Eating in 2030: trends
and perspectives

Barilla Center
FOR FOOD & NUTRITION

people, environment, science, economy

THE BCFN CONTRIBUTION TO THE MAJOR ISSUES IN FOOD AND NUTRITION

The multidisciplinary analysis concerning the people, environment, economy and society has led to the definition of 4 specific lines of interconnected studies on the issues related to food and nutrition.

FOOD FOR ALL

In the area Food for All, the Barilla Center for Food & Nutrition addresses the issues of access to food and of malnutrition, with the aim of reflecting on how to promote better governance of the global food system in order to make a more equitable distribution of food possible and to encourage a better impact on social welfare, health and the environment.

FOOD FOR SUSTAINABLE GROWTH

With reference to the area Food for Sustainable Growth, the Barilla Center for Food & Nutrition aims to examine the issue of a better utilization of natural resources within the food chain. More specifically, the analyzes performed have allowed us to point out the weaknesses, to assess the environmental impact of the production and consumption of food and to formulate (a set of) proposals and recommendations concerning personal and collective lifestyles that can have a positive affect on the environment and natural resources.

FOOD FOR HEALTH

In the Food for Health area, the Barilla Center for Food & Nutrition decided to start its research work by analyzing the relationship that exists between nutrition and health. It thoroughly analyzed the various recommendations made by the most authoritative scientific institutions in the world, in addition to the themes that emerged at different stages of discussion with the most qualified experts, thus providing civil society with a concise and effective overview of concrete proposals aimed at facilitating the adoption of a correct lifestyle and a healthy diet.

FOOD FOR CULTURE

In the Food for Culture area, the Barilla Center for Food & Nutrition described man's relationship with food. In particular, the BCFN wanted to retrace the most important steps along the path that have accompanied the development of the man-food relationship, bringing (through moments of comparison) the fundamental role of the "Mediterranean-ness" and its relevant dimensions to the center of attention.

THE VISION OF BARILLA CENTER FOR FOOD & NUTRITION

The Barilla Center for Food & Nutrition (BCFN) is a center of multidisciplinary analysis and proposals which aims to explore the major issues related to food and nutrition on a global scale. Created in 2009, BCFN intends to listen to the demands emerging from society today by gathering experience and qualified expertise on a worldwide level and promoting a continuous and open dialogue. The complexity of the phenomena under investigation has made it necessary to adopt a methodology that goes beyond the boundaries of different disciplines.

These topics under study are broken down into four areas: Food for Sustainable Growth, Food for Health, Food for All and Food for Culture. The areas of analysis involve science, the environment, culture and the economy; within these areas, BCFN explores topics of interest, suggesting proposals to meet the food challenges of the future.

THREE PRESENT-DAY PARADOXES ABOUT FOOD AND NUTRITION

AN ANALYSIS OF PRESENT-DAY GLOBAL SCENARIOS AND THEIR CONTINUAL AND RAPID
EVOLUTION HIGHLIGHT A WORLD OF UNSUSTAINABLE PARADOXES

1 DIE OF HUNGER OR OBESITY?

Today, worldwide, for every malnourished person, there are two people who are obese or overweight.

TODAY IN THE WORLD

UNDERNOURISHED PEOPLE
868 million

OBESE OR OVERWEIGHT PEOPLE
1.5 billion

FOR EVERY UNDERNOURISHED PERSON, THERE ARE TWO WHO ARE OBESE OR OVERWEIGHT

DEATHS EVERY YEAR WORLDWIDE FROM:

LACK OF FOOD
36 million

TOO MUCH FOOD
29 million
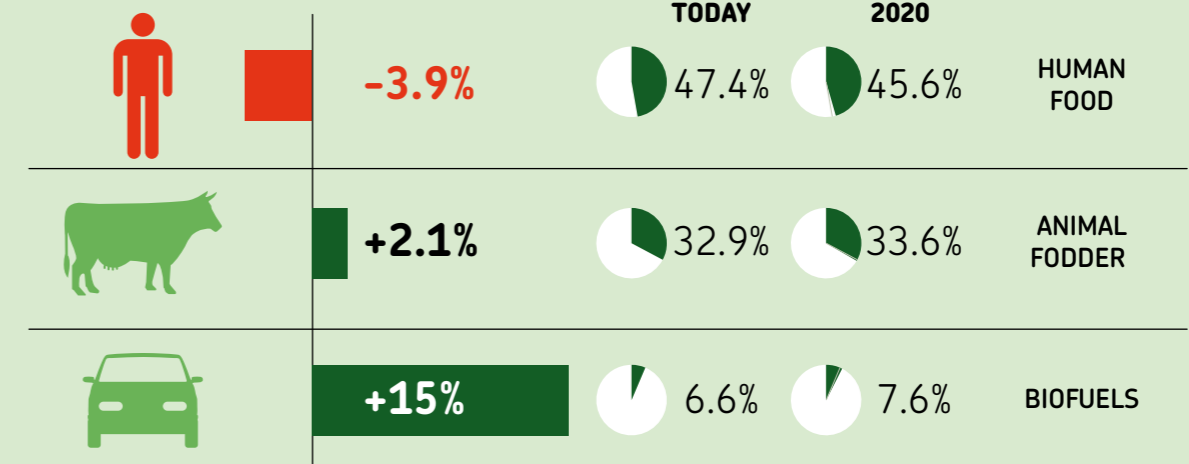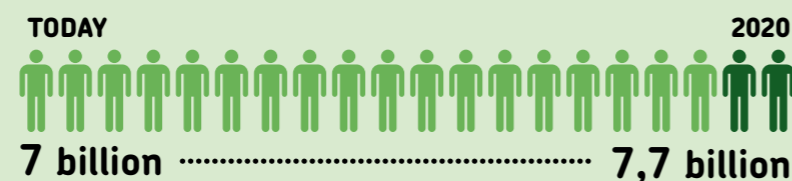
2 FEED PEOPLE, ANIMALS, OR CARS?

One-third of all food production worldwide is destined for feeding livestock. In addition, a growing share of agricultural land is used for the production of biofuel. As a result, we are choosing to feed automobiles instead of people.

* allocation of the use of grains as a percentage between animal food, human food, and the production of biofuel

GRAIN PRODUCTION IN THE WORLD AND ITS USE*

TODAY — 2020

2,245,000,000 t ·········· 2,633,000,000 t
+17.3%

POPULATION
TODAY — 2020

7 billion ·········· 7,7 billion
+10%

		TODAY	2020	
(human)	−3.9%	47.4%	45.6%	HUMAN FOOD
(cow)	+2.1%	32.9%	33.6%	ANIMAL FODDER
(car)	+15%	6.6%	7.6%	BIOFUELS

3 FEED WASTE OR FEED THE HUNGRY?

Every year worldwide, 1.3 billion tons of perfectly edible food are wasted, while 868 million people suffer from hunger.
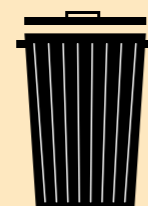
1/3 OF GLOBAL FOOD PRODUCTION = **1.3** OF FOOD ARE WASTED billion tons

ENDS UP IN THE GARBAGE EACH YEAR

4 TIMES WHAT IT WOULD TAKE TO FEED THE 868 MILLION PEOPLE WHO ARE HUNGRY

THE PLANET'S BALANCE IS NEGATIVE

Today, what is consumed is greater than what we are able to regenerate. For our current lifestyle, we will need 1.5 planets, and in 40 years we will need 3

TODAY
1.5 planets

2050
3 planets

INDEX

D ear Reader,
As Marino Niola reminds us, with a very cheerful expression, "food is the true fuel of history."

What we eat and the *way* we eat it contribute, to a considerable extent, to how we define our personal and social identity. In previous papers, we attempted to investigate in detail the cultural aspect of food, showing how people's attitude toward food reveals their most intimate needs and concerns.
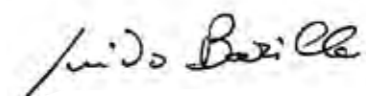
While the importance of food is certainly not destined to diminish in the near future, humankind's relationship to food is already taking different forms and, in the social and economic uncertainty we are experiencing today, they are becoming increasingly difficult to predict.

The attempt to identify and understand what the most important factors will be in the dietary scenario in the next few decades is fundamental, in our opinion, because there are actions that can be taken now to positively influence future developments.

Given the risk that we are facing today of the gradual impoverishment of food in terms of *value* and, as a result, of a dramatic degradation in the forms of social relationships associated with food, there are four themes from the analysis that seem to be the most significant for rediscovering a calmer and more sustainable approach to food: recovering an authentic dimension of *eating with others*, in the awareness that conviviality plays a fundamental role in supporting a balanced approach to food; *accessibility*, or consumers' ability to access a broad selection of quality food; the progressive evolution of *naturalness*, a series of only those minimal, strictly necessary interventions in the various phases of the agro-industrial chain, based on the best available knowledge; and the right degree of *contamination* between dietary cultures.

If the system of players in the food sector can guarantee the possible application of these themes, and if consumers are helped to accept the themes and gradually change their behavior and valorize them, we are confident that the "2030 scenario" will finally be free of the great anxiety that characterizes the relationship people currently have with the food they eat. This is our hope, in the awareness that – if this is to happen – each of us must do his or her part.

Happy reading!

Guido Barilla
BCFN President

EXECUTIVE SUMMARY

Food has always had a fundamental role in the history and social behaviors of humankind. In the near future, the importance of food is not likely to diminish, but people's relationship with food may assume different forms which – given the current phase of social uncertainty – are difficult to predict.

That said, the ultimate purpose of this work is to provide a framework of reflection in reference to the variables that will influence the future development of dietary styles, to understand how their interaction can generate future scenarios: this does not mean formulating predictions, but understanding what the dimensions and choices could be that determine future behaviors.

2030 is chosen, in particular, because as a time horizon, it is sufficiently distant to be able to develop some interesting projections, and at the same time, near enough to hypothesize a future scenario that is potentially realistic.

The perimeter we decided to perform our analysis in is represented by the post-industrial countries, which are characterized by a kind of post-modern culture. In fact, in an age where speed counts more than duration, where there is a growing sense of uncertainty, lack of control, and a sense of risk, a state of anxiety is created that was unknown to pre-modern society. This state of anxiety and uncertainty is also reflected in behaviors manifested in the diet, characterized by a demand for speed which necessitates greater practicality, due to less time being available to dedicate to consuming meals; demand for local food, associated with a search for greater authenticity in what we eat; and growing individualization, which introduces the risk of losing the dimension of eating with others.

In light of the conditions in which we live and people's perceptions and behavior in this era, our efforts were directed toward constructing a conceptual outline that can be used to understand the elements that will influence the future development of food choices within post-modern societies.

As a starting point for that outline, *five paradigms* were identified that impact the entire global socio-economic situation. The identification of the paradigms is the result of mapping the major *megatrends* upon which – as the evidence demonstrates – post-industrial and post-modern society develops. These are:

1 *demographic changes* (aging of the population, single-member nuclear families, immigration, the role of women, etc.);
2 *new geopolitical balances* (movement of power and cultural influence from West to East, from the Atlantic Ocean to the Pacific);
3 *total connectivity* (democracy and dissemination of information, immediacy);
4 *a focus on environmental aspects*;
5 *GRIN* (*Genetics, Robotics, Internet, Nano technologies*) *technologies*.

Interaction among the paradigms generates *eight forces for change and/or conservation*, each of which can be traced back, directly or indirectly, to one or more of these paradigms:

1 *globalization and financialization of the economy*;
2 *polarization*;
3 *tribalism*;
4 *sustainable happiness*;
5 *lack of trust*;
6 *convergence around media*;
7 *personalization of consumption*;
8 *the lifestyle of single people*.

It is important to emphasize that the paradigms and forces for change and/or conservation do not directly influence behaviors in the dietary context. However, they come together to define the context in which dietary tendencies can develop. Interaction among paradigms and the forces of change and/or conservation shapes the current food scenario and allows us to develop thoughts about the future.

This scenario features *thirteen* evolving *trends*, which in many cases are interrelated, which are:

1 *taste* as pleasure aimed at attaining a sense of gratification and satisfaction via the culinary experience;
2 *attention to health*, in terms of improvement of individuals' total well-being;
3 *orientation to the past*, which implies memory and preservation of traditions;
4 *orientation to the future*, which translates into an emphasis on and enhancement of progress;
5 *technology*, or the innovative force at the behest of a consumer who is ever more critical and demanding;
6 *naturalness*, or simplicity, understood as a reduction to the minimum (but not absolute) of interventions and manipulations;
7 *globalization of flavors*, understood as an exchange between dietary cultures;
8 *local and regional food*, which emphasizes the relationship between food and region;
9 *"luxury" food*, in terms of higher quality and scarcity of certain foods;
10 *"low cost" food*, or accessibility in the sense of wide availability;
11 *speed*, due to the lack of time available for the consumption and preparation of meals;
12 *individualization*, from a relational standpoint;
13 *sustainability*, which makes reference to a "knowledgeable" consumer who is involved in protecting the environment and product quality.

Each trend features certain distinctive elements, which sometimes make them appear antithetical. In many cases, however, trends that appear at first glance to be in opposition may, in fact, coexist.

Given the starting point, which highlights this opposition (which is presumed and theoretical for certain aspects) among the distinctive characteristics of the various trends, it is to be hoped that in the next 20 years, a progressive transition will be made toward a new equilibrium that features a balanced and positive approach to food: a future dietary scenario that is *realistic*, *constructive*, and *long-lasting*.

The exercise engaged in to test the scenario theory described in the document gave rise to some *questions* that are decisive for the future, about behaviors that people will adopt in the dietary context:

→ How will the sense of frenzy that characterizes current times be reconciled with a need to return to conviviality?

→ How will the search for pleasure, understood as "taste," coexist with the growing attention to well-being?

→ Will anxiety or awareness prevail in dietary choices?

→ How will elements such as traditions and simplicity survive in the face of the impact that technological innovation and scientific discoveries have (and will have) in the dietary context?

→ How will it be possible for a sense of authenticity to coexist with interest in and curiosity for new culinary styles?

→ Will access to quality food be the prerogative only of the wealthy?

→ Will the post-modern consumer be able to reconcile individual choices with environmental sustainability?

THE BCFN RECOMMENDS SOME ACTIONS FOR HELPING THE TRANSITION FROM THE CURRENT SCENARIO TO THE FUTURE ONE

To facilitate this transition from the current dietary scenario to the future one, in the BCFN's view, the main categories of actors that should be involved include: institutions, companies in the food sector, the distribution sector, and the catering sector.

In particular, it is recommended that *institutions*:

→ use price leverage in a balanced way to discourage habitual consumption of *junk food* and, instead, encourage purchases of healthy food;

→ promote the adoption of healthy lifestyles and diets that favor the consumption of foods that have a lower impact on the planet's ecosystem;

→ incentivize so-called "urban garden" initiatives;

→ support the dissemination of accurate information and dietary education.

Companies in the food sector should:

→ continue to develop new forms of *convenience food* with a high nutritional level;

→ propose further innovations to meet the growing personalization of food offerings and to limit the environmental impact of food packaging;

→ support consumers in their efforts to reduce waste to a minimum, in part thanks to the commitment of the entire manufacturing chain;

→ continue the activity of reformulating existing products in relation to advances in technology and develop new products;

→ promote healthy lifestyles and diets from people's first years of life;

→ promote new forms of communication design.

Where *distribution* is concerned, this involves:

→ developing new methods for rapid purchasing, with high digitalization;

→ developing actions and strategies that help direct choices toward products typical of a healthy diet and with a reduced environmental impact.

On the other hand, the *catering sector* should create new solutions to help people find new space and time to dedicate to eating meals with other people.

Keep in mind, as well, that the family and the school have a fundamental role in effective education about proper diet for tomorrow's adults. In fact, the first step toward changing total lifestyles consists in correcting the dietary habits of young children rather than revolutionizing dietary styles.

In recognition of the fact that isolated activities among a single category of actors could prove to be inadequate, the cooperation of all parties involved is believed to be necessary to achieve the desired results.

In conclusion, the ultimate purpose of this work is not to predict what will happen in 2030, but to offer some useful suggestions for contemplation to those participants in the dietary world, so that they can adapt to ongoing changes and attempt to enhance the most positive aspects of future trends.

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FOOD TOWARDS 2030

Demographic trends (aging of the population, single-person households ...), new geopolitical balance, total connectivity, focusing on environmental aspects and GRIN Genetic, Robotic, Information and Nano-processes) technologies are the 5 main models that have an impact today on the entire socio-economic globalization context. A series of opposing tendencies within the food scenario will be triggered between now and 2030 by the interaction among the global models and the forces of conservation and change. Knowing about them will allow us to act to address them the best we can for the welfare of society.

THE 5 MODELS

Demographic trends — New geopolitical balance — Environment — Total connectivity — GRIN technologies

MAIN TRENDS

Commensality

Speed and space-time barriers are increasingly reducing the opportunities for gathering around the table, fostering a strong push towards individualism. We need to create more opportunities to facilitate the sharing of food that encourage dialogue, reflection and the enjoyment of sociality

Accessibility

We must work to ensure that access to food is guaranteed to large segments of people, and offers a wide array and quality

Naturalness

Consumers that have bought organic food

83% in the world

Reduction of interventions and manipulations in the various phases of the agricultural sector, without sacrificing innovation

Fusion

Exploitation of the total connectivity to increase the knowledge and the exaltation of the different food cultures and their authentic flavors

Food at home vs Eating out

In Italy meals are eaten

76% at home

24% outside home

There has been a progressive increase in meals eaten outside the home, often characterized by individualization and a lower quality of the food offering

It would be opportune to make an effort to balance the trends for a healthy and balanced approach to food

RECOMMENDATIONS

The RESTAURANT INDUSTRY should strive to develop new solutions to help people find the space and time to devote to meals in the company of other people

The INSTITUTIONS need to focus more on promoting the purchase of healthy foods and use a balanced price leverage to discourage the use of junk food

The INSTITUTIONS should promote the adoption of lifestyles and eating habits that favor the consumption of foods that contribute to a healthy diet and have less impact on the eco-system of the planet

The FOOD INDUSTRY should spread and share in global markets not only goods but food and dietary habits, promoting their integration in contexts that are increasingly multi-ethnic

The FOOD INDUSTRY must continue to develop more and more new forms of convenience foods characterized by a high level of nutrition

2030

1. WHY IT IS IMPORTANT TO UNDERSTAND HOW WE WILL EAT IN 2030

UNDERSTANDING DIET IN THE 21ST CENTURY

Niola said: «Food is the true fuel of history for two simple reasons: one is natural and one is cultural. The first one is obvious – humans eat to live. The second, and much more crucial, is that people live to eat».[1]

Food has always played a fundamental role in the history of humankind and social behavior. In previous papers, we attempted to underline this aspect by highlighting how people's attitude toward food reveals their most intimate needs and concerns.[2]

While the importance of food is certainly not going to diminish in the near future, it is difficult to predict the ways that humankind's relationship to food could change, especially because of social and economic uncertainty.

