

DOI: 10.12957/demetra.2018.33244

# Construction of the healthy eating model and its implication in the configuration of the subjectivity of childhood and family

Construcción del modelo de alimentación saludable y su implicancia en la configuración de la subjetividad de la infancia y la familia

Pablo Gerardo Pereira Álvarez

¹ Universidad de la República, Programa Apex -Escuela de Nutrición. Montevideo. Uruguay

Correspondence Pablo Gerardo Pereira Álvarez E-mail: pablo.pereira@apex.edu.uy

#### Abstract

Throughout history, the construction of a model of healthy eating has been configured, which is the conceptual basis for building actions that tend to generate healthy subjects, healthy families, and healthy societies. Currently, food has become a way to achieve certain stereotypes, associated with beauty and the achievement of the perfect body. In order to problematize the institutionalization of a healthy eating model and its association with consumption and the production of subjectivities, an analysis article is made, proposing a foundation of the prevailing healthy eating model and its implication in families and society. The family as an institution that builds subjectivity in childhood is permeable to the constructions of imposed stereotypes, being a receiver and consumer of lifestyles. There is evidence of a discourse on the body and the healthy, appropriate for the food industry, the media and society as a whole. This system operates surreptitiously, producing a paradigm that contributes to an imaginary in relation to health. Consequently, healthy eating as a way to achieve a perfect body becomes an element of consumption, for those who can access it. The model of healthy eating increases social gaps; on the one hand, there are those who can access the foods that propitiate perfect bodies and on the other hand, the people who are segregated to eat to survive.

Keywords: nutrition-healthy-medicalization-consumption

#### Resumen

A lo largo de la historia se ha configurado la construcción de un modelo de alimentación saludable, el cual es la base conceptual donde se edifican acciones que tienden a generar sujetos saludables, familias saludables, sociedades saludables. En la actualidad, la alimentación se ha transformado en una forma de alcanzar determinados estereotipos, asociados a la belleza y el logro del cuerpo perfecto. Con el objetivo de problematizar la institucionalización de un modelo de alimentación saludable y su asociación con el consumo y la producción de subjetividades, se realiza un artículo de análisis, planteando una fundamentación del modelo de alimentación saludable imperante y su implicancia en las familias y la sociedad. La familia como institución formadora de subjetividad en la infancia es permeable a las construcciones de estereotipos que se imponen, siendo un receptor y consumidor de estilos de vida. Se evidencia un discurso sobre el cuerpo y lo saludable, apropiado por la industria de alimentos, los medios de comunicación y la sociedad en su conjunto. Este sistema opera solapadamente, produciendo un paradigma que contribuye a un imaginario en relación a lo saludable. En consecuencia, la alimentación saludable como forma de alcanzar un cuerpo perfecto se transforma en un elemento de consumo, para quienes pueden acceder a ella. El modelo de alimentación saludable incrementa las brechas sociales; por un lado, están quienes pueden acceder a los alimentos que propicien cuerpos perfectos y por otro las personas que son segregadas a comer para sobrevivir.

Palabras claves: alimentación-saludable-medicalización-consumo

### Introduction

This article aims at reflecting on the influence of a healthy eating model on the constitution of consumption life styles and therefore, a social differentiation on eating. In this respect, it provides an explanation for the construction of the eating model, acting as tool in the production of subjectivities in our society.

Eating as part of a complex system produces individuals that respond to a healthy life style under certain beauty paradigms, considered ideal for our culture. This triggers the generation of devices that have an impact on the family, contributing to a process of subjectivation during

childhood.<sup>1</sup> This subjectivation process shapes healthy life styles that lead to the consumption of food as part of a healthy way of life.<sup>2-4</sup>

When analyzing the construction of the eating model there is evidence of a message about the body and the significance of `healthy´, apprehended by the food industry, the media and the society as a whole.<sup>5-7</sup> This system works in a joint and underhanded way, producing a paradigm that contributes to a collective imagination with regard to beauty and health. Eating as a way of achieving a perfect body becomes an element of consumption for those who can afford it. This leads to the construction of a system that increases social gaps; on the one hand, those who can afford that food favoring perfect bodies and on the other hand, those people who are set segregated to eat to survive.<sup>8-11</sup>

Based on the mentioned premises, this work is composed of two parts, the first which makes a brief historical description of the healthy eating model, and then an analysis on how such model is imposed on the family and childhood. The medicalization process of society introduced by Michel Foucault and its expansion to food as stated by Paula Rodríguez Zoya is used as reference for the theoretical analysis.

