise, sunlight and the freedom to peck or root in the soil. Today one facility will house millions of birds, kept alive in atrocious conditions by drugs and "biosecurity"—the term now used

to describe a full array of antibacterial measures.

Systems of biosecurity are becoming more and more critical to poultry operations, as outbreaks of avian diseases are forcing farmers to destroy entire flocks. A farmer who is lax in the slightest faces the risk of waking up to a poultry shed full of sick and dying, unmarketable birds. Overnight a flock could have contracted Newcastle disease, fowl typhoid, infectious bursal disease or avian leukosis, to name just a few.

In May an outbreak of avian influenza struck flocks in Lancaster and Lebanon Counties in Pennsylvania. By June a million egg-laying hens had to be destroyed and a 75-square-mile area had to be quarantined. Permits were required to move any poultry or poultry products from one facility to another. Even the state police were called upon to monitor the situation.

In 1983 a similar outbreak in the state, which also affected Maryland and New Jersey, cost tax-payers \$100 million to eradicate.

In 1991 a particularly mysterious disease began to infect turkeys. The disease, poult enteritis mortality syndrome (PEMS), was first diagnosed in Union County, North Carolina, and has been baffling farmers and researchers ever since. The key symptom of this illness, which afflicts young turkeys, surely represents the ultimate bane of

any livestock producer: Birds continue to eat but gain no weight—ouch. Researchers tell us that neither a cause nor a cure has been found, but overcrowding and excessive use of antibiotics surely have something to do with it.

Livestock diseases are by no means restricted to the United States. Foreign farming operations have, in fact, been living with the rigors of biosecurity longer than those in the United States. In February a highly pathogenic strain of avian influenza infected 1.25 million egg-laying hens in Mexico. All were destroyed. Five animal-health

"brigades," bearing the awkward title of National Animal Health Emergency Response Team, were deployed during the height of the outbreak. These brigades policed designated systems of surveillance, quarantine and vaccination for several months to

It's no mystery why epidemics affect millions of birds at once, spanning entire regions.

make sure the bug was contained.

Get me out of this filthy mess. foothold isn't an easy task.

especially in such an incredibly filthy industry as poultry production. Cleaning out, scrubbing and disinfecting poultry housing remains a constant and thankless task. If surfaces are not kept clean, microbes brought in from the outside can more easily adhere to them.

If you want to keep nasty microbes out between flock placements, a rigorous procedure awaits you. Don Bell describes what you need to do: "Biosecurity must be an integral part of any poultry production system: Remove all dead birds, chunks of manure, feathers and eggs from cages.... Remove manure from pit.... Blow or scrape dust and caked-on material from fan housing blowers and blades.... Use a screwdriver to remove dried egg material and feathers from between rollers.... In shallow pits, hand scrape under escalator equipment in front and concentrate on shallow pit corners." After this it's time for wet decontamination. Every surface needs to be covered with disinfectant, followed by representative surface culture samplings.

Now, if all passes, you can make that call to your sponsoring processor to send a new batch of baby birds.

GARBAGE IN, GARBAGE OUT

Fecal Cuisine: Pass the poultry poop, please

The Hudson Foods E. coli beef-patty debacle in August brought numerous squeamish burger eaters over to a more vegetarian point of view. A Newsweek poll taken just after the 25 million pound beef recall, the largest ever in U.S. history, found 54 percent of respondents saying they were now less likely to buy burgers at fast-food restaurants. Forty-one percent said they were less likely to buy hamburger meat at the grocery store. It seems that knowing the long-term health benefits and other virtues of a meatless diet have not been enough to reduce cut-up cow

consumption. But the idea of dropping dead from diarrhea after a double cheeseburger...that seems to be quite another matter.

Funny, though, in spite of this apparent consumer recall, decided to launch

its gigantic third-of-a-pound King Burger. We can | only guess that it figures a slump in demand for beef is nothing that a little extra TV advertising can't fix. We'll be watching closely.

Luckily, as a result of the recall, widespread unwholesome practices in the meat industry gained media attention. We soon learned that there may be a few other constituent parts to the average burger besides E. coli.

No, burger eaters haven't been eating dogs and cats directly—at least

they hope not. But it's more than just a little bit likely that,

until recently, they have been consuming those furry friends indirectly through livestock. According to a story in U.S. News and World Report that came out the week after the Hudson recall, "40 billion pounds of slaughterhouse wastes like blood, bone and viscera, as well as the remains of millions of euthanized cats and dogs passed along by veterinarians and animal shelters, [have been] rendered annually into livestock feed." (See the May/June VivaVine.)

On August 4, to protect against mad-cow disease, which was likely caused in Great Britain by the practice of feeding sheep brains and spinal cords to cows, the Food and Drug Administration ordered a halt to feeding most slaughterhouse wastes to U.S. cattle and sheep. The question becomes: What will the cattle producers feed their animals in place of those billions of pounds of animal parts? Answer: a catch-as-catch-can slumgullion of fats emptied from restaurant fryers, human sewage sludge, cardboard, newsprint and cement-kiln dust. Also revealed in the U.S. News article was the unsavory but widespread and growing practice among U.S. farmers of dishing out chicken manure by the ton for their livestock, which can save a farmer a lot of money. According to the U.S. News story, chicken manure is \$15 to \$45 a ton, compared with up to \$125 a ton for alfalfa.

Yes, animals do get fat on a diet that includes ma-

nure, and, yes, according to the FDA, the practice is safe-if done correctly. Problem is, farmers don't always process the chicken feces through all the necessary steps, and even when and mercury concentrated

in the manure are not neutralized. In addition, chicken manure is widely known to contain intestinal

> parasites and veterinary drug residues, as well as deadly bacteria such as campylobacter and salmonella.

> "These bacteria and toxins are passed on to the cattle and can be cycled to humans who eat beef contaminated by feces during slaughter," the U.S. News article noted.

The main source for the U.S. News story was a scientific paper published in

the journal Preventive Medicine. According to one of its authors, Neal Barnard, M.D., president of

Physicians Committee for Responsible Medicine, the 3,000-physician-strong Washington-based provegetarian health lobby, "Feeding manure that has not been properly processed is supercharging the cattle feces with pathogens likely to cause disease in consumers."

