



UNESCO Chair in
World Food
Systems



6th ANNUAL CONFERENCE
3 FEBRUARY 2017

Pleasures in Food

OVERVIEW



The 6th Annual Conference of the UNESCO Chair in World Food Systems kicked off at 9 am on 3 February 2017 in a packed amphitheatre (400 people).

Anne-Lucie Wack (Director General of Montpellier SupAgro), **Michel Eddi** (Director of CIRAD) and **Guilhem Soutou** (Food Programme of the Daniel and Nina Carasso Foundation) in turn stressed the multidisciplinary nature of the Chair and its distinctiveness as an open space for groundbreaking discussions between different stakeholders (research, education, private sector). **Damien Conaré**, Secretary General of the Chair, then spoke about his main remits (overseeing the science-society dialogue, conference organization, research programme coordination) and the various activities under way in 2016, a period during which the Chair was audited.

Researchers in the fields of psychiatry, sociology, geography, anthropology and marketing, as well as chefs, elected officials and entrepreneurs, were invited to discuss the ‘Pleasures in Food’ topic. A highly attentive eclectic audience of young and older people attended. The conference poster—a photograph of New York workers eating clams while drinking white wine around a cart (a forerunner to the food trucks popular today)—met the organizers’ wishes to “*multiply their viewpoints, reach beyond the boundaries and shake up the certainties*”, recalled Damien Conaré.

<https://www.chaireunesco-adm.com/en>

INAUGURAL CONFERENCE

Roland Jouvent—psychiatrist, professor at the University of Paris VI and head of the Psychiatry Department at Pitié-Salpêtrière Hospital (Paris)—demonstrated how neuroscience has shed light on the mechanisms involved in the pleasure of eating.

The embodiment of pleasure

The human brain—which closely resembles that of lower mammals—has grown faster than the rest of the human body. In fact, had our bodies grown at the same rate, people would now be around 4 m tall! The brain consists of the neocortex (or symbolically, the rational rider – ‘sense’) and the reptilian brain (the emotional horse – ‘senses’). “*The body is the foundation of cultures*”, explained **Roland Jouvent**. Hence, if we look at a diagram showing two lines of the same size forming a T, the brain will tend to consider that the vertical line is longer than the horizontal one because that is the usual expected pattern.

Roland Jouvent then discussed the complex mechanisms that link our emotions with what we eat. Eating sugar leads to serotonin production, so this ingredient is a source of pleasure. A biological rationale underlies our desires, claimed Roland Jouvent. The researcher also stressed the physical value of words and the power of imagination. When we hear the word ‘chocolate’, our brain reacts in a specific way. Psychotropic drugs act on the oldest reptilian part of our brain. Some psychotherapies thus try to gain access to this region (hypnosis, etc.). The ‘reward system’ is also found in these old parts of our brain: I am thirsty,

I drink water; I feel pleasure because I secrete dopamine. This system influences the cortex, where desire takes shape. The alert system is in the ‘old brain’, which enables people to avoid danger without reflection. Roland Jouvent thus pointed out that “*the senses are smarter than our complex thoughts from a survival, adaptation and relevance standpoint*”. Roland Jouvent concluded this inaugural conference by calling for a reawakening of the senses, claiming: “*Everything became mental after the collapse of the dinosaurs, whereas sensual implementation is essential to avoid going crazy.*”



SAVOUR THE PLEASURES

Food pleasure—leveraged from our emotional experience—is also the consequence of transmissions of values, norms, rules and sociocultural constructions. The viewpoints offered in this session were expressed from various angles: nature, marketing, chemistry, etc.

President: Anne Dupuy, ISTHIA, University of Toulouse-Jean Jaurès (France)

Subtle natural taste construction in the Japanese tradition

Ikuhiro Fukuda, geography and social anthropology specialist at Waseda University (Tokyo)

Traditional Japanese cuisine, which was added to the UNESCO Intangible Cultural Heritage List in 2013, is healthy and tasty because it is primarily bound to nature. Meat is very moderately used as compared to fish since meat consumption was prohibited for religious reasons in Japan from the 7th to the mid-19th century. Japanese symbiotic sympathy for nature is not solely present in its food culture, it is also inherent to Japanese art and literature. With their use governed by seasonality, different vegetables and fruits are always carefully prepared. **Ikuhiro Fukuda** illustrated this trend by showing photographs of tiny Japanese gourmet cakes that taste the same but have different shapes depending on the season, e.g. iris, cherry, maple and camellia. Like *dashi*, a broth in which vegetables are cooked and that does not give a specific taste but instead accentuates the savoury flavour of the dish overall—the human touch must fade into the background in favour of nature, according to the Japanese.

People can thus feel emotions transcending the object constructed through their representations of nature. According to Ikuhiro Fukuda, these specificities explain the global prestige and spread of Japanese cuisine worldwide.