In our opinion, it is also fundamental to understand which crucial factors will exist in the food system in 2030, because there are actions that can be implemented now to positively influence future developments.

Our analysis of potential dynamics includes post-industrial countries, characterized by a type of post-modern culture: indeed, it is in this context that we will be investigating people's behavior, as individuals and as members of social groups.

Therefore, we intend to begin with the concept of a *post-modern society* to clearly define the basic features of the social environment in which changes in food sector trends will be analyzed.

According to Jameson,[3] the features which characterize modern society are heterogeneity, "difference" and fragmentation. These are the distinctive characteristics of post-modern society, strongly bound to the *compression of space and time* generated by the development of transportation, telecommunications, and computer networks. Various authors (including Bauman,[4] Beck,[5] and Giddens[6]) maintain that the result of this compression dynamic is a society of individual and global risk or uncertainty.

In social and economic organizations, vertical (pyramid) hierarchies are more and more frequently being replaced by a type of horizontal relation, based on the logic of the exchange of flows online, where types of political power and social mobilization change radically.[7]

Goods or people are no longer at the center of economic flows: communication networks primarily are vehicles for information, and to authors such as Bell[8] and Touraine,[9] post-modern society appears to be an *information society*. Indeed, in their view, information is the main merchandise for today's society and its production, handling, and transmission are at the core of a modern services economy. In this context, the Internet becomes both the format that best characterizes post-modern communications and the annulment of space, as well as a metaphor for the organization of relations and communication between nodes in each field.

Today's society (which Bauman describes as "liquid modernity") is a society that rejects stability and duration, which prefers appearance to substance, in which time is fragment-

ed into episodes and health becomes "fitness," where the greatest freedom of expression is channel surfing.[10] A society that is characterized by political apathy, the decline of public figures, a frantic search for community, the disappearance of the art of building social bonds; and a desperate worship of the body. And finally, a society in which individualism is accompanied by a sense of abdication of responsibility, where the individual finds it hard to be the true protagonist of his/her own existence.[11]

This society is characterized by fears, in which – again, according to Bauman – the only constant is change and the only certainty is uncertainty,[12] and all these fears can be traced back to a single, basic fear: the *fear of uncertainty*. This fear – which is the inability to understand what is happening and what will happen, combined with the dread of not knowing how to deal with changed circumstances – is generated by the frenetic anxiety of individuals who are now unchained from the weight of tradition.[13]

Even if "fear is certainly not new to human life [since] humanity has known it since its beginnings,"[14] this specific type of fear is new in the history of humankind.

Over the course of time, threats have always seemed to be the same, linked to three dimensions: *time*, *space*, and *relationships*. Sigmund Freud classified these fears in a definitive manner: "We are threatened with suffering from three directions: from our own body, which is doomed to decline and decay and which cannot function without pain and anxiety as warning signals; from the external world, which may rage against us with overwhelming and merciless forces of destruction; and finally from our relations with others."[15]

In an age where speed counts for more than endurance, where there is a growing sense of uncertainty, lack of control, and a sense of risk, a state of anxiety is created which was unknown to pre-modern society. According to Bauman, all of this is the price to be paid for new individual freedoms and new responsibility.

This state of anxiety and uncertainty is also reflected in behavior within the scope of eating. If we select a variable for each one of the dimensions cited (time, space, and relationships), this becomes particularly clear: the need for speed requires more practicality, due to the shorter time available to dedicate to meals. The demand for food linked to the land leads to the search for greater authenticity in what is eaten. Increasing individualism leads to the risk of losing the dimension of commensality.

The three dimensions of "time", "space", and "relationships" have always played a fundamental role in the history of eating.

Referring to *time*, Montanari recalls that "harmonizing the pace of your life to that of Nature's has always been one of man's primal needs, but at the same time, they were pursuing the goal of controlling, changing, and, in some way, opposing Nature's time."[16] The author goes on to maintain that the struggle for mastery of *space*, that is, to obtain food from other places, trying to combat the limitations of territory in addition to the seasonable variability of products, is an ancient practice ("action on space and action on time – in antiquity – intersected and strengthened each other"[17]). Finally, the third dimension, that of *relationships*, is linked to the element of conviviality, namely, eating together, as a characteristic feature of human culture.[18]

Going back to our era and to the sense of anxiety and uncertainty which distinguish it, a strong feeling of confusion is recorded in regard to the values and content of the food proposal, a confusion that was well depicted by Fischler and Pollan in their "omnivore's dilemma/paradox."[19]

Some important questions about the future originate here, also about the aspect of food; we will mention only a few:

→ What impact will the speed that characterizes this current era have on people's lifestyles and health?

→ Will the fragmentation of time and the individualism that are a hallmark of post-modern society influence emotional well-being in the future?

→ In the future, will technology have a positive impact on health and well-being, or will it
be judged as an element that opposes the concept of naturalness?

→ Will people be able to understand the importance that certain innovations in the food
system will have in the future, or will technology always be considered a manipulation
and an artifice of Nature?

These questions are difficult to answer. And it is precisely these and other questions that
the BCFN proposes to address in this paper. We are not attempting to outline an actual
future scenario in a deterministic sense, but to explain the great questions which under-
lie putting it into action.

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1.2 THE PAPER'S ANALYTIC METHOD AND LOGICAL THREAD

As previously stated, the ultimate purpose of this work is to provide a complete
framework for reflection, with specific attention to the variables which will influ-
ence the future development of eating habits, in order to understand how their
interaction may generate future scenarios. Therefore, no forecasts will be made; we will
try, instead, to understand what the dimensions are and the choices which will determine
future behavior in order to construct a *plausible* and *desirable* scenario which may help
us identify a path that can overcome the contradictions found in behavior and in the
dynamics of modern food systems. Having defined the starting point, ours is an exercise
regarding the search for a *way* and a *new pact* among the food system's actors.

Although we are aware of the topic's complexity and the difficulty of this task, we do not
want to deny ourselves the possibility of launching a reflection on the *direction* of the road
that the food system – and consequently, people's behavior – can take to regain a differ-
ent and more suitable approach to food.

In the first section of our work, we will analyze the most significant paradigm changes
now underway from a social and economic point of view.

The *paradigm changes* will be correlated to the major *forces of change and/or of conservation*
affecting people's lives, and the most significant *trends* in eating behavior will be listed in
the second chapter.

On the basis of the information gathered, we will construct a model that highlights the
realities present in the food system, outlining what future scenarios might look like. In
the third chapter, one of these scenarios will be presented, which, in our opinion, is ideal,
accompanied by reflections and recommendations – stated in the fourth chapter – so that
this scenario may actually come to pass.

We chose 2030 as the date of reference because it is a time horizon sufficiently distant to
be able to develop interesting projections and, at the same time, near enough to hypoth-
esize a future scenario that is potentially realistic.

Our analysis, which is qualitative, sociological, and cultural, may involve sacrificing some
aspects of analytical rigor and the relative certainties supplied by empirical evidence.

Nevertheless, the process of constructing the unifying framework of emerging trends pre-
sented here is based on an analysis of the most trusted scientific literature on the subject.
The subsequent developments and reflections which are derived from this are generated
by the BCFN's experience and convictions.

THE ANALYSIS
IS QUALITATIVE,
SOCIOLOGICAL,
AND CULTURAL

PARADIGMS, FORCES OF CHANGE AND/OR CONSERVATION, AND CURRENT MAJOR TRENDS

O ur efforts were directed toward constructing a *conceptual diagram* that can be used to understand the elements that will influence the future development of food choices within post-modern societies.

To this end, it is helpful to subdivide the change factors into three different groups, ranking them according to the breadth of their impacts and influence on eating behavior:

THE FACTORS OF CHANGE ARE SUBDIVIDED INTO THREE GROUPS BASED ON THE EXTENT OF THE IMPACTS AND INFLUENCE ON DIETARY BEHAVIORS

1 *Paradigms* represent the major basic trends of the economy and society, and contribute to defining the overall scenario inside which all the other forces operate. These are long-term models which are already deploying their effects on the present, and which will determine – through their interaction – the generation and evolution of forces and trends which will characterize the upcoming decades. In several specialist publications, paradigms are also called *megatrends*;[20]

2 The *forces of change and/or conservation* are the "engines" which drive the transformation of social behavior or are the "custodians" of the status quo. These elements co-exist in a dialectic form and explain both the processes of change and the phenomena of inertia which tend to slow them down;

3 The *food trends* derive from the interaction between paradigms and the forces of change and/or conservation. The identification of these trends – which here refer exclusively to food dynamics – is not solely the result of the analysis of existing literature on the subject,[21] but a direct comparison of authorities who are capable of understanding the interactions between food and social behavior, and can independently develop predictions of future dynamics.[22]

Due to the level of complexity of the multiple interactions which characterize them, it is impossible to establish the specific connection points between the model's different variables. Nonetheless, the qualitative description of the factors sets the bases for a sufficiently accurate discussion of food trends.

The overall approach is diagrammed in Figure 1.1.

In the following paragraphs, there will be a brief presentation of what, in our opinion, are the most significant paradigms and forces today, and in the future. The second chapter will be dedicated to trends in the food system, which are the core of our reflections.

1.3.1 Paradigms

FIVE PARADIGMS

As a starting point for the model produced, *five macro-paradigms* were identified which impact the entire global socio-economic situation.

As mentioned previously, paradigms are general models of reference, large global "waves" which propagate themselves over very extensive time arcs and which define society's evo-

Figure 1.1. Conceptual map: paradigms, forces of change and/or conservation and food trends
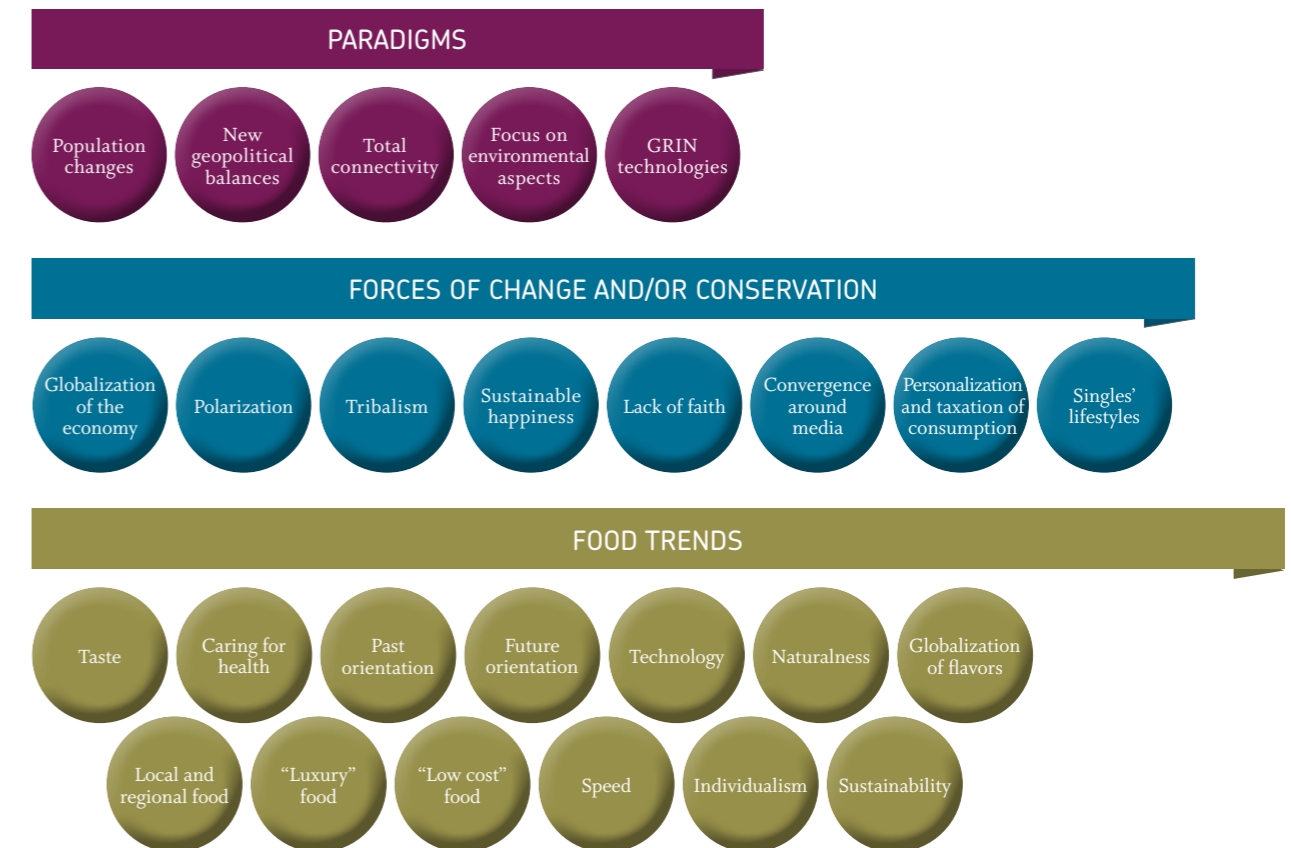
Source: BCFN, 2012.

lutionary trajectory. In other words, these are complex phenomena, which have bearing across geographic and industrial levels. These are actual "epicenters" which the forces of change and/or conservation can be traced back to. Therefore, the identification of the paradigms is the result of mapping the major megatrends – backed up by evidence – upon which post-modern and post-industrial society develops, including:

1 *Population changes* (aging of the population, single-member units, immigration, women's role, etc.);

2 *New geopolitical balances* (movement of power and cultural influence from West to East, from the Atlantic Ocean to the Pacific);

3 *Total connectivity* (democratic nature and disclosure of information, immediacy);

4 *Focus on environmental aspects*;

5 *GRIN* (*Genetics, Robotics, Internet, Nanotechnologies*) *technologies*.

Without presuming to explore topics of such breadth in detail, we will limit ourselves to outlining below their fundamental aspects, highlighting their relationship, even if indirect, with eating behavior.

Population changes

The growth in the world's population, led by developing countries,[23] is contrasted by new population trends taking hold in more developed countries, which are typical of post-industrial economies:

→ progressive aging of the population;

→ decrease in the birth rate;

→ increase in life expectancy;

→ influx of new population through migratory flows.

These trends have remarkable impacts – something that will occur more and more in the future – on countries' economic and social structure (also in relation to the increase in welfare costs[24]).

Specifically, the rebalancing of society and population will have a significant impact on the way people nourish themselves. Think, for example, of the growing and diverse needs characterizing the over-65 population group, which will become increasingly important. In this regard, the data on the growth trend in life expectancy in recent years is rather significant: in 1974, in developed countries, life expectancy at birth was between 72-75 years; today it is between 77-83 years. In about 35 years, life expectancy increased by almost eight years.25 In the next five years, the number of individuals who will be age 65 or older will, for the first time in the history of mankind, exceed that of children under age 5. The increase in the elderly population will be most evident in developing countries, although the segment of the population in industrialized countries that will increase the most will be the over-80 segment.[26]

Compared to the past, in Western countries the elderly population leads more active and independent lives, so much so that the definition of *aging active population*[27] was coined precisely to highlight how lifestyles differ from the past, as a result of improved overall health conditions.

The living conditions of this population category – which, for the first time, can influence the choices of society as a whole – in terms of *health* (healthy longevity is a goal that has yet to be consolidated even within Western countries[28]), *economic resources*, and *lifestyles*, represent one of the elements in the scenario that is most interesting and, at the moment, characterized by great uncertainty.

What seems relevant to us is to indicate the – current and predicable – presence within society of a group of independent elderly people, with a system of needs and a very specific availability of time, resources, and social relationships, and for whom eating may be a factor of interest and attention.

Younger population groups, in many cases, tend to establish the so-called "*forever young syndrome*," which translates into the myth of eternal youth.[29] Indeed, it is a type of worship of adolescence, whereby over the passage of years individuals do not accept life's biological pace.

This lifestyle is reflected in the eating patterns adopted by this population group, eating habits which mimic the way of life of young people. An example of this is the ritual of the happy hour, which Niola defines as "a syncretic social ceremony that remixes times and tastes, people and customs, fashions and manners, and the social theatre of drunkenness."[30]

Furthermore, the so-called "*new population*" that has been formed after waves of migration from emerging countries to more developed economies has and will have a strong impact on the forces of change and conservation (also in terms of "polarization," understood as the possibility or lack thereof of accessing higher quality level foods) and, consequently, on current food trends, especially for the significant fusion/exchange phenomena (among the trends that will later be discussed, here we refer to the "globalization of flavors").[31]

Finally, *women's roles* have also changed significantly in recent years and are destined to change more in the future: more women are working outside the home, and have less time to dedicate to household chores and to themselves. Over the last ten years in Italy, the time dedicated to taking care of the home (and meal preparation) by women who work, decreased by seven hours a week, and for unemployed women, by six hours.[32]

New geopolitical balances

With the fall of the Berlin Wall in November 1989, the signing of the World Trade Organization (WTO) treaty at Marrakech in 1994, and China's entry to the WTO in 2007, a new phase began in recent world history.[33] A phase during which relations among countries changed, unexpected geopolitical changes occurred, at times linked, albeit indirectly, to food (such as the Arab Spring) and in which a new division of labor was imposed.