Granted, fecal contamination of beef at the slaughterhouse is only an occasional occurrence: Material from a mistakenly punctured cow-carcass intestine must be given the opportunity to drip onto edible portions. Still, just one instance can affect a lot of burgers. According to Nicols Fox, author of the recently published book Spoiled: The Dangerous Truth About a Food Chain Gone Haywire, one burger can contain beef from 100 different animals from four different countries.

"Bacteria and toxins are passed on to the cattle and cycled to humans who eat Burger King, soon after the beef contaminated by feces." they do, heavy metals such as arsenic. lead. cadmium



a publication of THE VIVAVEGIE SOCIETY, INC. Issue: Vol. 6, No. 5 November / December 1997

P.O. Box 294
Prince Street Station
New York, NY 10012-0005
(212) 966-2060
E-mail: vivavegie@triroc.com

Publisher: Pamela Rice
Editor: Alex Press
Reference editor: Alan Rice
Advertising: Pamela Rice
Contributing writer: Scott
Lustig
Contributing artist: Juan
Torcoletti
Copyediting: Charles Patterson
Graphic-design styling: Dave
Horn

Horn

Gaggle of veg-evangelists:
Dean Milan, Rochelle Goldman,
Lenny Morgenstern, Irene
Ginsberg, Jean Thaler, Jesse
Silverman, Carmen Ginsberg
Editorial consultants:
Karen Davis, United
POULTRY CONCERNS
Henry Spira, COALITION
FOR NONVIOLENT FOOD
and ANIMAL RIGHTS INTERNATIONAL
Richard Schwartz, author,
Judaism and Vegetarianism
Special thanks to Craig

JOIN VivaVegie

To become a member of the VivaVegie Society for one year, send \$15 to the above address. Membership entitles you to one membership card, five issues of The VivaVine and one copy of "101 Reasons Why I'm a Vegetarian."

Filipacchi and Nadine Miral

of Earthbase

A class-action veg'n suit?

Meat-industry antibiotic abuse hurts us, too

The antibiotics that are being used indiscriminately on farm animals today ultimately foster the development and growth of antibiotic-resistant, disease-causing bacteria that threaten human populations directly. The misuse of antibiotics in animal feed by factory farmers may yet be found responsible for the development of plagues of killer germs that could rival the worst plagues in human history. Already, diseasecausing bacteria have been found in both Japan and the United States that are resistant to every known commercially available antibiotic. The lust for inexpensive animal flesh that spurs the use of antibiotics in animal feed may ultimately wreak much greater havoc on human populations-vegetarian and nonvege-



The VivaVine welcomes your letters. Send them to:
The VivaVegie Society
P.O. Box 294
Prince Street Station
New York, NY 10012
Or E-mail them to:
vivavegie@triroc.com

tarian alike—than degenerative diseases of meat eaters like heart disease, stroke and cancer.

This is, in effect, a "second-

SPEAKING OF PLAGUES AND ANTIBIOTIC RESISTANCE...

Bubonic plague returns; resistance easily transfers

It seems that the notorious disease that killed a quarter of the European population in the fourteenth century is still around. Bubonic plague is something that tends to rear its grim, infectious head every once and a while, even now. Such occurrences escape our attention, however, since normally the illness is easily neutralized by modern antibiotics. But times have changed.

According to the September 4 edition of the New England Journal of Medicine, a strain of bubonic plague that struck a 16-year-old Madagascar boy in 1995 is not responding to antibiotics. And, it was found, the resistant genetic material transfers easily to other strains of plague bacteria in the laboratory, indicating that transmissions could just as easily occur in nature.

Antibiotics are surely overprescribed in the doctor's office, but, according to Abigail Salyers, a professor of microbiology at the University of Illinois, "The second [greatest threat of antibiotic resistance] is the use of antibiotics as a feed additive for farm animals." According to Salyers, "Over two hundred thousand people die in hospitals each year from antibiotic-resistant bacterial infections."

Visit our Web site:

http://www.earthbase.org/vivavegie/

Fish Lib: Sympathy for struggling fish on the hook

hand smoke" issue for vegetarians. Vegetarians may be harmed through no fault of their own as a consequence of meat-industry practices. Are there any vegetarian lawyers out there ready to start a class-action lawsuit to force the meat industry to stop using antibiotics in animal feed?

Emanuel Goldman, Ph.D.

Professor of Microbiology and Molecular Genetics New Jersey Medical School Newark, New Jersey

I'm for veg activism

I am extremely frustrated with the vegetarian movement as represented by "vegetarian societies." In general, the vegetarian movement in the United States has a conservative backbone. Consequently, squeezing vegetarian activism out of vegetarian societies is like squeezing blood from a stone.

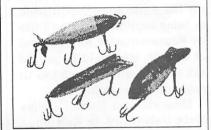
I long for a strong national vegetarian activist organization.

Ferrell Wheeler

Bowie, Maryland

Fishing belongs with cruel sports we have relegated to the past

(The following is a letter to the editor that ran in The Washington Post in response to one of its articles, entitled "Fish Story: They Feel Your Pain," Outlook, September 14.)



I never overcame my discomfort at seeing a fish struggling on a hook. Eventually the day came | when I put my rod and reel out with the trash and breathed a sigh of relief.

Pledge to support

Since then, science has stated what is obvious to all of us who the 1998 edition of have watched them struggle for lifefish feel pain.

"101 Reasons Why I'm a Vegetarian." Tradition may See page 9. rank fishing right up there with apple pie and the American flag, but it doesn't be-

long there. It belongs with those cruel sports we have relegated to the past.

Marin Blessing Seattle, Washington

You should categorize the "101 Reasons"

The statistics are amazing, Pamela! Your research is great, but your "101 Reasons Why I'm a Vegetarian" would be clearer and easier to negotiate if the items were placed in categories, such as health, animal cruelty, environment, politics and money, and natural resources.

