

Food Choices, Morality, and the Role of Environmental Ethics

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In the present article we analyze the ethical dimensions of the issue of human nutrition. Three axes which relate our human diet and food to the moral philosophy, namely the killing of living organisms, overpopulation, and genetically modified products respectively, will be analyzed. Finally, we will refer to the philosophy of Deep Ecology and the possible answers it gives to the moral dilemmas we face.

Keywords: human nutrition, moral philosophy, food, environmental ethics

Introduction

The modern era is characterized by rapid development of science and technology. Both the mechanization of agriculture and the great development of the food industry sector have led to the abundant production of a variety of food products in our time. As it is well known, there is a connection between human health and human nutrition. A factor which plays an important role in the deterioration of our health is the overconsumption of food and more specifically the overconsumption of food that takes place in western developed societies. Moreover, a significant factor that affects the quality of people's nutritional habits in modern western societies is the general way of life: due to long hours of work and many hours away from home, people resort to snacks (fast food) which results in incomplete human nutrition.

Another factor that affects modern human beings' nutrition in a negative way, in addition to overeating and snacks which have been mentioned in the previous paragraph, is the use of a variety of chemicals used to enhance properties to them (e.g. smell, color, taste) and also contribute to their maintenance. Of course, relevant legislation and relevant lists have been created by international organizations regarding approved food additives, as well as their maximum acceptable levels. It is worth mentioning the fact that components such as nitrite and nitrate E_{249} - E_{252} , which are used as preservatives in cold cuts, during the cooking of these products form nitrosamines that have a carcinogenic effect (Li, Ricker, Tsai, Hsieh, Osborn, Sun, Marder, Elmore, Schmitz, & Sandy, 2021). Another example that shows the direct link between food/human nutrition and the quality of the natural environment is the presence of pesticide residues in them. A more typical case is that of the insecticide DDT which has been banned in most developed countries since the 1970s due to its toxicity (Curtis & Lines, 2000).

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FOOD CHOICES, MORALITY AND THE ROLE OF ENVIRONMENTAL ETHICS

As it is evident from the data presented above, our daily food choices are strongly related to human health since it is also clear that the pollution of the natural environment and the existence of various chemical compounds in it cause serious problems regarding our nutrition. But beyond the pure scientific data that we presented earlier we strongly believe that our food choices have also had a profound moral element. Easily comes to our mind the question "why is morality related to food?". The ethical issues surrounding our food choices are both fundamental and complex at the same time. This connection between morality and our food choices is what we try to analyze in the following paragraphs.

Ethical Issues Surrounding Our Food Choices

- Killing animals, fish, and plants
- Overpopulation
- · Genetically modified foods

Killing of Land Animals, Fish, and Plants

Let us begin the analysis of these three axes with the most obvious one, namely the killing of living organisms by humans, so that we could meet our nutritional needs. According to some calculations that have been made, an average person who consumes meat and is 70 years old has consumed 30 sheep, 30 pigs, 600 chickens, and 5 cows during their lifetime (Bryant, Baggott, & Searle, 2006). Furthermore, according to some data provided by Viva (2021) for the United Kingdom, it has been estimated that 1.1 billion chickens, 10.6 million pigs, 2.8 million cattle, approximately 20,000 horses and 180,000,000 rabbits are killed each year in order to make human beings meet their nutritional needs (the number of rabbits represents the European Union as a whole and not just the United Kingdom).

Undoubtedly, these numbers are impressive and, in our opinion, this massive killing was a stimulus to elaborate the contemporary movements of vegetarianism and animal rights as well as a new field called Animal Ethics (Fischer, 2021).

Two philosophers well known for their struggle for the liberation of animals and the attribution of rights to them are Peter Singer and Tom Regan respectively. Peter Singer has written an article in the Guardian Newspaper entitled "Fish: The Forgotten Victims on Our Plate" where there is a reference to the violent killing of billions of fish in the open seas and oceans every year in order to meet human nutritional needs. In this article, Singer makes special reference to the fact that when fishermen slaughter fish, actually no care is taken in order to make sure that fish suffer as little as possible, despite the fact that their nervous system is similar to that of birds and mammals and therefore, they can feel pain (Tsekos, 2021).

