

# Generation Z and Sustainable Cured Meat Consumption: Educational Challenges and Pedagogical Perspectives



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## 1 Introduction

The (theme of the) relationship between food, consumption and sustainability is, today, a field being widely investigated and explored from a multidisciplinary perspective (IPCC, 2022; Baldock & Hart, 2021; Berners-Lee et al., 2018; Bornatici, 2017; Birbes, 2012). Food is configured as a complex and multifaceted object that touches different dimensions of people's lives. If it is essential to monitor its quality and its usability in concrete terms, equally important is the investigation of the impacts that this object has on the socioeducational dimension. The experience of eating is often linked to the internalization of the educational models to which one has been exposed during one's history and to the particular emotional component that this dimension evokes. Food gives meaning to our sociality and our feelings and receives meaning from them. It cannot be experienced only as a product within a market but must be sought in terms of its profound meaning for humanity (Birbes, 2012).

The promotion of well-being through attention to the quality of the food consumed is, therefore, also reflected in the area of the nourishment practices to which a person is subjected, which are rooted in a culture that is the result of historical and symbolic processes connected to the development of different societies over time.

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When we refer to food, we are often led to categorize it as a material object designed to satisfy a primary need of humanity and all living beings. The act of eating is extremely necessary to ensure the survival of every living being.

Hence, food cannot be limited to its utilitarian function, capable of merely satisfying a primary human need. It assumes a symbolic function and value that makes it something more. It may seem strange that food could have configured such an important ingredient in human affairs, marking everything that humans have done throughout history. As Morin (2015) states, however, eating is an anthropological act. Food and food practices have always regulated humans' relationship with the world around them and their inner dimension. Food can be defined as a descriptor of the lifestyle of the human being and a means of expression of the sociality through which encounter and exchange between peoples and generations are generated. It becomes the mirror of the history and traditions of a territory because it is able to express identities, symbols and values that go beyond nutritional aspects.

Food and nutrition are, then, constituted as complex themes of investigation, as they relate, in an integrated way, to different dimensions of the lives of people and societies. Food practices can be defined as real food cultures, where food is constituted as a fundamental cultural index because it affirms itself as an instrument of identity construction. Food, as stated by Montanari (2004), is the first medium for contacting different cultures because eating the food of others is easier than decoding their language. Food, today more than ever, in a globalized world in which different cultures converge and coexist, can be a tool to initially "taste" the culture of other peoples and to "taste" one's own culture, from the perspective of reciprocity (Montanari, 2004).

The consumption of the food and food cultures of a community also suggest to us what relationship food has with the constructs of time and space. If we take Western culture as an example, it is evident that there is a link between food and temporality, a link that reflects the historical and social phenomena to which it is subject. A fast logic, characterized by praise and the triumph of speed (Tomlinson, 2007), has also imposed itself on the consumption of food; during the lockdown period following the COVID-19 pandemic, this trend was accelerated.

As reported in "The impact of the COVID-19 emergency on the eating habits of Italians during the quarantine period" (Grant et al., 2021), published by the Observatory on Food Surpluses, Recoveries and Waste (OERSA), this confinement period had, and is still having, important social repercussions from not only a socio-economic point of view but also a psychological-behavioural perspective, having manifested itself in consumption practices and in the reshaping of lifestyles. This reflection shows how food practices are closely interconnected to the social and historical context in which one is immersed. Food, therefore, has done more than nourish over the centuries: it has been a catalyst for social transformation and organization and economic expansion (Standage, 2010). Eating is thus a behaviour that develops beyond its specific purpose; it is a situational element, and the circumstances of consumption determine its semantic meaning. Eating food generates identification with certain values and ideals, communicates our thinking and materializes the structures that orient us.

Food and the processes of its preparation convey, then, fundamental cultural meanings through which subjects constitute their sense of home and belonging to a social group, assimilating the habits, tastes, prescriptions and hierarchies that allow them to reconnect the here and now to history and family memory. Food is not only a glue between generations, a medium that expresses the prolongation of maternal dependence; it is also confirmed, in Euro-American contexts, as a fundamental component of parental thinking that maintains a close bond with a person and the creation of bonds between people (Grilli, 2014).