Caleb Crawford

Via Internet

Pamela responds: This suggestion has come up at least a dozen times over the seven-year life of "101 Reasons." My response is that I have quite deliberately organized the flyer in this way. By forgoing categories, I force readers to read many reasons they might otherwise not bother to look at. The way I see it, all the reasons come under one heading: vegetarianism.

In addition, because "101 Reasons" is arranged as a list, those among us with short attention spans will not be put off. That's a good thing these days. "101 Reasons" can be read backwards to front, a little at a time or however a person prefers. This, I think, gives people some power and control over the subject at hand, a subject matter that we all

know can be quite daunting at first.

In addition, let's say a person reads 15 reasons. Let's say he or she is completely unfamiliar with the issues of vegetarianism. Let's assume that the reasons this per-

son happens to read seem pretty astonishing-quite a likely scenario. At this moment, there is the added phenomenon of wonder-wonder about the other 86 reasons that still have not been read. Our reader at this point will necessarily feel sufficiently overwhelmed. Just wondering about those unread reasons will weigh heavily on his or her mind. It's just a matter of time before it all begins to unravel.

And it all unraveled from there

Thanks for the "101" list. Mighty inspiring. I actually became a vegetarian after the movie Babe came out. I started thinking about the intelligence of pigs (smarter than dogs, but we wouldn't think to eat dogs), and it all unraveled from there.

Leitha Matz

Minneapolis, Minnesota

My son was instantly converted!

A friend gave me your "101 Reasons Why I'm a Vegetarian." I showed it to my 17 year-old son, who read it and was immediately converted.

Dorothy R. Brown

Bryn Athyn, Pennsylvania

Pfiesteria: Cell from hell strikes Maryland this time

Mad-cow link to brain disease in humans confirmed

If any doubt remained about the link between infected beef and the fatal brain disease that has afflicted young Britons in the past few years, it has now been dispelled. A study published in the October 2 issue of the British journal Nature found that bovine spongiform encephalopathy (BSE), also known as madcow disease, and new-variant Creutzfeldt Jacob disease (nvCJD) are one and the same. Since the mid-'80s, BSE has led to the destruction of more than a million animals; nvCJD has killed at least 14 people and has been diagnosed in seven others. Using animals to get to the bottom of this animal-industrycreated disaster, researchers found that mice injected with

Times, "This nails it. We are about as close as we can get to having proof that people get the disease from contact with bovine products."

Chicken waste fuels toxic organism in Maryland waters

Pfiesteria piscicida, a destructive one-celled organism tied to manure runoff, emerged with a vengeance in Maryland last summer. The organism, which has been blamed for wiping out a billion fish in the rivers and sounds of North Carolina in recent years (see the May/June VivaVine), is normally harmless, but when an excess of nutrients, as from animal wastes, comes its way, it turns into a toxin-releasing, fisheating monster. Whereas North Carolina is plagued by an abundance of factory-farm hog opera-

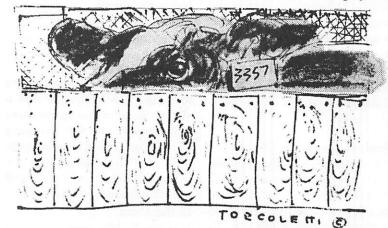
Parris Glendening to shut down portions of the Pocomoke River. the Chicomacomico River and King's Creek in August and September. Glendening also said he would appoint a commission to recommend new regulations for controlling the flow of chicken waste. As The Washington Post noted, although the federal Clean Water Act requires rural homeowners to obtain permits for septic tanks, "there may be no such requirement for the owner of a corporate-run chicken farm that houses thousands of animals and produces as much raw sewage as a small city."

Congress has already approved \$7 million for the Centers for Disease Control to research the organism.

Your tax dollars at work: Researchers explore hog stink

As activists across the country fight to keep industrial pig farms out of their communities, researchers are hard at work pursuing a technological fix for one of the facilities' most nettlesome problems: their mephitic stench. Scientists at the National Center for Agricultural Utilization Research in Peoria, Illinois, are seeking funds to come up with solutions, none of which involves eliminating industrial pig farms. The center, a division of the U.S. Agriculture Department, is being supported in its efforts by Representative Ray LaHood of Illinois, who said he would ask Congress for \$1 million to pay for the research.

Meanwhile, at North Carolina State University, in Raleigh, a team of researchers is developing an electronic nose to measure the intensity of hog efflu-



the brain tissue of infected humans developed the same pattern of brain damage as those injected with the brain tissue of infected cows. The pattern is distinct from that found in victims of traditional Creutzfeldt Jacob disease, which primarily afflicts people over age 65. In the words of a CJD expert quoted in *The New York*

tions, Maryland's Eastern Shore, where the latest outbreak occurred, has one of the nation's largest concentrations of poultry producers.

Fish kills or the appearance of lesions on fish coupled with reports of lesions, memory loss and other ill health effects among people exposed to affected waterways led Governor

Agro Nightmare: Prisoned hens, imperiled workers

vium. According to the Associated Press, the nose "features a pump that sucks the air from a small plastic bag containing a paper filter saturated with an odor." The smell is then "conducted...to electronic sensors. which send information about the properties of the odor to a computer." As part of the project, a Duke University researcher supervises 20 professional smellers (human ones, that is), who are paid to categorize the aromas. The researchers hope to have the prototype of a portable model ready by the end of next year. (See also "The Excrement Files" in the March/ April Viva Vine.)

School for slaughter

Those interested in indulging their blood lust while earning a college degree might want to look into North Carolina State University, an institution whose fine work in the service of odor abatement is described above. The university received approval in August from Raleigh's city planning commission to build a slaughterhouse on campus. The facility, which would have the capacity to dispatch 25 cattle, 50 hogs, 2,000 turkeys or 5.000 chickens twice a week, is to be part of a 25,000-square-foot building that will also include laboratories, a 100-seat multimedia classroom and offices. The state legislature has already approved \$5.5 million to pay for the project. Bizarre as it sounds, in the United States there are already 20 land-grant universities with slaughterhouses, offing more than 44,000 animals each year, according to the Associated Press. Although the proposed North Carolina slaughterhouse has attracted some local opposition, Ellen Bring of the Factory Farming Economic Conversion Project, an organization fighting to block the facility, observed that "odor seems to be the big concern, not the brutality and killing of living beings."

