

The sustainable Convivium
Values, behaviours, education

Identity, values, and food

Is there a relationship between the food we eat and our values and identity? To answer this question, we must first look at what are the relations between personal values and food choices. We will then take a more in-depth look at the motivations underlying our food choices and how such motivations can change in time.

Values and food choices

Several disciplines (psychology, sociology, political science, economics, philosophy) have proposed different definitions of the concept of 'value'. From a psycho-social point of view, values are relatively stable convictions that people have regarding desirable ways of acting and being. This also includes the objectives that people set in their lives, relating with their personal and social identity. We usually associate with people, and more generally become part of groups, with whom we share the same values.

But what are these values, exactly? Among the scholars who have studied values as motivational objectives that guide individual existence, the Israeli psychologist Shalom Schwartz¹ proposed perhaps the most complete and systematic model. Through numerous survey studies carried out in more than 60 different countries² and involving over 75,000 people, Schwartz created an integrated model of human values based on 10 fundamental values that can be found in every culture. These values are universalism, benevolence, tradition, conformity, security, power, achievement, stimulation, hedonism, and self-direction. During one's lifetime, each person attributes greater importance to some values and

¹ S.H. SCHWARTZ, *Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries*, «Advances in Experimental Social Psychology», 25 (1992), pp. 1-65.

² S.H. SCHWARTZ, *Measuring Changing Value Orientations Across Nations*, in R. JOWELL - C. ROBERTS - R. FITZGERALD - G. EVA (eds.), *Measuring Attitudes Cross-nationally – Lessons from the European Social Survey*, Sage, London 2006.

less to others, thus creating a personal hierarchy of values. According to Schwartz's model, the value hierarchy reflects a bi-dimensional structure of values, which are usually distributed around two main axes: the Conservation-Openness to change axis, which reflects the opposition between the desire for independent thought and action (stimulation and self-direction) and adherence to social norms (tradition, conformity and security), and the Self-Enhancement-Self-Transcendence axis, which instead reflects the trade-off between interest in the well-being of others (benevolence and universalism), and the strive for individual self-affirmation (power and achievement). Those who attribute greater importance to the values at one side of each axis will tend to give less importance to the values of the opposing side and vice versa.

Given the central role of values, the value hierarchy is relevant not only to our existential objectives and motivations, but also to the convictions and beliefs that guide our daily lives, our behaviour³, and even the food we choose to eat. In a recent study⁴, we analyzed the relation between food choices, i.e. the frequency of consumption of meat, fruit and vegetables, and the importance attributed to the different values. The study used a sample of 150 young people, mainly students of the Università Cattolica. Study participants were prevalently females (71%), with an average age of 24 years. First, we administered a questionnaire measuring the importance given to the values with a scale of 20 items (therefore including two items for each fundamental value). These items consisted of brief statements, for example: 'helping those around us', or 'being successful in life'. Participants rated the subjective importance they attributed to each value, on a scale which varied between 'opposed to my principles', corresponding to the lowest attributed importance, to 'very important for me', corresponding to the highest attributed importance. In this way, we were able to calculate numerical indexes representing the importance attributed to the 10 values and compare those indexes with the frequency of consumption of meat, vegetables and fruit (measured as the number of weekly meals in which each food was consumed).