From a pedagogical perspective, it may be interesting, in the context of the ongoing ecological transition, to understand people's levels of concern and perceptions in relation to food, nutrition and sustainability to better orient current generations towards acting in a certain direction. The transition to sustainability requires more environmentally aware, social and economic food choices. Any substantial transition to a just and sustainable world calls into question the choices of the global consumer who, increasingly and particularly in high-income countries, assumes food consumption lifestyles based on products with a deep environmental footprint (Bogueva & Marinova, 2022).

Talking about sustainability also means talking about food sustainability. Growing sensitivity towards the sustainability of food leads to increasing attention on the elements that define its main characteristics: healthiness, safety, environmentally friendly production and economic profitability for companies and consumers. The debate on sustainable diets is open and dynamic, and the components to be considered are diverse and evolving.

## 2 Research Focus: Human Development Work Unit

A particular area of interest in reference to food sustainability is linked to the production of meat and cured meats—for several centuries, these have been part of the Mediterranean diet and Italian food culture—which at the same time have been increasingly subject to attention and criticism based on nutritional, ethical and environmental reasons (Bernardi et al., 2019).

A special report from the *Intergovernmental Panel on Climate Change* (IPCC, 2019) documents how between 10.8 and 19.1 billion tonnes of CO<sub>2</sub> equivalent emissions per year come from food and have a considerable impact on the four pillars of food security—availability, access, use and stability. Food is big business: the 100 largest food and beverage companies worldwide include 10 major meat producers and processors.

In particular, global meat companies play an important role in determining how meat and feed products are produced, transported and traded. In this context, the attitudes and values of adolescents and young people often anticipate the future and can configure important agents of environmental, social and economic change (Loader et al., 2014). Nevertheless, the future of food will be increasingly

sustainable due to the decisive push in this area among younger generations, who are at the centre of the ecological transition as agents of change.

In this context, Goal 12 of the *2030 Agenda*, “Ensure sustainable patterns of production and consumption” (United Nations, 2015), deserves particular attention, as it aims at a radical change in the ways in which goods and services are currently produced and consumed. Production and consumption are, therefore, united in the same objective, as inseparable dimensions of the market on which it is necessary to act following a unitary strategy that involves, at the same time, economic operators and citizens-consumers.

The Human Development work unit within the VIS (Valore Impresa Sostenibile) project is intended to address the “consumption of cured meats, Generation Z and sustainability” triad, an educational challenge that identifies training opportunities in the family, at school and in the local community. The focal perspective is that of the Gen Z consumer, adopted to explore not only the salient motivations for the consumption of cured meats and highlight the factors that can guide consumption choices towards greater sustainability but also the obstacles that can condition the relevant decision-making process. Accordingly, the aim of this study is to probe the consumption habits of cured meats among young people in the age group from 15 to 25 years by investigating consumption methods, purchasing influences (see contribution by Zane/Molinari), selection criteria and sustainability evaluations as a parameter of product choice. In particular, we seek to highlight some aspects related to the cultural dimension connected to the consumption of cured meats by Generation Z: what is changing in the set of knowledge, opinions, attitudes, perceptions, practices that we indicate with the term youth food culture. The culture of consumption contributes decisively to the renewed critical capacity of the consumer, understood not necessarily as a way of rejecting or denying consumerism but as the ability and possibility to redefine the symbolic meanings of consumer goods. Moreover, to think sustainably about cured meats, all edible material and packaging as well as the complete purchase process must be considered to mirror the importance of reflecting on the entire experience underlying the consumption of a food, i.e., the entire consumption process.