Your tax dollars at work, part 2: Gender-selected pigs

In a development that the St. Louis Post-Dispatch chirped "could lead to more efficient hog production," scientists at the University of Missouri, Columbia, managed to produce litter after litter of all-female or all-male piglets last summer by building on a technique for semen separation developed by the U.S. Department of Agriculture. Scientists at a USDA facility in Maryland did the actual sperm sorting. Although thrilled with the project's success, the professor of animal science who led the Missouri end of the enterprise "cautioned," as the Post-Dispatch put it, that more work is needed before the technology can be applied commercially.

Pork polluter hit with record penalty

In Virginia the Smithfield Foods company, one of the largest pork packers on the East Coast, was fined \$12.6 million in August for a total of 6,982 violations of the Clean Water Act since 1991. The company, whose two pigslaughter plants had been dumping waste into the Pagan River, a tributary of the Chesapeake Bay, poisoning shellfish beds, was also cited for destroying documents to cover up its actions. Although the fine was the largest ever for water pollution, the net effect on the pig killers' bottom line was minimal: The judge found that Smithfield, a multibillion-dollar corporation, had already saved itself \$4.2 million by avoiding or delaying compliance with environmental rules.

Egg giant fined for lifethreatening conditions

Agrigeneral, the Midwest's largest producer of white eggs, faced fines of more than \$1 million last August when federal inspectors uncovered lifethreatening conditions at its Croton, Ohio, plant. During an inspection, the Occupational Safety and Health Administration found unguarded machinery that could lead to amputations, catwalks where falls of 100 feet were possible, dangerous levels of ammonia and dust in the air and electrical hazards. The plant's migrant workers were also subjected to raw sewage as much as an inch deep in the basement of their living quarters, drinking water contaminated with insecticides and bacteria, and infestations of insects and rodents. Predictably, OSHA reserved comment on the "working conditions" of the 10 million chickens crammed into this agro-industrial nightmare.

Cloned bull heralds big profits for biotech companies

In the fevered race to squeeze yet more profit from the tortured bodies of livestock, ABS Global, a Wisconsin company specializing in frozen bull semen, took an early lead last August after cloning a bull calf using a stem cell from a 30-day-continued on page 8

VEGETARIAN NEWS, CONT.

Red-Meat Menace: Cancer, ecological devastation

continued from page 7

old fetus. Stem cells are unspecialized, which makes their genes relatively easy to manipulate, but Michael Bishop, ABS's vice president of research, told The New York Times his company was awaiting the birth of 10 calves that originated from difficult-to-clone adult cells. (Dolly, the lamb who made headlines earlier this year, sprang from such a cell, taken from the udder of a 6-year-old ewe.) "We can make an unlimited number of cells, freeze them for any amount of time, then thaw them and make identical animals possessing a desired trait," Bishop gloated. This would mean, for example, making duplicates of cattle that produce even more beef or milk than the unnatural levels achieved through selective breeding and hormones. Another lucrative application would be cloning cattle genetically engineered to produce milk with pharmaceutical properties. Although the calf, named Gene, was not the first to be "cloned"—that is, produced asexually to be an exact duplicate of another animal—he was the first to be born from a nonembryo-derived cell, as well as the first product of "a commercially viable [cloning] process," according to ABS.

How to squander water, grain, fuel? Eat beef

Any meat eater who claims to be concerned about conservation should consider the staggering figures put together by David Pimentel, a professor of ecology at Cornell University's College of Agriculture and Life Sciences. At a July meeting of the Canadian Society of Animal Science in Montreal, Pimentel reported that

"if all the grain currently fed to livestock in the United States were consumed directly by people. the number of people who could be fed would be nearly 800 million." Pimentel estimated that if that grain were exported, it would boost the U.S. trade balance by \$80 billion a year. In an analysis of U.S. Department of Agriculture statistics, Pimentel found that the ratio of fossil-fuel input to protein output in beefcattle production is 54 to one, compared with 3.3 to one for grains. According to Pimentel, grain-fed beef production consumes 100,000 liters of water for every kilogram of food, in comparison with 2,000 liters for soybeans, 900 for wheat and 500 for potatoes. And livestock animals in the United States consume five times as much grain as is consumed directly by the country's human population.

Experts agree: Red meat causes cancer

In late September, the World Cancer Research Fund issued a report concluding that to reduce the risk of cancer, people should eat more plant-based foods and less red meat. It's not exactly a stunner, but the fact that the report involved the examination of more than 4.000 studies of diet and cancer by an international panel of 15 scientists, who were in turn supported by 100 reviewers, made the event newsworthy. Still, the panel's recommendations were not entirely a cause for veggie celebration, as they revealed the timidity health experts almost invariably show when making unwelcome pronouncements to a carnivorous world. The report said that "if eaten at all" red meat should be limited to three ounces a day

but added, "It is preferable to choose fish, poultry and meat from nondomesticated animals in place of red meat."

North Korea feeds poultry in Japan

A shipment of about 1,000 metric tons of feed corn from North Korea was sent to Japan in mid-July to supply a poultry farm, according to a Dow Jones dispatch. It was around this time that the world first learned from the reclusive Communist nation that some 5 million of its citizens were suffering from malnutrition and starvation.

Aussie environmentalists put marsupials on menu

They're adorable national symbols, but even that may not save Australia's koala bears and kangaroos from human appetites, a pair of reports in the South China Morning Post suggest. Speaking at a conference in Brisbane, the head of Australia's Commission for the Environment asked, "Why can't I sit down to a koala steak?" His point was that Australians should be going native in their cuisine rather than following European cow-eating patterns. In fact, a number of Australian scientists have taken to promoting consumption of Australian animals instead of cattle and sheep. whose hooves, they say, have seriously damaged the country's topsoil. (A plant-based diet is apparently off the radar for these concerned citizens.)