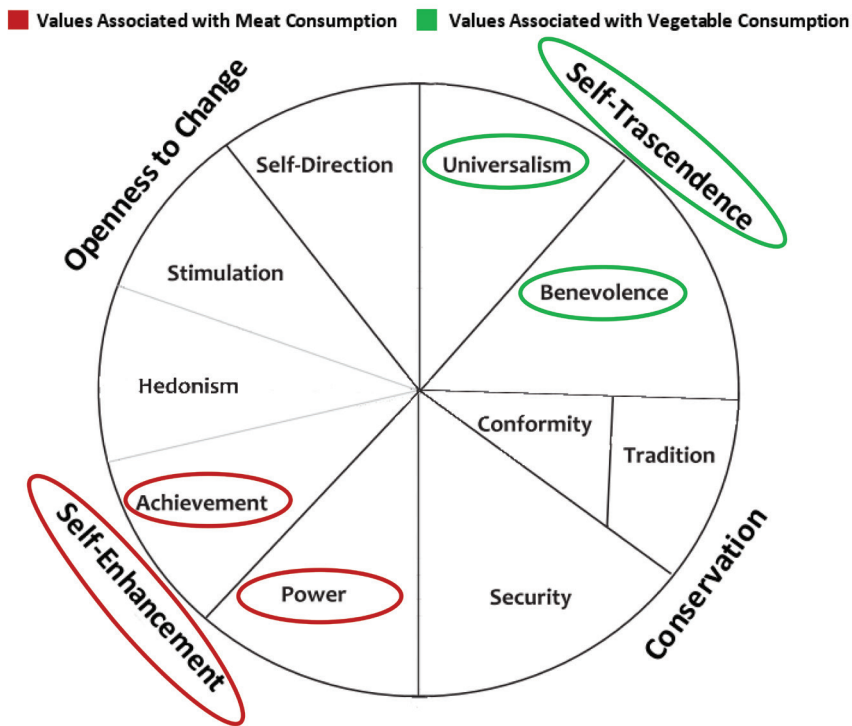
The analysis showed a significant correlation between the consumption of meat and vegetables and the importance attributed to different values. In particular, results showed that those who often eat meat give more importance to the values of power and success

³ P. CATELLANI - P. MILESI, *I valori e la scelta di voto*, in P. SEGATTI - P. BELLUCCI (eds.), *Votare in Italia: 1968-2008*, Il Mulino, Bologna 2010, pp. 213-245.

⁴ M. BERTOLOTTI - E. MELANDRI - P. CATELLANI, *Effetti del framing nella comunicazione per la salute in ambito alimentare*, Paper presented at the IX National Congress of Health Psychology, Orvieto, May 10-12, 2013.

than those who eat meat less often. On the other hand, those who eat a lot of vegetables give more importance to the values of benevolence and universalism (Fig. 1) than those who eat little vegetables. This result was somewhat surprising because, if we look at Schwartz's model mentioned above, we can rather precisely outline the distribution of food choices along one of the two value axes, i.e. the Self Enhancement - Self Transcendence axis. We therefore decided to investigate whether this correspondence between values and meat or vegetable consumption is also reflected in the different motivations underlying our food choices.

Figure 1 - *Relation between the importance attributed to values and to the consumption of meat, fruit and vegetables*



Motivations underlying food choices

When investigating the motivations underlying food choices, we shall concentrate on what prompts people to eat more meat, or conversely, more vegetables. Research on food habits and choices, especially on the

choice of becoming vegetarian, substantially identified four types of motivations: those related to health, those related to ethics, those related to social issues, and finally motivations related to the environment⁵. The first class of motivations is substantially selfish: we choose to eat one type of food rather than another in order to improve our physical fitness and well-being, or to prevent disease. The second class of motivations, on the other hand, is linked to an altruistic type of concern, in particular, concern for the suffering of the animals we use to produce meat. The third and fourth motivations have even wider scopes and refer to the concern for the consequences that our food choices have on society or on the planet ecosystem.

Selfish motivations: The effects of meat consumption on health

For a long time now, medical research has found evidence that frequent consumption of meat, and in particular red meat, constitutes an important risk factor for a series of rather serious diseases. Many scientists believe that the incidence of some widespread diseases of our time (e.g., cardiovascular and metabolic disorders, tumours) can be attributed, at least in part, to the massive increase and diffusion of meat consumption in the decades following World War II⁶.

A large number of studies in medical and nutritional research have shown that reducing meat consumption can lead to substantial health benefits, including a reduction in the risk of heart attack (-31%), stroke (-18%), hypertension (-25%), and a consistent reduction in the risk of malignancies of the digestive system (e.g. stomach and colon cancer, -75%). A diet including little or no meat can also reduce the risk of diseases that are not even directly linked to our diet, such as lung cancer (-33%) and Alzheimer's Disease. But does awareness of the risks of meat consumption (and conversely, of the benefits of fruit and vegetable consumption) have an effect on people's actual food preferences?