Although it does not have a direct impact on the lifestyles of Western countries – the focus of our attention in this paper – all this impacts, at least indirectly, the level of wealth, in part due to the processes of globalization of production.

In this scenario, cities play an increasingly crucial role; in particular, some megacities[34] are clearly assuming a global role and are progressively becoming the center of new development. In these new urban centers, a gradual movement of tastes is occurring, and consequently, there is a change in eating habits. We are witnessing a diminishing of the role of tradition; consumers' means of access to products is also changing because of new distribution organizations, which are taking on increasing importance in defining eating patterns.[35]

Worldwide, the number of these megacities is expanding considerably: in 1950, only New York had over ten million inhabitants. In 1985, there were nine megacities; in 2004, there were 19, and today there are 27.[36] It is predicted that in 2050, the world's population will reach nine billion people (+32.4% since 2010) and 70% of the world's people will live in cities.

Among the various urban regions currently undergoing rapid expansion, the most striking pace is in developing countries: in these locations, within an arc of forty years, it is predicted that the urban population will grow by 70% on average (65% in Asia, 72% in Africa).[37]

In summary, the scenario that we are dealing with increasingly takes on the features of an "urban" scenario.

Total connectivity

In recent years, we witnessed the emergence of new ways to interact and socialize among individuals, companies, and communities. This scenario has gradually diminished the importance of physical and time distances: the – primarily virtual – "*community* effect" and "*network* logic" are now an integral and indispensable part of daily life, invading every social and relational aspect. For example, think of the number of Internet users worldwide: today, there are four times as many users as in 2001 (2.2 billion compared to 495 million a decade ago). Another fact that helps to understand the phenomenon is the number of text messages sent every second worldwide: they have almost quadrupled in three years, from 56,000 in 2007 to over 192,000 in 2010.[38]

Nevertheless, these impacts do not involve the entire population but only those groups which are most able to receive technological and computer innovations.

The enormous availability of data and information that can be found today, more freely, in real time and with new methods, is a positive result of the great changes underway. For example, *informal learning* has increased significantly: according to one study, the boom in social media and mobile devices has resulted in a new way of learning that influences 80% of what we learn.[39]

The use of technology itself has changed enormously over time, with *greater connectivity* among consumers. According to predictions, in 2013 people who use "mobile-type"

devices to connect to a network will exceed the number of people who will connect to it from a fixed location.[40]

However, if, on the one hand, new information technology tools increase the potential for interaction among individuals, they might, on the other hand, cause the onset of social and relational problems in some cases as well. In fact, a new compulsive syndrome, "ITSO" ("Inability to switch off"),[41] is increasingly afflicting the lives of people who feel the need to always be connected. This also regards electronic devices used in the workplace and which some people have difficulty disconnecting: over time, the risk is that people who are always connected might incur both physical and psychological breakdowns.

Also, the link to diet is obvious, if one considers the decisive role that conviviality represents for people.[42] One of the great challenges in upcoming decades will be to create social situations in which the new technologies contribute to enriching relationships. This will have an effect on many potential developments in the food industry.

Focus on environmental aspects

Population growth and consumption models contribute to the progressive scarcity of some of the natural resources which have made the last fifty years of economic development possible. The concept of *environmental sustainability*, i.e., the ability to maintain the quality and reproducibility of natural resources, is becoming increasingly important. The serious water stress that afflicts many areas of the planet, the production of electricity that depends too much on fossil fuels, and the serious risk of biodiversity loss are some of the factors that are raising growing alarm regarding the accelerated consumption of non-renewable resources.

Climate change, which we previously analyzed,[43] contributes to worsening the future agrifood scenario, and the search for sustainable agricultural paradigms is one of the great challenges for the next twenty years.[44]

In addition to resource scarcity, another equally significant topic is emerging – the loss/waste of resources. From an agricultural point of view, the issue of the use of (financial and physical) resources to produce biofuel is increasingly more important, with potential impacts on future agricultural sustainability.[45]

It also must be noted that in recent years we have been witnessing growth in the number of environmental movements.[46] Many scholars and observers have tried to explain the emergence of environmentalism starting in the 1960s as part of a more generalized passage toward post-industrial societies and the rise in new cultural models oriented toward self-realization and "postmaterialistic" values,[47] rather than toward the satisfaction of material needs. The first movements were linked to the use of chemical pesticides, the proliferation of nuclear weapons, and the use of nuclear energy. Subsequently, the perception of the finite nature and scarcity of the natural resources available on the planet became widespread, thanks to scientific contributions which had great repercussions, including the report by Dana Meadows on the limits of development, promoted by the Club of Rome.[48] In those years, an important role was played by several representatives of the scientific community, from Rachel Carson[49] to Barry Commoner.[50] It is practically impossible to cite all the major environmental organizations which were created during that time, but among them, Greenpeace is certainly the one that has taken on a very important role in international environmentalism for the near future.[51]

The renewed sensitivity to environmental topics attracts great interest in relation to food

THE CONSUMER IS ASKING BUSINESSES IN THE SECTOR TO TAKE ON INCREASING RESPONSIBILITY FOR PROTECTION OF THE ENVIRONMENT

topics, with an increasingly careful consumer who demands increasing responsibility from the food industry in safeguarding the environment and the quality of products.

GRIN technologies

New technologies – especially in the fields of energy, information, and sustainability – will play a fundamental role in evolving socio-economic changes.

According to some experts, GRIN technologies (*Genetic, Robotic, Information, and Nano processes*)[52] will change human life within the next few decades. The combined use of GRIN technologies could create a totally different world than the one we know: For example, automobiles with very low consumption that do not need drivers, solar energy that completely replaces fossil fuels, objects that can be reproduced remotely by 3-D photocopiers, and new materials that have scant impact on global resources. These are products which are already available at the experimental level, and will be further developed over the next decade.

Consider nanotechnology, a field of applied science and technology that concerns the control of matter at an atomic and molecular scale. Nanotechnologies make handling food ingredients at the molecular level possible. In the future, nanotechnology products could have a considerable effect on the food and animal feed industry, offering potential advantages to industry and consumers, as well as potential health and environmental risks.[53]

Nevertheless, the debate on the role of emerging technologies is open:[54-56] supporters of the benefits of technological changes usually see emerging technologies as an opportunity to improve human conditions. Critics, however, maintain that some of these emerging technologies could be dangerous and even contribute – in an extreme scenario – to the extinction of the human race itself.

The role of GMOs in agriculture is at the center of these debates.[57] Over the years, genetically modified organisms have generated great expectations, disappointments, and differences of opinion within the scientific community, and today the role that they may play in the near future is uncertain.

THE GRIN TECHNOLOGIES CAN PLAY A FUNDAMENTAL ROLE IN THE FUTURE DIETARY SCENARIO

1.3.2 The forces of change and/or conservation

In our opinion, interaction among the paradigms produce some significant *forces for change and/or conservation*, and each one of them can be traced back – directly or indirectly – to one or more of these forces. In particular, we have identified eight main forces of change or conservations:[58]

1 *Globalization and financialization of the economy;*
2 *Polarization;*
3 *Tribalism;*
4 *Sustainable happiness;*
5 *Lack of trust;*
6 *Convergence around media;*
7 *Personalization of consumption;*
8 *Singles' lifestyle.*

Globalization and financialization of the economy

Globalization is understood to mean the phenomenon of the worldwide unification of markets, which has pushed toward more uniform and convergent consumption and production models as a result of the spread of technological innovations and the opening of international trade. The main effect of this phenomenon is a sharp *economic and cultural convergence* among the world's countries. On the one hand, we are witnessing the gradual standardization of needs and the subsequent disappearance of traditional differences in consumers' tastes at the regional or national level, while, on the other hand, companies have more ability to take advantage of significant economies of scale in the production and sale of products, especially of standardized consumer goods. Among the risks deriving from globalization, one of the most important is excessive *cultural standardization*, understood as the loss or lack of appreciation of individual cultural identities.[59] Alongside globalization, the power of *financialization* appears to be emerging, or the significant increase in the role of financial activities within the socio-economic system's activities.[60] It is an economic development model based less and less on the real economy's manufacturing and production processes: a model that led to the extraordinary global economic crisis that the world has been experiencing since 2008.

As a reaction to this approach, alternative points of view are taking hold, proposing different approaches to economic growth and more frugal and economically sustainable consumption.[61] The dialect between these approaches will generate the overall alternative approach to consumption that will be imposed in upcoming decades.

THE LOSS OR FAILURE TO SUPPORT CULTURAL IDENTITIES IS ONE OF THE RISKS RESULTING FROM GLOBALIZATION

Polarization

The concept of *polarization* addressed herein refers to the area of post-industrial countries and, therefore, to the cultural area that refers to post-modernism.

There is an increasingly more *marked socio-economic division* between *different classes*. According to a recent study,[62] in OECD countries the average income of the richest 10% of the people is nine times higher than that of the poorest 10%. The income gap has grown even in countries with a tradition of equality, such as Germany, Denmark, and Sweden, and has gone from a ratio of 5 to 1 in the 1980s to a ratio of 6 to 1 today. The gap is 10 to 1 in Italy, Japan, Korea, and the United Kingdom, and reaches levels of 14 to 1 in Israel, Turkey, and the United States.

According to the OECD, the leading cause of this gap has been the growth in salary and compensation inequality.

At the same time, we are witnessing a gap that is not only measured in wealth, but also in *access to new information technologies*. The so-called "digital divide" is a recent phenomenon that is complex and linked to the development of information technologies and the Internet, and is generating significant cultural and social inequalities. The digital divide is closely connected to the social divide because the lack of a possibility of accessing digital technologies prevents some population groups from having the possibility to access economic, employment, and cultural opportunities.[63] In this regard, we also recall how within Europe itself there is a digital divide between the Northern and Southern European countries.[64]

Again, in this case, these are phenomena that determine not only cultural and consumption paradigms, but also the restructuring of production and industrial systems that will go in alternative directions. The decline of the middle class in the Western world will correspond to a re-thinking of an entire economic system built on the assumption of the ideal, econom-

POLARIZATION WILL HAVE EFFECTS ON THE ABILITY TO ACCESS FOOD

ic, and social priorities of the intermediate category of the population, with consequences which are unpredictable at this time.[65]

Tribalism

Starting at the end of the 1960s, the traditional social structures which had long contributed to shaping Western societies (family, church, political parties, firms, in the logic of a "lifetime job") began to fail. New situations (extended families, one-member units, etc.) were created, leading to new innovative methods of aggregation, which in their most extended form have found an effective concept in the idea of a tribe, first proposed by Maffesoli.[66]
Maffesoli defines these types of socialization as emotional communities based on "common feeling and experience." In fact, according to the author, "it can be said that we are witnessing the trend toward replacing a rational socialization with socialization that is dominated by empathy." In this manner, just when the individual is acquiring new social legitimacy, there is a growing desire to spend time together, to share ambiences and exchange emotions: thus, totally new forms of socialization arise, different from the more traditional forms based on belonging to a caste or class, since tribalism, even before it is a political, economic, or social phenomenon, is a cultural phenomenon.[67]
The concept of the neo-tribe[68] led to *tribal marketing*, a marketing strategy theorized between 2000 and 2004, whose goal is to create communities of consumers linked to the product or service being promoted.
Maffesoli and Cova, considered the main experts on *tribal marketing*, believe that this approach is an alternative that is more strictly "Mediterranean" compared to the classic North American type: while the latter usually meets a request from consumers for individualization and personalization, in tribalism, the firm does not set the goal of creating a personal bond with the customer. Instead, the firm prefers to nurture and support the bond between the customers themselves, helping them to share their passions and feel like they are part of a group. In other words, this concerns a response to the need for conviviality and belonging that is emerging in a society which, having overcome the traditional ways of belonging, has launched a course of research on new approaches and methods for social interaction.

Sustainable happiness

The expression "lifestyle" is often used to refer to what permanently and deeply characterizes the way a person lives.
Today's lifestyle, according to many sociologists, is a society that identifies happiness with hedonism and opulence, based on consumption, pleasures, and disproportionate attention to material goods. Therefore, we have supposedly achieved a substantial hollowing out of the sense of civil co-existence, and this contributes to shaking the foundations of social well-being, which include confidence, belonging, inclusion, cohesion, security, and – above all – sobriety.
In contrast to the obviously poor attention paid to society's needs and the impacts of lifestyles on society, the economy, and the environment, a spreading trend is aimed at sustaining and proposing a lifestyle focused on good practices and sustainability.[69] The objective is to guarantee *widespread and sustainable well-being* by preserving everyone's environmental, social, and cultural heritage: promoting the achievement of happiness, or meeting (basic and non-basic) needs, in a way that can be sustainable over time.

As a result, research has been conducted to find indicators able to measure the happiness and wellbeing of people; this research has involved several European countries in recent years, including Italy[70].

Lack of trust

Recent years have seen the exponential growth of problems linked to anxiety and emotional stress, especially among workers, a situation which has also been worsened by the widespread crisis.

A feeling of impatience and frenzy characterizes the lives of many people: if we compare today's lifestyle and work pace with that of about ten years ago, we realize that we are much more stressed and under pressure today due to economic issues, and forced to live at a much more frenetic pace.
While in the past, a widespread feeling of security and stability could be felt, *now everything seems to be at risk* regarding employment, society, and the future. Everything seems to be changing at an accelerated pace, beyond one's direct control, with no certainties.
One of the negative consequences of this new, widespread condition of anxiety is represented by the increasingly frequent appearance – at all social and age levels – of more or less serious nervous and behavior diseases, such as depression[71] and eating disorders. According to the World Health Organization (WHO), there are currently about 150 million people worldwide suffering from depression.

Convergence around media

Convergence of the "screens" people use and the migration of content from one technological device to another make it increasingly easy to access different high-quality sources and content, facilitating their interaction.

The risk is that having to assess the quality of different modes of communications is difficult for many consumers who lack an adequate level of information and skill. This risk for food choices is particularly high, and is the reason why consumer education on these topics is one of the crucial issues for governments and companies.
In fact, new media have reached a particularly high level of influence: specifically, blogs' and forums' ability to modify or completely change, an individual's opinion on previously-known products and services seems to be very high.
In addition, social interactions among consumers are growing, to the point that some movements and consumption patterns are born on and feed off the web. For example, think of the freegan movement (the term derives from the combination of the words "free" and "vegan"), people who live off what others throw away; or the locavore movement, people who would like to promote nearby agriculture and "zero mileage shopping" to reduce the distance food travels.

Personalization of consumption

Consumption patterns by individuals or groups bring with them a set of meanings that go beyond the simple acquisition of goods. Over time, consumption patterns and their main actors have undergone significant changes and taken on different meanings.
After the oil crises and the consumer crunch due to the international recession in the

1980s, the needs that drove consumption began to change, going in the direction of individualism and attention to the product. At the present time, some segments of consumers are distancing themselves from this model in favor of a search for experiences instead of products, of feelings and sensations rather than their use value, generating consumption models that are not very linear or predictable: this type of consumer is attracted by customized and personalized products, which under certain aspects are "unique" for their genre.

Consumers – who are increasingly more mature, demanding, and selective – take for granted functional features and benefits, the quality of products, and a positive brand image.[72] What they want are products, communication, and marketing campaigns that they can relate to and include in their lifestyles, that touch their senses and their hearts, which stimulate their minds and can provide an experience.[73]

In this context, there is room for experiential marketing, which maintains that companies need to offer consumers experiences and emotions to satisfy and engage them, thus favoring the purchase and consumption of the product/good or product/service "experienced." This approach is based on the presupposition that the consumer's choices are dictated by emotions, thus aligning with what cognitive behavior scientists have been saying for some time: the consumer does not always act rationally; indeed, in the purchasing process, the determinant is the emotional factor. Therefore, in the current situation, the brand itself is an increasingly abstract element, based on shared social values and emerging cultural identities.[74]

Singles' lifestyles

Over the past half-century, the family has undergone wide-ranging changes, from a nuclear, traditionally closed model to a broad, variably understood model.

In today's society, a family understood to be a married couple with children is progressively losing its core role, even statistically, to the emerging new family units: childless couples, single-parent families, and singles. If current trends hold in Italy, very soon single, childless people will "surpass" couples with children: in ten years, one-member units increased by 39%, while at the same time couples with children dropped more than 7%.[75]

The changes underway in the dimensions and characteristics of family units and in social dynamics also significantly influence trends in lifestyles and consumption. The seven million Italians who live alone spend 71% more on food purchases compared to the average family.[76] A person living alone often purchases greater quantities of food since smaller-size formats often do not exist, leading to grocery expenses that are higher than traditional expenses and, as a consequence, more waste created. The mass market production and distribution sector has already been aware of the "single phenomenon" for some time now, and offers, for example, single-serving products. However, on the other hand, the current time of economic uncertainty has impacted families' behavior and outlooks on consumption, including a push toward the re-composition of family units (the so-called "recreated families").

In any case, singles are an eloquent example of new consumption orientations, with strong individualism in selections and intolerance for market offerings that are not generally examined for their needs.

Paradigms and the forces of changes and/or conservation do not directly influence dietary behavior. However, they contribute to defining the situation in which food trends may develop. It would indeed be difficult to understand the trends without knowing the scenario they are included in. For this reason, we felt it was fundamental to present the factors described in this first chapter, to make understanding the dynamics easier and to display the socio-economic structural elements "supporting" the trends.

2.1 INTRODUCTION

Food trends are the central element of our study. It is only through an analysis of the trends that are becoming apparent today that it is possible to imagine future developments and identify positive pathways that will lead to a preferable and sustainable future.

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2.2 MAJOR FOOD TRENDS AND THEIR FEATURES

Interaction between paradigms and the forces of change and/or conservation in the curren food scenario allows us to develop reflections on the future.