Kangaroo meat became legal in most parts of Australia in the early '90s.

Vegetarian News is written by Alex Press with reference assistance from Alan Rice.

BEEF RECALL: COVER STORY, CONT.

Bovine Victims: 25 million pounds = 50,000 cows

continued from page 1 yanked Hudson beef from 1,650 restaurants, leaving many briefly burgerless. The chain's decision not to buy beef from Hudson anymore led to the sale of the Nebraska plant to IBP, a competing meatpacker and of Hudson itself to Tyson, the country's top chicken processor. Meanwhile, the Clinton administration pushed Congress for the power to order recalls and impose civil fines for violations of meat-safety laws, proposals opposed by the industry.

While highlighting widespread fecal contamination in beef, the Hudson affair focused attention on other ugly aspects of meat |



All-American Restaurant

production, such as the practice of feeding chicken manure to cattle (see page 3). As magazine readers braved headlines like "Can This Meat Kill You?" (Newsweek), TV viewers were treated to footage of cow tissue being extruded, wormlike, from industrial grinders.

A number of commentators and some lawmakers used the

recall to demand beef irradiation, which, they claimed, would render all bacterial contamination-and, presumably, the unsanitary conditions that produce it-moot.

Sadly, amid the cries for greater safety, few questioned the dominance of beef in the American diet, despite all the health risks (saturated fat, cholesterol, animal protein) inherent in even the "safest" cuts, not to mention the steep environmental costs of the meat-based diet. Nor were many tears shed for the 50,000 bovine victims whose suffering provided the material basis for those 25 million pounds.

1998 Edition

Contribute to the next edition of the "mighty convincer"

new printing in 1998. The VivaVegie Society needs \$2,400 in pledges to send it back to I two years. More than ever before, the VivaVegie

press. Only 4,000 copies of the 1996 edition are left.

In exchange for a \$50 pledge, have your name or your compaFor a \$50 pledge, this space will be reserved for you to place your name or your company's name.

"101 Reasons Why I'm a Vegetarian" is due for a | ny's name appear in the flyer. We plan to go to press with 20,000 copies, which will last for about

> Society is calling on you to help. Please make this contribution.

Keep "101 Reasons Why I'm a Vegetarian" alive.

I pledge \$50 to the VivaVegie Society toward the 1998 edition of "101 Reasons Why I'm a Vegetarian"—a press run of 20,000 copies. In return, I am entitled to the box shape above for my name or my company's name. I understand that I am not to pay any money now, but will be contacted at production time.

Date (CALL AHEAD IF AFTER JA				
Address		City	State	Zip
Phone (important!):	AREA CODE () NUMBER		
DETIIDM THIS CODM TO-	THE VIVAVECIE COCIETY DO E	ROY 204 PRINCE STREE	T STATION NEW YORK	NY 10012 (212) 966-2060

REVISITING STORIES PAST

Greenpeace to EPA: Put the brakes on biotech

Salmon wars resume

Canada and the United States continue to quarrel over salmon fishing rights. After British Columbia's premier, Glen Clark, unsuccessfully attempted to evict the U.S. Navy from a torpedo testing range at Nanoose Bay early in September, Alaska made good on a threat to stop all ferry traffic to British Columbia, a move that will cost the Canadian province millions of dollars.

Biotech OK challenged

Greenpeace International is leading a coalition of 31 environmental, farming and scientific organizations petitioning the Environmental Protection Agency to reverse its approval of genetically engineered plants. The coalition charges that the agency went ahead with approval of the plants without producing an environmental-impact statement.

The plants are genetically engineered to resist the effects of a companion pesticide designed to kill nearly everything it is applied to. The plants themselves are also designed to kill insects.

Greenpeace fears that the genetically engineered varieties could harm other plants, as well as animals that eat the targeted insects. The EPA has countered that it wasn't required to prepare an environmental-impact statement and that during the approval process it consulted with the U.S. Department of Agri-

culture and the Food and Drug Administration. Millions of acres of genetically engineered crops have already been planted by U.S. farmers.

Mad cow disrupts exports

Millions of dollars in tallow and billions of dollars in pharmaceuticals from the United States will not be exempted from a European Union ban on products deemed at risk of harboring mad-cow disease, the European Commission announced on September 23. Even though U.S. cattle remain officially free of bovine spongiform encephalopathy, the EU fears that the longtime-though now halted-U.S. practice of feeding meat and bone meal to cattle continues to pose a risk to consumers.

Do you have skills in:

reading

- · Journalism
- Photography or illustration
- Sales & marketing
- · Editing & proof-

Next

Viva-

- · Computer graphics
- Press relations
- · Demo organizing
- · Accounting
- · Clerical work
- Fund-raising

333

Then, please,
volunteer
with the
VivaVegie
Society

You could develop valuable skills at the same time. Call 212-966-2060

So, what is the VivaVegie Society?

he VivaVegie Society takes vegetarian advocacy to the streets. VivaVegie advocates confront Mr. and Ms. Pedestrian to get the facts out about their healthful, ethical and environmentally conscious vegetarian diet.

Advocates assemble where there is plenty of pedestrian traffic. They come equipped with brightly colored T-shirts with vegetarian messages and plenty of fact-filled literature. VivaVegie activists take turns wearing the out-fit shown on Laurie Jordan on page 1. Our mission? To distribute, for donation, the flyer "101 Reasons Why I'm a Vegetarian," written by Pamela Rice and inspired by John Robbins's book Diet for a New America.

The VivaVegie Society has been, and will be in the future, involved with various projects, such as the Project for Economic Justice for Vegetarians, World Vegetarian Day, starting a vegetarian center in New York City and mass mailings of "101 Rea-

sons Why I'm a Vegetarian."

Donations are appreciated



VEG NEWS YOU CAN USE

Obscure Ingredients: Animal, vegetable, mineral

Vegetarian travel guide

Taking a trip? Worrying? If you're a traveling vegetarian, a recently published book by a couple of Queens, New York, travel agents could be for you.

