

## Editorial

A GHOST is wandering the world: the one of obesity, overweight, undernourishment, malnutrition and all their full consequences in the wellbeing of people, families, entire societies (including their economies, their political organization structures, and their cultures) and the environment. It's not enough to say that "it's a big monster that makes great strides" or that "only the strongest will survive." We need to describe it, characterize it, relate it, and get to know it better so that we can act on it, avert it against its serious consequences, but it seems this "ghost" doesn't make it easy to come to terms with it.

Since 1980, prevalence of obesity has increased to the double and now it records significant increases all over the world. To the World Health Organization (WHO), in year 2014, 39% of adult people over 18 years were overweight and 13% had obesity. This trend towards a "globalized" obesity, which virtually affects the total world population, has for a few years made the WHO and its member countries alert against an obesity epidemic. The extent of this problem can be seen in the recently created United Nations' *Agenda 2030 for Sustainable Development*, where one of its sustainable development goals aims to make face to all sorts of malnutrition—either by deficit or by excess—in addition to developing more sustainable production models that are inclusive and accessible, and the promotion of nutrition-sensitive food systems that favor the fulfillment of the human right to food and health.

To Mexico, this goal to be attained within the next 15 years represents one of the most urgent social priorities because today obesity and overweight together with their consequences at various levels of social life are a grave problem of public health all around the country. In this regard, the 2016 National Survey on Health and Nutrition revealed that the nationwide prevalence in overweight and obesity in Mexican adults over 20 years old is estimated to affect seven out of ten Mexicans that suffer from overweight and a third of the affected can be considered medically obese.

Perspectives for the future are dramatic as, on the one hand, there is a marked trend towards a rise at all ages, in all regions and socioeconomic groups; on the other hand, if we look at the future generations, Mexico's obesity and overweight rates in children are the highest in the world (3 out of 10 children between 5 to 10 years old have these conditions). This feature increas-

es a little more in teenagers (36.3%), and there is a growth in the number of obese babies.

The social consequences around this are huge if we consider that 14% of adults in Mexico have diabetes, which represents the main death cause in the country. The tremendous mass of diabetic people who will lead the country in a few decades has been born.

This social and food-related problem is emerging in Mexican sciences and has usually been studied from different and separate works of research, all of which have yielded top-level results explaining, for example, the role of the economic, neuro-chemical, psychological, sensorial dimensions, among others.

On the other hand, the disciplinary perspectives have also reduced the social and food-related problem from a unidimensional aspect to a question of “poor” nutritional information (ignorance of the nutrients and quality of foods). These points of view have shown this problem as a matter of scarce economic income (buying the cheapest items or whatever is available to eat to the detriment of their nutritional value), have fixated it into an matter of low self-esteem and various psychological compensations in face of food, or they have circumscribed it to a harsh and absolute addiction to a type of foods with very, but very gratifying components and micro-nutrients. Either separately or “altogether” though not integrated, these approaches have contributed to the development of an entire series of recommendations, designs, and actions in terms of public health policy that haven’t accomplished to mitigate the so-called “obesity epidemic” yet. Recognizing the dimensions attached to this problem as a public health issue is at least a step forward.

Nevertheless, this “ghost” is not only wandering the world; actually, *it’s fattening it and making it ill* thanks to a series of symbolic vectors (to say the least) that, on the one hand and within the official propaganda blame the obese for being obese, the diabetic for having so much sugar in their blood, and those who don’t take care of themselves for not doing so, for not measuring themselves, for not moving enough, for not getting a check-up. On the other hand, the huge and powerful food industries and their marketing strategies seduce the palate with *fun* flavors, bright colors, “cool” aromas and sensations, desirable atmospheres, imitable and unforgettable celebs that invite to eat their products compulsively (“bet you can’t eat just one”). At the end of such commercials and in order to comply with a lukewarm regulation of the health sector, they make a recommendation that goes by “eat healthily,” “have fruits and veggies,” “have it with milk.” This publicity management and its discourse strategies were not included in this issue; however, their interrelations with the other dimensions of the problem are worth another issue.

We believe that the social and food-related problem is a model case to be studied as a complex system. That is to say, we have tried to understand this problem as a relative whole comprised of an arbitrary selection of elements that the various and different components of society link in their daily activities to the notion of food consumption in the broadest sense of the term.

The articles that comprise this dossier represent only a few from the array of the *heterogeneous* components that have been linked to each other over time through *interdefinibility*, that is, a series of processes intimately related at different levels of organization, whose mechanism operates at different scales, and their specific behavior cannot be detached from the others to understand the problem. They can only be defined and understood by their relations with the rest of components in a structure of relations that is moving and that we understand as a system of transformations, as an organized whole. Due to this reason, a willful juxtaposition of various disciplines, all of which are pertinent in their own specific (disciplinary) domains, methods and objects, is not enough to scientifically shed light on the enormous and complex harm that lives in the contemporary world between food and society.

It is urgent to produce detailed knowledge on the *properties* of what each discipline can contribute to this matter, but at the same time, we have to establish and document the *relations* that constitute their structure and allow us to understand such properties. In the meantime, we must document the transformations that have marked their evolution over time to be able to build plausible explanations that enable us to act in face of this tremendous problem. Knowledge enables action but mutilated and isolated knowledge causes mutilating and isolating repercussions over a multidimensional condition that we essentially ignore, but for which we are paying a very high cost in all spheres of social life.

We will not be able to fully understand how overweight has been structured in Mexican families if we do not connect this biomedical phenomenon with the modifications undergone in the diverse ways of social conviviality in the country, or if we do not connect the consumption of bottled soda to the role played by sensations configured in consumers' taste and the supply and availability of such industrial beverages to the detriment of other home-made or artisanal drinks with the marketing strategies that make them appealing, or the food change patterns with the construction of taste and the national Mexican identity, to mention a few. We still need to work on these and other interrelations to be able to assemble a transverse knowledge, which can only be accomplished by new questions that are, by definition, outside the *normal* domain of each discipline.