This scenario features the following *thirteen evolving trends*, in many cases correlated:[1]

1. *taste*;
2. *caring for health*;
3. *orientation to the past*;
4. *orientation to the future*;
5. *technology*;
6. *naturalness*;
7. *globalization of flavors*;
8. *local and regional food*;
9. *"luxury" food*;
10. *"low cost" food*;
11. *speed*;
12. *individualism*;
13. *sustainability*.

Each trend features some distinctive elements which may put the trends themselves in contrast with each other. However, we will be able to point out how, in many cases, trends that are apparently opposites of each other co-exist, manifesting themselves with behavioral impacts that are both positive and negative.

Behavioral trends relative to food will be analyzed in detail below. They will be dealt with in order, so as to highlight contrasting phenomena whenever present.

13 ONGOING TRENDS WITH BOTH POSITIVE AND NEGATIVE EFFECTS ON BEHAVIOR

Taste

The search for pleasure is expressed by achieving a feeling of fulfillment and satisfaction through the culinary experience. This satisfaction presumes that sensory needs will be fulfilled, especially that of flavor.

Furthermore, the search for flavor and satisfaction at the table recalls the practice of conviviality, or coming together at the table, not only to share food, but also to foster dialog, reflection, and the pleasure of socialization. Thus, food also assumes cultural value, not only in reference to preparation techniques and nutritional qualities, but also in regard to the ways it is eaten. "Since gestures made together with others tend to depart from a simply functional dimension and take on a communicative value, man's convivial vocation

is immediately translated into attributing meaning to the gestures made while eating."[2] An extreme example of this approach is the Slow Food movement, which believes that pleasure is included in the sphere of human rights. Slow Food takes up and develops the activities developed by the international non-profit organization *Slow Food*, founded by Carlo Petrini in 1986 to "promote interest linked to food as a bearer of pleasure, culture, traditions, identity and a lifestyle that in addition to diet, is respectful of local territories and traditions."[3]

Faced with the "incipient globalization"[4] phenomena, the philosophy which is the foundation of Slow Food opposes the standardization of flavors, values small-scale economies, and – as can be read in Slow Food's *Manifesto*, drawn up in 1987 by Folco Portinari – makes pleasure the keystone of a new cultural model that transforms living "slow" into a militant objective.[5]

By adopting a different concept of flavor, which prefers wholesome food and which sees meals as a time for comparison and socialization, the search for pleasure can also be seen as a way to repress boredom or as a hobby, sometimes to the detriment of good eating practices. This is linked to a kind of "indulgent" awareness that translates into eating something that actually should be avoided[6] when seeking purely physical satisfaction. In these cases, emotions prevail over reason: an attempt is made to attain satisfaction by eating very tasty foods that bestow immediate sensory pleasure. An example of this trend is the regular consumption of junk food: although aware of the negative impacts it has on health, many people regularly eat high caloric foods with low nutritional value, rich in fat and sugar.

However, the consumption of junk food is a choice for only some groups of people. Unfortunately, for others it becomes a necessity, because it is more affordable.

As a result, specifically in reference to this inadvisable impact on satisfaction and flavor, the search for pleasure contrasts with caring for health and well-being.

Caring for health

In the food industry, health concerns are not a new trend. Over the course of history, people – regardless of their social or economic position – have always paid attention to food's healing properties. For example, the use of herbs with medicinal properties in the preparation of meals.[7]

Furthermore, recent interest in promoting and safeguarding health has gained a higher level of attention at the scientific and institutional levels: the increase in life expectancy and the resulting increase in the number of elderly people and their relative health costs have, in fact, pushed governments, researchers, and healthcare and food industry professionals to find a way to effectively manage changes linked to changes in population. In addition, there is the explosive increase in diseases that can be traced to increasing rates of being overweight, obesity, and metabolic disorders.[8]

It has now been widely recognized that the risk of diseases can be decreased and health can be preserved by adopting a correct *diet* and lifestyle; the concept of diet no longer appears to be linked exclusively to the concept of *nutrition*, but is more broadly linked to the improvement in people's overall well-being. In fact, consumers increasingly pay attention to a healthy lifestyle, made up of healthy dietary choices, which may, however, take on contrasting connotations and also generate behavioral manifestations which may be of an extreme nature at times.

Well-being matches the search for a benefit where food is not only the means to pursue sensory and emotional pleasure, but also to preserve physical health. When this connota-

tion takes on a very distinctive nature, it can be traced back to functional foods: a food that, aside from its nutritional effects, has a beneficial effect on one or more bodily functions (a relevant benefit which improves the state of health or well-being and/or reduces the risk of disease) and is eaten within a normal dietary regimen is defined as *functional*.[9]

On the other hand, safeguarding individual well-being can turn into obsessive behavior when food is eaten in an overly controlled manner and becomes a predominant fixation. In fact, at times, attention to healthy eating becomes a disease: orthorexia is an obsession with the harmfulness of what is ingested and was defined by Marino Niola as "the most recent among the food diseases of a West that no longer fears hunger."[10]

An orthorexic is convinced that his/her health is crucially dependent on diet and develops a series of ironclad food rules which, if broken, involve a strong feeling of guilt.[11] It is a type of fear of food that is not linked to the quantity of food – as occurs in the case of anorexia and bulimia – but to the quality of the food.

Orientation to the past

Past oriented identifies with memory and involves recalling and preserving traditions rooted in a specific socio-geographic context. Thanks to memory, the culinary traditions of a certain place can be preserved over time and appreciated.

Indeed, food tells of, and allows room for, a group memory made of knowledge and flavors, refined dishes and humble daily tasks, elementary needs and great exchanges, farming rituals and industrial realities.[12]

This leads to food at times being identified as one of the ways to go back in time and in certain cases, food provides "comfort" (the reason why it is called *comfort food*): authentic, simple, fulfilling, linked – if not in actual fact, at least in the minds of the people who eat it – to traditions, childhood, and the family.

Therefore, comfort food is of an intrinsically local nature, as it is linked to specific cultural differences and to people's diverse culinary habits and origins. For example, Americans consider milk shakes, fried chicken, and potato chips comfort foods. Instead, in Europe, these foods do not appear to be either traditional, familiar, or genuine.[13]

Memory, however, also presupposes a feeling of nostalgia[14] for a past that is considered simple, secure, and relaxing, compared to the faster and more frenetic lifestyle which characterizes the current era and which often induces high levels of emotional stress in people, translating into widespread conditions – depression, anxiety, and feeling of loneliness.

In the editorial which opens the special issue of "Hedgehog Review" dedicated to the topic of fear, it says in fact that: "Lacking existential comfort, we now content ourselves with security or a simulation of security."[15] Such a feeling of security and comfort could therefore be provided by the memory of past times.

Nostalgia can be traced back to the broader concept of *prejudice*, which involves a defensive and hostile attitude toward of others' food, as we will have an opportunity to explain later, and, in particular, exotic foods. This backwardness acts as a brake and, thus, contrasts the impulse toward the future, whose fundamental element is progress.

Orientation to the future

In complete contrast to the situation illustrated in the preceding paragraph, future oriented emphasizes and values progress, not so much in the sense of a "threat of unstoppable and

PROGRESS CONSTITUTES
AN OPPORTUNITY FOR
INNOVATION WHICH,
HOWEVER, DOES NOT
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CULINARY TRADITIONS

inevitable change, which does not bring peace and relief, but crises and constant tension, without even an instant's pause,"[16] but as an opportunity for innovation.

Specifically in reference to the food industry, this innovation can be traced back to the expansion of offerings through the invention of new foods, dishes, and culinary styles whose goal is to propose solutions for the criticalities that are being experienced more and more, which upset the current food scenario (such as the constant increase in the prices of food products, overpopulation, environmental issues, etc.).

In response to these concerns, by way of example, we cite the growing attention paid to the creation of new foods or foods which replace current foods. In fact, according to many researchers and scientists, because of the predictable increase in meat prices, in the future insects could also be widely included in Western food diets. In 2008, FAO stated that: "Although the idea of eating insects may appear unusual to some people, it must be said that their consumption by human beings is actually fairly common in many parts of the world. In 36 African countries at least 527 different species are eaten, and this also occurs in 29 Asian countries and in 23 countries in the Americas."[17] In addition to insects, algae can also be introduced into the diet, offering – in part – a potential solution to the worldwide issue of food scarcity. At the same time, experiments with the production of "artificial" meat are being carried out in the laboratory, through the use of stem cells.[18]

Another future oriented acceptance is the spreading of new culinary techniques. An example in this sense is the so-called "molecular cuisine," a discipline (practiced within a very small scope) that studies the transformations that occur in foods during their preparation. The creation of new dishes, recipes, and preparation techniques is achieved by applying, to cooking, scientific knowledge that is extraneous to the food world.[19]

If we wish to propose a more critical point of view which clearly opposes the concept of *preserving* and *valorizing memory*, progress and projection toward the future cannot be equated with safeguarding culinary traditions and actually contribute to the loss of food's historical value, since they encourage the search for new sensory experiences which are "often frightening and not necessarily pleasurable."[20]

With reference to ready-to-eat food, the above-mentioned loss of historical value also includes a loss in relation to biodiversity, a feature which over time will be increasingly less known to new generations.

Technology

Food production technologies were created in ancient times to obtain various products available from the raw materials of vegetable and animal agricultural production. These technologies have been refined and developed to improve the quality of foods, their shelf-life, flavor, and appearance; in order to do so, traditional knowledge is augmented with the most up-to-date scientific knowledge.[21]

In particular, the agrifood industry has been under constant demand to make an intense, innovative effort at the request of consumers who are increasingly critical and demanding, with new consumption behavior.[22]

INNOVATION FOR
DEVELOPING NEW FOODS
AND PROCEDURES RUNS
THE RISK OF RESULTING
IN UNDESIRED FOOD
SOPHISTICATION

Because of the growing attention paid to individual well-being and safeguarding health, innovation and the implementation of technologies in the food industry were in part directed to the development of functional foods (which at this time have a very low and geographically limited distribution). These innovations concern the development of foods that can, for example, improve brain function, prevent aging, combat fatigue, or induce drowsiness, etc.[23]

On the other hand, new technologies are emerging that are capable of speeding up purchasing procedures and food preparation, in an attempt to satisfy the practical demands of eating. For example, the proliferation of "ready-to-eat" foods (which will be discussed later) or the now common technological automation present at points of sale and large restaurant chains.

Furthermore, to guarantee food safety – one of the aspects that is now a great focus of attention – some sophisticated software programs that let food products be traced continue to be subjected to implementation and experimentation. According to European and United States laws,[24] in particular, agrifood industry operators must use systems and procedures that allow the origin and composition of foods to be identified in order to facilitate their withdrawal from the market in the event of a danger to consumers' health.

However, excessive reliance on technology leads to the excessive and unwanted adulteration of food which – as we shall see – presumes a departure from routine cooking practices and the ideal of simplicity, precisely in the attention paid to naturalness in eating habits.

Naturalness

In opposition to the adulteration of food, and in response to a demand for authenticity, there is a trend toward rediscovering nature and natural products.

In the food industry, the concept of *naturalness* requires a specific definition. It cannot be understood in absolute terms, in as much as food is inevitably subjected to changes: human handling and technology have always been used in food preparation. Ever since food has been cooked, nature has become culture: in fact, food is a work of humankind that uses specific techniques.[25]

The trend toward naturalness must therefore be translated into the acceptance of *simplicity*, to be understood as a reduction to the minimum of handling in the various phases of the agricultural production chain, or as a not excessively invasive use of technology and with attention paid to the sustainability of agricultural models.[26] In this regard, different ideas on natural food can be identified.

For people who take more extreme positions, naturalness agrees with the products of natural agriculture promoted by Masanobu Fukuoka. This agricultural model calls for human intervention that is limited to the stages of sowing and harvesting, letting nature guarantee the progress of the growing process.[27]

For others, the concept of naturalness more realistically agrees with the choice of organic food, produced through organic farming or by an agricultural model that takes advantage of the soil's natural fertility and prefers limited external interventions. In fact, organic agriculture promotes environmental biodiversity, reduces the use of synthetic products to a minimum in the various stages of production, processing, and storage, and excludes the use of genetically modified organisms.[28]

Opposing supporters of organic agriculture, there are people who still believe that the production of agricultural goods carried out through the massive use of biotechnology is, in the future, the only path to obtain natural products, making the use of most of the chemical compounds employed today in conventional agriculture superfluous.

Furthermore, within a strictly culinary framework, naturalness takes on additional acceptance which refers not only to the preference for whole and organic foods, but also to the way the dishes are prepared. They must be simple and not overly elaborate.[29]

The *Scandinavian New Nordic Cuisine* movement belongs to this current, as presented in a manifesto which reveals its ambition to exalt the pure and simple flavors and products of

Scandinavian lands. In fact, it proposes to exclusively rely on distinctive ingredients from the area, preserving their natural aromas and reducing the addition of fats to a minimum. Furthermore, the idea of naturalness does not provide for man's intervention in agriculture and, in order to find the necessary foods, it prefers the practices of hunting and gathering. If, on the one hand, simplicity aims at maintaining foods in their natural state as much as possible, on the other, it risks being radicalized to the point of creating hostility against technological innovations and obsessions for naturalness. In this regard, it is helpful to again mention orthorexia, which may now also be seen as an obsession for organic food.

Globalization of flavors

The growing mobility among countries, the desire to discover other civilizations' characteristic features, the industrial expansion strategies of some multinational firms and, in general, the globalization of the economy have changed the culinary landscape.

In recent decades, the difference between culinary approaches which are typical of great culinary traditions and food preferences expressed by individuals and groups has become increasingly confusing.[30]

Specifically, the exchange between food cultures is the characteristic feature of the trend identified as the globalization of flavors, which opposes the uniqueness and specificity of exclusively local and regional food.

Globalization nurtures a feeling of curiosity for other peoples' food and lifestyle customs: and in fact, "we are living on a planet that is increasingly narrower and more communicative, where mass tourism has violated even what was inviolable. Perhaps this is the reason why we are searching for new worlds to explore. And to do that we use a fork as a compass and gastronomic guidebooks as maps to discover what's cooking in other people's pots. The farther away a dish is from our tastes, our customs and traditions, the more it seems to us to be worth a trip. Even if it is just imaginary."[31] The approach toward ethnic culture can be associated with this, mainly through restaurants: Chinese, Indian, Tex-Mex, Spanish, and – perhaps more in line with a healthier food vision – Japanese cuisine are appreciated in English-speaking and Mediterranean countries. At the same time, interest in "exotic" foods is not limited only to ethnic cuisine, but also concerns the production of unusual culinary combinations.[32] *Fusion cuisine*, for example, represents an eating pattern (mainly in those countries which do not have solid historical and cultural food traditions) which combines different elements and flavors – associated with different culinary traditions – in order to produce meals that cannot be traced back to any specific culinary tradition.

On the other hand, constant mobility and intercultural exchange is leading to a type of standardization. In fact, this deals with the *McDonaldization* (a term coined by George Ritzer in 1993) of eating habits worldwide, which is a type of cosmopolitan diet that generates uniformity throughout the world, causing the loss of diversity and local traditions. This is the point that, more than others, conflicts with the sense of origin and appreciation of one's territory which belongs to the trend linked to eating local and regional food.

Local and regional food

The trend to local and regional eating refers to the relationship between food and territory. In this case, this relationship refers to the proximity of the place of production to the place a food is eaten, which is a guarantee of authenticity.

Consequently, in a situation with these characteristics, ideological movements are created which prefer eating the food produced in the vicinity, such as the so-called "zero mileage philosophy" (or *locavorism*),[33] which promotes the sale and consumption of products that are characteristic of the territory and which do not have to travel great distances before reaching the consumer. According to this philosophy, eating local products is advantageous since it contributes to environmental sustainability and promotes the region's agrifood heritage, in addition to guaranteeing a fresh, healthy, and seasonal product. The concept of seasonality is, in fact, implicit in the concept of proximity.[34]

Furthermore, the search for local and seasonal foods drives consumers to vary their purchasing habits, preferring experiences where there may be direct contact with the producers. The connection between a food's place of production and its place of purchase actually is an additional guarantee of authenticity (just think of the fact that, occasionally, the names of some foods match their geographical place of origin and production).[35]

Again, adopting a purely cultural point of view, the relationship between food and territory is included in the concept of the *geography of taste* elaborated by professor Montanari: "'eating geographically,' knowing or expressing a territory's culture through a cuisine, some products, some recipes, seems absolutely 'natural' to us."[36]

Local food is also capable of "telling a story" and this story does not solely refer to nature and the preparation of a specific food, but also to the culture and traditions of the place of origin and the people involved in its production.[37] Food, in fact, is to be considered the "mirror of our history, a lens that shows what we are and what we are becoming."[38]

Nevertheless, if on the one hand, the link with the territory is synonymous with the authenticity of food products, on the other, it is also a type of conditioning, since it represents a limitation in the sense of time (linked to the seasonality of products), as well as geographically (tied to a certain production location), that is completely foreign to the phenomenon of the globalization of flavors, which, instead, presumes accessibility to exotic foods, anywhere and anytime.

This contributes to turning these types of foods into exclusive products: as we shall see, local and regional food is often a niche market, characterized by poor accessibility.

"Luxury" food

This trend can, in part, be traced back to a series of food scandals which occurred in recent years (for example, BSE, or "mad cow disease," or "dioxin chicken") which generated – among their many consequences – greater attention paid by the consumer to food risks, places of origin, and food production methods.[39] As a result, some consumers are more often willing to pay higher than average prices to purchase those products which meet the requirements of authenticity and naturalness, such as foods produced locally and organic foods. In fact, these foods cost more than the equivalent conventional product because producers are subjected to higher production costs, and – as they have exclusive features – can be considered "luxury" foods.