Flavours for the food industry: perceptions and emotions

Isabelle Cayeux, Principle Scientist, Sensory Analysis, R&D, Firmenich SA (Geneva)

“Even a manufacturer can contribute to eating pleasure.” With these words, **Isabelle Cayeux** began her talk, as a representative of Firmenich SA, a Swiss company that currently ranks 2nd in the world in the perfumery, flavours and ingredients business. The company has a staff of 6,000 people, with 23 industrial plants and a turnover of CHF 3 billion, including 10% invested in R&D. A flavour is a complex blend of synthetic or natural raw materials and/or a solvent designed to provide a specific taste in a given application. Manufacturers produce flavours to: (i) compensate for a loss of taste due to the manufacturing, storage or transport of food products; (ii) ensure consistent quality; (iii) substitute exceptionally rare raw materials; and (iv) cover unwanted tastes or develop new ones. Researchers draw inspiration from nature to create flavours. The most interesting molecules are assembled, tested and their behaviour in the end product is checked. Hence, around 250 molecules are found in orange juice, 800 in braised beef, etc. The taste—otherwise referred to as ‘flavour’—consists of smells and aromas (nasal and retronasal), flavours (sweet, salty, sour, bitter and *umami*¹) and trigeminal perception (hot, spicy, cool and tactile). Chemical stimuli are interpreted via their psychological

effects in a given setting. Based on the emotional powers of smells and aromas, Firmenich SA, in collaboration with the University of Geneva, has developed an emotion measurement system that can be tailored to any cultural context, i.e. ScentMove®, with a glossary of 25 terms and 9 categories. Today’s challenge for manufacturers is to preserve identical tastes while meeting health (produce with less salt, sugar and fat) and economic (produce at low cost) concerns. Flavours can also help generate more pleasure with fewer calories.



1. One of the five basic flavours. This Japanese word describes “an appetizing and lasting pleasant ‘broth’ or ‘meat’ taste that coats the tongue.” There is no English translation for this term.

Sensory pleasure aligned with a healthier diet

Pierre Chandon, Marketing Professor, Director of INSEAD-Sorbonne Universités Behavioural Lab (France)

Pierre Chandon, Marketing Professor, intervened to argue against the preconceived notion that getting pleasure from eating is necessarily unhealthy. In this respect, a binary purely health-oriented approach focused solely on the nutritional quality of food may be counterproductive. Pierre Chandon's talk focused on the importance of taking the consumed quantity into consideration. Through a few striking examples, he revealed the extent to which individual portion sizes increased during the 20th century and until today. For instance, Coca Cola bottles contained 19 cl of beverage for 60 years and then the company suddenly increased the volume

to 50, 64 and 94 cl. Our view of what is a 'normal' portion has changed along with our consumption patterns. However, heavily-handedly trying to make consumers feel guilty is not the solution. This is where the notion of pleasure comes in, as opposed to satiety. Eating less and taking more time to eat enhances the pleasure. Pierre Chandon concluded with a quote from Epicurus: *"The wise man will choose the tastiest food, not the most abundant one."*



SO WHAT?
POLICY BRIEF N° 6 - NOVEMBER 2017

UNESCO Chair in World Food Systems

The UNESCO Chair in World Food Systems aims to advance the frontiers of knowledge on food, and to foster a global network of researchers who will contribute to the world's food systems.

Sensory pleasure and mindfulness, allies of a healthier diet

Pierre Chandon, INSEAD, Fontainebleau, France
Roland Jouvent, Pierre and Marie Curie University, Paris VI, Pitié-Salpêtrière Hospital, Paris, France

KEY POINTS

- Sensory pleasure can be aligned with a healthier diet - neuroscience and marketing show us how the hedonic network is stimulated.
- Food consumers tend to favour quantity over quality, spurred by the increase in food portion sizes and the high price per kilo of small portions.
- Eating enjoyment can be maximized by eating less and more slowly (savouring).
- Hedonic imagery can enhance the anticipation of consumers' pleasure.
- The food industry can help make a positive shift towards healthier consumption habits.

The thermostat reads 30°C, and you are relishing at the thought of drinking a cold glass of lemonade. In fact, the same areas of the brain are activated whether you are actually drinking, imagining drinking or watching someone else gulp down their drink. We feel pleasure and satisfaction at the mere hint of an action. Imagining makes us feel, and in turn feeling makes us believe. Marketing research uses this information to gain insight into our eating behaviours and taps into the simulation capacity of our brains while demonstrating that the anticipation of food's sensory pleasure can help reduce the quantities consumed. Eating less and taking more time in the process may also boost eating enjoyment.

Marketing and neuroscientific research highlight the links between food expectations, packaging and behaviours. There is also a growing interest in pleasure as a relevant focus of research, which can no longer be solely confined to sensory aspects.