The Treccani Encyclopedia defines Generation Z as those born between 1997 and 2012, the generation of the near future, also called *Gen Z*, *zoomers*, the *iGeneration*, *postmillennials* or *Homelanders*. It is also necessary to frame the context in which Generation Z were raised. The contemporary era is that of sustainable transition, of collective and global duty and responsibility, which includes a particularly profound change in the paradigms of society and economy, the transition from one way of being or living to another. The Next Generation EU and the Green New Deal are the most recent regulatory interventions of the European Union focused on supporting the sustainable transition in a context where consumers and financial institutions are giving increasing attention to sustainability issues. Consumers’ interest is also growing in the final product, from its organoleptic characteristics to its nutritional values and packaging, across the entire production chain. Hence, there is a strong tendency to seek more information on cultivation and breeding methods, the use of pesticides and the origin of raw materials. Organic, GMO-free, biodiversity, Slow

Food, locally grown produce, fair trade, veg and cruelty-free are examples of forms of resistance in the culture of conservation that are shaping the demand for consumption.

Over the last century, the increased presence and rapid transformation of media in the daily life of adolescents and young people and the availability of touchscreen devices and intelligent features during the first years of life have transformed their relationship with consumption. Their constant connections with their peer group and a multitude of sources of information have given this demographic an extraordinary range of options when making choices.

Young people under 25 have suffered greatly from the limitations imposed by the COVID-19 pandemic, specifically, from the loss, for months, of the possibility of interacting in person with their peers, attending school in person, being able to socialize in the best ways or even shopping directly in a store.

Generation Z is the next generation of consumers who, at 32% of the world's population, will make up the majority of the workforce by 2030. The next great change in buying habits will be driven by Generation Z, considered the most critical group, with a very different perspective on buying and consumption than previous generations. They are the ones who will have great purchasing power in the coming decades, which means that the market, including the food and feed industries, will have to earn their trust.

Without an adequate understanding of this generation, the world of production and commerce will find it difficult to interact with and retain this consumer target.

Furthermore, the future of food is becoming increasingly sustainable due the decisive push from young people in this area. This is highlighted in research conducted by AstraRicerche for McDonald's (2021), which explores the expectations and behaviours of Generation Z regarding the ecological transition in the agri-food chain. This report shows that the younger generations are clearly aware of the concept of ecological transition in the food supply chain and are very curious about it, whereby, e.g., they state that they want to know more. For members of Generation Z, the relevance of nutrition has also increased substantially in the last 5 years, and this interest in food is leading young people to visit festivals, events and themed fairs, both within and outside their own region.

The new generations have to deal, every day, with factors of social transformation that strongly and, unfortunately, negatively affect eating behaviours and choices made at the table. These phenomena include the following examples:

*The deconstructing of meal preparation*, which manifests itself in the research on and consumption of ready-to-cook and ready-to-eat foods. From this perspective, food choice favours products that have good service content and are suitable to be consumed instantly compared to fresh food;

*The deconstructing of the food day*, which manifests itself by shattering the traditional consumption rhythm (breakfast, snack, lunch, snack, dinner) and multiplying the opportunities for instant and unregulated consumption of foods available at any time of day, in every season and in every situation—often of inadequate nutritional quality and with a strong environmental impact;

*The spread of meals outside the home*, which delegates to public and private management companies the task of choosing the qualities, combinations and portions of everyday foods, accentuating in users an inevitable passivity with respect to consumption patterns and eating styles.

Clearly, outlining the evolutionary perspectives on the consumption of meat and cured meats is a difficult challenge. Many economic, demographic, environmental, social, climatic and technological variables intervene to change the course of events.

### 3 Cured Meat Culture and Generation Z

The issue of the consumption of cured meats among Generation Z is particularly complex and remains little investigated in the national and international pedagogical literature. This has required prudence in defining this study's methodological framework, the elaboration of its tools, the analysis of the data and the interpretation of the results.

The survey "sustainability and cured meats in Generation Z", following what emerged from the questionnaire (see contribution by Zane/Molinari), has been further developed in the management of two focus groups, representing this consolidated qualitative method in educational research (Baldacci & Frabboni, 2013; De Ketele & Roegiers, 1996; Trinchero, 2002; Viganò, 2003). Thus, it has enabled us to examine the extant quantitative data and to raise further questions. It was decided to propose a focus group to give the floor directly to the focal students without proposing any standardized categories within which to place their possible responses to prompts. Small group discussion, characteristic of this survey tool, in our opinion, proved to be effective in allowing participants to express themselves through a usual form of communication, namely peer discussion.