# Brief Historical Construction of the Healthy Eating Model

In this article, healthy eating model shall be defined as the production of discourses by health disciplines, the expansion of political messages, the commercialization of food and the community. This first part presents a recapitulation of some historical aspects of the process by means of which health takes eating as part of its practices, standardizes it, researches about it, globalizes it and turns into a strategy for the construction of subjectivities in society as a whole. The main characteristics of this model are: a biological vision of the world, globalization and its insertion in the medicalization process of society.<sup>2,7,9</sup> To understand the emergence of the eating model it is necessary to make a review of the history of medicine and diet as part of the treatment to disease.

Analyzing the construction of the current eating model implies a review of the importance of health and eating, taking as reference the origins of the health-food relation coined by the Greek, which would then "nourish" with the contributions of modern science, since the 17<sup>th</sup> Century to our days. The construction of the healthy eating model as a bio-political strategy will be also analyzed. For such purposes, it is considered relevant to take the concepts of Foucault's medicalization process and the expansion of this process to eating, food and family.

### **Food and Health in History**

Food and health have been closely linked since the beginning of medicine itself in Ancient History, in Greece around the 4<sup>th</sup> and 5<sup>th</sup> centuries BC, where Hippocrates is attributed the creation of theoretical constructions about the importance of food in health treatments. Greeks used the concept of *diaita* with two different interpretations: on the one hand, it was attributed the treatment of diseases, and at the same time it was conceived as a way of preventing and improving health.<sup>2,5,6,12</sup>

There are diverse treatises on medicine attributed to Hippocrates, some of which make direct reference to the diet as On Regimen in Acute Diseases, Regimen in Health and On Regimen, all of which evidence the importance of the role of diet in Ancient Greece.<sup>2,3,6</sup>

Although Greeks, through the Hippocratic School, consider food and health something essential for life, the first scientific knowledge about this topic is generated many years later. Academic production on food and nutrition is a process that has been constantly progressing throughout centuries, particularly remarkable the 18<sup>th</sup> and 20<sup>th</sup> century. As it is a long period of time, some landmarks in which the production of knowledge contributing to the scientific foundations of the eating model was accentuated shall be mentioned.

When considering eating throughout history it is necessary to highlight the 15<sup>th</sup> century when Leonardo Da Vinci introduces the first outlines and postulates on metabolism. This constitutes a first step to elucidate the metabolic basis of nutrition.<sup>3</sup> Later and with the advent of modern science between the 16<sup>th</sup> and 17<sup>th</sup> century, there emerge a series of scientific production that contributed to the development of nutrition as a science.<sup>12</sup>

By the start of the period with the most significant advances, in the 18<sup>th</sup> century, the first study on human nutrition, evidencing that the scurvy is associated to the consumption of citrus, is drafted by British doctor James Lind (1716-1794).<sup>12</sup>

Between 1780 and 1850 there is relevant progress in the chemistry field, including the discovery of the first elements as chlorine, glycerol, and oxygen, among others. The Swedish pharmaceutical Carl Wilhelm Scheele (1742-1786) stands out for his contribution to this research. With this kind of discoveries, science starts to regulate and control food, to analyze the components of it and identify them; the first patterns to control food adulteration are established as these were very frequent those days and affected the commercialization.<sup>12</sup>

In 1770 Antoine Lavoisier (1743-1794), considered one of the most remarkable scientists in the impulse of nutrition as a science, describes the main steps of human metabolism. The sum of these and other findings sets the scenario of productions that forge a network of knowledge and contributes to constitute the development of science, medicine and nutrition. As technology advances, this development is exponentially multiplied, adding technical works on the subject.

