

From the editor

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The current issue has four articles and three book reviews. The first article, “Biofuels: efficiency, ethics and limits to human appropriation of ecosystem services,” is by Tiziano Gomiero, Maurizio G. Paoletti, and David Pimentel. In it, the authors question the claim that biofuels are a promising and cheap source of sustainable energy and argue that “some important ethical and environmental issues have also to be addressed: (a) the conflict between biofuels production and global food security, particularly in developing countries, and (b) the limits of the Human Appropriation of ecosystem services and Net Primary Productivity.” They issue a number of warnings about the large scale conversion of “crops, grasslands, natural and semi-natural ecosystem (such as the conversion of grasslands to cellulosic ethanol production, or plantation of sugar cane and palm oil)” because of its negative social and economic consequences, including food security in developing nations. They conclude with the claim that “biofuels will not represent an energetic panacea and their role in the overall energy consumption will remain marginal in our present highly energivorous society.”

The second article is by Michiel Korthals. In “Uncertainties of Nutrigenomics and their Ethical Meaning,” Korthals argues that although knowledge of the human genome has great potential for human health it also has “uncertain, incoherent, and ambivalent results” that are unlikely to disappear. What is problematic about some of these uncertainties for end-users of nutrigenomics is that they will have to cope with them without being able to perceive them as risks and to subject them to risk-analysis. Korthals goes on to list five types of such uncertainties and the problems they are likely to cause for individuals relying on the science to make healthy choices. Unfortunately, Korthals argues, current ethics and theories of responsibility do not account for continuing uncertainty, so he offers us some “provisional thoughts that assume that the dynamic of science to produce uncertainties and

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dilemmas is endemic,” and then he stresses “the need for consumers to institutionalize value searching, exploring, and deliberating devices in the health and food sector to find out the most important uncertainties and correspondingly socially desirable research priorities.”

The third and fourth articles are complementary. In “Meat and Morality: Alternatives to Factory Farming,” Evelyn Pluhar lists the increasingly urgent dangers to “human health, the environment, and nonhuman animal welfare” that scientists have revealed. To start with, she cites the 2008 Pew Commission on Industrial Farm Animal Production, which completed a 2-year investigation of factory-farming practices in the United States. Among the negative effects on humans are the strains to workers caused by witnessing these practices, and the risks of infections they and the wider population incur from the risks caused by pollution and the use of anti-biotics. Effects on the environment include, among others, the greenhouse gas emissions. The effect on animals raised under factory conditions are well known, and some states in the US have passed legislation banning some of these practices. In the fourth article (“Limitations on the Confinement of Food Animals in the United States”) Terence Centner describes some of the efforts adopted to ban these practices in several states in the US.

Pluhar goes on to explore some of the alternatives to factory farming from a variety of ethical perspectives in the light of current U.S. and European initiatives in the public and private sectors. These alternatives include vegetarianism, humane food animal farming, and in vitro meat production and she concludes that “vegetarianism and potentially in vitro meat production are the best-justified options.”

Centner, after describing the efforts in the US to limit animal confinement, concludes by arguing that these efforts “suggest a movement to provide better treatment for farm animal” that provide “challenges for animal production industries in remaining competitive while meeting social expectations on the ethical treatment of food animals. While the actions are only a small step in addressing welfare issues, they may be the beginning of a significant movement to do more to address human and animal welfare issues.”