With this in mind, we do not mean to say that disciplinary studies do not have any relevance in this pandemic of non-transmissible diseases. Quite the contrary, we need very good and detailed pieces of work in each discipline to

describe the properties and characteristics of our object. Starting from there, we could gauge the size and costs attached to this complex problem. We are aware that every scientific perspective in any of its specialties or subspecialties is never free of non–scientific elements which means taking a position (whether consciously or not) in face of what we ethically consider as a problem and the relational incisiveness of the matters we need to study, together with the scenarios of the future we want and do not want as Mexicans and humans.

This dossier we are presenting our readers highlights some of these characteristics that we must fully understand in terms of their interdefinability relations that have interwoven over time and that today operate (as the unperceived ghosts they are) against millions of people’s health.

The opening text has been written by three researchers from the National Public Health Institute: Florence L. Théodore, Ilian Blanco–García and Clara Juárez–Ramírez. Employing Sidney Mintz’s conceptual approximation, they present a clarifying analysis of how Mexico has become one of the first countries in consumption of bottled soda worldwide. This phenomenon not only harms the family economy and the Health Sector that has to deal with the emergence of chronic non–transmissible diseases such as diabetes and hypertension, but also the environment.

The article by Patricia Severiano–Pérez (School of Chemistry, UNAM) is particularly interesting to the reader who is not very well acquainted with food chemistry. It shows us what sensorial evaluation is and the potential of this discipline to influence consumers’ taste as well as its use in the clinics to specifically make an early diagnosis of neuro–degenerative diseases.

From a sociological view, the article by Alejandro Martínez Espinosa (COLEF, Tijuana) seeks to identify the approach of policies in obesity towards childhood in Mexico and pinpoints some of their limitations. The article underlines that government actions treat the population as an aggregate of individuals disregarding the processes of interaction in the family that allow or resist the influence of the environment.

In addition, the text by David Oseguera (Autonomous University of Chapinigo) addresses the problem of the historical configuration of the regional food pattern in the sociohistoric space of the city and the state of Colima in western Mexico. He documents a series of changes that range from the pre–Hispanic world, going through the long period of New Spain and end in the late 20th century.

The core section of this dossier includes two articles related to each other by history, nutrition, and science development. Sandra Aguilar Rodríguez’s article (Moravian College, PA, USA) analyzes the influence that racial and eugenics discourses have on the Mexicans’ food practices along the 20th century. Her text argues how intellectuals and Mexican physicians responded to the growing pop-

ularity of eugenics that pretended to “improve” the race in Mexico. Therefore, this article helps us understand that despite the fact that the ideology of interbreeding pointed out that the Mexicans were the result of a blend between an indigenous origin and Spanish origin, the European or western culture was dominant in this fusion, or at least that was the goal, with the purpose of improving the Mexicans and making them *modern Mexicans*.

Joel Vargas Domínguez (posdoctoral at CEIICH-UNAM) tracks, in his article, the historical development of calorie uses in the science of nutrition in Europe, United States, and Mexico in the 19th century and the early decades of the 20th century. His main argument states that diverse concepts, instruments, and practices that emerged in thermodynamics consolidated the idea of human body as an “engine.” As a starting point, such notions guided the popularization of nutritional knowledge while they concealed the different social and cultural contexts of such a phenomenon.

Tommaso Gravante presents the early results of his postdoctoral research at CEIICH-UNAM. As a scholar in social movements, Gravante explores some of the practices and networks of food autonomy characterized by a *pre-figurative activism*, and the way in which these practices are embedded in a complex of moral values and emotions where food plays a significant role.

Our last article is about agroecology. León Enrique Ávila Romero, Emilia Itzel Cordero Oseguera, Jhonny Ledezma Rivera, Ana Cecilia Galvis and Agustín Ávila Romero explore the relationship between theory and practice in agroecological initiatives in Latin America. The objective of this article is to understand how closely related practice and theory are in three agroecological initiatives. The authors explain how agroecological practice can serve as a basis for a more effective strategy to achieve food justice and sovereignty.

Guillermo Bermúdez and Martha Elena, *La Jornada del Campo* editors, interview Carlos A. Monteiro, Head of the University’s Centre for Epidemiological Studies in Health and Nutrition at the University of Sao Paulo. Dr Monteiro and his team developed the NOVA food classification. NOVA is the food classification that categorises foods according to the extent and purpose of food processing, rather than in terms of nutrients. NOVA is now recognised as a valid tool for nutrition and public health research, policy and action, in reports from the Food and Agriculture Organization of the United Nations and the Pan American Health Organization.

Lastly, the dossier finishes with three reviews that look into this recurrent topic. In the first one, Dr. José Antonio Vázquez–Medina from Universidad del Claustro de Sor Juana, in Mexico City, made a critical review of Jeffrey Pilcher’s work, an indisputable referential of the history of food, taste, and Mexican food, and co-founder of the perspective called *Global Studies*. The second, by Dr.

Tommaso Gravante, presents Carole Counihan and Valeria Siniscalchi's book titled *Food activism. Agency, democracy, and economy*. This is a compiled volume that shows us a wide reading of food activism from an anthropological viewpoint, a line of research that is little known in Mexico and Latin America. The last review, by Dr. Joel Vargas Domínguez, presents Laura Montes de Oca Barre-ra's book titled *Comida chatarra. Entre la gobernanza regulatoria y la simulación*, from the politics sociology focus the author explores the processes of regulation about 'junk' food in Mexico along three actors, which represent the State, the market and the civil society. ■

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Guest Editors