The exclusivity of expensive foods is justified by their higher quality and the difficulty of finding them. From this point of view, examples of "luxury" foods are not those which were traditionally considered symbols of luxury foods in the kitchen (saffron, caviar, and truffles), but those which belong to simple and common categories (such as, for example, chocolate, jams, and condiments) which have recently become *premium* items, and are special, sought-after products with high prices.

Nevertheless, the higher cost of this type of food makes it accessible only to a limited number of people and, thus, leads to a sort of discrimination of an economic, social, and cultural

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nature (which can to a certain extent be traced back to the phenomenon of polarization), an issue that is absent in low cost foods, which, instead, are distinguished by their purchasing accessibility.

"Low cost" food

As we just mentioned, the exact opposite of the exclusivity of luxury foods is the accessibility of low cost foods.

The increased attention paid in recent times to these foods can be attributed to the current difficult global economic situation, which has resulted in many families finding themselves in situations of economic hardship (in particular, low-income families).[40]

One of the effects produced by the present economic situation, added to the increase in the prices of agricultural raw materials on the markets,[41] can be seen in the record increase registered in purchases made at food discount stores. In fact, there is a tendency to purchase food products at "super-discount" shopping centers which lack brands but where prices are more accessible, to the extent that in the last six years in Italy, the number of low-income families who prefer these centers to other purchase locations has doubled: one out of five family units among those with the lowest spending levels makes low-cost purchases, compared to 10% six years ago.[42] However, for the purpose of a comparative example, spending on cell phones, text messages, and Smartphone Internet connections remains significant.[43]

The trend to making purchases at discount stores, however, is not only recorded by families with lower financial resources: even the wealthier groups are changing their purchasing habits, and for over 60% of Italians, it is normal to do their grocery shopping at discount stores.

Additional confirmation of the ever-growing attention to low cost products is provided by the increased presence of private label products in shopping carts, which are those products sold under the retailer's brand and which have been experiencing great growth in recent years.

Basically, the result of all this is that the cheapest food products, on average, allow for greater accessibility: on the one hand, they guarantee widespread availability, that is, they can be purchased – unlike "luxury" foods – by people who have fewer resources. On the other hand, they often are equated with a loss of quality in the product, as it has been noted that underpriced products feature a lower than average level of quality.

Speed

Starting in the 1970s, and in line with the spread of eating patterns that mirror an average lifestyle which is increasingly fast-paced and hectic, speed is the element which, more than any other, has marked a substantial difference in how people structure their lives.[44] It should not be surprising that these years coincided with the spread of fast food restaurants. In fact, the first restaurant of the McDonald's chain, founded in 1955 in the United States by Raymond Kroc, opened in Europe in 1971.

For years now, individuals have been leading lives which leave less and less time available to them and their families; this also involves a reduction in the time dedicated to cooking and meals and, at the same time, a change in methods and types of purchases.

In the first place, the time traditionally dedicated to main meals – occasions when families come together at the table – has decreased, and the same thing has happened to the time spent in the kitchen preparing the meals themselves. In fact, as Niola affirms, "if in the past every grandmother was a living cookbook, ready to give lessons and pass on the secret alchemies of family dishes, now those precious flying pages have been scattered by the winds of modernization. As a result, eating at home gets worse and worse, and is always more hurried. And most people consider cooking a waste of time."[45]

This leads to an increase in the trend of eating at odd hours, on the road, or during the commute from home to work. Food has become increasingly more "mobile," while the custom of eating three meals a day is being progressively replaced by the frequent intake of quick snacks. For example, many people regularly eat at bars and coffee shops where sandwiches and fast food can be found. In addition, there are studies which report how, in the United States, 15% of meals are eaten in cars and, as a confirmation of this trend, about 60% of sales of fast food breakfasts are made at the "drive-through window."[46]

Secondly, it points out how the types of products purchased also tend to undergo changes as more attention is paid to foods with a high service content, that are easy to purchase and prepare and convenient and quick to eat. These *convenience foods*, ready-to-eat or semi-ready foods, to be cooked in a microwave or just heated up, are a manifestation of the technological innovations that have occurred in the food industry.

Furthermore, there is also a growing demand to optimize the time needed to prepare meals. In this sense, the success achieved in the United States by the *Dream Dinners* chain is significant. It offers an alternative method of meal preparation: it is a chain of "do-it-yourself dinner shop" stores, where people can quickly prepare meals that are more functional relative to individual needs while being less expensive than ready-to-eat foods purchased at supermarkets or from restaurants. Customers first select menus and order the ingredients they need online, then make an appointment at the closest store to assemble the ingredients, and prepare a minimum number of dinners to take home.[47]

Two types of impacts on human behavior can be linked to the aspects discussed up to this point. The first is the search for ever-greater convenience in eating, which translates into the trend of purchasing convenience foods. The second type refers to the spread of a constant state of psychological pressure among people, which often involves high levels of frenzy, impatience, and emotional stress. All this leads not only to a reduction in the time dedicated to meals, but also to a generally poor level of attention paid to a diet's nutritional aspects.

Individualism

In recent times, food is increasingly being eaten individually and in the shortest time possible.

Eating has been gradually losing the nature it has historically borne as a ritual in the preparation of meals, socialization, and interaction. In fact: "If it is true that food is the truest mirror of a society and its history, the decline of 'home-style' cooking reflects the pulverization of family bonds and habits, which were always symbolically consecrated in the preparation and sharing of food."[48]

It can thus be presumed that the trend toward individual consumption derives from the general acceleration of life's pace and, consequently, from new family dynamics. It is not coincidental to note how people who live alone are less inclined to care about preparing and eating meals, with a fragmentation of their intake methods and a more marked preference for the consumption of snacks.[49]

IMPOVERISHMENT
OF THE TIME SPENT
CONSUMING FOOD
AND, CONCURRENTLY,
PERSONALIZATION OF THE
PROPOSALS

All this leads to impoverishment of the time dedicated to eating food, which is now characterized by the absence of gregariousness and conviviality.

As we already mentioned, conviviality is one of the elements that, more than any other, provides satisfaction at the table. Its absence presumes that the pleasure and the interactive component of eating together have been lost.

However, individualism allows for greater personalization of food, which favors the development of a food product that increasingly responds to, and is in line with, customers' specific needs, both in terms of quality of the product and the formats available. Just think of the creation of specific foods or food diets on the basis of genetic heritage and the individual's specific diseases, or more simply, of single-serving packages aimed at reducing waste.

Sustainability

As previously stated in the section relative to the forces of change and/or conservation, the consumer pays more and more attention to sustainability issues and asks food industry companies to take greater responsibility in safeguarding the environment and the products' quality. Thus, the consumer becomes "autonomous, or critical, independent in his choices, interested in setting up a dialog, an actual relationship with the world of production."[50] The consumer who is the result of this process can be defined as "responsible." He takes food products' environmental impacts into account, and specifically, elements such as, for example, pollution deriving from production plants, the quantity of energy used in production, a preference for recycled materials or those which use renewable resources, etc.

In addition, talk of *consumActors* is heard more and more often. This is a specific type of consumer who wants to be involved in the process which creates the food product and no longer wants to be merely a passive spectator. Basically, consumActors want to be coprotagonists and interact with the producer, actively participating and sometimes gathering together, even informally, into purchasing groups (so-called "co-producers").[51]

The appearance of these new personages lets companies experiment with corporate strategies based on cooperative competition: products and consumers act as a team to reach common objectives that can benefit all participants in the economic exchange.

PARTICIPATION BY
"RESPONSIBLE"
CONSUMERS CONTRASTS
WITH THE PRESENCE
OF OTHER CONSUMERS
WHO ARE COMPLETELY
INDIFFERENT

On the other hand, participation by responsible consumers is contrasted by the presence of other consumers who are completely indifferent. In fact, as recalled in the first chapter, postmodern society is characterized by strong individualism, which at times leads to abdication of responsibility. In the food sphere, this aspect translates into the near-total power given to institutions to act on criticalities relative to sustainability through institutional initiatives.

After having illustrated the general context of reference (paradigms and forces of change and/or conservation) and, especially, after having thoroughly examined the food trends that are currently influencing people's behavior, the next chapter will define an analytical diagram that will be useful in understanding how we assume these trends will move in the future. On the basis of this diagram the *desirable* and *sustainable* food scenario for 2030 will be defined. In the next chapter, we will also address some major issues that in the future will involve social behavior in the food sphere, attempting to understand through a number of reflections how the actors involved in the food world (consumers, companies, institutions, etc.) should behave.

3.1 INTRODUCTION AND AN ANALYTICAL OUTLINE AS A POINT OF REFERENCE

I n the preceding chapters, we presented an analytical model describing the over-arching paradigms influencing today's socio-economic reality and the forces for change and/or preservation that characterize it. As well, we investigated, in detail, dietary trends present in the current context.

Beginning with the trends we discussed in the second chapter, we now turn to delineating a future dietary scenario projected over the next 20 years which is as desirable and sustainable as possible. A dietary scenario, therefore, that is:

→ *realistic*, in terms of probability, with reference to the paradigms and to the forces for change and/or maintaining the status quo, that will act on people's lives;

→ *constructive*, by offering a framework for people of how and what they will be able to eat in the future (a perspective that coincides with a solution that is accessible, practicable, based on the value of individual well-being, collective, and environmental – in other words, a constructive solution);

→ *long-lasting*, because it is structurally sustainable.

As a result, we will concentrate on individuals' behaviors and their lifestyles. We are convinced that the challenge in the next few decades will be to attempt to reduce the disparity between wanting to achieve a healthy diet and lifestyle, overcoming existing social and cultural systems, and actually managing to do so.

As we have seen, in the food sector, each trend arises from numerous factors. Although these factors are, in part, different from each other, it is possible to identify a particularly distinctive trait for each trend, one which characterizes it in a more specific way. For this reason, in the preceding chapter, each of the thirteen dietary trends was listed with the characteristic that best distinguishes it from the others; that is, the element which (given the data and models examined) we felt characterized it better than other factors. In addition, for each characteristic, certain factors were presented that can impact on individuals' behaviors in contrasting ways.[1]

Based on the analysis, the trends can be grouped into "trend pairs" that are apparently antithetical.

Specifically, we are talking about the contrast between distinctive characteristics such as:[2]

→ pleasure and well-being;
→ memory and progress;
→ innovation and simplicity;
→ exchange and region;
→ exclusivity and accessibility;
→ time and connection.

Because of its specificity, the topic relating to the environment is treated separately.

TRENDS ARE GROUPED IN APPARENTLY ANTITHETICAL PAIRS AND ARE CHARACTERIZED BY CONTRASTING ELEMENTS AND DISTINCTIVE CHARACTERISTICS

Before outlining the future dietary scenario, a summary outline will be provided for purposes of greater explanatory clarity. The distinctive characteristic of each dietary trend will be shown and, in turn, connected to the relevant contrasting elements.

DIETARY TREND DISTINCTIVE CHARACTERISTIC		
⊖ PASTIME Food as a way to suppress boredom Highcalorie food	TASTE PLEASURE	SATISFACTION ⊕ Culinary experience like a sensory experience
⊖ OBSESSION Uncontrolled fear of food	ATTENTION TO HEALTH WEL-BEING	BENEFIT ⊕ Attention to individual health Food as a means of preserving mind and body
⊖ PREJUDICE Hostility toward "exotic" food Defensive attitude Nostalgia as a refuge	ORIENTATION TO THE PAST MEMORY	PRESERVATION/ ENHANCEMENT ⊕ Attention to traditions
⊖ LOSS OF THE HISTORIC VALUE OF FOOD Loss of traditions	ORIENTATION TO THE FUTURE PROGRESS	INNOVATION ⊕ Exchange and discovery of new foods and new culinary styles
⊖ SOPHISTICATION OF FOOD Distancing oneself from daily practices	TECHNOLOGY INNOVATION	TECHNOLOGICAL DISCOVERIES ⊕ Development of new means of production, preparation and consumption
⊖ OBSESSION FOR BIOLOGICAL FOOD Hostility toward innovations	NATURALNESS SIMPLICITY	NATURAL, WHOLE FOOD ⊕ Absence of manipulation
⊖ HOMOGENIZATION Loss of diversity and local traditions	GLOBALIZATION OF FLAVORS EXCHANGE	INTEREST AND CURIOSITY ⊕ Combining experiences and flavors
⊖ CONDITIONING Niche products, poor accessibility	LOCAL AND REGIONAL FOOD REGION	AUTHENTICITY ⊕ As much as possible, local and seasonal food
⊖ DISCRIMINATION Social and cultural economics Polarization	"LUXURY" FOOD EXCLUSIVITY	EMPHASIS ON QUALITY ⊕
⊖ DEGRADED QUALITY OF FOOD OFFERED	"LOW COST" FOOD ACCESSIBILITY	WIDE AVAILABILITY ⊕
⊖ HURRY/FRENZY Less time dedicated to meals Little attention paid to nutrition	SPEED TIME	PRACTICALITY ⊕ Foods with a high service content
⊖ IMPOVERISHMENT WHEN FOOD IS CONSUMED Absence of eating together and sharing	INDIVIDUALIZATION CONNECTION	PERSONALIZATION ⊕ Food offerings aimed at specific needs in terms of quality and format
⊖ TOTAL DELEGATION TO INSTITUTIONS, INDIFFERENCE	SUSTAINABILITY ENVIRONMENT	RESPONSIBLE CONSUMPTION ⊕ Attention to themes of food sustainability and food security

3.2 THE REALITY OF FOOD TODAY

T he current dietary scenario was reconstructed on the basis of evidence which emerged during the analysis[3] and interviews with experts on the interaction between food and social behaviors.[4]

In post-modern society, characterized (as to the prevailing psychological condition) by uncertainty, which often translates into uneasiness,[5] the scenario may be summarized by the points set forth below.[6]

Between *pleasure* and *well-being*, one of the most typical food behaviors is traceable to the association between food and pastime. Food is often seen as a means of psychological compensation for anxiety and boredom, and its value is often degraded because of compulsive and repeated consumption, with individuals often turning to high-calorie foods. Little attention to good dietary practices by some individuals contrasts with true obsessions developed by others (including the phenomenon of the already-cited orthorexia): apart from the exaggerated interest in safeguarding health, there is a risk of developing an excessive preoccupation with food.

Considering the antithesis between *memory* and progress, it is possible to note how an orientation to the past may provoke a kind of "prejudice" against how the value and the taste of new culinary styles are perceived. A kind of nostalgia develops, which becomes a search for a refuge and comfort in the face of the fast pace which typifies modern life; hostility toward "exotic" cuisine and a defensive attitude against innovation are created. On the other hand, the behavior of people who are most oriented toward the future reveal a tendency to lose sight of the historical value of food and this, in opposition to the values of memory, leads to a progressive distancing from traditions.

Regarding the concepts of *innovation* and *simplicity*, some people show low tolerance toward innovations, which can lead to behaviors tied to a so-called simple and natural dietary style (especially "biological" food). On the other hand, other people are interested in the excessive use of technology, preferring complex recipes and ingredients which are difficult to understand, which are not only far from the ideal of simplicity but also from daily culinary practices. In this case, the mass media play a fundamental role: for the consumer in the post-modern age, it becomes difficult to extricate himself or herself from the ever-more frequent calls for naturalness and simplicity spread by advertising, and the slogans used by the most popular and avant-garde chefs about using "extreme" ingredients.

The contrast between the trend toward dietary validation and choosing to limit oneself to eating only local and regional products is implicit in the meanings of *exchange* and *region*.

While globalization is influencing the current dietary scenario, increasing homogeneity is causing people to progressively distance themselves from local dietary habits and traditions, which also results in the loss of part of the taste of "diversity" which is characteristic

of a specific region. The authenticity and uniqueness of local products thus run the risk of being impoverished in the name of global consumption, enjoyable by everyone, everywhere, at any time. On the other hand, there is an element of conditioning in individuals' behaviors that leads them to limit their dietary choices only to foods that are produced nearby, that are less available and accessible, and, in some cases, niche items.

It is important to emphasize that the difference in habits (apart from little or no intergenerational transfer of culinary flavors and knowledge) is also partly traceable to the influence on the consumer of communication methods, advertising pressure, and distribution network policies.

Exclusivity and *accessibility* (in this case, understood purely in the financial sense), which lead to the consumption of luxury and low cost foods, can have social and qualitative consequences with exactly opposite effects. In fact, the following behaviors can be seen in individuals who are susceptible:

→ to economic and cultural discrimination, which is traceable in some way to the climate of social polarization;

→ to the purchase of below-cost products, even with the knowledge that such food is likely to have lost value. In this case, we mean not only the qualitative loss in the food offering, but also of its memory, history, and the guarantee of security that the consumer requires: security, a characteristic considered non-negotiable, but which is also taken for granted.

The qualitative impoverishment of foods offered means that currently the value of food is almost completely based on taste: if other characteristics (memory, security, etc.) are not appreciated, there is a risk that food will be valued by the standards of every other product. The connection between available *time* and social *relationships* demonstrates, on the other hand, a correlation between hurry and frenzy (resulting from the state of constant urgency which marks the lives of the population) and a lessening of the amount of time dedicated to food consumption. People are progressively dedicating less and less time to the preparation

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HOW?

FUTURE DIETARY SCENARIO

CURRENT DIETARY SCENARIO

today   2030

TASTE
PLEASURE

ATTENTION TO HEALTH
WELL-BEING

ORIENTATION TO THE PAST
MEMORY

ORIENTATION TO THE FUTURE
PROGRESS

TECHNOLOGY
INNOVATION

NATURALNESS
SIMPLICITY

GLOBALIZATION OF FLAVORS
EXCHANGE

LOCAL AND REGIONAL FOOD
REGION

"LUXURY" FOOD
ESCLUSIVITY

"LOW COST" FOOD
ACCESSIBILITY

SPEED
TIME

INDIVIDUALIZATION
CONNECTION

SUSTAINABILITY
ENVIRONMENT

and consumption of meals, neglecting the nutritional aspects and limiting (and changing the form of) the time dedicated to conviviality and sharing. At the same time, thanks to increasing connectivity, which is becoming ever more widespread, new forms of sharing and conviviality are being created, which bring a profoundly different conception of space and time. Since all of this can influence the consumption of food, it becomes a fascinating field of inquiry but today it is still difficult to interpret.