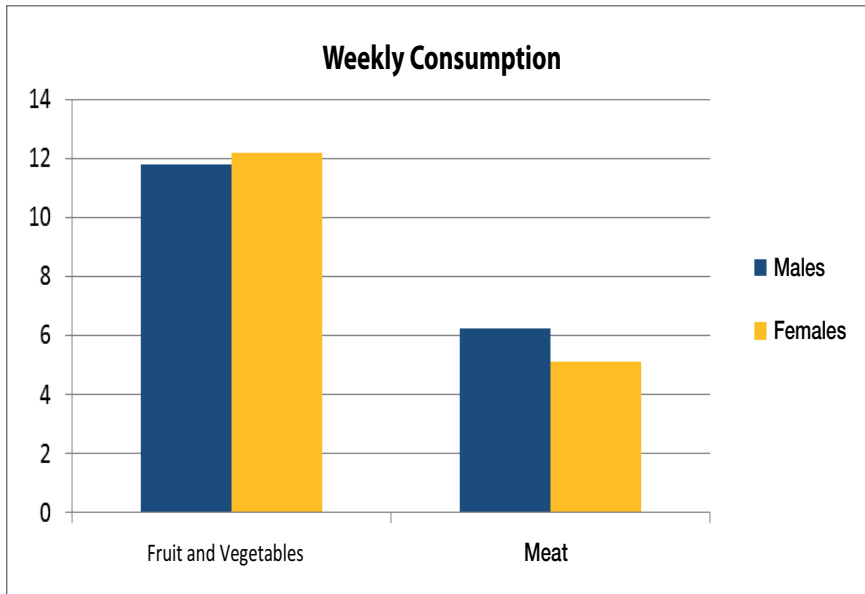
If we look at the data obtained from a young student sample (Fig. 2), we can see that years of campaigns by doctors and nutritionists might have had a certain impact on the eating habits of latest generations. If fruit and vegetables are consumed in practically all the main meals (an average of at least 12 times a week), the consumption of meat is consid-

⁵ M. LINDEMAN - M. SIRELIUS, *Food choice ideologies: The modern manifestations of normative and humanist views of the world*, «Appetite», 37 (2001), pp. 175-184.

⁶ D. KROMHOUT, *On the waves of the Seven Countries Study; a public health perspective on cholesterol*, «European Heart Journal», 20 (1999), pp. 796-802.

erably less frequent, with an average of six meals a week for males and approximately five for females. Although we found some gender differences in eating habits, they are of limited extent.

Figure 2 - *Differences in the consumption of meat and fruit and vegetables between males and females*

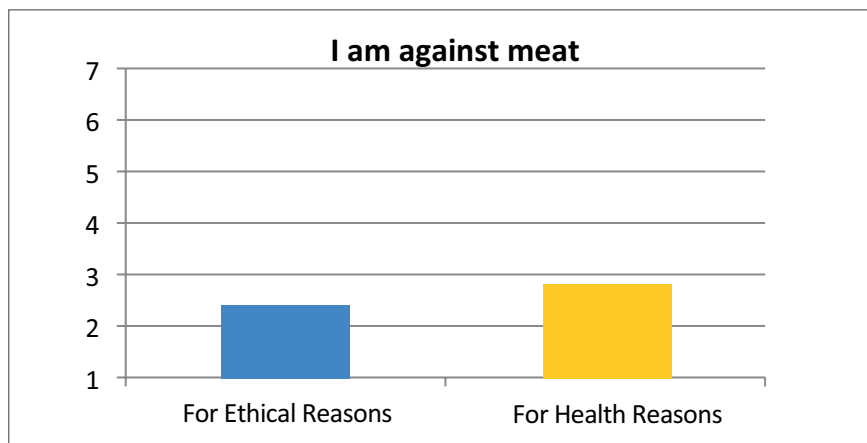


We then asked participants to express, on a 7-point scale, their agreement with a series of statements regarding the effects of fruit and vegetable consumption and meat consumption on health, such as, for example, 'Eating fruit and vegetables is good for your health', 'Eating fruit and vegetables prevents disease' and 'Eating meat could be harmful to your health'. The results showed high levels of agreement on the fact that fruit and vegetables are good for health and help preventing diseases, while the negative effects of meat consumption were a little more controversial, with lower agreement among participants. Although almost everyone agreed with the beneficial effects of fruit and vegetable consumption, opinions about the risks derived from meat consumption seemed to arouse more controversy and less consensus.