The biological, social, hedonic and cultural needs of food consumers must be taken into account when processing raw materials into food commodities. But how can this be done and how can we deal with the fact that taste tends to override health concerns when consumers make food choices?

Anticipating the sensory pleasure of food helps reduce the quantities consumed

Supported by

At lunch time, participants were invited to share a buffet consisting of organic, seasonal local produce as a token of a pleasurable meal.

Meal, conference and conviviality



SOCIALLY-COMMITTED GASTRONOMY //////////////

Is gastronomy only for privileged people? The second session focused on demonstrating that it is not. Well-known chefs are committed to offering the best to those who otherwise would not have access, and to promote smallholder farmers' commitment. This session provided an opportunity to hear the viewpoints of stakeholders from both developed and developing countries.

Moderator: Damien Conaré, UNESCO Chair in World Food Systems, Montpellier SupAgro (France)

Bridging the gap between farmers and consumers

Teresa Corção, professionally trained designer, chef in O'Navigador Restaurant (Rio de Janeiro)

Teresa Corção has always considered that the kitchen is the most interesting part of a house. She is now recognized worldwide and was a finalist for the Basque Culinary World Prize in 2016. Here she presented her experience acquired after 20 years of family cooking, her discovery of slow food and her wish to narrow the divide between farmers and consumers. The most important links in the food chain are the least favoured, she lamented. In a short documentary which she had directed and screened during this session (*O Caminho da comida*), Teresa Corção showcased organic food markets in Rio created by smallholder farmers to overcome their frustration with not being sufficiently paid and having little contact with consumers. The experience is exhausting for farmers as they are forced to get up at dawn several times a week to take their produce to the market, but this burden is offset by the rewarding contact with customers. Teresa Corção regrets, however, that smallholders are still always hampered by major difficulties, especially

financial, and she fears that the political shifts in Brazil will be detrimental to them. In this setting, the chef called upon the support of consumers and civil society. She has created a network of responsible 'ecochefs' who are aware of these issues—in commemoration she displayed an ecochef tee-shirt she was wearing with the slogan 'Chef, move your ass'. Teresa Corção concluded her talk by inviting participants to taste *cachaça*, a Brazilian spirit distilled from sugarcane juice. She also brought some cassava flour, an emblematic ingredient in Brazilian cuisine.



Cooking and ‘eating together’ are essential for refugees

Damien Carême, Mayor of Grande-Synthe and patron of the Le Recho Association (France)

Damien Carême—who is both Mayor of Grande-Synthe (shared gardens, 100% organic food offered in the municipal canteens) and patron of the Le Recho Association—discussed the importance of cooking and ‘eating together’ for refugees welcomed in his town. Refugees, including Kurds, Iraqis, Iranians and Syrians, have been passing through his town on the road to Calais and the UK since 2006. They were hosted in a makeshift camp for 10 years where they scraped by until, in late December 2015, the flow of refugees increased considerably and the living conditions for these people, which then also included women and children, became unbearable. The media widely publicized the Mayor’s initiative of building a refugee camp to UNHCR standards, which opened in March 2016 to provide basic hygiene, health and education services. The media coverage of this event has attracted volunteers from many countries, especially with a focus on cooking. *“Fulfilling more than just the bare needs is perhaps essential”*, could be the motto of Elodie Hué and Vanessa Krycève, the two young women who sparked the launch of the Le Recho Association (which in French stands for refuge, warmth, optimism). This association of women cooks aims to provide meals tailored to refugees’ culinary cultures, while enabling them to cook and exchange with others around

meal preparation. In the Grande-Synthe Camp, collective kitchens were thus set up and 60 volunteers helped to cook for—and especially *with*—the refugees over a 20-day period. A documentary based on this experience was screened, illustrating the unifying power of cooking, thus helping to “reduce the strangeness of others”. The Mayor of Grande-Synthe pointed out that the habitat of the camp—which was initially planned as a temporary refuge—is currently degrading as it still hosts 1,300 people.





Tension between pleasure and food requires arbitration

Christine Cherbut, Scientific Director for Food, Nutrition and Bioeconomy at INRA (France)

Christine Cherbut offered a counterpoint opinion to the previous interventions. After highlighting that food pleasure is a powerful lever to cope with health, economic development, society and environment issues, the researcher discussed five points: (i) we cannot just eat to meet our physiological needs, eating is also linked with our psychological needs, and these two aspects are inseparable; (ii) tensions between pleasure and food requires arbitration, but it is essential to combine eating pleasure and health. Furthermore, it is important to make changes to our food systems in favour of healthier and more sustainable systems—citizens' initiatives exist and researchers must make use of them; (iii) pleasure has an individual, social and cultural dimension; nourishing ourselves with pleasures does not solely concern what is on our plate, there is also a systemic dimension; (iv) gastronomy must appeal to the five senses, and this is not only the remit of major chefs—it can be found at

home or in collective catering. Civil society and public policy can help to ensure that this concept incorporates health and environment aspects; (v) what will food pleasure be in the future? Civil society is now definitely dealing with these issues, which was not the case 10 years ago. Public policies should mainstream this food dimension.



