

Avian Influenza (Bird Flu) – What You Need to Know

Poultry producers would like people to think that the highly pathogenic avian influenza viruses currently infecting migratory waterfowl and domestic fowl are the result of birds running wild in the fresh air and open skies. The way to control these viruses, they claim, is to lock up every domestic chicken, turkey, duck, goose, and quail, and when that doesn't work, exterminate the birds wholesale and start over, ad infinitum. Between government subsidies, reimbursements, and protective insurance policies, the poultry and egg industries can exterminate thousands, even millions, of birds without losing a cent (NTF; Todd; Bird flu in Asia).

Poultry factory farms and transport methods – including an international trade in day-old chicks (McNeil), added to traditional farming practices, live bird markets,¹ cockfighting, and the wild-caught bird trade, have created the conditions responsible for the spread and mutations of highly pathogenic avian influenza viruses capable of infecting birds and humans alike (Greger, 151-159; 226-228). By January 2007, 163 people worldwide had reportedly died of the H5N1 virus, which first appeared in Hong Kong in 1997. Meanwhile, hundreds of millions of wild and domestic birds have either died of the disease or been intentionally exterminated since 2003 (Bird flu in Asia).

Don't Blame Waterfowl

In our efforts to streamline farming practices to produce more meat for more people, we have inadvertently created conditions by which a harmless parasite of wild ducks can be converted into a lethal killer of humans.
– Yolken & Torrey, influenza experts quoted in Greger, 166.



Photo by: David Harp

Modern chicken house in the United States.

Avian influenza viruses have lived harmlessly in the intestines of waterfowl for millennia. Shed in sparsely populated outdoor settings in the droppings of birds whose immune systems have evolved to accommodate them, these viruses are kept in check. Flu viruses are rapidly killed by sunlight and tend to dehydrate to death in the breeze (Greger, 168, 186, 194). But industrialized poultry production practices have vastly increased the potential of these viruses to mutate into highly pathogenic strains, like the H5N2 virus that struck commercial chicken operations

in Pennsylvania in 1983, and the H5NI and H7N3 viruses that struck Asia and Canada respectively in 2004. According to a UN News Centre release published in 2005, “We are wasting valuable time pointing fingers at wild birds.”

A Report by United Poultry Concerns 2007



Effects of Western-style Poultry Production on Traditional Bad Practices in Asia

For centuries, Guangdong province has had the largest concentration of poultry, pigs, and people in the world. The “Asian flu” of 1957 and the “Hong Kong flu” of 1968 are just the latest two examples of epidemics arising in the region. . . . Guangdong surrounds and feeds Hong Kong [which is] ‘one big bird market.’” – Greger, 146.

Every day 100,000 chickens are brought into densely populated Hong Kong from Guangdong to be sold alive in more than a thousand “wet” markets. In these live animal markets,

chickens, ducks, geese and quails are crammed into small plastic cages. The cage-stacked birds defecate on one another amid feathers, feces, blood, intestines, and live slaughter. Unsold birds may be sent back to Guangdong, then returned to the markets, thus continuously cycling viruses from farm to

market and back again. Influenza experts state that “Highly concentrated poultry and pig farming, in conjunction with traditional live animal or ‘wet’ markets, provide optimal conditions for increased mutation, reassortment and recombination of influenza viruses” (Webster & Hulse quoted in Greger, 147).

According to Professor Emeritus Kennedy Shortridge, a molecular biologist at the University of Hong Kong who is credited with having first discovered the deadly H5N1 virus in Asia, “It is the siting of large-scale chicken production units, particularly in southern China where avian influenza viruses abound, that is the

crux of the problem. There, domestic ducks have been raised on rivers, waterways, and, more recently, with the flooded rice crops cultivated each year. The importation of industrial poultry farming into that same region introduced millions of chickens – highly stressed due to intensive production practices and unsanitary conditions – into this avian influenza virus milieu. The result? An influenza accident waiting to happen” (Greger, xii).