We then asked our participants whether, and to what extent, they were against meat consumption. Furthermore, we asked them specify

whether they were against meat consumption for health reasons or ethical reasons. On average, participants stated they were not against meat consumption, neither for health reasons, nor (actually even less so) for ethical reasons (Fig. 3). These results are consistent with the literature on this topic, according to which those who reduce or remove meat from their diet mainly do so for health reasons, especially at first⁷.

Figure 3 - Agreement with the statements 'I am against meat for ethical reasons' and 'I am against meat because of its effect on health'



Lastly, we compared the average meat consumption (distinguishing between the consumption of red meat, white meat and cured meat and charcuterie) of participants who declared to be against or very much against meat consumption for health reasons and of those who declared to be against it than for ethical reasons. Results showed that participants who opposed meat consumption for ethical reasons on average ate less meat (of all three kinds) than those who opposed it for health reasons (Fig. 4).

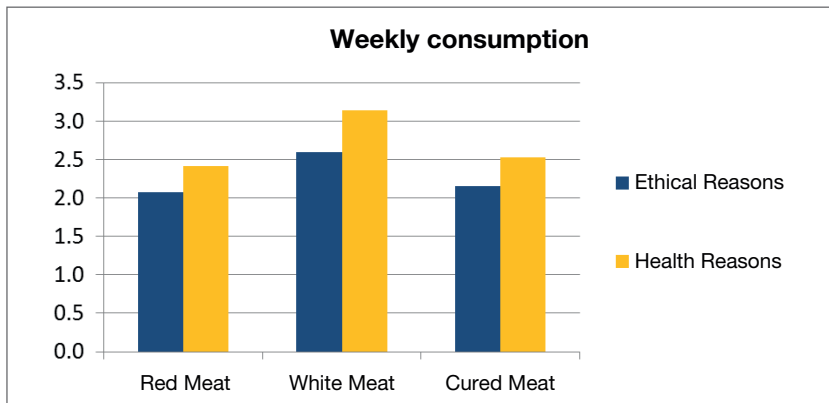
This result is in line with previous findings reported in literature⁸, too. People who decide to eat less meat to improve their physical fitness and appearance, or under their doctor's advice, for example after

⁷ B.A. WYKER - K.K. DAVISON, *Behavioral change theories can inform the prediction of young adults' adoption of a plant-based diet*, «Journal of Nutrition Education and Behavior», 42 (2010), pp. 168-177.

⁸ *Ibidem*.

receiving particularly poor medical test results, or following the onset of a serious medical problem, usually find it harder to stick to their decision, allowing themselves frequent ‘exceptions’ to the rule. A smaller percentage of people decide instead to change their eating habits more decisively, as those who became vegetarian or vegan. Among these individuals, the motivation seems to become stronger and more stable over time, as it is rooted in a radical rejection of meat consumption based on the very origin of meat products, i.e. the death of innocent animals.

Figure 4 - *Frequency of meat consumption among persons contrary to meat consumption for ethical reasons rather than for health reasons*



Ethical motivation: Animal suffering

It was once said that if slaughterhouses had glass walls, we would all turn vegetarians. The consequences of concern for animal suffering on food choices have been investigated by psychologists to explain the eating behaviour of not only vegetarians, but also of those who do eat meat. How can the majority of people easily accept the fact that their meals derive from the brutal killing of creatures not so different from the pets they keep at home and care for? Is it a form of collective denial? And what are the mechanisms that make it possible?