Between the 19<sup>th</sup> and 20<sup>th</sup> century, the rise of knowledge in the Modern Age spawns a series of inquiries which start to reveal the empowerment of science on everyday life, through the validation of knowledge by means of experimental studies. Therefore, investigations based on the biological functions of the body take this as the object of study. It is worth highlighting the first research on human digestion, carried out by US surgeon William Beaumont (1785-1853) in the 19<sup>th</sup> century. Such research is carried out on a war patient whose wound was not healing, allowing Beaumont to observe the fluids of the stomach and the digestion process. The surgeon would then held back the injured patient against his will in his eagerness to keep on learning about the process of digestion. This type of event evidences the rising power of medical science, which is positioned above the right of an individual.

Contributions made by the German chemist Justus von Liebig also stand out among the contributions of science to the consolidation of a paradigm that positions health, medicine and nutrition as a power able to control life itself.

In 1837, Justus von Liebig (1803-1873) discovers certain intermediate compounds in the conversion of alcohol during fermentation and in 1842 he generates a first classification of food. These investigations have, as in previous cases, the purpose of classifying and controlling the production and commercialization of food. As a consequence, between 1850 and 1910, some scientists as Atwater (1844-1907) or Francis Gano Benedict (1870-1957) contribute to the construction of the parameters used today in food composition databases, with their input on the measurement of the energy that can be metabolizabled by the body.<sup>6,12</sup>

In this sense it is possible to observe how, throughout these centuries, science generates a great academic production that explain the functions of the body from its anatomy and physiology, hatching biological definitions of the bodies. The human organism starts to be construed as an object taken by science for its study, leading to a medical discourse about everyday life.

Science takes over part of the body and food that, with technological advancement, would imply a greater development of research with regard to health and food, where nutrition is consolidated as an essential part of health.

The development of technologies in the 20<sup>th</sup> century allows to position nutrition as a science founded on investigations about biological functions of persons, constituting a scenario where the biologistic vision is in a dominant position, conceiving the technical frame for the construction of devices that intervene to preserve health.<sup>13-15</sup>

Therefore, the development of science has driven the foundations of this model which has historically moved hand in hand with the interests of the food market, enabling regulation and control. This first stage of the construction of the eating model is located mainly in Europe and United States. As shown below, this process will end up exercising control over the rest of the world. <sup>13-15</sup> In order to keep on developing the healthy eating model it is necessary to delve into some aspects at a global level which arise on the 20<sup>th</sup> century and had a great impact on the stage of globalizing and expanding the model.

### Consolidation and Globalization of a Healthy Model

In the 20<sup>th</sup> century the healthy eating model reaches its peak development and one of the most significant milestones of the process is the creation of two bureaucratic organisms which are key in the history of health and eating, ratifying that indissoluble health-food relation.<sup>10-19</sup>

In October 1945 the Food and Agriculture Organization (FAO) for the United Nations is created in Quebec, Canada, with the aim of liberating humankind from hunger and malnutrition, and of managing the world food system in an efficient way.

Actions prior to the foundation of FAO date back to 1943 by U.S. President Franklin D. Roosevelt, who promoted the creation of an organization within the United Nations in order to preserve the world food systems.

Later, in New York, in June 1946, it starts the process of creation of the World Health Organization. Its Magna Carta states a definition of health that nullifies generated differences and aims at seeking world peace after a war period in the Western world. These organizations are an essential part of the process of construction of the healthy eating model, being its core aim the globalization of health and food. Both WHO and FAO are controlling and auditing entities worldwide.