Planetary Poisons and Bird Flu

Dr. Sherri Tenpenny, an osteopathic medical doctor and the author of *FOWL! Bird Flu: It’s Not What You Think*, contends that toxic residues of dioxin and thousands of

other poisonous chemicals added through nuclear radiation and nuclear waste are contributing to illness in migratory birds, domestic fowl, and humans. Instead of blaming wild birds for bird flu, she writes: “More likely, the horrific living conditions of industrially raised chickens and the exposure



Live bird market in Hong Kong

of wild birds to substantial environmental toxicities have suppressed the immune system of both sets of birds. During long migrations, the birds undergo stressful conditions that utilize energy reserves. Burning fat stores will mobilize the chemicals that are stored in fat, creating acute poisoning of the birds” (195).

Environmental poisons, combined with the H5N1 virus, have led, in her view, to “deadly inflammation in the tissues in both types of fowl.” H5N1, rather than being a *cause* of virulent bird flu, may more likely be a *contributor* to the sickness and death of birds overloaded with toxicities.

Poultry House Poisons and Bird Flu

Health experts urge people to wash their hands almost compulsively, and to sneeze into their elbows instead of their hands, to prevent flu viruses from spreading. Preschoolers have been called “hotbeds of infection” for failing to cover their sneezes. Yet lapses in human hygiene pale compared to the way billions of chickens, whose respiratory tract is similar to that of humans, are being raised in North America and around the world.

Michael Greger, MD describes the cesspool-like environments in which chickens are raised in *Bird Flu: A Virus of Our Own Hatching*: “Tens of thousands of

chickens [are] crammed into a filthy, football field-sized shed, left to lie beak-to-beak in their own waste. The air is choked with moist fecal dust and ammonia, which irritates the birds’ respiratory passages, further increasing susceptibility in chickens already compromised by the stress of confinement. Since

the birds are standing in their own excrement, the virus need not even develop true airborne transmission via nasal or respiratory secretions. Rather, the virus has an opportunity to be excreted in the feces and then inhaled or swallowed by the thousands of other birds confined in the shed, allowing the virus to rapidly and repeatedly circulate” (169).

“Nine Parts Manure”

The fact that feeds or fertilisers based on chicken droppings are suspected to serve as a medium of bird flu spread or infection makes the extent of the basic problem crystal-clear.
– Pia Mautes, *Meat Processing*, Global edition.



Modern chicken house in the United States

In addition to the rapid growth of Western-style poultry factory farming in Asia and around the world, traditional farming practices in Asia include feeding poultry droppings directly to pigs and fish. According to the UN Food and Agriculture Organization (FAO), chicken feces are “commonly used as food and fertiliser in integrated fish farms in China” (GRAIN, 6). In *Bird Flu: A Virus of Our Own Hatching*, Michael Greger describes a traditional Asian fish-farming practice in which battery-caged chickens are placed “directly over feeding troughs in pig pens which in turn are positioned above fish ponds. The pigs eat the bird droppings and then defecate into the ponds” (138-139).

This method of feeding excrement to farmed animals mirrors the way farmed animals around the world really are fed, and how much of the world’s plant agriculture is fertilized. Animal-based fertilizer and wastewater runoff from animal farming operations explain why crops such as cantaloupe and spinach can

infect people with intestinal bacteria like *Salmonella* and *E. coli* and why fresh vegetables may contain substantial amounts of antibiotics with potential health risks to consumers including enhanced antibiotic resistance (Kumara).

Farmed animal feed is a dumping ground for farmed animal waste (Firman). Farmed animals are fed each others’ infected body parts and manure. Egg-laying hens are fed “spent hen meal.” A 2006 report on the poultry industry’s leading role in promoting virulent bird flu, by the agribusiness watchdog group GRAIN, notes that a standard ingredient in industrial chicken feed and most



In Indonesia, chickens are burned alive to destroy avian influenza “spirits.”

industrial animal feed is poultry litter, “a euphemism for whatever is found on the floor of the factory farms: fecal matter, feathers, bedding, etc.” (GRAIN, 13).

Used poultry litter, which starts out as wood shavings on the floor of commercial poultry houses, has also been found to be “rich in genes called integrons that promote the spread and persistence of clusters of varied antibiotic-resistant genes” (Crowe). Subsequently fed to cattle and other farmed animals and otherwise dumped into the environment, used poultry litter is a filthy mess comprising “nine parts manure” (Morse; UPC [a]).