The meetings took place online and were recorded. The first focus group was attended by 10 students (4 males and 6 females) and the second by 8 (3 males and 5 females); all participants came from the Università Cattolica del Sacro Cuore and were enrolled in degree courses in which the theme of sustainability is addressed during specific courses.

Attendance to the focus group was garnered through a response to an invitation email sent to those who had already participated in the questionnaire that had comprised the subject of the first phase of the research conducted by the Human Development work unit.

The two groups were homogeneous in terms of age and heterogeneous in geographical and academic origin.

The most represented gender was the female gender; 98% of the focal sample declared that they consumed cured meats.

From the analysis, a rich and highly articulated youth food culture emerged. The focus group began with the question: "*Why do you consume or not consume cold cuts*"?

Among the emergent reasons, the majority identify the consumption of cured meats with pleasure and gluttony. Importance is also attached to wealth and respect for family and local traditions. Those who do not eat cured meats do so for ethical or environmental reasons, and some consume them in moderation for reasons of diet or food intolerance.

A theme that emerges is connected to the possibility of quickly preparing meals with cold cuts: *“eating a good salami allows you to quickly prepare a good dish and to comfortably carry a good food”*; *“I eat them because I can easily bring a sandwich to school”*; *“they are convenient to prepare when I have to eat a fast, packed lunch”*. A further aspect concerns conviviality, an identification with feeling good among company in the context of aperitifs, parties or moments of sociability. The participants declare that they know little about the place of origin of cured meats, but in their intentions, there is the desire to read more about the origin of these products. If in general the attention towards pollution and the fight against waste have increased, it is not possible to grasp the close link between sustainability and cured meats, also understood as production, distribution and consumption.

Hermeneutic analysis of the focus groups has made it possible to reveal individual meanings and perspectives with respect to the focal issues, to go beyond the responses, highlighting some implicit elements in relation to the link between consumption, cured meats and sustainability.

Analysis of the contents of students' contributions thus shows that the salient factors in and/or processes for their involvement in sustainable actions are attributable to different levels.

The categories at the individual level mentioned by the students are skills and information, motivation, personal values and sense of responsibility and attitude towards the future: *“I buy it (food product) because there is quality”*; *“I buy it because it suits me”*; *“I buy it because one is worth the other”*; *“...but, you don't go to the supermarket with the idea of buying a product that will have the least impact on the environment [...] because you don't know how to evaluate it, you don't have the information”*.

The expressed reasons also refer to external factors that can affect purchasing and consumption choices: *“I do not believe that sustainable actions in the purchase of cured meats will save the world, because I do not believe that everyone does [this]; there will always be someone who will not”*.

On the other hand, there is a sense of disempowerment regarding the role of young people in society, since, according to some participants, the possibility of implementing real change depends, above all, on the decisions of institutions: *“I think we are still too young for these things; we need to focus on who has the power. They are the ones who ultimately decide for all generations”*.

In particular, the perception of trust is a category that transversally influences different aspects, i.e., the relationship with institutions, the economic market and the system in general:

*“[...] Journalists and mass media then exaggerate [things]... And, all this makes us even more confused and ignorant”*; *“At the supermarket, organic things*

*do not even have shelves. They are hidden in the corners. You walk by and you don't even see them unless you're really interested".*

A further element pointed out by the focus group participants is the risk, on the part of some companies producing cured meats, of using greenwashing in their communications with consumers, a strategy aimed at minimizing the true social, environmental and economic impact of their products. As a participant in the focus group stated, *"there is so much greenwashing, many words but few concrete certifications, that it becomes difficult for the consumer to be responsible, especially if you do not know the terms used to define sustainability in the supply chain"*. The use of vague and misleading language for consumers and the use of declarations of organic or green certifications whose existence is difficult to verify are thus some of the techniques more widespread than *greenwashing*. In the meat trade, terms such as "regenerative pasture" or "low-carbon chicken" are just a few expressions frequently used in marketing but for which there are no standards or scientific definitions, leaving these ideas vulnerable to being used in a plot for greenwashing.