The world institutionalization of health and food arises in a context with regard to Human Rights; in 1948 it was proclaimed its Universal declaration in order to keep on contributing to peace and to protect life. Considering the loss the war implied for Europe at a humanitarian, social and economic level, developed and developing countries had the need to generate agreements to highlight the importance of life and reactivate submerged economies.<sup>10,16,17</sup>

By virtue of this, health becomes a synonym of peace and economic well-being, regulated by WHO and, what is more important, measurable. In other words, this fosters the creation of health indicators which are monitored to assess and redirect interventions strategies at a local, regional and international level; therefore, we can classify and create categories of countries depending on whether these reach certain values or not.

In its Magna Carta, WHO defines health as follows:"... Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." This Utopian

346

concept becomes the health reference worldwide, positioning this entity as valid knowledge and key actor in the process of construction of a healthy and globalized eating model.

In terms of power, both the creation of the WHO and of the FAO allow developed countries to come up with indicators to classify and, therefore, keep on generating dichotomies, between rich/poor, healthy/sick countries, developed/underdeveloped countries. The definitions of health and food safety proposed by these entities nullify differences between countries and cultures, creating processes of globalization and domination. <sup>10,16</sup>

The conception of health coined by WHO is individualist as it focuses on the subject and not on the collective subject, taking hegemonic positions based on expert knowledge, ignoring other alternative productions and slyly shaping a totalizing model, as this entity represents the qualified voice in the scientific community to validate, or not, health processes.<sup>16,20-22</sup>

The definition by WHO appears in a post-war context with depressed economies and this was a key aspect for having it approved without great questioning. This statement comes from medical sciences and generates devices that are based on the control and watchfulness of society. The prevailing health model responds to imperialist logics, aiming at the control and classification under standards determined by those who hold the power. The sanitary model is then just another globalization process which contributes to the social control of life standards. <sup>8,10,23</sup>

The model is built and validated by knowledge and power of science; therefore, this is the authority to determine references of consumption, nutritional recommendations, health indicators, growth patterns, among others. These frameworks are built through investigations and financed by international entities, providing technical validity to this procedure. This leads to the establishment of recognized methods to measure, building the "normality" category, and methods to intervene so that everyone takes part in it.

The documents and agreements of FAO and WHO are considered at times as the sole conventions of valid knowledge by the scientific community with regard to health and food,<sup>5-7</sup> establishing a system of power that perpetuates while several economic interests coexist covered up by knowledge.

## **Medicalization Process of Society**

Upon the scientific works on the body and health, modern science emerges by the end of the 18th century and with it the medicalization process of society:

Medicalization –that is, the fact that starting in the eighteenth century human existence, human behavior, and the human body were brought into an increasingly dense and important network of medicalization that allowed fewer and fewer things to escape.<sup>3</sup>

Foucault locates the origin of the medicalization process in the 18<sup>th</sup> century, when it becomes relevant to contribute to the control over the body, laying the foundations of expansion and power over society. This process increases, becomes stronger and expands on several aspects of everyday life.

#### In this respect the author states:

The control of society over individuals was accomplished not only through consciousness or ideology but also in the body and with the body. For capitalist society, it was biopolitics, which is above all important, the somatic, the corpora, than mattered more than anything else. The body is a biopolitical reality; medicine is a biopolitical strategy.<sup>13</sup>

Foucault suggests the generation of a prevailing model that is based on the knowledge about the body as a biopolitical strategy for mass control, which in capitalist terms means to preserve the health of the worker to preserve productivity.<sup>12</sup>

According to Foucault, biopolitics become a form of expression of power over life; to this regard, the author states:

[...] an exercise of power regarding the man as a human being [...]Biopolitics deals with the population, with the population as a political problem, as a problem that is at once scientific and political, as a biological problem and as a power's problem, I believe it appears here[...] In sum, biopolitics will address the random events that occur in a taken population in its duration.<sup>14</sup>

By virtue of the processes generated in the 20<sup>th</sup> and 21<sup>st</sup> century, international organizations validate a method for the institutionalization of biopolitics and to keep on expanding its action over society. Within the medicalization frame, medicine as science takes power over the body and eating. Knowledge about the body generates a process of control of everyday life, socially creating the problems in medical or health terms. The process of construction of healthy eating is also considered part of this phenomenon as the medicalization of eating is imposed.<sup>5-9</sup>