Mass Extermination – “Depopulation” – of Birds to Fight Avian Flu

While international bodies call for the massacre of all birds exposed to highly pathogenic influenza viruses, there are no international regulations governing how the birds are to be killed. – Dr. Sherri Tenpenny, 146.

As a result of bird flu, hundreds of millions of chickens, turkeys, ducks and other birds have been and continue to be gassed to death, kicked to death, clubbed to death, electrocuted, burned alive, buried alive in plastic bags, sliced to death in woodchippers, and buried under blankets of firefighting foam (Tenpenny, 145-148; Hawthorne; UPC [b]). Foam extermination, which was approved by the U.S. Department of Agriculture in 2006, has been described by poultry welfare scientist

Dr. Ian Duncan as “horribly inhumane” and by poultry slaughter expert Dr. Mohan Raj as tantamount to being “buried alive.”

Between 2003 and 2006, more than 200 million domestic chickens, ducks and geese were brutally exterminated in Asia, Europe, Africa and the Middle East to control the virus (Serjeant). Villagers in Indonesia set fire to thousands of live chickens to get rid of the “evil spirits” on which they blame the flu (AP).

In the U.S., Canada, Britain and other western countries, poultry crews routinely massacre (“cull”) tens of thousands of birds at a time to manage the many types of viruses swarming in the poultry houses and lodged in every cranny along with bacteria, parasites and molds. For example, in 2002, the Commonwealth of Virginia destroyed 4.7 million turkeys and chickens on 197 farms to combat a strain of avian influenza virus (NTF).



These chickens were gassed to death in avian influenza killings in Canada.

In 2003, the U.S. Department of Agriculture destroyed more than 3.5 million chickens in California to halt the spread of Exotic Newcastle Disease (caused by a virus similar to the avian flu viruses). As part of the destruction, workers in San Diego County dumped thousands of live egg-laying hens into woodchippers. In addition to fully compensating poultry and egg producers for each bird destroyed, the U.S. Department of Agriculture reimbursed cockfighters up to \$1,850 per bird in taxpayer dollars, despite the fact that cockfighting is illegal in California (Carlson; Chong; Shridler).

In 2004, the Canadian government exterminated 19 million birds to curb an avian influenza outbreak in British Columbia. Farmers shot birds and left them wounded, beat them to death with sticks, electrocuted them and gassed them. Thousands of ducks were repeatedly gassed with carbon dioxide (CO₂) before they would die (VHS).

In early 2007, an outbreak of the H5N1 virus on a large turkey factory farm in the U.K. resulted in the destruction of 159,000 turkeys following the death of 2,600 birds from the disease. This outbreak “represents the largest incident of avian influenza in a domestic flock in central Europe and a resurgence of the disease” since August, 2006 (ElAmin [a]).

Unlike in places like Indonesia and Vietnam, however, the news media don't show the taxpayer-funded massacres taking place on the home front. An industry advisory warns in *Slaughter of Poultry for Disease Control Purposes*, “Where possible, slaughter of poultry should not occur in public view, so as not to unduly distress onlookers” (Galvin).

Poultry Products – “Dripping With Disease”

The fear is that, should the virus mutate to a human form, a major outbreak of disease similar to the 1918 “Spanish Flu” [related to avian influenza and responsible for killing around 50 million people worldwide] will erupt. – Clare Druce, 2.

Poultry is the most common cause of food poisoning in the home. – Michael Greger, 47.

The big bucks are in sickness. You can make money getting people sick by selling them bad food and make more money selling them remedies for what you did to them.”
– Nicholas Von Hoffman

In *Bird Flu: A Virus of Our Own Hatching*, Michael Greger, MD writes that the “domestication and captivity of birds have created biohazards like *Salmonella* [and] *Campylobacter*. Most seriously, it brought us influenza” (341). According to the U.S. Department of Agriculture,

the major foodborne pathogens that make people sick and can even kill them – viruses, bacteria, parasites, and fungi – are found mainly in “meat, poultry, seafood, dairy products, and eggs” (Buzby & Roberts).