The Vegetarian Traveler (Larson Publications, \$15.95) is an upto-date international guide to lodgings and vacation spots, covering more than 300 select guest houses, bed and breakfasts, motels, spas, resorts, hostels and outdoor adventure tours with thoughtful accommodations for vegetarians, vegans and environmentally sensitive travelers. Illustrated with photos and maps. To order, call (607) 546-9342.

What's a monoglyceride?

Some vegetarians, when confronted with unknown ingredients, cross their fingers and hope for the best. Others who are more careful will want to consult the 28-page "Vegetarian Journal's Guide to Food Ingredients," which covers 200 question-raisers. Although the guide does not provide all the answers, it at least gives you the tools to speak knowledgeably when you call food manufacturers. To order, send \$4 to the Vegetarian Resource Group, P.O. Box 1463, Baltimore, MD 21203, or call (410) 366-8343.

Humane education for food-animal activists

Schools today are, more and more, welcoming educators with backgrounds in humane education. Some even include it as a mandatory part of their curricula. A correspondence certificate program now available through the Center for Compassionate Living comprises five study modules, including one focusing on animal issues (not to the exclusion of food animals). The course is not solely for teachers, and students may follow a set program or design one of their own. Write to the Center for Compassionate Living, P.O. Box 1209, Blue Hill, Maine 04614, or call (207) 374-8808.

Deconstructing dominionism

In Unnatural Order: Why We Are Destroying the Planet and Each Other, Jim Mason, the coauthor of Animal Factories, analyzes the patterns of thought that have put mankind at war with the natural

world and shows that they were formed a lot further in the past than we might think (would you believe, the beginning of agriculture?). This

acclaimed book, originally published in 1993, is now available in paperback from Continuum (\$17.95).

Gary Francione rains on welfarists

In Rain Without Thunder: The Ideology of the Animal Rights Movement, Rutgers law professor Gary L. Francione casts a harsh light on "new welfarists," who

operate on what he sees as the vain hope they can abolish animal exploitation through reformist measures, such as better conditions for farm animals. Francione asks whether this strategy actually reinforces an oppressive status quo in which animals are nothing more than property. (Temple University Press, paperback \$22.95.)

Pumpkin Soup

Just in time for Thanksgiving, a vegan soup from *Vegetarian Times* (October 1996). If you use canned pumpkin, boost the flavor by sautéeing garlic, ginger and a teaspoon of curry with the onion. To subscribe to *VT*, call (800) 829-3340.

1 Tbs. light olive oil

1 tsp. ground cumin

1 tsp. ground coriander

¼ tsp cinnamon

2 cups diced yellow onion

6 cups vegetable stock

2 cups fresh pumpkin purée or 15 oz. can

Salt to taste

14 cup thinly sliced scallion

½ cup toasted croutons

Heat oil in 3½ quart saucepan. Add dry spices, stirring to warm, but do not brown, about one minute.

Add onion, stirring to coat. Sauté over medium heat until onion is soft but not brown, about five minutes. Add pumpkin purée and stock; stir to mix. Bring to boil. Lower heat to simmer. Simmer, covered, until soup is slightly thickened and flavors are melded, about 20 to 25 minutes. Salt to taste.

Pour soup into large bowl. Purée in batches in food processor or blender. Return to pan. Heat before serving. Garnish with scallions and croutons. Makes eight servings.

Food Police:

Watch what you say about meat

hen McDonald's sued two London activists for libel several years ago, the duo faced an uphill battle. To avoid penalties, they had to prove every assertion made in the now famous "What's Wrong With McDonald's?" pamphlet. (See the September/October VivaVine.)

In the United States, in contrast, libel law generally places the burden of proof on the plaintiff. But so-called food-disparagement laws, now on the books in 13 states, shift the burden to the defendant.

The statutes, which date back to the Alar pesticide scare in 1989, make it possible for food producers to seek damages against those who question the safety of their products in the absence of "reasonable and reliable scientific inquiry, facts, or data." Proponents argue the laws are needed to protect producers from malicious accusations. Opponents say the laws are unconstitutional and intended only to chill discussion.

So far, only one suit has been filed. In April 1996, ex-cattleman Howard Lyman suggested on The Oprah Winfrey Show that the practice of feeding cows to cows, as he put it, posed a danger of spreading mad-cow disease in the United States. (The Food and Drug Administration, in apparent agreement, banned the practice on August 4 this year.) The day of the show, cattle markets dropped sharply. A group of Texas cattlemen, claiming losses in the millions from the "Oprah Crash," filed suit under their state's fooddisparagement law against Lyman and Winfrey. At press time, no trial date has been set.

Calcium: Dairy is not the answer

BY ALEX PRESS

n mid-August, a panel convened by the National Academy of Sciences increased the recommended daily intake of calcium from 800 milligrams to a whopping 1,000 for people ages 19 to 50, far more than the 500 to 700 taken in by the average American adult. For the panelists and for the media, this meant only one thing: Eat more dairy. But amid all the free advertising for dairy interests, several basic questions went unasked. First, if cow's milk is an essential part of human nutrition, as we've all been told, how does one account for the three-quarters of the world population who are lactose-intolerant? And second, how does one explain the fact that the nations with the highest dairy consumption—the United States, Finland, Sweden and the United Kingdom-also have the highest rates of osteoporosis?

Calcium, which is critical for maintaining bone density, has become a national obsession. And it's no wonder. More than 25 million Americans, 80 percent of them women, have osteoporosis—weak, brittle bones prone to breaking. Each year in the United States, the disease causes 1.5 million hip fractures and health-care costs of \$13.8 billion. But is dairy the solution?

Almost every news account emphasized that a thousand milligrams of calcium is the equivalent of three and a third 8-ounce cups of milk. Nondairy sources when mentioned at all were mere footnotes. One NAS panelist, a professor of foods and nutrition at Purdue University, griped that, in their effort to avoid fat, Americans were giving short shrift to the dairy case. "That is why one out of four women will have hip fractures

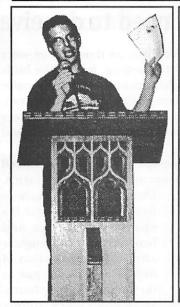
within their lifetime," she told USA Today. In an interview with The New York Times, the same expert elaborated on the panel's recommendations: "We're talking about having cereal with milk for breakfast and yogurt and milk or cheese at lunch and dinner."