Hence, companies wishing to emphasize the environmental characteristics of their products, thereby gaining the confidence of consumers, must provide consumers with complete and truthful information.

Pedagogical reflection can help prevent episodes of greenwashing from a dual perspective. On the one hand, it is a matter of compelling companies, in identifying relevant consumer-oriented measures, to integrate a green transition into their corporate identity and organizational design, making sustainability a lever for development and, on the other hand, of training consumers in deciphering *marketing* messages, in distinguishing the serious and sustainable commitment of virtuous companies from greenwashing.

The debate on consumption and sustainable production questions companies regarding their sustainability in terms of how their products and services reflect the lifestyles of customers, in terms of the belief that "façade" interventions are not enough. In fact, it is necessary to redefine a business model in depth, to propose socioenvironmental performance improvement and to not hesitate to intervene to influence consumer habits in a more responsible sense. It is up to companies to intensify the demand for precise information on the nutritional characteristics of products, reiterating the importance of an effective guarantee regarding the requirements of health, safety, environmental impact and production processes.

The points of sale and purchase of cured meats, whether supermarkets or small family-run shops, are interposed between producers and consumers and, if pedagogically oriented, can become educational laboratories, informal places for food education that present themselves as important allies of formal education.

Although the on-the-shelf presence of products that are not only ecological and organic but also fair trade and have reduced packaging, as well as the adoption of environmental management measures, is no longer a sporadic exception within the points of sale in large-scale distribution, the relationship between environmental awareness and purchasing choice needs to be further deepened according to the participants: two state that they *do not buy products linked to a sustainable supply*

*chain*, despite being aware of environmental problems, and only one out of 18 students reported paying attention when choosing the point of sale.

Another interesting element is the identification of the sustainability of products with sustainable packaging. *“I look more at sustainability by linking it to other aspects, for example, packaging”*, stated one participant, whose statement was then reiterated and confirmed by others. Without wishing to deny the importance of the sustainability of packaging and the numerous initiatives to reduce plastic, the excessive attention given to the way in which a product is presented can deceive a consumer if he or she is not trained in the first years of life in making a critical product choice. The risk that can be glimpsed, then, is that we could lose sight of the need and the real characteristics of a product itself, beyond the packaging or advertising message that accompanies it.

Numerous studies on the symbolic value of food attest that product choice is strongly influenced by the meaning attributed to a food choice and by the private and public value that this type of consumption possesses (Russo, 2011).

Generation Z is more likely to declare, in principle, that they care about the environment more than other generations; however, established beliefs do not necessarily translate into concrete actions. In this study, although concerns were expressed about the environmental footprint of food of animal origin and the consumption of soil and water linked to the production of cured meats, only three participants stated that they personally address these when buying and choosing the cured meats they consume and expressed a desire to become more informed. These young participants are increasingly aware of the climatic costs of their actions and choices, but, generally, they are not willing to radically change their diet: one participant declares to have reduced her consumption of cold cuts but does not feel ready to cease this because this food is part of her roots and family traditions. It is an opportunity for socializing and sharing. These young Gen Zers also state that they are willing to change their consumption habits of cured meats, in terms of sustainability, if prompted by adequate scientific evidence that justifies the change: *“I am willing to change my habits if I receive scientific data of a certain type, data on actual water waste, for example; scientifically made information with evidence”*.

While no particular comments emerge in relation to the price of a product, a recurring theme is the concern for animal welfare, i.e., that the meat used to make cured meats comes from farms they define as “ethical”.

In both focus groups, the Zers declare that they do not usually read labels and do not know the sustainability criteria for cured meats. Students who come from faculties oriented to the theme of sustainability, however, report that addressing some thematic aspects in the classroom during lectures has helped them reflect on the theme and raise awareness in terms of changing, albeit limitedly, some consumption habits.

The family turns out to be the context that most influences and accompanies the choices of young people. In particular, it functions as the backbone of social coexistence in its relational dimension and in that linked to consumption. Family lifestyles thus play a critical role in determining the creation of sustainable forms of habitus, from both a social and environmental point of view.