Foodborne bacteria, such as *Salmonella*, *Campylobacter*, *Shigella*, *Yersinia*, and *Listeria* in poultry products, can migrate from people's intestines to other body parts – blood, bones, nerves, organs, and joints – to cause seemingly unrelated diseases that may emerge only later in life, such as arthritis (Stanley; Buzby & Roberts). *Campylobacteriosis*, a disease that comes from handling and eating contaminated chickens and turkeys, and is the most widespread foodborne illness in the United States, can cause a paralytic disease with fatal nerve damage known as Guillain-Barre syndrome. According to *The New York Times*, of the 5,000 or so cases of Guillain-Barre in the U.S. each year, 20 to 40 percent follow a *Campylobacter* infection from eating poultry products (Burros). *Campylobacteriosis* – which causes severe abdominal cramps, nausea and diarrhea – has “trebled in the past 15 years” in New Zealand, where retail chicken products and packaging have been found “literally dripping with campylobacter” (Watt).

Poultry meat and eggs can cause *Salmonellosis* in people. *Salmonellosis*, like *Campylobacteriosis*, is an infection of the intestinal tract causing nausea, vomiting, abdominal cramps, diarrhea, fever, chills, weakness and exhaustion. For years, the U.S. Food and Drug Administration (FDA) has acknowledged “the number of hens with reproductive-tract infections that can cause egg contamination” (Zamiska). Researchers in the European Union (EU) call *Salmonellosis* and *Campylobacteriosis* “by far the most frequently reported food borne diseases in the EU” (Study finds Salmonella).

In 2007, *Consumer Reports* reported that tests on 525 chickens purchased from U.S. supermarkets and specialty stores in 23 states found 83 percent of chickens contaminated with *Campylobacter* and *Salmonella* bacteria – a substantial increase from their 2003 study. In addition, 84 percent of the *Salmonella* and 67 percent of the *Campylobacter* bacteria showed resistance to antibiotics. A study in Germany found one in six



broiler chicken farms in the country to be infected with *Salmonella* bacteria. Germany's Federal Institute for Risk Assessment (BfR) calls poultry "the most common source of food borne infections in the EU" (ElAmin [b]).

Dampness, Darkness, Dirt, Distress = Immune Dysfunction & Disease



Egg-laying hens in battery cages in Pennsylvania

Like all contagious intestinal and respiratory infections, avian influenza viruses are density-dependent pathogens with a penchant for darkness, dampness, dirt and weakened immune systems – the perfect conditions in which to mutate and proliferate in birds and humans alike. The poultry and eggs one buys at the store came from birds who lived, day in, day out, in excrement, including the excretory ammonia fumes rising from the decomposing droppings in the chicken and turkey houses. These poisonous gases penetrate egg shells (Carlile, 101). They enter the birds' airways and immune systems, inviting *Salmonella*, *Campylobacter*, and avian influenza viruses to colonize, mutate, and spread. The droppings themselves contain disease organisms, antibiotic residues, cysts, larvae, and metals such as copper, zinc, and arsenic (UPC [c;d]).

Changing Our Diet

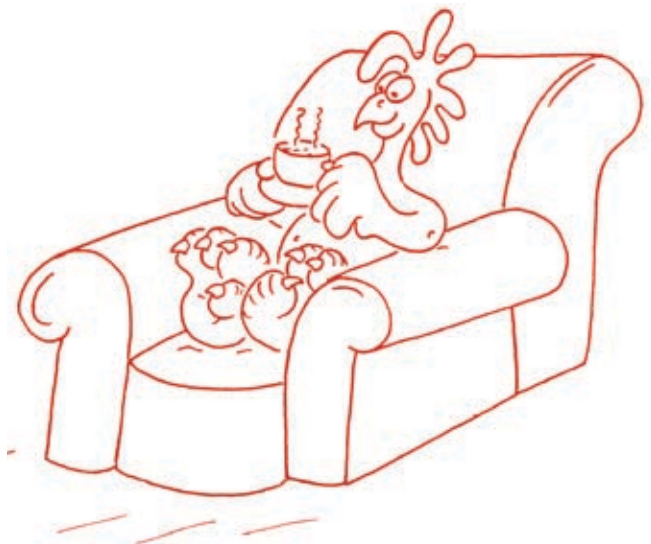
As long as there is poultry, there will be pandemics.*
– Michael Greger, MD, *Bird Flu: A Virus of Our Own Hatching*, 346.