Finally, regarding the issue of *sustainability*, in particular the need to pay attention to the increasing scarcity of natural resources, there is still ample maneuvering room for achieving true environmental awareness. In fact, at present, indifference seems to be the most prevalent attitude, manifested in a failure to take responsibility and the delegation of responsibility to institutions or to the big players operating in the food sector (in this case, the food industry), which are the most active parties in safeguarding natural resources. From this standpoint, the syndrome known as NIMBY (*Not In My Back Yard*) seems to be spreading: many people still oppose interventions which are in the general interest of the environment, only because these actions are mistakenly perceived as a potential limitation of their own individuality.

In summary, the characteristics of the dietary scenario of post-modern society which are the most worrying are as follows:
→ people eat alone more and more often; eating frequently takes on excessively personalized characteristics that are not easily shared and that are targeted to specific nutritional needs: this kind of eating is the opposite – a photographic negative – of how we have typically considered meals as a time to share the same food with others;[7]
→ "When you can eat anything, anywhere, and anytime (as you can today), food – which is simultaneously ubiquitous and transparent – is trivialized;"[8]
→ "Today, awareness of food is an aspect that can be considered elitist, because the knowledge (and accessibility) necessary to create that awareness enjoys only limited access (mainly by individuals with greater financial resources);"[9]
→ people find themselves thinking more and more in terms of "caloric debit/credit:" they are submerged by information about nutritional properties and the degree of food security and, as a result, attention that focuses on healthy behavior through calorie counting ("debit") alternates with behavior that goes in the opposite direction ("credit");
→ often, fast-paced and hectic lifestyles lead people to create a relationship with food which is excessively superficial and limiting. They neglect the value of the time dedicated to culinary culture and reduce eating to mere nourishment, resulting in the commercialization of food like any other product. Often, fast-paced lifestyles also influence the relationship with food when people decide to change their dietary regimen and expect to achieve results in a very short period of time.

Given this starting point, we hope that a progressive transition will occur over the next 20 years, through a balanced and positive approach to eating (as shown in the outline at page 57).

This is why the central point of our discussion is the "transition," which consists in an inversion of trends which is to be sought by identifying the key elements of the process of change that is being asked of the players in the world of food.

3.3 THE DIETARY SCENARIO OF 2030

We will now explain what, in our opinion, should be the distinguishing aspects of the new and better, possible "status of equilibrium."

The first point involves the theoretical contrast between the *search for pleasure and attention to health*. A situation of general well-being should be sought, which simultaneously combines physical and psychological benefits with the pleasure that comes through the gratification of several senses.

The idea that pleasure is healthy – or that what you like is good for you – is, in fact, one of the guiding principles of ancient dietetics.[10] The relationship between food and sensory pleasure gives way to a rather complex interweaving, in which need, desire, and pleasure are dimensions that are connected to each other.

To accomplish this, education about taste is necessary to help enhance more varied and articulated food habits, putting the role that different foods play in daily eating into proper perspective without deprivation but with greater "sobriety." The practical demonstration of how foods which are not typically thought of as "sources of pleasure" can actually be prepared with satisfaction and pleasurably shared.

This involves rediscovering the flavors and characteristics of food, to enjoy it to the fullest – as occurred to a certain degree in the last 20 years in the "world of wine." It is necessary to spread the idea that it is possible to properly nourish oneself, maintaining a dietary style that is capable of safeguarding health, without giving up taste and the pleasure of eating.

A similar statement will have to be accompanied by coherent dietary proposals from industry, by different forms of collective catering, and by the diffusion of proper dietary information by institutions, in a progressive education process targeted at taste and health – for example, consider educational and relational initiatives advanced by movements like *Slow Food* and initiatives like *Eataly*. In particular, it will be necessary to promote the broadest concept of lifestyle, as opposed to the more limiting concept of *diet*, because a proper *lifestyle* based on balanced eating and constant physical activity seems to be the key to guarantee well-being in longevity.[11]

With reference to *orientation to the past and future*, it appears that is reasonable that each of us experiences a new sense of "proportion" between preservation and innovation, appreciating new foods and culinary styles without, however, forgetting traditions, even in the knowledge that traditions are a historical product that changes over time.

This entails accepting foods and innovations, overcoming that kind of indifference that is typical of the current consumer, and broadening the confines of a community's identity. It is necessary to set aside the perplexities associated with progress and the static vision tied

solely to nostalgia for the past, and to welcome innovation, which is understood not as a loss of traditions, but as an affirmation of new ideas that can help to satisfy changing social needs.

In 2030, it is to be hoped that people will also, to a certain degree, make their choices in relation to the *interaction between technology and naturalness*: technological discoveries cannot and must no longer be sacrificed in the name of natural food (which presupposes an absence of manipulation). However, as already mentioned, humans and technology have always intervened in the preparation of food. "Cooking is human activity par excellence, it is the gesture that transforms the product of nature into something profoundly different: the chemical changes induced by cooking and the combination of ingredients make it possible to bring to the mouth a food which, if not totally artificial, is surely constructed."[12]

We emphasize the fact that there are certain "myths to be disproven," such as the concept of *raw food* (a food model that consists of eating primarily raw and living foods that has become quite widespread in the last few years), which is seen by some as the maximum expression of naturalness. In some cases, in fact, advanced technologies are used specifically to meet the need for "rawness" (consider raw fish and the need to use a blast chiller to guarantee the necessary levels of safety).

In addition, often, "local" is associated with "natural;" nonetheless,it is not always accurate to think that what is native is genuine and authentic, while what comes from the outside is sophisticated and artificial.

For the food industry, and for all parties which are active in the food world, the challenge to be taken up is to propose solutions and innovations which are capable of making products that are nutritionally richer and more enjoyable from a taste perspective.

As announced beforehand, the *globalization of flavors* is causing a crisis in the cultural identity of food. What is hoped for the future is that, in the face of the homogenization of food models, interest and curiosity about the "exotic" will be accompanied by recovering roots, flavors, and tastes (which often leads to the discovery of exchanges and relationships between one's own culture and other cultures) and to the rediscovery of the region and the authenticity of *local and seasonal food*.

In the future, disseminating, making people aware of, and sharing local cultures will be one of the best ways to confront the effects arising from cultural and gastronomic validation. In practice, it will involve global markets exchanging not only merchandise, but also food and food styles: knowing the food culture of a group will be a way to support integration and the protection of food and gastronomic biodiversity, and a way to widely spread the idea of sustainable eating and pleasure, "a pleasure which is considered legitimate, almost necessary."[13]

Taking into consideration now *the contrast between "luxury" food and "low cost" food* it becomes clear that, in the future, total food offerings will have to adhere to growing minimum quality requirements, understood within a broader meaning that goes from food safety to sensory perception, from the nutritional level to the sustainability of the processes underlying it, and from availability and ease of use to facilitating the reduction of waste.

In opposition to low-cost consumption, there is a desire to experience food of great and recognized quality. In particular, with the increase in the level of availability of products, thanks to the expansion of commercial boundaries, the object of desire is no longer abundant food, but rather exceptional food.[14] This can be traced to the fact that social, economic, and cultural differentiation is considered synonymous with *exclusivity*.

In this situation, which is governed by dynamics which often have little or nothing to do with proper food choices, a desirable development would be the affirmation of a situation

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in which the price (and, in general, the value) of foods are, to a certain extent, associated with the optimal frequency of their consumption, in accordance with indications offered by nutritionists,[15] in order to concretely encourage the adoption of "good" dietary models. In addition, we add the topic of costs associated with certain low-calorie regimens: in fact, the most common dietary styles are often characterized by high costs, precisely because they require the presence of particular foods that are not always common in the diet. However, it is typically not necessary to spend a lot of money to adhere to a dietary style that tends toward healthy eating and good health.

With reference to the values of *conviviality* and *eating together* will assume more and more importance in the future. In fact, sharing food is universally recognized as one of the fundamental ways to promote, establish, and maintain interpersonal relationships. Conversely, a lack of sharing, which is typical of factors associated with *individualization*, transmits a sense of social detachment, distance, and exclusion.

In the future, however, values such as conviviality and eating together will not be able to be exactly duplicated, because the *acceleration of the rhythms* of life and resulting lack of time to dedicate to meals will give rise to new times and models for conviviality. The awareness that the rhythm of our lives is destined to change in a structural way, associated with recognizing the importance of the notion of "conviviality," can constitute a useful point of view to structure food systems and, in parallel, individuals' choices. Reclaiming conviviality will occur not only by changing the food that is offered, but also through a real change in the technological paradigm, whereas up to now (except for a few cases of businesses which have adopted a profoundly "human" vision of technology, and which must be considered exceptions), greater connectivity has not translated into more time and/or quality of time, but rather into overexposure to work activity.[16]

Plus, the attention to the environment will become one of the fundamental factors at the foundation of future dietary behavior: people must become conscious of the fact that they will have to engage in responsible behavior so that the planet's resources are used more efficiently and waste is reduced.
A cultural change will be necessary, changing our individual lifestyles and production and consumption models. To meet the dietary and nutritional needs of a more affluent and urbanized world with a growing population, it will be important to disseminate sustainable dietary habits, transmitting awareness about the cost associated with the environmental impacts of the different dietary models.[17]

In conclusion, the hope is that in 2030, the focus will be shifted more and more from "what" we eat to "how" we will eat. It is the choice of the "how," of the value we attribute to food and its importance in our personal and social life, that will become a possible turning point for the adoption of healthy dietary styles and the creation of systems to offer good quality and accessible food.

As Claude Fischler pointed out in the introduction to *The Excellence of the Mediterranean Way* (BCFN, 2010), the social dimension of eating with others will play a fundamental role in giving individuals the proper perspective toward food, by encouraging a balanced approach to food. The "how" (values, culture) will prevail over the "what" (the products). In other words: *tell me how you eat and I'll tell you who you are.*

4.1 DECISIVE QUESTIONS FOR THE FUTURE

From the very beginning, we thought that our work would not arrive at any conclusion, but rather provide a series of open questions about the future which are useful for contemplating the choices that will have to be answered in the next several years, *primarily* by individuals and, more generally, by other actors in the food world.

Although we did not intend to offer specific responses to each of the questions proposed, we would like to focus on the concept of "*proportion*", understood as balance and proper equilibrium between trends that are in apparent conflict among themselves. It involves one of the cardinal rules for a balanced approach to dietary themes, today and in the near future.

Here are some of the questions that, in our opinion, are the most relevant:

1 How will the sense of frenzy that characterizes current times be reconciled with a need to return to conviviality?

In the context of what Bauman defines as "lives in a hurry,"[1] the rules and manner of sharing food has changed. In fact, it is becoming more and more frequent for people to eat by themselves, in non-traditional places, for the most part take-out food and food made for specific nutritional needs. Even at the table, the phenomenon of individualism is becoming more widespread, and has been defined by Claude Fischler as "one of the causes of dissolution of the collective identity."[2] In the future, therefore, people will have to rediscover the value of conviviality and come up with new solutions to find new space and time to dedicate to eating meals with others. These meals do not necessarily need to adhere on a daily basis to the rituals of slow food, but will mainly focus on taking advantage of the time allotted for eating in order to interact and communicate with others.

2 How will the search for pleasure, understood as "taste," coexist with the growing attention to well-being?

Often, the attention paid to safeguarding health through diet is perceived as being in stark contrast with the search for pleasure. In some cases, however, this opposition constitutes a kind of "myth to be disproven." In the future, attention to health and consumption of foods capable of providing additional physical benefits will not need to preclude the satisfaction that comes from sensory pleasures. In that sense, the already-cited idea that "what tastes good is good for you" coincides with the idea that "what is good for you tastes good."

Thus, pleasure will also be found in the way in which foods are varied/combined within the diet, in avoiding monotony – a consequence of speed – and in the capacity to select foods that are healthy and gratifying at the same time.

3 Will anxiety or awareness prevail in dietary choices?

Food and diet are increasingly becoming the object of media attention.

Claude Fischler[3] believes that today "there is information, but there's too much of it. And it's incoherent, cacophonous, and continuously changing." In addition, this information is contradictory, because it comes from a plethora of different sources, with advertising, internet blogs, and the innumerable television shows, books, and magazines providing advice on diet.

The "information surplus" that is created converges to generate anxiety in people rather than knowledge about the real attributes of food, and becomes partially responsible for unsuitable dietary choices. In fact, it becomes apparent that dietary choices are, indeed, an expression of a person's identity, while at the same time, the result of a process of acquiring information – which is often not "easily digested." In the future, it will be necessary to know how to manage this excess of information, to create a greater level of awareness in people when judging which foods to select.

4 How will elements such as traditions and simplicity survive in the face of the impact that technological innovation and scientific discoveries have (and will have) in the dietary context?

As we already emphasized, currently scientific progress is also targeted at developing new foods, to which technological innovations oriented toward the diffusion of new production methods are reconnected.

In reference to new foods, it is not, however, very clear what the ingredients of the future will be; scientists and futurists predict the marketing of foods based on algae or insects, or even foods developed in the laboratory.

In this context, and provided that the development of new foods can guarantee proper nutritional content, the consumer will need to be supported in the process of accepting these new foods, even as he or she tries to preserve culinary traditions.

On the other hand, when it comes to technological discoveries, we reiterate the importance of the sense of "proportion," specifically in relation to the production methods. The widespread opinion that "what's natural hasn't been technologically manipulated" must be discarded in favor of the idea of "responsible" technology that is not excessively sophisticated and responds to the advanced needs of future consumers.

5 How will it be possible for a sense of authenticity to coexist with interest in and curiosity for new culinary styles?

If, on the one hand, tastes are becoming homogenized, on the other – as a reaction and out of a sense of curiosity – local and regional production is being rediscovered.

Global acceptance must take on a new meaning. Instead of talking about the globalization of flavors and homogenization, we'll discuss the diffusion and sharing of culinary cultures. Authenticity is no longer measured solely by proximity to places and producers, but also includes awareness of the "history" and traditions.

6 Will access to quality food be the prerogative only of the wealthy?

In the future, one of the aspects to which greater attention will need to be paid in the dietary context is food quality. Currently, the belief is widespread that to eat "well" a person has to have a lot of money. Certain foods, which are often considered to be the only foods that are able to guarantee the requirements of naturalness and well-being, are often expensive and inaccessible to most people.

We need to be able to guarantee to everyone, even those within the segments of the popula-

tion with the least financial resources, the right to choose among a wide selection of food that features a good level of quality and is accessible. In brief, it will be necessary to bring greater awareness to people so that they can understand that it is possible to eat in a healthy way without spending a lot of money.

7 Will the post-modern consumer be able to reconcile individual choices with environmental sustainability?

The health of human beings cannot be separated from the health of ecosystems.

In order to meet the dietary and nutritional needs of a world that is more affluent, more urbanized, and with a growing population, people's dietary habits will have to undergo radical transformations, requiring them to forgo the attitude of avoiding responsibilities that is typical of the post-modern consumer.

As a result, there is no "proposition"; the only way it will be to develop within people a greater sensitivity for global environmental questions, with the knowledge that the planet's natural resources are not unlimited and that the population cannot, over the long term, maintain the current lifestyles.
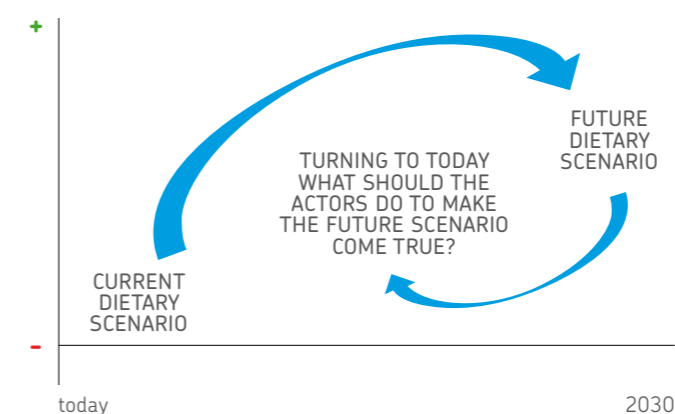
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4.2 WHAT CAN BE DONE TODAY TO ARRIVE AT 2030 "READY"?

The questions that will become the leitmotifs in the scenario defined for 2030 are: what must the actors in the agroindustrial sector do to accomplish the "transition" and bring about the desired reality?; and again, what are the guidelines and actions needed to meet people's resources and expectations?

The main categories of actors who will be referenced are the *institutions*, *companies* in the *food sector*, the *distribution sector*, and the *catering sector*.

Some reflections as to the role that each actor can play in this scenario will be proposed below and, just to give some examples – in an attempt, with the force of imagination, to further clarify what some of the inspiring principles of the choices could be –, some initiatives that each category of actors could undertake will be cited.

The initiatives proposed below result in part from analyses and research activity conducted by the BCFN during its first four years of existence.

+

FUTURE
DIETARY
SCENARIO

TURNING TO TODAY
WHAT SHOULD THE
ACTORS DO TO MAKE
THE FUTURE SCENARIO
COME TRUE?

CURRENT
DIETARY
SCENARIO

-

today   2030

As already discussed in detail in the first chapter, post-modern society is characterized by uncertainty, frequently due to the overabundance of information, which also comes from the proliferation of communication channels. In this context, the *institutions* will have the task of facilitating greater clarity in their messages, so that consumers will be informed and "educated," in part through initiatives consumers undertake on their own. The institutions will also have the task of directing collective choices consistently with the defined scenario, so that diet will again have the appropriate emphasis in people's behavior.