When asked, “What would you recommend to cured meat producers in order to communicate their sustainability practices to consumers?”, the focus group participants suggested making all certifications more visible, investing in them to position them on the market in an irrefutable way and to define strategies for companies to be closer to their consumers and communicate their efforts in a transparent way.

A noteworthy aspect for these students is the importance of making evident the origin of a product and the guarantee of the use of *Italian meat* in the production of cured meats. Today, the competitiveness of products is increasingly based on the possibility of communicating and assuring the customer that they come from contexts known and recognized as excellent. In this light, giving new impetus and innovating production according to the criterion of particularity imply new logics and significant training actions oriented towards research and the construction of meaning to help producers and consumers reinterpret and give a new identity to this important market sector.

#### **4 Challenges and Educational Perspectives for Sustainable Cured Meat Consumption**

Only a food culture more attentive to the values of quality, particularity and sustainability in all its forms can successfully address the food issues of our century, from those related to the access to food to the prevention of a wide range of diseases and to respect for the environment. Proper, good nutrition, not understood in terms of restrictions and therapy but in educational terms, should become the subject of teaching, which also favours the recovery and consolidation of local traditions, to ensure a lifestyle based on respect for oneself and one’s territory.

The particularity of a dish is linked to its territoriality. This term, from the French *terroir*, recalls the environment in a cultural, economic, morphological sense, focusing on biodiversity and the local and includes the human in his or her social and historical interactions. Territory from this perspective specifies the quality of a product, whether it is good and if possible, fair, that is, produced while respecting both the natural and social environments. The particularity of a food thus expresses its ability to convey the customs and traditions of a place, helping build its identity.

Today’s food, as M. Franchi recalls, is flexible: “it adapts to the situations in which it is consumed, intertwines with them, gives rise to varied phenomena of hybridization, breaks down into ever smaller and more transportable portions, dresses in different forms, is continuously transformed into ‘other’: spectacle, symbol, care, sociability, communication” (Franchi, 2009, p. 11). Today, we discuss the sustainable quality of nutrition, which takes into account health in relation to humans (emotionally, psychologically, in terms of taste), the environment (ecological value) and society (cultural, economic, political value). Deciding what is good to eat generates a certain apprehension and difficulty of choice: humans are stunned today more than in the past by the excess of supply and information; they do not

know, in depth, the industrial processes, composition of food or consequences for health of what they eat.

Choosing what to eat has the power to change the world. We also build a certain food culture through the choices we make. Learning to choose is therefore a primary goal of nutrition education.

Educating for sustainable consumption requires processes of shared responsibility geared towards global well-being and from the perspective of a culture of sustainability. First, there is the need to put in place training courses at different levels of the supply chain to spread among workers an analytical knowledge of their products and the ability to communicate this to consumers and stakeholders and grasp the information needs of the latter. For example, it would be interesting to help companies promote, through the organization of events open to citizens or workshops dedicated to families, correct and healthy lifestyles, starting from the knowledge of the focal company's products itself. To transfer these issues in a comprehensible and immediate way, thereby integrating product/service communication with the dimensions of sustainability, sustainable educational communication is more necessary than ever; it must be based on a new paradigm that takes into account complexity and offers an unprecedented look at the environment and processes. Second, without any advocacy of a particular temporal order, as it is necessary that these two paths develop jointly, the activation of educational paths in the school, family and social spheres can no longer be postponed to ensure consumers know how to choose and open themselves to change in terms of assuming responsibility for a sustainable way of life. Strengthening the alliance between person, local identity and local brand is a useful strategy to prevent the ignorance of the citizen/consumer and the simultaneous indecision of producers, affecting the image of a company and, at the same time, the attractiveness of its products.

An interesting element for overcoming uncritical habits and routines by virtue of the close link between individual behaviour and context is the importance of promoting more sustainable behaviours, moments of social learning, participatory problem-solving, comparison and shared discussion.

The discourse around food is characterized as an opportunity to interpret, between the local and global, new lifestyles and daily experiences of consumers. That is, it is an opportunity to spread a new culture of the planet that alludes to responsibility and participation.