First of all, we know that there are large and at times surprising cultural differences in the way we categorize animals regarding their edibility. In some cases, religious norms define certain animals as pure or impure, and others as sacred and untouchable. As we know,

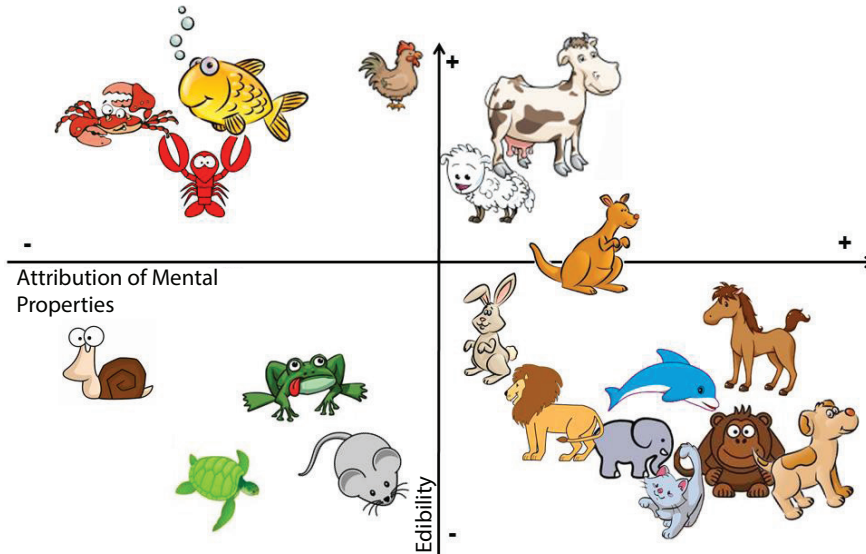
Muslims and Jews do not eat pork, whereas Hindus do not eat beef, and some forms of Buddhism prescribe vegetarianism to their followers. In other cases, cultural customs are so deep-rooted that they influence our opinion of whether certain foods are appetizing or disgusting. For example, people in the western world consider dogs as pets, while some East-Asian populations consider them a delicacy. But even looking at cultural differences within our own continent, what is considered edible in one country may not be so in another. Horsemeat consumption, for example, is relatively common in most South-European countries, but it is looked upon almost with horror in Anglo-Saxon countries.

A number of studies have investigated from a psychological point of view why we consider some animals edible and others not. One of the hypotheses put forward by researchers was that there is a relation between edibility and the attribution of mental properties to animals: the animals that we perceive as more intelligent and capable to experience emotions (and therefore more similar to humans) are those that we find more difficult to 'sacrifice' to food production.

In one study⁹, people were asked to attribute mental properties such as hunger, fear, pleasure, pain, anger, morality, memory, emotions, and planning capacity, to different animals, using a scale ranging from 1 (not possessing the mental property) to 7 (possessing the mental property). They were then asked to rate the edibility of each animal, answering the simple question: 'Would you eat this animal?' using a similar 7-point scale. The analysis of the results showed the hypothesized inverse correlation between edibility and the attribution of mental properties (Fig. 5). The results showed that the animals that were attributed greater intelligence and emotions (for example domestic animals, but also large mammals such as lions, tigers, elephants, kangaroos, dolphins and primates) were considered less edible, while on the contrary, those that were considered more edible were those that were attributed little mental properties (fish, shellfish, molluscs, chickens and hens, etc.). Some animals were attributed little mental properties, but were nonetheless considered not particularly edible (frogs, snails, tortoises and rats). There are, therefore, animals that are considered more intelligent but less edible, and animals that are considered less intelligent but more edible.

⁹ B. BASTIAN - S. LOUGHNAN - N. HASLAM - H.R.M. RADKE, *Don't mind meat? The denial of mind to animals used for human consumption*, «Personality & Social Psychology Bulletin», 38 (2012), pp. 247-56.

Figure 5 - Attribution of mental properties and degree of edibility of animals



Source: BASTIAN ET AL., *Don't mind meat?*, Study 1.