SHARED PLEASURE

Is sharing a meal always a pleasure? We too often forget that the context and environment are crucial. This was highlighted by the results of a sociology survey in French retirement homes, as well as by studies (just as enlightening) conducted by researchers focusing on disadvantaged populations and meal settings.

President: Nicolas Bricas, CIRAD, UNESCO Chair in World Food Systems

Enhancing eating pleasure for extremely vulnerable people

Magali Ramel, ATD Quart Monde (France)

Magali Ramel discussed the topic “Enhancing eating pleasure and the social role of eating for extremely vulnerable people.” What could eating pleasure represent in conditions marked by hunger and malnutrition? Magali Ramel—a PhD candidate preparing a thesis on the enforceability of food rights—has worked with disadvantaged communities through ATD Quart Monde. Since 1999, this association has been conducting yearly studies on the health of extremely vulnerable people, and a food working group that Magali Ramel has been monitoring was set up in 2012. Food is a source of tension and social exclusion (urgency, daily fear of not having enough to eat, etc.), but pleasure and the social role of food are fundamental aspects for the poorest. However, food aid in its present form does not contribute in any way to reintroducing the pleasure aspect—food aid beneficiaries see it as a parallel exclusion pathway, where “you take what you are given”, often cheap industrial

products, via an administrative obstacle course—thus undermining the possibility of choices, tastes, conviviality and sharing. Eating pleasure helps people cope with difficulties and promotes sharing and solidarity, so it is important to stand up for decent sustainable access to quality food for all—it is an issue of equality between citizens.



An experimental restaurant – the importance of the setting in the pleasure

Agnès Giboreau, Research Director, Paul Bocuse Institute, Lyon (France)

The Research Centre of the Paul Bocuse Institute, based in Lyon, conducts studies on food behaviours and links between humans and their diet. With its ‘living lab’—an experimental restaurant where studies are carried out in real situations—research is focused on the importance of the setting in eating pleasure. The Research Director **Agnès Giboreau** presented a few experiments and their results. Customers who come to the restaurant to eat know that they are filmed. The restaurant decoration may change and customers behaviours and reactions are monitored and analysed.

Research has also been carried out in retirement homes and on the quality of meal services in the *Hospices Civiles de Lyon* (a university hospital). These different experiments have revealed that the setting is a major element in the enjoyment of eating. “*The dish is, however, not the only factor to take into account, it must also be in line with the consumers’ tastes and cultures*”, said Agnès Giboreau.



Is eating together in retirement homes really a pleasure?

Laura Guérin, Associate Researcher, Centre Edgar Morin, CNRS (France)

Laura Guérin spent several months in three different residential care facilities for dependent elderly people (EHPAD) for the purposes of her research work. She began her talk by screening a German advertisement showing an old man eating his Christmas meal alone and who subsequently simulates his death to get his children finally to come—they are then seen happily together at the table eating a festive meal. Although everything suggests that eating is only enjoyable when it is a shared experience, actually not all shared meals are friendly. Not participating in a meal can also be a sign of social emancipation. In retirement homes, generally only evening meals can be taken separately and a medical certificate may be required to be able to opt out of collective lunches. The absence of a resident may be a sign that he/she has been moved to another hospital or that he/she has passed away. Actually, collective meals are primarily provided for economic and organizational reasons. Collective meals in EHPADs are thus often awkward situations where some residents may get up in the middle of the meal (Alzheimer), and some others with impaired cognitive or psychic abilities may scream and throw food, while others fall asleep at the table. This meal time—which is supposed to be a way to preserve

residents' health—is nevertheless seldom enjoyable. Eating together bonds, but it is very difficult when some residents have more serious handicaps than others and must be spoonfed. Residents eat according to their health state, with some classified as being 'mixed', as opposed to 'normal'—language deviations can be conducive to pleasure or to the constitution of a harmonious community of residents likely to eat with pleasure.



Conclusion

Is eating pleasure a luxury? The conference revealed that there is no single answer to this question, but boosted awareness on a complex and diverse range of viewpoints. Eating pleasure is based on simple principles (taking time to eat reasonable quantities of healthy products). However, this pleasure deserves to be flaunted via motivated civil society and committed research. **Damien Conaré** concluded the conference by noting the remarkably high participation in all of the interventions—the amphitheatre was still almost full after 5 pm. He thanked all speakers for the quality of their talks and made an appointment with the participants for the 2018 session. The UNESCO Chair will certainly further showcase the innovative and exciting aspects of world food discussed in this meeting.



<https://www.chaireunesco-adm.com/en>