The challenges of healthy eating are issues that challenge everyone. Pedagogical reflection, answering calls to explore new frontiers of research and action for sustainable well-being, confirms the relevance of training in the discourse on nutrition, recalling, among others, the themes of nutrition, human health and inclusion. Food is a material and symbolic "place", generative of experience and knowledge, of culture and science, of dialogue and comparison. It is necessary to create real *food education* oriented towards greater ethical responsibility from a perspective that is not an obstacle to the fulfillment of each person.

Identifying some levers that stimulate consumer behaviour, i.e., affect purchasing styles and stimulate the demand for products attentive to sustainability, is a useful means for improving direct business strategies aimed at encouraging sustainable

cured meat consumption. This is certainly a complex and multifaceted challenge that must be accepted by policy-makers with the support of the various parties involved: producers, processors, distributors, technicians, researchers, trade representatives and consumers.

It is important that the changes leading to the sustainability of the food system start from the bottom, that the ecological transition is conducted not only by the state or the market but also the values of individual protagonists and that the responsibility of civil society and the younger generations is recognized.

Consumer information is, therefore, a key element in sustainable development strategies, not only at the European level but also at the national level. The use of consumer information tools in relation to sustainability objectives poses numerous challenges of which we must be aware.

It is necessary to address the fact that citizens-consumers alone, via their purchasing choices, cannot change the entire production system because these choices move, in any case, within a system that is designed with the choices and actions of multiple actors, starting with economic operators and institutions. This reiterates the importance of informed and conscious participation that includes more points of view and more space and time for reflection on any action. It is thus necessary to consider the urgency of training courses aimed at parents, teachers, canteen staff and food companies that go beyond a notional-nutritional and taxation-precept approach. The complexity of food touches the past and the present, time and space, nature and culture, near and far, body and mind, thoughts and feelings: it touches humanity in its entirety.

“I do not consider myself sustainable regarding the consumption of cured meats, but even in this consumption I can improve myself”: this statement leads us to reflect on how if, on the one hand, the interest of Generation Z consumers in food issues has increased. On the other hand, the attention to “eating well” or at least “eating better” is not sufficiently widespread and therefore should be addressed through adequate food education. Producers, suppliers and consumers must be able to travel together on a stretch of road towards greater food awareness, building a concrete training alliance across the entire supply chain in terms of sustainability. A diet oriented to sustainability and attention to different and better nourishment can contribute, more than many other economic and social factor, to significantly changing our way of living and being together, with a consequent increase in the confidence in a future of greater individual, family and community well-being.

The focal object in this research, if in some ways it seems very distant from the educational dimension, in reality can only feed on it. For sustainable cured meat consumption, we need more education and investment in the new generations, engines of change. Nutrition and consumption are “formative” acts, an integral part of our life experience, through which pedagogy can contribute to deciphering the educational sense of sustainable choices, on which human survival depends. Committing to a more adequate management of the Earth’s goods means confronting a change that has important ethical, ecological and economic repercussions; it alludes to educating people who draw on resources in a fair and responsible way, thus generating new lifestyles.

It has thus emerged that the adoption of green behaviours requires systematic action to raise awareness on the issue, understood as the training and involvement of businesses and citizens, educating even the youngest to act responsibly in their daily choices.

On the one hand, if the consumer has the opportunity to manage his or her relationship with food in an active and creative way, contributing to the formation of his or her identity, on the other hand, we cannot but consider the risk that basing his or her identity on consumption leads to a commodification of life. Pedagogical reflection, in contrast, can enrich the paradigm of food with meaning, enhancing it in the context of an economy in which innovation is not played out exclusively before the introduction of new distribution formulas or new levers of communication and marketing. No preventive action can be separated from a rigorous education programme that can take place in different contexts: families, schools, universities, businesses, supermarkets and territories.