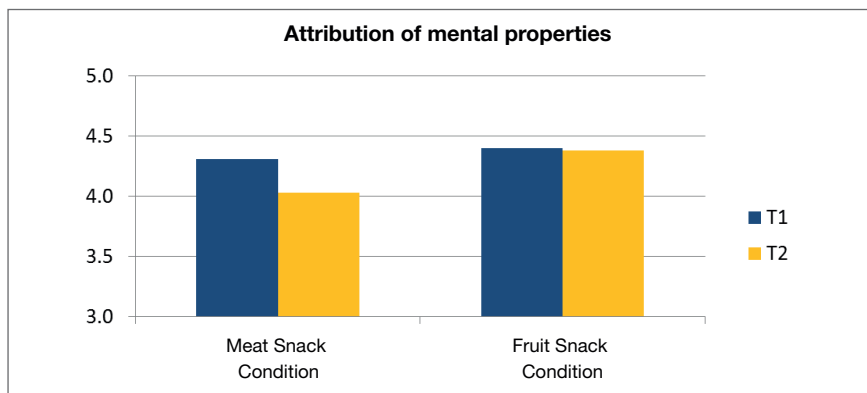
It is interesting to note the position in the graph of some of the animals more commonly used for the production of edible meat such as cattle, sheep, goats and rabbits. This sub-group of animals finds itself in the peculiar situation of having obvious mental properties but at the same time, unfortunately for them, being excellent meat sources.

For a more in-depth investigation of this issue, the authors decided to experimentally investigate whether they could identify a cause-and-effect link between edibility and attribution of mental properties, and its direction. In other words, what the authors wanted to ascertain was if when both characteristics are present, the fact of giving greater weight to one (e.g., edibility) determines giving a lower weight to the other (e.g., mental properties). The researchers then created two experimental conditions: a group of people was shown the photograph of a lamb with the following caption: 'This lamb will be transferred to another pasture where it will continue to graze with other sheep'. Another group was given the same photograph, but with a caption that made specific reference to the fact that the lamb was destined to food production: 'This lamb will be taken to the slaughterhouse, killed and cut up for sale in the supermarkets as meat'. After this, both groups were asked to attribute the lamb in the photograph the same mental properties as

in the previous study. The result was that participants who had seen the lamb destined to be slaughtered attributed it less mental properties than participants who had seen the lamb destined to pasture. This result indicates that the attribution of mental properties to animals is influenced by the mental accessibility of their use as food sources. Therefore, besides our pre-constituted categories of edible and non-edible animals, thinking about animals as living creatures or as potential food sources can influence our attribution of mental properties, preventing us to attribute mental properties to animals we know are destined to become edible meat.

A further confirmation of this mechanism comes from a third study where the same researchers measured how people attributed mental properties to the same lamb of the previous experiment in two successive phases, at the beginning and at the end of the study. First, participants were asked to rate the mental properties of the lamb, as in previous studies. Then, after a series of ‘distracting’ tasks, one group of participants was told that at the end of the experiment they would be given a fruit snack, while the other group was told that they would be given a meat snack. Finally, the attribution of mental properties to the lamb was reassessed. The result was that the group that had been promised the fruit snack attributed mental properties to the lamb to a similar degree in the two phases. On the other hand, the group that had been promised a meat snack attributed significantly less mental properties to the lamb in the second phase (i.e., after being promised a meat snack) than in the first one (Fig. 6).

Figure 6 - Attribution of mental properties in function of the expectation of meat or fruit consumption



Source: BASTIAN ET AL., *Don't mind meat?*, Study 3.

In sum, people not only attribute less intelligence to animals that are presented as a source of food compared to those that are presented neutrally, but they can even adapt this attribution according to the context they are in, underestimating the mental properties of the animals when they are about to eat meat. This phenomenon is known in social psychology as the reduction of cognitive dissonance¹⁰, through which people try to diminish their sense of unease deriving from inconsistencies between their attitudes and behaviours.

Going back to the motivations underlying food choices, concern for the suffering of animals may be in some way 'swayed' to influence our food preferences: if some people choose not to eat meat to prevent animals from suffering, many others manage to avoid thinking about it to avoid spoiling their appetite.