On the opposite side of those who claim that humans have every right to consume animal flesh to meet their nutritional needs are those who are called vegans. In the previous paragraph we mentioned Peter Singer and Tom Regan. The first person, who belongs to the philosophical school of Utilitarianism, argues that the fact that humans and animals are two different species does not justify the mistreatment of animals by humans and condemns morally experimenting on animals, as well as the consumption of animal flesh as food for humans (Bryant et al., 2006).

It is worth mentioning here that the basic principle of Utilitarianism is "the greatest possible happiness for the greatest possible number of beings", so killing animals and consuming them as food is a morally reprehensible deed. Singer suggests replacing the protein we eat in animal foods with plant-based proteins such as soy (Protopapadakis, 2006). Unlike Peter Singer, Tom Regan uses arguments of Kantian origin (an act can be described as moral or immoral regardless of its consequences) and argues that animal cruelty is absolutely immoral. Therefore, according to Regan (2004), it is our duty not to use animals as a means to an end and consequently, this philosopher morally condemns behaviors such as hunting, animal experiments, and apparently the consumption of animals as food by humans.

Overpopulation

The enormous size of the human population on our planet is indisputable. There are currently about 7.75 billion people on Earth and the forecast for 2040-2050 is that at that time there will be about 8-10 billion people on our planet (Lutz & Samir, 2010). A very high size of the population, as it is obvious, implies a large increase in the consumption of natural resources and energy consumption. Moreover, the frightening increase of the population will have serious consequences in the effort which is made to satisfy the nutritional needs of more and more people on our planet. From what was mentioned in the previous section, one can easily observe how much extra consumption of natural resources and energy will be created by the need to feed so many people.

Undoubtedly not all people in all countries consume foods at the same rate. Although undernutrition prevalence has decreased during the last decades, a slight increase has been reported since 2015 and the world will probably not achieve the target of Zero Hunger by 2030 (UN Foundation, 2015). In many countries around the world, especially among those of low and middle income, a significant percentage of the population does not have access to sufficient and adequate nutrition, which may lead to impaired physical, cognitive, and mental health and to a life circle of poverty, inadequate nutrition, and poor health for them and the next generations. The problem prevails also among the most vulnerable population groups living in many high-income countries, where food insecurity and hidden-hunger coexist with high rates of overweight and obesity (WHO, 2021). Furthermore, the same population groups are less likely to experience a high level of nutrition and environmental literacy, which could result in a higher adherence to both healthy and sustainable dietary patterns. These inequalities both in food and in nutrition and environmental literacy accessibility pose a significant ethical issue. Moreover, despite the fact that approximately 2 billion people in the world did not have regular access to safe, nutritious, and sufficient food in 2019 and almost 700 million people still suffer from hunger, one-third of food produced for human consumption is lost or wasted globally, which amounts to about 1.3 billion tons per year (FAO, 2011).

The question that arises here is how to find sufficient food for all these people in 2050, when as early as 2021 there is food insecurity, malnutrition, and hunger, especially among the most vulnerable population groups, i.e. children (Vassilakou, 2021). It has been estimated that the population growth of approximately 2 billion people by 2050 will result in a significant increase in the total global food demand by 35%-56%, which will be hardly met by the traditional forms of agriculture (Van Dijk, Morley, Rau, & Saghai, 2021; FAO, 2009). It is likely that the ever-increasing food insecurity will create even more migratory flows which, combined with the phenomenon of eco-refugees (migration in response to the effects of climate change and natural disasters), will exacerbate the already tensed situation.

Can the human population grow exponentially for a long time to come? If the world population reaches 20 billion at some point, then we believe that they will hardly be able to feed themselves adequately and the excuse for creating new genetically modified super-foods will probably be created (which we will discuss in the next paragraph) flooding the shelves of supermarkets. Would we like, for example, to drink milk from a cloned cow

that carries two human genes, so that the milk it produces contains human insulin? This example is not a utopia and it does not lie in the realm of science fiction, but it has really taken place in Argentina (Popper, 2007).

Genetically Modified Foods

Genetically modified foods are the result of the use of genetic engineering techniques, i.e. the transfer of genes among animals, plants, and bacteria (Tsekos, 2015). The use of genetic engineering in food takes place in order for them to acquire certain desirable characteristics, such as being tastier, having a higher nutritional value or other more specialized properties, e.g. potatoes which produce fewer carcinogens when fried (National Library of Medicines, 2021).

