Why go global?
Reducing our intake of animal products across the world can have positive global impacts: improved health, more stable ecosystems and climate, and safer food. The simple, easy-to-execute message of Meatless Mondays can foster collaboration—and create change—among diverse groups, ranging from nonprofit organizations, local institutions, and influential figures such as chefs, celebrities, and politicians. Even a small change—like cutting meat from your diet once a week—can make a difference!

What is Meatless Monday?
The goal of the Meatless Monday Campaign is to encourage people to refrain from eating meat one day a week. Meatless Monday seeks to reduce the prevalence of preventable illnesses and the environmental impacts associated with meat production and excessive meat consumption. Meatless Monday was originally promoted by the U.S. government during both World Wars by urging families to reduce consumption of key staples. It was reintroduced as a public health awareness campaign in 2003 by former ad man turned health advocate Sid Lerner, in association with the Johns Hopkins Bloomberg School and the Center for a Livable Future. Since 2003, Meatless Monday has grown into a global movement powered by a network of participating individuals, schools, hospitals, worksites and restaurants around the world.
Resistant bacteria on animal products

In the U.S., meat from the grocery store has been shown through university research and government surveillance programs to carry antibiotic-resistant bacteria. When animal products carry resistant bacteria, people can be exposed when they mishandle or undercook meats or when they do not properly sanitize food preparation surfaces used for preparation of raw animal products. According to the United States Centers for Disease Control and Prevention (CDC), one-third of the twelve resistant pathogens categorized as a “serious” threat to public health are found in food, and 22 percent of the antibiotic-resistant infections in the U.S. every year are linked to foodborne pathogens.\(^{i}\)

Transmission of pathogens into surrounding communities

Research has shown that antibiotic-resistant bacteria and other harmful pollution can be spread from animal production sites, affecting workers, fence-line neighbors, and residents of rural communities that are home to industrial food animal production. Industrial food animal production provides the ideal conditions for animal-to-human spread of an array of pathogens, including influenza, Q-fever, methicillin-resistant Staphylococcus aureus (MRSA), and E.coli, all of which have important consequences for public health. At greatest risk for exposure are animal production site workers, their families and those living close by who may come into contact with contaminated animals, soil, water and manure and other animal waste products.\(^{ii,iii,iv}\)

Beyond infectious disease concerns, these operations have been shown to elicit health concerns related to respiratory illnesses, stress and other sicknesses among nearby residents of industrial food animal production operations. There is also evidence of reports of poorer quality of life for those individuals.\(^v\) Biological contaminants that can make people sick, such as endotoxins and cow allergens emitted from industrial farms have been found in outdoor and indoor dust samples of homes as far as three miles away from industrial food animal

Pathways for Transmission of Antibiotic Resistant Bacteria from Food Animal Production to Humans

![Pathways diagram]

- Food Animal Producers and Processers
- Contaminated Food Animal Products
- Environmental Releases and Waste Management
- Non-domesticated Animals
- Humans
production facilities. Additionally, there have been health concerns with contaminated drinking water near industrial food animal production (IFAP) sites due to large amounts of manure being spread in small areas that may leach into the ground water and be transported by runoff into surface waters. Communities living near or downstream from IFAP operations may be exposed to a range of water-borne contaminants from the manure, including nitrates, bacterial and viral pathogens, veterinary pharmaceuticals, heavy metals, and hormones. People may be exposed from drinking contaminated ground water and from contact with contaminated surface waters.

**Health consequences and societal burden of infections with resistant bacteria**

Antibiotic-resistant infections are more expensive and challenging to treat. They are more likely to result in longer hospital stays and increased likelihood of various illnesses and death compared to infections that are susceptible or respond to antibiotics. It is estimated that a large percent of the global use of antimicrobial drugs is in the animal sector. In the U.S., for example, nearly 70 percent of all medically-important antimicrobials sold in 2012 were for animal use. This may suggest that food animal antibiotic use is responsible for a significant fraction of the overall burden of drug-resistant infections, which have been predicted to reach an estimated 10 million deaths/year and a cumulative cost of $100 trillion by 2050.
References


iii. Understanding and Managing Zoonotic Risk in the New Livestock Industries; Environmental Health Perspectives 121:873—877 (2013). http://dx.doi.org/10.1289/ehp.1206001


vi. Williams, D., Mc Cormack M., et al., Cow allergen (Bos d2) and endotoxin concentrations are higher in the settled dust of homes proximate to industrial-scale dairy operations, Journal of Exposure Science and Environmental Epidemiology (2016) 26, 42–47; doi:10.1038/jes.2014.57; published online 20 August 2014