Community and ecological motivations: Social and environmental costs of meat production

As we discussed earlier, in addition to health and ethical reasons there are two more classes of motivations that can influence people in their food choices, and in particular, the choice of not eating meat. These reasons include on the one hand concerns for the social costs of meat production, and on the other, concern for its environmental costs.

Current animal breeding and meat production practices generate so much waste that, according to many, they are downright anti-economical and harmful to the wellbeing of the community. It has been calculated that, in order to produce a certain amount of animal proteins (for example, the equivalent of a single hamburger), a much greater quantity of resources is required than those needed to produce the same amount of vegetable proteins (obtainable from soy or legumes, for example). The meat industry requires huge quantities of raw materials (water, fuel, fodder), for which it competes with other fundamental economic sectors. Furthermore, the increasing quantity of land required for the production of animal fodder (70% of arable land worldwide) inevitably restrains arable land for agricultural production.

Many people are otherwise concerned for the environmental costs of meat production and consumption. Besides the already mentioned costs in terms of exploitation of agricultural soil, industrial farming produces a series of negative effects on the environment. According to scientists, the indiscriminate use of pesticides and massive use of antibiot-

¹⁰ L. FESTINGER, *A theory of cognitive dissonance*, Stanford University Press, Stanford (CA) 1957.

ics and hormones can come to alter the ecosystem, interfering with natural flora and fauna, and spreading virulent diseases and parasites. Further problems arise from the disposal of waste and sewage from industrial farms.

Most people have little or no knowledge of these problems, and even less interest in them, whereas those who choose to become vegetarian or vegan often cite these as compelling arguments in favour of their radical food choices. In their case one may therefore wonder how important are these motivations, with respect to those regarding health and ethics.

In the last few years, a number of studies¹¹ have investigated the impact of different motivations in the food choices of vegetarians. Findings showed that, for the majority of vegetarians, the initial choice of no longer eating meat lay in the concern for health and for the suffering of animals, whereas only a small minority reported social, economic and environmental concerns. Interesting data emerged in this case, too: the initial motivations for choosing to become vegetarian are not necessarily unchangeable, and other, previously less prominent factors can assume greater importance at a later stage. In particular, one study¹² showed that for many vegetarians, the reasons underlying their refusal to eat meat tended to vary in time. Reasons of a more selfish type (in particular health-related motivations) are gradually overcome by ethical, social and environmental concerns. The proposed explanation for this shift refers to the relation between values, identity and food, this time in a dynamic rather than in a static sense. According to the authors, the choice of not eating meat puts people in contact with new habits, convictions and information, and this in turns influences the way they think about what they eat and the significance they attribute to food. The choice to become vegetarian connects people to a network of other vegetarians and leads them to identify with this new group. Some studies, for example, showed that many vegetarians interact online with blogs, groups and forums, in order to share practical information (e.g. recipes and ingredients for meat-less meals and suggestions on where to purchase them), and eventually engaging in more wide-ranging political and social discussions. In this way people tend to share their ideas not only re-

¹¹ N. FOX - K. WARD, *Health, ethics and environment: a qualitative study of vegetarian motivations*, «Appetite», 50 (2008), pp. 422-429; A. JOYCE - S. DIXON - J. COMFORT - J. HALLETT, *Reducing the environmental impact of dietary choice: Perspectives from a behavioural and social change approach*, «Journal of Environmental and Public Health», 2012 (2012), Article ID 978672.

¹² S.R. HOFFMAN - S.F. STALLINGS - R.C. BESSINGER - G.T. BROOKS, *Differences between health and ethical vegetarians. Strength of conviction, nutrition knowledge, dietary restriction, and duration of adherence*, «Appetite», 65 (2013), pp. 139-144.

garding food, but also on other themes, such as environmentalism, energy saving, recycling, ethical and fair trade consumption, etc.

In conclusion, we have taken a brief look at how identity, values and motivations underlie our food choices and our preferences for some foods rather than others. We have also seen how, in certain cases, what we eat influences our opinion of food, and also our identity and our values. We should therefore think of the true and wider significance of the term 'convivium'. Eating together primarily means sharing food with people close to us, but it can be also a way to think of other people and communities further away, and to the planet as a whole.