It is worth noting that, due to long-standing doubts about how safe genetic engineering products are for human health and ecosystems, there has been great skepticism in the European Union (and elsewhere of course) about the legalization of their use (Alahiotis, 2011). The fact remains that, as Gatew and Mengistu (2019) point out, genetic engineering as a whole remains a new technique with many risks not yet fully understood. The general public's skepticism about these novel products is clearly reflected, in our opinion, in previous research which has shown general public's desire for labeling in foods containing genetically modified ingredients (Miles, Ueland, & Frewer, 2005).

Apart from the purely scientific side of this issue (i.e. the arrival of products made by genetic engineering techniques at the market), there is undoubtedly the moral side, as well. In our opinion, the morally unacceptable result which arises from developments in the field of genetic engineering is, without a doubt, the creation of transgenic artificial beings that do not exist in nature. A lot of people claim that via their construction man represents a "little God" and he has added himself to the 8th day of the creation of the world. Also, when we, as humans, intervene in the genome of an organism, we affect what we call "telos" (end) of that organism, which is the purpose that this organism has on earth, in other words its deepest substance and certainly we exceed the permissible limits of our intervention in nature.

There is also something very important. The ability we currently have to transfer genes from plants and animals to other plants, animals, and bacteria tempts some scientists to create (when of course the law allows such activity) genetically modified humans with improved-modified genomes in the future. Would we be satisfied, for example, with the creation of humans who, in addition to human genes, would also have genes from horses, crabs, and bacteria?

Deep Ecology: An Answer to the Environmental Challenges of Our Era

After the previous analysis, the question that arises here is: what should our attitude towards the ethical dilemmas that emerge regarding our diet, our food choices, and, more generally, our ecological problems be? From our perspective, the answer can come from the philosophy of Deep Ecology. Deep Ecology was the brainchild of famous Norwegian philosopher Arne Naess, who coined this term ("Deep Ecology") in the 1970s. Arne Naess was a member of Vienna Circle (among its members were Rudolf Carnap, Kurt Gödel, and Otto Neurath) and Professor of Philosophy at the University of Oslo (Protopapadakis, 2006).

Arne Naess's Deep Ecology was created as a powerful answer to the serious ecological problems of our planet. The Norwegian philosopher has been convinced that these problems cannot be solved by small corrective actions, such as reducing air pollution or reducing acid rain (solutions offered by the so called "Shallow Ecology") and he tried to articulate a completely different philosophical discourse. In contrast to Shallow Ecology, which,

as mentioned above, seeks to find temporary and occasional solutions, Deep Ecology offers a completely different worldview as a response to burning environmental problems (Naess, 2005). The new worldview proposed by Naess is based on a different kind of technological and economic development, which will be the basis for a new human-environment relationship. Let us examine the basic points of the theory of Deep Ecology in more detail (Devall & Sessions, 1985):

(1) Human's well-being and non-human life on earth are of intrinsic value irrespective of their value to humans.

(2) Diversity of life forms is part of this value.

(3) Humans have no right to reduce this diversity except to satisfy vital human needs.

(4) The flourishing of human and non-human life is compatible with a substantial decrease in human population.

(5) Humans have interfered with nature at a critical level already, and interference is worsening.

(6) Policies must be changed, affecting current economic, technological, and ideological structures.

(7) This ideological change should focus on an appreciation of the quality of life rather than adhering to an increasingly high standard of living.

(8) All those who agree with the above tenets have an obligation to implement them.

We believe that these eight basic points of Deep Ecology can offer a general platform in our relationship with the environment including our food choices.

Conclusions

In the present article we presented an extensive discussion on various topics regarding the ethical aspects of our food choices. The ethical issues that arise from our food choices are very complex and make our decisions even more ambivalent. For example, even if one considers himself/herself as a vegan, it is not easy to condemn meat eaters as immoral people. Morality remains something very personal and our moral beliefs are affected by our worldviews and personal philosophical views.

However, Ethics requires training in order for us to be familiar with various ethical issues that arise in our daily life. We strongly believe that the best way to achieve moral development is the establishment of educational programs in Ethics to all educational stages (from primary school to universities). In addition, it is worth mentioning the fact that there are appropriate educational techniques in teaching Ethics that avoid any kind of indoctrination.

The training which has already been mentioned before becomes more significant in the case of scientists whose training is absolutely necessary due to their wider role and responsibilities in society. In our opinion, we should pay attention to that, otherwise the current situation will always remind us the melancholy knight Tristan had in his eternal search of princess Isolde.

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