Here are some examples of initiatives that institutions could undertake:

→ use price leverage in a balanced and appropriate way to discourage the use of *junk food* and encourage purchases of healthy food. However, the use of price leverage on certain foods, without putting interventions in place to encourage the choice of healthier alternatives and make them actually accessible to the consumer, will likely not significantly impact behaviors;[4]

INSTITUTIONS MUST
INFORM AND EDUCATE THE
CONSUMER, DIRECTING
COLLECTIVE CHOICES
SO THAT DIET AGAIN
ASSUMES ITS PROPER
ROLE IN INDIVIDUALS'
BEHAVIORS

→ promote the adoption of healthy lifestyles and diets favoring the consumption of foods that have a lower impact on the planet's ecosystem;

→ incentivize the creation of urban garden initiatives, which have already existed for a number of years in many countries and are helping restore a sense of naturalness and a greater sense of conviviality. It is hoped that institutions, too, will commit to greater management of these places, where it is possible to rediscover the value of naturalness and simplicity;

→ support the dissemination of accurate information and dietary education, to promote adoption of proper dietary and life attitudes, so that individuals may achieve greater awareness of the importance of dietary choices and more complete knowledge on the topic. It will be necessary to help people choose and implement a proper dietary style.[5]

Given the characteristics of the post-modern consumer, who attributes more value to appearance than to substance and is seeing his or her time becoming more and more fragmented, the *food industry* must propose solutions that are accessible, practical, and guided by the value of individual, collective, and environmental well-being. Businesses must be able to adapt food offerings to the good practices discussed above and, at the same time, be able to communicate them in an effective way. In particular, companies in the food sector should:

→ continue to develop new forms of *convenience* food featuring a high nutritional level;

→ propose further innovations regarding format size, in order to meet the growing personalization of food offerings. In this case, we mean not only single-serving packages (which at the present time are only marginally widespread in mass retail distribution, and primarily only for certain types of foods) which are targeted at satisfying the needs of people living alone, but also specific formats for large families. At the same time, the food industry must propose additional innovations to limit the environmental impact of food packaging, specifically the quantity of packaging material required today to package single-serving products.[6] Thus, the industry should orient itself toward better alignment between satisfaction of current consumption trends and responsible management of packaging;

→ support consumers in their efforts to reduce waste to a minimum, in part thanks to the commitment of the entire manufacturing chain;[7]

→ continue the activity of reformulating existing products in relation to advances in technology and develop new products that can offer an increasingly wide choice to people in relation to the nutritional requirements of single people;

→ promote healthy lifestyles and diets from individuals' first years of life through the definition and implementation of productive strategies (reformulation of existing products and/or innovative products with planned nutritional content) and communication that is more in line with the indicators emerging from the most accredited scientific studies regarding the relationship between diet, lifestyle, and health;

→ promote new forms of *communication design*. In that sense, they could change not only the content carried by communication, but also the tone and style used, in order to have a more effective impact on behaviors.

In today's world, characterized by speed and high digitalization, which pervades almost every aspect of people's lives, the *distribution* sector will play a key role in providing solutions that respond to these needs.

This entails, for example:

→ developing new methods for rapid purchasing and increasing the digitalization content. Up to this point, some of these procedures do not seem to be very widespread; consider, for example, automatic checkouts in supermarkets, *self-scanning*[8] methods, and internet purchases. An obvious example of how technology can respond in this sense (and need) for speed is, as already discussed in the second chapter, the chain of "do-

THE FOOD INDUSTRY MUST PROPOSE SOLUTIONS THAT ARE ACCESSIBLE, PRACTICABLE, AND GUIDED BY THE VALUE OF INDIVIDUAL, COLLECTIVE, AND ENVIRONMENTAL WELL-BEING

IN A WORLD CHARACTERIZED BY SPEED AND HIGH DIGITALIZATION, THE DISTRIBUTION SECTOR WILL PLAY A KEY ROLE

ityourself dinner shops" that make it possible to prepare meals in an innovative way;
→ developing actions and strategies that help direct the choice toward products that belong in a healthy diet and, at the same, time have a reduced environmental impact.

THE FOOD SERVICE
INDUSTRY MUST COME UP
WITH NEW SOLUTIONS
TO HELP PEOPLE FIND
SPACES AND TIMES TO
DEDICATE TO MEALS
WITH OTHERS

In the future, eating together will obtain new acceptance, the product of a fast lifestyle that will be typical of consumers. New forms of conviviality will be created in non-traditional places; for example, people will eat more frequently on city streets. It will be necessary for the *catering industry* to adapt to the changing needs, also thanks to the introduction of innovative formats that allow these new needs to be satisfied.

The catering sector will have to create new solutions to help people find new space and time to dedicate to eating meals with other people. These meals do not necessarily have to adhere to traditional rituals that identify the table as the place for sharing, but can happen in new eating spaces. What counts is that every day people can take advantage of eating time to interact and communicate with others.

In addition, keep in mind that the *family* and the *school* are, for different reasons, the main participants in effective education about proper diet, targeted as much to young people as to tomorrow's adults. It is within the family where the child "learns" to eat and internalizes dietary behaviors that he or she will naturally be likely to adopt in the future. But at the same time, the school – due to the increasing importance of its presence in the dietary context and its potential for involvement by families themselves – could and should play a truly active role in promoting balanced dietary styles, by inviting families to understand the best dietary choices and to "join forces" toward a single approach.

In addition, the first and perhaps most important step in changing overall lifestyles consists not so much in a revolution in one's own dietary style, but in a correction of dietary and life attitudes among the youngest individuals, starting from the pre-school age through to adolescence. This stage of life is absolutely central, and proper dietary and behavior attitudes adopted during the first years of life constitute a decisive element both for health in infancy and adolescence and for quality of life later on.

If each actor plays a specific role in the transition toward a new model, the *cooperation* of all the different parties involved in various ways is necessary. The inversion of current trends cannot be the result of the efforts of a single, isolated agent of change, nor can a single individual modify a framework which often subjects him or her to negative influences, in a practical context that does not encourage the choice of suitable and positive lifestyles.

Is there an incentive that can modify current approaches and introduce new logic within the system? In our judgment, this element must reside in an awareness of the overall unsustainability of the current reality, hich risks being further aggravated by future developments. People, even if they have a hard time expressing it, want food to have value in their lives. For reasons that are structurally tied to their humanity, they want the consumption of food to be full of significance, emotions, and experience.

What will be asked of the actors in the food system is the ability to *enhance this desire*, to reconstruct a more balanced and positive approach to food.

To do this, it will be necessary first to deepen people's cultural capital regarding diet, encouraging the development of a different perception of the intrinsic value of food.

In fact, there is a lack of adequate capacity for judgment and a sufficient level of specific competence to enable putting together tasty and healthy diets at accessible prices, which are based on an accurate assessment of the value of the food choices that are available in the market.

In this situation, we are witnessing an increasing difference between "*premium* offers" (for example, think of food defined as "organic," offered by the so-called "zero km" chain) and junk food: a growing distance that seems to underscore the definitive impossibility of reconciling taste, health, and financial resources.

And yet, there are dietary models (such as the Mediterranean diet) that are structurally able to reconcile these "opposites." We must proceed in this direction, certainly; but at the same time, we must make these approaches feasible for everyday reality, now and in the future, removing their "mythical" dimension to make them a tangible reality in people's lives.

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TAKING A GLANCE
AT THE FUTURE

The path we have undertaken was primarily intended to show which variables should be monitored to understand the evolution in dietary systems, putting individuals and their behaviors front and center.

The attempt at modeling that emerged from this is imperfect, but so is every model. However, it takes the most recent scientific production on the topic into account and offers a broad and rather deep framework for the debate in progress relating to changes in behaviors and in people's attitudes toward food.

We used the model to formulate a hypothesis for the "desired" scenario, that is to say, a scenario which is not only possible, but is also realistic, constructive, and sustainable.

The scope of our work was not to design future scenarios; this would be a task for futurists. Our concern, instead, relates primarily to the present, and the objective of the exercise was to provide starting points for reflection to the various actors in the food system, to encourage positive action in the desired direction.

IT IS NECESSARY TO UNDERSTAND THE PRESENT SO WE CAN ASK OURSELVES ABOUT THE FUTURE

To do this, we had to understand the present and ask ourselves about the future. The future that we can imagine today, however, depends in large part – and it is important to bear this in mind – from images that come to us from the past and from the present day.

As Claude Fischler[9] has often reminded us, the future can take directions and have consequences that are completely unexpected: "Imagine a convention of futurists at the end of the secondary period,[10] which was organized to discuss and anticipate what would happen in the next era, the tertiary period.[11] In response to the question 'What will the future be like?,' the participants make predictions based on the trends and evidence relating to the era in progress, and they report a scenario featuring the presence of large examples of predators, namely, reptiles and dinosaurs. From that they develop a prediction of a future period marked by a greater number of animals that are even larger than they currently are. However, no one pays any attention to the smallest animals, particularly the mice: miniscule creatures that usually run in between the predators' legs. Contrary to the predictions, it is precisely these creatures that are the only ones who will survive and become the first examples of mammals, that is, the animals of the future. The futurologist's task is thus particularly critical, in that it consists of 'finding the mouse' in every analytical context, while having at hand only the trends that in the past and at that time seem to define it." [12]

The history of food is full of "mice." A good example is the tomato.

The tomato is one of the products introduced in Europe from Central America, following geographical discoveries and the creation of the first colonial empires at the beginning of the sixteenth century.

This unexpected encounter with the so-called "New World" caused a full-fledged revolution to explode in the cuisine of Old Europe. This revolution became a great transformation that, bit by bit, brought seeds and plants to Europe from species which before that time were unknown to the European world. It was precisely those seeds and plants – discovered in the New World – that revolutionized European gastronomy: corn, cocoa, potatoes, peppers, chilies, and other foods, including the tomato. The latter (which initially was not considered important) changed the colors, flavors, and aromas of the cuisines of many countries, becoming one of the most characteristic elements of the Mediterranean diet.

We don't know what the "mice" of the future are. In spite of the careful analysis carried out by the most authoritative experts based on evidence and experience acquired over the years, the future is always unforeseeable and cannot be planned, especially when the subject of study is people's behaviors.

In this context, the ultimate purpose of this work is not to guess what will happen in the next 20 years, but rather to offer the actors in the food world useful starting points for discussion so that they can adapt to changes in progress, attempting to enhance the most positive aspects of future dietary trends.

THE ULTIMATE GOAL TODAY IS TO OFFER STARTING POINTS FOR REFLECTION TO THE PLAYERS IN THE WORLD OF FOOD

It is, in fact, possible to start directing initiatives and activities toward a dietary scenario that is the most desirable and sustainable possible, featuring a predominance of positive and preferable behavioral spin-offs for individuals.

At the same time, we must not ignore the possibility of an unforeseen event that could upset the likely scenario. It is exactly this attitude of reflecting deeply on the variables of the scenario that will allow us to be as prepared and trained as possible to "discover the mice" of the future.

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13. Bauman, Z. (1999), *La società dell'incertezza*, il Mulino, Bologna, p. 101.

14. Bauman, Z. (1999), *La società dell'incertezza*, il Mulino, Bologna, p. 99.

15. Freud, S. (1978), *Il disagio della civiltà* [The Unease of Civilization], Boringhieri, Turin.

16. Montanari, M. (2004), *Il cibo come cultura* [Food as Culture], Laterza, Rome-Bari, p. 17.

17. Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari, p. 23.

18. Montanari, M. (1989), *Convivio. Storia e cultura dei piaceri della tavola* [Feast. History and Culture of the Pleasures of the Table], Laterza, Rome-Bari, pp. VII-XXIV.

19. Fischler C. (1992), *L'onnivoro: il piacere di mangiare nella storia e nella scienza* [The Omnivore: The Pleasure of Eating in History and in Science], Mondadori, Milan; Pollan M. (2008), *Il dilemma dell'onnivoro* [The Omnivore's Dilemma], Adelphi, Milan.

20. Ambrosetti Club (2011), *I nuovi megatrend che impattano sul business e sulle nostre vite* [The New Megatrends that Impact Business and Our Lives].

21. The entire list of the sources used to define the conceptual outline is in the bibliography.

22. The following are thanked for their valuable contribution of ideas and method: Marco Croci (professor and expert in inter-cultural management); Mitchel [sic – Mitchell] Davis (journalist, writer and Vice President of the James Beard Foundation, a non-profit organization that promotes culinary arts and culture and every year organizes the James Beard Awards, the "Oscars of the Food World"); Fabio Parasecoli (professor and expert on diet, media and culture); and Richard Watson (writer and futurologist, author of Future Files). Particular thanks go to Massimo Montanari (professor and expert in the history of food), who played the role of advisor for this work.

23. Emerging countries are on demographic paths that are different than those of developed countries. Rates of population growth, which previously were low, have increased, as mortality (especially in the first year of life) has decreased, thanks to the introduction of modern medical techniques and improvements in public hygiene, and the fact that birth rates have not declined.

24. International Monetary Fund – IMF (2012), *Global Financial Stability Report: the Quest for Lasting Stability – 2012*.

25. BCFN (2011), *Longevity and well-being: the role of diet*.

26. Kinsella, K. and W. He (2009), *An Aging World: 2008. US Census Bureau. International Population Reports*, US Government Printing Office.

27. The definition of active aging most often used is from the World Health Organization, for whom active aging in good health is "a process for optimizing opportunities relating to health, participation and safety, for the purpose of improving the quality of life of elderly people."

28. BCFN (2011), *Longevity and Well-Being: the Role of Diet*.

29. Reference is made to the so-called "Peter Pan syndrome." The term came into common use following the publication in 1983 of Dan Kiley's book (1983), *The Peter Pan Syndrome: Men Who Have Never Grown Up*, Dood, Mead.

30. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna.

31. On this topic see also: Montanari, M. (edited by) (2002), *Il mondo in cucina. Storia, identità, scambi* [The World in Cuisine. History, Identity, Exchanges], Laterza, Rome-Bari. And cited: "Cuisine thus constitutes an extraordinary vehicle for self-representation and communication. It is not only an instrument of cultural identity, but also perhaps the first way to enter into contact with different cultures, since eating other people's food seems easier – even if only apparently – than codifying the language. More than words, food lends itself to mediating between different cultures, opening systems of cuisine to every kind of invention, intersection and contamination."

32. Censis (2012), *I valori degli italiani* [Italians' Values], FrancoAngeli, Milan.

33. Tremonti, G., *Le cause e gli effetti politici della prima crisi globale* [The Political Causes and Effects of the First Global Crisis], lecture given on November 19, 2009 at the Party School of the Central Committee of the Communist Party in Beijing.

34. Megacities are metropolitan areas that have reached a population of at least 10 million inhabitants.

35. Perulli, P. (2000), *La città delle reti. Forme di governo nel postfordismo*, [The City of Networks. Forms of Government in Post-Fordism], Bollati Boringhieri, Turin.

36. Brinkhoff, T. (2012), *The Principal Agglomerations of the World*, (April). At the top of the classification of megacities is Tokyo with more than 34 million inhabitants; Guangzhou with more than 25 million; Jakarta, Shanghai, and Seoul with approximately 25 million; Mexico City and Delhi with around 23 million; and lastly, with more than 20 million citizens, are New York, Sao Paolo, Karachi, Mumbai, and Manila.

37. Analyses by The European House–Ambrosetti of United Nations data (Population Division – UN–Habitat) and the World Bank.

38. International Communication Union, 2012.

39. Quinn, C. (2009), *Social Networking: Bridging Formal and Informal Learning*, (February 23).

40. *Sicurezza informatica: uno sguardo al mondo mobile* [Computer Security: a Look at the Mobile World] in "Business Magazine," April 2012.

41. The emblematic case that brought the topic to the fore was that of a manager of Lloyd's who, at the beginning of 2012, declared without warning that he was ill and unfit (temporarily) to manage Lloyds Banking Group because of this syndrome (from *Il supermanager che non riusciva a staccarsi dal lavoro* [The Supermanager Who Couldn't Leave His Work], in "Corriere della Sera," January 5, 2012).

42. BCFN (2010), *The excellence of the Mediterranean Way*, with an introduction by C. Fischler.

43. BCFN (2009), *Climate Change, Agriculture and Food*.

44. For a comprehensive framework of the problems tied to the sustainability of agroindustrial systems, see: BCFN (2011), *New models for sustainable agriculture*.

45. BCFN (2011), *New models for sustainable agriculture*.

46. By environmentalism, or ecologism, is meant the ideology and all of the political initiatives aimed at the protection and improvement of the environment.

47. Inglehart, R. (1983), *La rivoluzione silenziosa* [The Silent Revolution], Rizzoli, Milan.

48. Meadows, D. L. *et al.* (1972), *I limiti dello sviluppo* [The Limits of Development], Mondadori, Milan.

49. Carson, R. (1984), *Primavera silenziosa* [Silent Spring], Feltrinelli, Milan.

50. Commoner, B. (1972), *Il cerchio da chiudere* [The Circle to Close], Garzanti, Milan.

51. Greenpeace originated in the 1970s in Canada, during the opposition to a nuclear test on the Aleutian Islands.

52. The first person to use the neologism GRIN was the journalist Joel Garreau in his book *Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies — and What It Means to Be Human* (Doubleday, New York, 2005). Some other acronyms exist to express similar concepts, including: NBIC (*N*anotechnology, *B*iotechnology, *I*nformation technology and *C*ognitive science), GNR (*G*enetics, *N*anotechnology and *R*obotics), GRAIN (*G*enetics, *R*obotics, *A*rtificial *I*ntelligence and *N*anotechnology), and BANG (*B*it, *A*toms, *N*euron and *G*ene).

53. www.efsa.europa.eu.

54. McKibben, B. (2004), *Enough: Staying Human in an Engineered Age*, St. Martin Press, New York.

55. Kurzweil, R. (2005), *The Singularity is Near: When Humans Transcend Biology*, Viking, New York.

56. Bostrom, N. (2002) *Existential Risks: Analyzing Human Extinction Scenarios*, in "Journal of Evolution and Technology," 9, 1.