The medicalization of eating implies several representations of control over production, distribution and consumption of food in order to preserve an optimal health condition and avoid risks.<sup>8,23-26</sup>

This medicalization process works as the conceptual framework to analyze the healthy eating model, where expert knowledge promotes and outlines all aspects related to eating as a way of staying healthy and avoiding risks.<sup>24-26</sup> The previous leads to a trivialization of eating by the consumer society, which positions this model as a lifestyle seeking to achieve the perfect body to live healthily.<sup>5,7</sup>

The current capitalist system needs consumers, as it is no longer based on the productive and industrial force, according to Sibilia.

Contemporary subjects face the Faustian tragedy of their own obsolescence, when assuming the "Draconian demands of competiveness". It is another step in the privatization process of destiny: health becomes a capital individuals must manage, choosing what to consume and life habits, making convenient investments and assessing the risks that these may imply. So, once again, the corporate logic is expanded to all institutions and conquers new spaces.<sup>27</sup>

The eating model is then a consumer option which is constantly renewing and used to sell associated lifestyles which lead to success and the perfect body.

The healthy eating model comprehends a series of aspects that can only be appreciated from deep analysis, as from a superficial perspective it is only possible to see the marketing of "healthy". Relations of power are covered up. Therefore:

[...] medicalization is conceived from a loop between professionals and markets on health, the media and consumers; feedback dynamics among several social forces that contribute to the populatization of symptoms and diagnoses, as well as to the corresponding creation of new consumer markets.<sup>7</sup>

The complex medicalization frame then feeds on science, obtaining a legitimate power aimed at preserving things as they are, as its addressed from a superficial and visible perspective; that is, health diagnosis and not in the structural aspects as the prevailing economic system. 5.7,20,28-30

The medicalization process exercises control mechanisms that contribute to a "healthy" feedback cycle, in which the more technology advances at the service of medicine, the more investigations reporting on biological processes at a cellular level- associating each nutrient with diseases- are obtained, finally constituting an eating model based on prevention of risks. <sup>24,25,30</sup> Now a day, it is possible to know the genetic predisposition to disease and to associated risk factors so the prevention and control of those prejudicial practices is the ultimate aim. This generates a strategy of primary health care, with an emphasis on marketing for 'healthy' promotion, focusing on the prevention of risks through an appropriate intake of the healthy food. This 'healthy' phenomenon prevails, generating a whole marketing strategy endorsed by healthcare professionals, fitness instructors, personal trainers, nutrition coaches, everything to keep us far from risk and healthy. <sup>47,8</sup>

As a consequence, current medicine no longer seeks to cure, the aim is to avoid risk. This gives rise to series of consumption items and a growing market that ensures families consume to avoid getting sick.<sup>29</sup>

Current recommendations intend to have a premature impact on prevention and as it is not enough for adults childhood becomes the aim. <sup>1,29-31,33,34</sup> Accordingly, the family shall be the recipient of this model from the diverse actors that take part in it, to contribute to a process of construction of healthy individuals. <sup>29,35,36</sup> The existence under risk of current society is introduced by Giddens. <sup>24</sup> This author states that modern society is exposed to risk, implying that all hazardous behavior must be studied, documented, published and controlled. Within the medical science field there are currently several compounds classified as "risky" such as trans fatty acids, excess of sodium and pesticides, which represent a threat to human nutrition. For this reason, selecting food becomes an increasingly complex task and requires the need for a consultation with a professional. Eating is not enough, it is necessary to acquire healthy food, which help avoid the risk of being sick and keep perfect bodies. <sup>4,29</sup>

The scientific foundation of eating practices is based on a perfect health model, where eating serves as a means to achieve ennobled body images. Having a Utopian conception as reference implies following guidelines that shape and constitute a pattern to follow in order to be part of society. Consequently, the construction of these models is generated by upper classes as a means to control working classes. <sup>4,14,37</sup> Today, such control means being part of the consumer society, being able to acquire healthy products and contributing to social gaps in the food scope.