Whether an avian influenza pandemic is imminent,

consumers and handlers of poultry and eggs will continue to get sick, and even die, from contact with these products. Millions of taxpayer dollars will continue to be poured into the poultry and egg industries to control the diseases of production – for example, the U.S. Department of Agriculture provided \$100 million to exterminate birds and compensate owners during the Exotic Newcastle Disease outbreak in California in 2003 (Olejnik).

Wild birds face endless brutal exterminations that could drive some species to extinction. Billions of birds raised for food will continue to live, as they do now, in disease-filled darkness and squalor in order to satisfy the demand of billions of people for their flesh and eggs.

Without a major shift in people's eating habits, factory farming will continue to expand around the earth. Current trends indicate that the global production of meat and dairy will double by 2050 – this at a time when experts are calling farmed animal production "one of the top two or three most significant contributors to the most serious environmental problems, at every scale from local to global" (Steinfeld). By contrast, a wholesome vegetarian diet would eliminate this core contributor to disease, suffering, and environmental destruction. Choosing delicious and nutritious all-vegetarian, vegan foods in today's world has never been easier or more sensible. It is the kindest and most reasonable thing that people – each person – can do to prevent bird flu.



*The word "poultry" refers to birds raised for food. Poultry – domestic chickens, turkeys, ducks, etc. – are birds who evolved in the wild and are (apart from their human-created afflictions) capable of reviving a self-sustaining way of life – going feral. Due to density and its attendant filth, stress and other inimical factors, farmed animals are much more prone to diseases than are their wild and feral counterparts. Indeed, animals in nature would never survive if they carried the complex load of diseases and weakened immune systems that characterize modern farmed animals and vastly enrich the pharmaceutical industry.

Resources

Vegetarian cookbooks, recipes and meal plans are available from bookstores, organizations and the Internet. Here are some recommendations.

Cookbooks

Replacing Eggs – 16 delicious recipes. United Poultry Concerns. \$3.50. 757-678-7875. www.upc-online.org.

Instead of Chicken, Instead of Turkey: A Poultryless "Poultry" Potpourri – homestyle, ethnic & exotic dishes, delicious & easy to prepare. Book Publishing Company. \$14.95. 757-678-7875. www.upc-online.org.

The Vegetarian Meat & Potatoes Cookbook by Robin Robertson. Harvard Common Press. 275 hearty, satisfying recipes. <http://robinrobertson.com/>.

Vegan Planet by Robin Robertson. Harvard Common Press. 400 recipes for every season and for every occasion. http://robinrobertson.com/vegan_planet1.htm.

Simply Vegan: Quick Vegetarian Meals – 160 quick vegetarian recipes including meal plans and guide to Vegan Shopping by Mail. The Vegetarian Resource Group. 410-366-VEGE (8343). www.vrg.org.

Guide to Vegetarian Eating. The Humane Society of the United States. 202-452-1100. www.hsus.org Delicious recipes and menu suggestions. Free.

Magazine

VegNews – named by the *Chicago Tribune* one of the top 50 magazines. Marvelous recipes, glossy color photos, tons of tips. 415-665-NEWS (6397). www.Vegnews.com.

Internet – recipes and information

www.tryveg.com

www.vrg.org

www.vegkitchen.com

www.goveg.com

www.pcrm.org/health/recipes

<http://robinrobertson.com/>

www.meatout.org/recipes.htm

www.mercyforanimals.org/vegan_starter_kit.asp

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Note

¹ **Live bird markets** are linked to frequent avian influenza outbreaks in the U.S. (In Asia, these disease-ridden shops which slaughter birds on site are called "wet" markets.) Each year, New York and New Jersey markets alone sell more than 80 million chickens and other birds brought in from places no one keeps track of. Many of these birds are visibly sick, as can be seen in *Inside a Live Poultry Market*, a DVD/VHS tape of a New York City bird market produced by United Poultry Concerns. Although live markets are considered "time bombs" with respect to bird flu, the U.S. Department of Agriculture and its state agency counterparts refuse to shut them down and pay mere lip service to regulating them (Henderson; UPC [b; e]).



Live bird market in Los Angeles