57. BCFN (2010), *Is GM agriculture sustainable?*; BCFN (2011), *Beyond GMOs. Biotechnology in the agrifood sector*.

58. The entire list of the sources used to define the conceptual outline is in the bibliography.

59. Numerous contributions are cited for Joseph Stiglitz, Nobel prize winner for economics in 2001, and Paul Krugman, Nobel prize for economics in 2008.

60. On the effects of financialization see also: Tremonti, G., *Le cause e gli effetti politici della prima crisi globale* [The Political Causes and Effects of the First Global Crisis], lecture given on November 19, 2009 at the Party School of the Central Committee of the Communist Party in Beijing.

61. Bayon, D., F. Flipo and F. Schneider (2012), *La decrescita: 10 domande per capire e dibattere* [Degrowth: 10 Questions to Understand and Discuss], with an introduction by S. Latouche, Asterios, Trieste.

62. OECD [Organization for Economic Cooperation and Development] (2011), *Divided We Stand: Why Inequality Keeps Rising*, (December).

63. On that topic Collin [sic – Colin] Powell said, "Much is said about the Digital Divide. [...] I prefer to use another term: digital apartheid. If the digital apartheid persists, we will all be defeated. The digital have–nots will be poorer and will not become the specialized workers and potential consumers necessary to sustain the growth of the new economy" (in "Business Week," December 18, 2000).

64. Eurostat.

65. McKinsey Company (2012), *Global Forces: An Introduction*.

66. Michel Maffesoli, a French sociologist, was considered among the primary exponents of post–modern European thought for his thesis on the crisis of modern rationality and for having caused new forms of postmodern sociability to emerge.

67. Maffesoli, M. (1988), *Il tempo delle tribù: il declino dell'individualismo nelle società di massa* [The Time of the Tribes: The Decline of Individualism in Mass Society], Armando Editore, Rome.

68. For Bernard Cova, one of the greatest experts on the topic, the neotribe is a "group of individuals who are not necessarily homogeneous (in terms of objective social characteristics), but are interrelated by a single subjectivity, affectivity or ethic, and are capable of carrying out intensely lived but fleeting microsocial actions, all in a strongly ritualized fashion."

69. Reference is made to movements tied to the concept of degrowth, theorized by Nicholas Georgescu-Roegen, founder of bioeconomics, and in line with the thought of Serge Latouche, one of the principal advocates of degrowth, in whose view the term means the need for and urgency of a "paradigm change," an inversion in the trend relating to the dominant model of growth and unlimited accumulation (Latouche, S. (2006), *Le pari de la décroissance* [The Bet of Degrowth], Fayard, Paris).

70. BCFN (2010), *Measuring people's well-being: the BCFN Index*.

71. On the list of the most disabling diseases worldwide, depression currently is fourth, but it is predicted that by 2020 it will reach second place.

72. Fabris, G. (2003), *Il nuovo consumatore: verso il postmoderno* [The New Consumer: Toward Post-Modernism], FrancoAngeli, Milan.

73. Schimtt, B. H. (1999), Experiential Marketing Views Consumers as Rational and Emotional Human Beings Who Are Concerned with Achieving Pleasurable Experiences, Free Press, New York.

74. Caiazzo, D., A. Colaianni, A Febbraio, and U. Lisiero (2009), *Buzz Marketing nei social media* [Buzz Marketing in Social Media], Fausto Lupetti Editore, Bologna.

75. Censis (2011), *45° Rapporto sulla situazione sociale del Paese/2011* [45th Report on the Social Situation in the Country/2011], FrancoAngeli, Milan.

76. By "typical Italian family" is meant a nuclear family format with an average of 2.5 people (Coldiretti, 2011).

1. We will show the relationships between the variables whenever it is possible to do so.

2. Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari.

3. www.slowfood.it.

4. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna, p. 45.

5. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna, p. 46.

6. Watson, R. (2012), *Future Files*, Nicholas Brealey Publishing, London-Boston.

7. Speech by Prof. Massimo Montanari during the BCFN Advisory Board, July 17, 2012; Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari.

8. For an exhaustive treatment of the relationship between food and health, see the various papers produced in the last few years by the BCFN: *Alimentazione e salute* [Food and Health] (2009); *Longevità e benessere: il ruolo dell'alimentazione* [Longevity and Well-Being; The Role of Diet] (2011); *Obesità: impatti sulla salute pubblica e sulla società* [Obesity: Impacts on Public Health and on Society] (2012); *Alimentazione e benessere per una vita sana* [Diet and Well-Being for a Healthy Life] (2012).

9. European Commission, European Research Area Food, Agriculture & Fisheries & Biotechnology Food. Since there is not a legal definition of the concept at either the European or national level, the definition for functional food goes back to 1999 and is the product of the work of a commission of 100 European experts in nutrition and medicine, who worked for three years on the FUFOSE (Functional Food Science in Europe) project. In the same manner, there is no unanimous judgment as to their usefulness and practicality. As an institution that protects consumers, the European Food Safety Authority (EFSA) has the responsibility of evaluating the scientific reliability of new requests for authorization for functional indications on health and for indications regarding reduction of risk of disease.

10. Niola, M., *Quando il salutismo diventa una malattia* [When Health Consciousness Becomes an Illness], in "Il Venerdì di Repubblica," June 6, 2012.

11. Bratman, S. and D. Knight (2000), *Health Food Junkies*, Broadway Books, Portland (OR).

12. *Cultura Gastronomica Italiana* [Italian Gastronomic Culture] (2007), *I Musei del Gusto. Mappa della memoria enogastronomica* [The Museums of Taste. Map of the Enogastronomic Memory], Carsa Edizioni, Pescara.

13. Watson, R. (2012), *Future Files*, Nicholas Brealey Publishing, London-Boston.

14. Watson, R. (2012), *Future Files*, Nicholas Brealey Publishing, London-Boston; Rufus, A. (2011), *Explaining the Psychology of Comfort Food*, on www.gilttaste.com.

15. "Hedgehog Review," V, 3, 2003.

16. Bauman, Z. (2006), *Vita liquida*, Laterza, Rome-Bari.

17. In 2008, FAO organized a workshop in Thailand to call attention to edible forest insects' potential as a food source, to document the contribution of edible insects as a means of rural subsistence and evaluate the connection with the sustainability of forest management and conservation. Following this meeting, in 2010 FAO proposed adding insects to the human diet for their high nutritional value. (FAO (2010), *Forest Insects as Food: Humans Bite Back*).

18. Thousands of types of algae exist in the world's seas that could be cultivated in the oceans (and have the potential to remedy the growing lack of arable land and water) and would also be useful in producing biofuels. Along with insects, algae could be added to food diets, in line with what has been done by the experts at Sheffield Hallam University, who used particles of algae to replace salt in bread and commercial foods (Winterman, D., *Future Foods: What Will We Be Eating in 20 Years' Time?*, in "BBC News Magazine," July 29, 2012).

19. Cassi, D. and E. Bocchia (2005), *Il gelato estemporaneo e altre invenzioni gastronomiche* [Impromptu Gelato and Other Gastronomic Inventions], Sperling&Kupfer, Milan.

20. Bauman, Z. (2006), *Vita liquida*, Laterza, Rome-Bari.

21. Italian Ministry of Health, *Relazione sullo Stato Sanitario del Paese 2009-2010* [Report on the Health Status of the Country 2009-2010].

22. Esposti, R. (2005), *Cibo e tecnologia: scenari di produzione e consumo alimentare tra tradizione, convenzione e funzione* [Food and Technology: Production and Food Consumption Scenarios Among Tradition, Convention and Function], Agriregionieuropa, Ancona.

23. At the European level, the European Food Safety Authority (EFSA) applies stringent evaluation criteria for the definition of functional food, to the extent that, up to now, no probiotic has been deemed able to fulfill the relative health requirements.

24. (EC) Regulation no. 178/2002 of the European Parliament and of the Council of January 28, 2002 that establishes the principles and general requirements for food legislation, created the European Food Safety Authority and established procedures in matters of food safety (Article 18); FDA Food Safety Modernization Act – FSMA (SEC. 204. Enhancing Tracking and Tracing of Food and Recordkeeping).

25. Barba, B. (2008), *Tutto è relativo. La prospettiva in antropologia* [Everything is Relative. Perspective in Anthropology]. SEID, Florence.

26. Speech by Prof. Massimo Montanari during the BCFN Scientific Symposium, March 5, 2012.

27. BCFN (2009), *The cultural dimension of food*.

28. BCFN (2009), *The cultural dimension of food*.

29. Johnston, J. and S. Baumann (2010), *Foodies. Democracy and Distinction in the Gourmet Foodscape*, Routledge, New York-London.

30. 27 BCFN (2009), *The cultural dimension of food*.

31. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna.

32. Johnston, J. and S. Baumann (2010), *Foodies. Democracy and Distinction in the Gourmet Foodscape*, Routledge, New York-London.

33. This term was coined in 2005 by Jessica Prentice, chef and author of the book *Full Moon Feast: Food and the Hunger for Connection* (Chelsea Green Publishing, Vermont, 2006).

34. Coen, E., *L'ora dei locavori* [Time for the Locavores], in "L'Espresso," September 17, 2012; Johnston, J. and S. Baumann (2010), *Foodies. Democracy and Distinction in the Gourmet Foodscape*, Routledge, New York-London.

35. Johnston, J. and S. Baumann (2010), *Foodies. Democracy and Distinction in the Gourmet Foodscape*, Routledge, New York-London.

36. Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari.

37. Speech by Prof. Massimo Montanari during the BCFN Advisory Board, July 17, 2012.

38. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna.

39. Italian Ministry for Economic Development – Department for Development and Cohesion Policies (Public Investment Assessment Unit – UVAL), *Consumi agro-alimentari in Italia e nuove tecnologie* [Agroindustrial Consumption in Italy and New Technologies], National Strategic Framework 2007-2013.

40. BCFN (2011), *Il costo del cibo e la volatilità dei mercati agricoli: le variabili coinvolte* [The Cost of Food and Volatility of Agricultural Markets: The Variables Involved].

41. Between July 2010 and February 2011, the FAO Food Price Index increased by 38%, reaching a peak greater than that recorded during the food crisis of 2008. In one year, from June 2010 to June 2011, the price of cereal alone grew by 71%. Among the causes of the ascent in

prices of agricultural commodities is also a change in consumption models in the most affluent segments of the population of emerging countries. They are now eating more meat, and the resulting increase in demand for poultry, beef, pork, etc. is not without consequences. Raising such a large quantity of animals necessitates significant fodder production, which leads to an increase in demand for soy, maize, and other cereals.

42. Istat [National Institute for Statistics] Report 2012.

43. Osservatorio Mobile Internet, Content Apps, promoted by the School of Management of the Politecnico di Milano [Milan Polytechnic] in collaboration with the ICT Institute and the MEF.

44. BCFN (2009), *La dimensione culturale del cibo*.

45. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna.

46. Watson, R. (2012), *Future Files*, Nicholas Brealey Publishing, London-Boston.

47. www.dreamdinners.com.

48. Niola, M. (2012), *Non tutto fa brodo*, il Mulino, Bologna.

49. Osservatorio FedeSalus (Italian Federation for companies that produce health products).

50. Fabris, G. (2003), *Il nuovo consumatore: verso il postmoderno*, FrancoAngeli, Milan.

51. www.consumattori.info.

CHAPTER 3

1. We wish to emphasize that only some of the elements that affect the trend have been taken into consideration here. Therefore, the treatment delineated here cannot be considered completely exhaustive, but rather represents the results of certain choices made by us.

2. Here reference is made to the distinctive features identified for each trend and, specifically, dietary trends with related distinctive characteristics. Taste: pleasure. Attention to health: well-being. Orientation to the past: memory. Orientation to the future: progress. Technology: innovation. Naturalness: simplicity. Globalization of flavors: exchange. Local and regional food: territory. "Luxury" food: exclusivity. "Low cost" food: accessibility. Speed: time. Individualization: connection. Sustainability: environment.

3. The entire list of the sources used to define the conceptual outline is in the bibliography.

4. For a detailed list of the experts interviewed to produce this work, see Chapter 1.

5. For a more extensive framework as to the boundary of the analysis, see the introduction to Chapter 1, where the distinctive traits of post-modern society are introduced.

6. The meaning used for each term is presented in the outline.

7. Fischler, C. (interview), *Con i cibi ufo annulliamo la nostra identità* [We are Losing our Identity with UFO Food] in "Corriere della Sera Sette," October 19, 2012.

8. Fischler, C. (interview), *Con i cibi ufo annulliamo la nostra identità* in "Corriere della Sera Sette," October 19, 2012.

9. Parasecoli, F., interview on May 29, 2012.

10. Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari.

11. BCFN (2012), *Nutrition and well-being for healthy living*.

12. Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari.

13. Fischler, C. (interview), *Con i cibi ufo annulliamo la nostra identità* in "Corriere della Sera Sette," October 19, 2012.

14. Montanari, M. (2004), *Il cibo come cultura*, Laterza, Rome-Bari.

15. BCFN (2009), *Food & Health*.

16. For more information, see Tom Chatfield's article, *Is the Web Driving Us Mad?*, in "Newsweek Magazine," July 9, 2012.

17. For more information, see also: BCFN (2012), *Double Pyramid 2012: enabling sustainable food choices*.

CHAPTER 4

1. Bauman, Z. (1999), *Vite di corsa* [Lives in a Hurry], il Mulino, Bologna.

2. Fischler, C. (interview), *Con i cibi ufo annulliamo la nostra identità* in "Corriere della Sera Sette," October 19, 2012.

3. Fischler, C. (interview), *Con i cibi ufo annulliamo la nostra identità* in "Corriere della Sera Sette," October 19, 2012.

4. On this topic, see also: BCFN (2012), *Obesity: the impacts on public health and society*.

5. On this topic, see also: BCFN (2012), *Nutrition and well-being for healthy living*.

6. It has been calculated that a single person produces two and a half times as much packaging waste (11 kg. vs. 4 kg) as a person who lives in a family of four people (Industry Council for Packaging and the Environment data, Great Britain).

7. On this topic, see also: BCFN (2012), *Food waste: causes, impacts and proposals*.

8. It entails a purchasing system, adopted primarily by supermarkets and hypermarkets, that uses mobile bar code readers and self-scanning pods used by purchasers when they are shopping to speed up checkout .

9. Claude Fischler has been a member of the BCFN Advisory Board since 2010.

10. The name *Mesozoic Era* or *secondary era*, also called the *age of the reptiles*, derives from the Greek *mesos*, "middle," because it occurred between the ancient era (Paleozoic) and the recent era (Cenozoic) of life on Earth.

11. The name *Cenozoic Era* or *tertiary era* derives from the Greek *kainòs*, "recent life."

12. Interview with Claude Fischler during the BCFN Advisory Board on July 17, 2012.

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Esposti R. (2005), *Cibo e tecnologia: scenari di produzione e consumo alimentare tra tradizione, convenzione e funzione*, Agriregionieuropa, Ancona.

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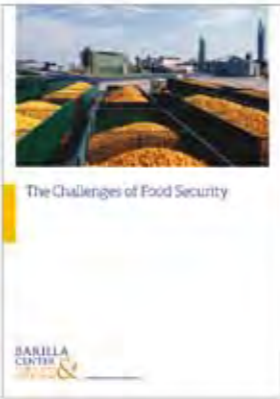
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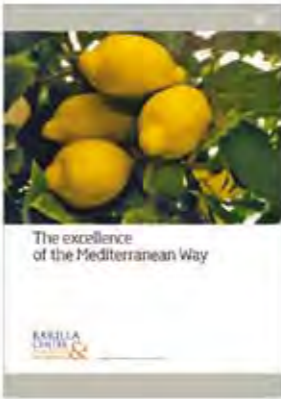
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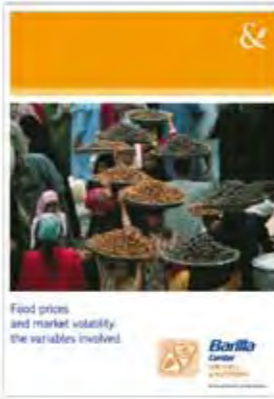
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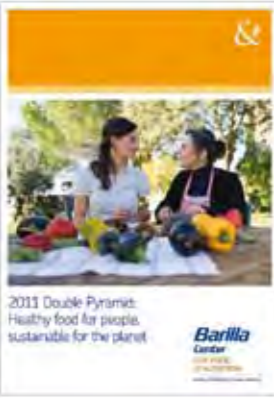
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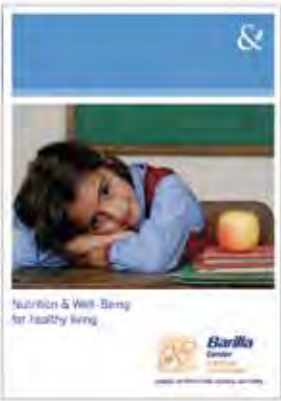
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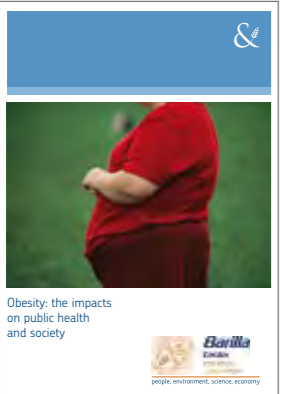
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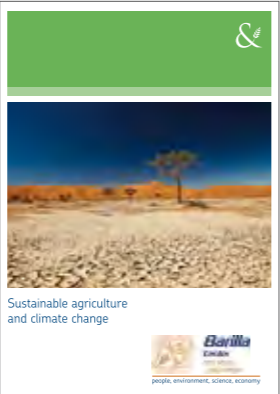
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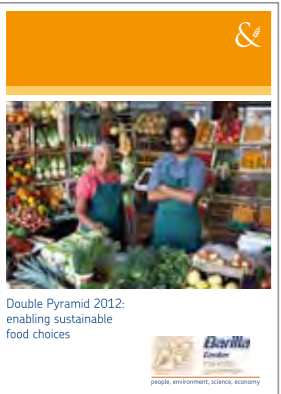
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