The crucial role of citizens-consumers and, therefore, of the information addressed to them in sustainable development strategies must be promoted with the awareness that the active participation of citizens cannot be reduced to the dimension of consumption alone. Strategies that truly want to make citizens an active part of the transition towards a fully sustainable world cannot relegate them to the sole role of individual-consumer but must provide solutions that guarantee the full, effective and active participation of citizens in achieving the Sustainable Development Goals in multiple forms and at every level. That is, they must include the full participation of each person in public life and decision-making processes, favouring forms of active citizenship that are independent of the individual's purchasing power. The ecological transition in the cured meat supply chain thus requires a "virtuous circle of responsibility": the involvement of all institutional, social, economic and individual actors in a common commitment aimed at promoting the civic engagement necessary for change leading to a more sustainable future.

## References

- Baldacci, M., & Frabboni, F. (2013). *Manuale di metodologia della ricerca educativa*. UTET.
- Baldock, D., & Hart, K. (2021). *Pathways towards a legislative framework for sustainable food systems in the EU*. Institute for European Environmental Policy.
- Bernardi, E., Capri, E., & Pulina, G. (2019). *The sustainability of meat and cured meats in Italy. Nutrition aspect, food safety, environmental impact, animal welfare, circular economy, no waste*. Franco Angeli.
- Berners-Lee, M., Kennelly, C., Watson, R., & Hewitt, C. N. (2018). Current global food production is sufficient to meet human nutritional needs in 2050 provided there is radical societal adaptation. *Elementa: Science of the Anthropocene*, 6(52), 1–14.
- Birbes, C. (2012). *Nutrirsi di relazione. Una riflessione pedagogica tra cibo e educazione*. Pensa Multimedia.
- Bogueva, D., & Marinova, D. (2022). Australian Generation Z and the nexus between climate change and alternative proteins. *Animals*, 12(19), 2512.

- Bornatici, S. (2017). *Dal banco alla tavola. Percorsi educativi, spreco alimentare, didattica sociale*. Pensa Multimedia.
- De Ketele, J. M., & Roegiers, X. (1996). *Méthodologie du recueil d'informations: Fondements des méthodes d'observations, de questionnaires, d'interviews et d'études de documents*. De Boeck.
- Franchi, M. (2009). *Il cibo flessibile. Nuovi comportamenti di consumo*. Carocci.
- Grant, F., Scalvedi, M. L., Scognamiglio, U., Turrini, A., & Rossi, L. (2021). Eating habits during the COVID-19 lockdown in Italy: The nutritional and lifestyle side effects of the pandemic. *Nutrients*, 13(7), 2279.
- Grilli, S. (2014). Case, cibo e famiglia. Pratiche dell'abitare e della relazionalità parentale. *Lares*, 80(3), 469–490.
- Intergovernmental Panel on Climate Change (IPCC). (2019). *Climate change and land: An IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems*. Accessed February 20, 2023, from <https://www.ipcc.ch/srccl/>
- Intergovernmental Panel on Climate Change IPCC. (2022). *Sixth assessment report – Chapter 7: Agriculture, Forestry and other Land Uses (AFOLU)*. Accessed February 20, 2023, from <https://www.ipcc.ch/report/ar6/wg3/>
- Loader, B. et al. (2014). 'The networked young citizen: Social media, political participation and civic engagement'. *Information, Communication & Society* (pp. 143–150).
- Montanari, M. (2004). *Il cibo come cultura*. Laterza.
- Morin, E. (2015). *Insegnare a vivere. Manifesto per cambiare l'educazione*. Raffaello Cortina.
- Russo, V. (2011). Le 'nuove' sensibilità dei consumatori e il cambiamento nei processi di comunicazione. In V. Russo, S. Marelli, & A. Angelini (Eds.), *Consumo critico, alimentazione e comunicazione. Valori e comportamenti per un consumo sostenibile* (pp. 24–72). FrancoAngeli.
- Standage, T. (2010). *Una storia commestibile dell'umanità*. Torino: Codice, Torino.
- Tomlinson, J. (2007). *The Culture of Speed. The Coming of Immediacy*. Sage Publications.
- Trinchero, R. (2002). *Manuale di ricerca educativa*. Franco Angeli.
- United Nations (2015). *Transforming our world: The 2030 Agenda for sustainable development*.
- Viganò, R. (2003). *Professionalità pedagogica e ricerca*. Vita e Pensiero.