



DISCUSSION CASES

Nuclear Waste and Future People

Nuclear waste from both electric power plants and military applications is among the most toxic substances on earth. Some of the waste from power plants is designated as "low-level" waste because the radiation emitted occurs at levels not particularly harmful to humans. High-level waste emits radiation that can have immediate and deadly consequences. Some of the most toxic radioactive waste, such as plutonium and uranium-235, will remain highly radioactive for hundreds of thousands of years. Plutonium remains highly toxic for 250,000 years; uranium-235, a by-product of plutonium decay, remains toxic for 710,000 years.

Debates concerning the storage of nuclear waste focus on our ability to guarantee safety. Although some storage systems might be secure into the indefinite future, this is seldom thought to be more than a few hundred years. Does it make sense to talk about responsibilities to people living 100,000 years in the future? What might those responsibilities be? What can we know about the people who might live 100,000 years in the future? On Feinberg's analysis, what rights might they have against us and what duties do we have to them?

Animal Research—LD50

Various government agencies, including the Environmental Protection Agency and the Food and Drug Administration, have used animal tests to determine the toxicity of various substances. One of the most infamous such tests was the LD50—"lethal dose 50 percent."

The LD50 test administers the substance being tested in increasing dosages to determine the level of exposure at which 50 percent of the animals die. This test, therefore, provides a common standard to determine the relative risks of various substances. With highly toxic substances, 50 percent die rather quickly and the rest are significantly poi-

soned. With less toxic substances, enormous quantities must be force fed and injected before 50 percent die. In all cases, animals that don't die still suffer, and because the scientific validity of these tests require controlled experiments, suffering animals cannot be euthanized.

What do you think of such tests? Do your views on animal testing vary depending on the animal being tested? Would your views change depending on the substance being tested or the purpose of the substance? What ethical restrictions are placed on research that uses human subjects? Would the same restrictions work for animal subjects? Why or why not? Would it make a difference in your ethical evaluation if research animals could be anesthetized?

Factory Farms

Modern factory farming is far from the image many of us have of bucolic farm life. Food animals such as chickens, calves, and pigs can be raised in conditions that appear brutal and cruel. Hens are often confined into tightly packed coops with wings clipped to prevent flapping and beaks cut to prevent pecking. Veal calves are confined in tight pens to prevent muscle growth and systematically malnourished to keep their flesh pink (due to iron deficiency). Many animals in such conditions are fed mixtures of growth hormones, vitamins, and antibiotics to accelerate growth and promote, relatively speaking, health. What ethical issues are involved in such practices?

Would Singer and Regan agree in their ethical evaluation of factory farming? Could animal farming ever be justified according to either Singer or Regan? What policy should be followed if we are convinced by Singer and Regan? Should all the animals presently living on farms be freed? Do we have an obligation to keep and feed such animals? Could we eat them, ethically, if they die a natural death?

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