Two days after printing a letter from vegan author Erik Marcus pointing out that there arebelieve it or not-plant-based alternatives to dairy, the Times ran a suspicious rebuttal from a Boston dietitian asserting that broccoli has a mere 36 milligrams per cup. This was not only inaccurate—the U.S. Department of Agriculture attaches that figure to a half cup of broccoli that's been boiled-but also oblivious to richer nondairy sources, such as kale, collards, tofu, sea vegetables and almonds. And contrary to the letter's implication, the calcium in leafy greens is readily absorbed. In fact, kale has a higher absorption rate than milk.

Towever, amid all the distortions and omissions, the most disturbing was the indifference to a fundamental nutritional reality: Osteoporosis is a problem of calcium retention, not of calcium intake. Numerous studies have documented that calcium loss results from excessive dietary protein, particularly animal protein, which is endemic to affluent western societies. Thus, the irony: More dairy consumption correlates with more, not less, osteoporosis.

The truth is, Americans, like other human beings have no nutritional need for the mammary secretions of cows or of any other mammal besides their own mothers. That's right, none. The answer to calcium deficiency is not to eat more dairy; it's to eat less animal protein.

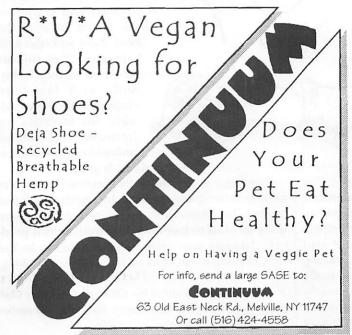
YOU DON'T SAY





On October 8, over 400 animal-rights supporters gathered at a church on Manhattan's Upper West Side to honor movement pioneer and VivaVine consulting editor Henry Spira (right). A documentary on his life was presented by Peter Singer, author of Animal Liberation. Also on hand were Dave Morris (left, holding the now famous "What's Wrong with McDonald's?" pamplet) and Helen Steel, the McLibel Two, who bravely stood their ground against McDonald's in the recently decided libel trial in Great Britain.

But even as the attendants were drawing inspiration from the evening's guests and from one another, news broke of a disheartening development that reinforced how much work we all have ahead of us. McDonald's announced plans to double its restaurants in Latin America to 2,000 within three years. McDonald's also said it had opened a store in Qito, Ecuador, now the 105th country where the bloodstained company does business.



Veorie Numets

The personal is the political! ☆
Her job is to oversee the promotion of
beef for the Texas Department of
Agriculture. But for Diane Smith, who
says she's been a vegetarian for
fourteen years, her diet "has nothing
to do with my work. It's a personal
preference." [U.S. News and World
Report, May 20, 1996]

If I ruled the world in a recent issue of George magazine, Gloria Estefan pondered what she'd do if she were president of the United States. "I would close down slaughterhouses and places where the animals we eat live in cramped, little spaces, and I'd let them roam free on big ranches," she said.

Shrimpers make big mistake *

August 24, 1997, Cape Canaveral: A \$205 million NASA science mission readies for liftoff. All clear. But launch countdown is halted when two shrimp boats anchored in the Atlantic, where the rocket's nine strap-on rocket boosters are to fall, refuse to move. One is chased away, but the other does not respond to radioed demands to clear the area. Cost to NASA: hundreds of thousands of dollars, space experts said.

Assume it's contaminated ☆

According to Safe Tables Our Priority (S.T.O.P.), a nonprofit organization dedicated to the prevention and proper treatment of foodborne illnesses, "Handle all meats and poultry as if they were contaminated. Never use the same utensils, plates and bowls to prepare your foods which you use to serve your food. Remember...when in doubt, throw it out."

S.T.O.P. has successfully targeted the media as well as influenced legislation. [http://www.stop-usa.org]

SWEET ON THE OUTSIDE

"Free-Range": Meaningless term, used to deceive

"Free-range" animals are

transported, handled and

slaughtered in the same

way as factory-farmed

animals. Their lives

are in no way natural.

BY SCOTT LUSTIG

In food stores today, it is common to find animal products labeled "free-range." These items, their producers claim, come from animals raised in natural settings. The labels conjure up images of lush, expansive open-air spaces offering plenty of sunlight and room for exercise. It is implied that people concerned about factory

farming should purchase free-range products as a humane alternative.

In reality, farmers apply the term "free-range" loosely and arbitrarily—you might say all too freely. The federal government has a vague standard, requiring only that free-range animals have access to the outdoors. According to the June '97 issue of *Meat Processing*, a trade magazine, "Legally, the phrase means nothing." On farms that claim free-range, animals are for

ing." On farms that claim to be free-range, animals are found without bedding or vegetation. They're exposed to cold in overcrowded facilities with small exits to the outside. "Places I've visited may have just a gravel yard with no alfalfa or other vegetation," a U.S. Department of Agriculture staffer told Karen Davis, president of United Poultry Concerns, an organization that promotes the compassionate treatment of domestic fowl. "The birds can exercise but cannot range-that is, sustain themselves."

Davis herself investigated the farm of one popular free-range egg company, Happy Hen Organic Fertile Brown Eggs. In its advertisements, the company states that its hens are "free running in a natural setting...nest and lay eggs in individual hole nests of wheat and straw [and are] humanely housed in healthy, open-sided housing, for daily sunning—something Happy Hens really enjoy." What she found is indicative of the conditions on most free-range farms. "Through the netting at the front of the long barn I saw a sea of

chickens' faces looking out, as though they were smashed up against the netting. Inside, the birds were wall-to-wall—6,800 chickens, with one rooster for every hundred hens. They never set foot outside. They were debeaked, and their feathers were in terrible condition—straggly, drab and worn off."

Most of the same abusive practices associated with factory farms occur on free-range farms.