In this sense we take Sibilia's concepts on the expansion of the corporate system within healthcare as part of a market supply and rather away from a law perspective.<sup>4,27</sup>

The concept of medicamentalization of food and medicalization of eating will be developed to delve into other aspects inherent to the construction and imaginary of healthy eating. <sup>5,8</sup>

#### **Medicalization of Food**

With the development of the different worldwide strategies, FAO and WHO generate the absolute technification and appropriation of food-related and nutrition-related processes. The scientific research in its paroxystic expression takes control over food and health, achieving increasingly specificity and associating each component of diet with certain disease, thus expanding the medicalization process to food.<sup>5,7,14,15</sup>

The concept of medicamentalization of food and medicalization of eating differ in several aspects. To this regard, Paula Rodríguez states:

[...] the medicalization of eating and the medicamentalization of food. The first refers to the medicalization of the action of eating and feeding on as an essential dimension of the human condition and of everyday life; while the second one implies that food is conceived, promoted or administered as a means for the optimization of diverse organic functions, as if it was medicine.<sup>11</sup>

In Rodríguez words, for today's society eating is considered a medical act, where expert knowledge rules. Decisions about what is permitted and what is prohibited arise from medical science, exercising control over childhood through the construction of healthy subjects, regulating through laws so that girls and boys can achieve optimal eating that keeps them away from risk.

This medicalization process sets market niches, which are exploited by the food industry, mass media and social networks, used to spread information and trends about food and product tips for all the needs of the consumer. Then, we have more and more "healthy" products on the shelves of supermarkets so that we can stay healthy and active.<sup>4,5,7</sup>

For today's society, the production of products linked to the needs of the consumer and the advance of science aims at generating more and more complete foods that can satisfy our needs and help us achieve success. Success in capitalist terms, or capitalist health, is to have perfect bodies to be competitive in society. <sup>5,7,27</sup>

The new forms of production develop food that is custom-made for the consumer, where big multinational companies own patents and control food markets, increasing the power network and using the concept of "healthy" to cover up the true purposes of raising money.

It is possible to see that advertising is constantly highlighting the properties of nutrients, leading to disputes in the food industry for the leadership and orienting their massive campaigns based on healthy eating. Moreover, they add constituents to create products for new needs, which, as research progresses, are modified with increasing frequency. Therefore, food is produced and commercialized within the frame of a health model as the industry is in line with this message and takes it as a platform for its marketing strategies. 11,20,27

The development of the concept of functional food is an example of food and nutrition. In this case, the food industry has perfected productions with additional nutrients that are beneficial for health. The dairy industry is a model in this subject as evidenced in the shelves of supermarkets where it is possible to see milk, dairy desserts and yogurt with addition of omega-3 fatty acids, dietary fiber, phytosterols and vitamins, among others. This industrialization process has generated a wide range of food, making the supply of healthy dairy products for the consumer increasingly varied.<sup>11,35</sup>

In view of the foregoing, we are before a medicalization process of food, where, based on the advance of science, the industry itself produces, executes and promotes healthy products, generating a dispute to become the leader in eating and nutrition. As a strategy, food companies visit schools to spread healthy messages and good habits, covering up the true aim that is to promote and sell its products to achieve loyalty to its brand among boys and girls.<sup>1,4,9,31</sup>

### Healthy Eating Model in the Global Context

After its worldwide consolidation the Healthy Eating Model starts to become globalized upon the epidemiological reality of Northern countries; for such purposes, WHO creates a series of technical documents on Non-communicable Chronic Diseases (NCDs) associated to unhealthy eating and lifestyles. 17,18,21,23

From an epidemiological perspective these pathologies have become the justification of sanitary policies to promote healthy eating habits. The significance of the NCDs becomes the center of the approach, which positions food as the subject of health promotion campaigns worldwide.<sup>8,18,35</sup>