Deprived of the chance to live out their natural life spans, dairy cows and hens are sent to slaughter after their production of milk or eggs drops, just as they are on factory farms. Male chicks are simply trashed, while still alive, and male calves are used for veal. Broiler chickens are fattened beyond their natural weight. Dairy cows are artificially inseminated—kept perpetually pregnant so that they pro-

nated—kept perpetually pregnant so that they produce a continuous supply of milk. Lastly, free-range animals are transported, handled and slaughtered in the same way as factory-farmed animals.

t's important to note that free-range production represents only 2 percent of the poultry and egg industries. By far, most of the meat, dairy and eggs sold today come from animals raised on factory farms. And, with fast-food chains expanding worldwide, the incentive for intensive, high-volume animal-food production

systems is great.

Free-range as it is normally practiced today is in no way natural, and it allows for much abuse and neglect. The only way to give animals real freedom is for all of us to free ourselves from animal products. Liberate your taste buds, and switch to the rich, exciting world of meatless, dairyless cooking.

Scott Lustig is president of the Ethics and Animals Club at Ramapo College of New Jersey. He is also a member of the VivaVegie Society.

VIVA VEGIE SOCIETY NEWS

Tax-Free Status: 501(c)3 fund-drive goal reached

OUTPOURING OF SUPPORT FOR VIVA VEGIE

eartfelt thanks to all the people who sent donations to help defray VivaVegie's legal and accounting costs in our quest for 501(c)3 tax-exempt status. A total of over \$1,000 was collected, which is enough to cover our professional expenses as well as government fees. Official tax-deductible status just barely eludes us, but we are confident that the papers we have filed will be satisfactory to the IRS. We will let our readers know when, exactly, contributions to the VivaVegie Society are tax deductible.

With the nonprofit status we hope to have next year, we predict that all those people who will be paying up their pledges for the 1998 edition of "101 Reasons Why I'm a Vegetarian" will be able to deduct their contributions on their tax forms. It's been a yearlong learning process for the VivaVegie Society in obtaining this tax-status goal. Now that most of the process is over, we are proud to say that we will be able to offer our contributors a little break from the IRS.

Since our last issue, two more people can be added to our list of distinguished contributors. They are:

Mary Kuechler

R & V Navarro

VivaVegie now has a message board on the World Wide Web on the Internet. Go to:

http://www.triroc.com/reasons/
It's a place for discussion about "101 Reasons Why I'm a Vegetarian." The message board will give our "mighty convincer" a new life. We will share our feelings as well as our facts and figures at this cyber location. We at the VivaVegie Society look forward to getting to know you better!



http://www.triroc.com/cyberpeas/yourname/ a super deal:

500 WORDS • ONE PICTURE • ONE YEAR • 40 BUCKS CALL: (212) 966-2060

Proceeds go to the VivaVegie Society

"101 Reasons Why I'm a Vegetarian"

More powerful than ever, the 1996 edition of "101 Reasons" is sure to wake 'em up.

No carnivorous human has a chance against the "101 Reasons."

Yes...please send me _____(copy / copies) of the 1996 edition of

"101 Reasons Why I'm a Vegetarian."

The first copy is: \$1 plus one first-class stamp or SASE

• Add'l copies are 50¢ each, postage paid • 50 copies are \$20 • 100 copies are \$35

Name______

Address______

City _______

State ______Zip _____

Now: BECOME A MEMBER of the VivaVegie Society

For a COST of \$15 PER YEAR receive:

- one copy of "101 Reasons Why I'm a Vegetarian"

- five issues of VivaVegie's newsletter, The VivaVine
- and manharable and
- one membership card

(Yes, I) / (No, I do not) want to become a card-carrying member of the VivaVegie Society. Herewith, also, is a donation to the VivaVegie Society for \$ _____. Total enclosed \$ _____.

Checks payable to the VivaVegle Society • Send order to the VivaVegle Society, P.O. Box 294, Prince St. Station, New York, NY 10012

CALENDAR

Saturday, November 22

- United Poultry Concerns leaflets for turkeys in Darnestown, MD, from 2 to 3 p.m. Thanksgiving vegan potluck afterward at nearby UPC, starting at 4 p.m. Information: (301) 948-2406.
- Turkey-free Thanksgiving dinner with EarthSave Long Island, featuring Jim Mason and Shelton Walden, 6:15 p.m. Information: (516) 421-3791.

Sunday, November 23

- VegOut potluck lunch (fourth Sunday of every month), 1-3:30 p.m. at the Lesbian and Gay Community Services Center, 208 W. 13th Street, NYC. Bring vegan dish to share and \$3 donation. Information: (212) 802-8655.
- Vegetarian cooking class and dinner sponsored by *Veggie Singles News*, 5-8 p.m. at 515 Broadway, 5A, NYC. \$45 plus \$12 materials fee. Information: (718) 437-0190. (Also, December 7.)
- Turkey-free Thanksgiving with EarthSave Hudson Valley, 6 p.m. in Pleasantville, NY. Information: (914) 472-7392.

Friday, November 28

■ Fur-Free Friday demonstration, 10:30 a.m. at Saks Fifth Avenue (between 49th Street and 50th Street), NYC, organized by

Friends of Animals. Information: (212) 247-8120.

■ Vegetarian Vision vegan Thanksgiving feast, cosponsored by Big Apple Vegetarians and Sierra Club NYC's Vegetarian Outings Committee. Entertainment, speeches by Howard Lyman and Roberta Kalechofsky, 6:30-10:30 p.m. at Shaan Restaurant, 57 W. 48th Street (off Fifth Avenue), NYC. \$35 single/\$65 couple. Tickets: (212) 971-0653.

Friday, November 28-Sunday, November 30

■ First International Summit on Vegetarianism, sponsored by the International Vegetarian Association, with Doctors Dean Ornish, John McDougall and Michael Klaper. Las Vegas, Nevada. Information: (719) 475-9610.

Saturday, December 13

Big Apple Vegetarians' annual holiday party, featuring a catered vegan dinner and singalong. Information and song suggestions: (718) 855-6030.





THE VIVAVEGIE SOCIETY
P.O. Box 294
Prince Street Station
New York, NY 10012-0005