In the 90s, with the purpose of fostering and standardizing a healthy eating model worldwide, the International Conference on Nutrition was held in Rome (1992), extending the concern to work at an international level on these subjects. <sup>18</sup> In 1995 a joint consultation of FAO and WHO proposed the creation of Food-Based Dietary Guidelines (FBDGs) as tools to work on food consumption and nutrition in the population. These kind of sanitary policies arise in United States, where the first food pyramid was established in 1992, representing the graphic icon of a healthy diet. This impulse is taken at a global level as the FBDGs become the main international strategy implemented in campaigns on healthy eating. The historical evolution of FAO and WHO generated the globalized scenario which conceptually endorses the healthy eating model in a complex social scheme.

However, the policies of the FBDGs has not caused the expected results, and in the year 2000 WHO created a work document in which it placed non-communicable chronic disease as the main problem to be addressed.

Obesity, a disease which can start during childhood, is considered a public health problem in developed and developing countries. Back in 1997 a committee of experts of WHO reported the epidemic and warned that, if nothing was done about it, millions of people around the world would be at risk of suffering chronic diseases (diabetes, hypertension, atherosclerosis, heart disease, etc.) and that this would bring a high impact on morbidity and mortality. 18,35

WHO, in the mentioned declaration, warns about the current epidemiologic situation, but despite of it the number of NCDs continue to rise. In view of this situation, organizations responsible for health and food worldwide have continued to modify its strategies by encouraging health lifestyles. These campaigns are based on a healthy diet and physical exercise and strategies are carried out globally and applied indiscriminately to all social classes.<sup>4,5,7,18,27</sup>

As it was mentioned before, the healthy eating model is positioned from a biological paradigm of health, establishing a control policy with regard to the production, commercialization and consumption of food, creating a market niche for healthy food. Healthy eating in that sense gives

rise to great gaps between those who can afford these lifestyles, typical of upper classes, who take this model to control the eating practices of lower classes. The healthy eating model as a concept is then a system that is feedbacked and based on scientific knowledge, obtaining validation from the upper classes and applying on lower classes. Hall While some enjoy a healthy life, others are imposed a Utopian and controlling model. Healthy eating ends up being trivialized and imposed as a trend at a certain cost. As a consequence, access is then economic; this model generates control mechanisms, which are validated in public policies on food such as the food card in Uruguay, which can control the consumption of food for the beneficiary population, limiting it to those items considered fit for the users of the system. 19,35

Analyzing the healthy model within the medicalization process contributes to identify actors that somehow operate undercover to standardize a capitalist system which is functional to the market. The food industry, international organizations as FAO and WHO assemble a complex regime, where health disciplines take part, but do not necessarily determine the model.

In this last stage the advance of technology has permeated all imaginable fields, nutrition related to genetics, the design and development of food to fit the needs of the consumer, new technologies, that by virtue a messianic message intend to be the solution to cater for health and hunger. We are facing the paroxystic expression of the healthy eating model, in which the priority is to control the forms of production with the application of new technologies to validate a hegemonic message about the significance of healthy. From this approach, the conception of the body as a biological entity assumes importance to be addressed by the diverse disciplines of medicine. <sup>1-3,16,23</sup>

The development of these technologies brings together several economic interests that favor the investment by food and nutrition multinational companies and the corresponding raising of large sums of money in a very profitable market.<sup>27</sup>

### **Healthy Eating Model in the South**

The concept of healthy eating started to emerge as a formal and globalized construction through international entities. Despite of this, at a regional level the reference for the importance of eating is the creation of the Schools of Dietetics in South America, where the pioneer of nutrition was Pedro Escudero. This Argentinian doctor created in 1928 the Department of Nutrition of Universidad de Buenos Aires, giving rise, in 1933, to the first dietitian degree in Latin America. He also founds the Argentinian Nutrition Association in 1941. Another of his contributions to human nutrition was his law for a proper nutrition where he frames four basic principles: quality, quantity, harmony and appropriateness. This postulate originates in a biological vision of nutrition; as a vital function it considers eating a medical act to stay healthy, ignoring other aspects beyond the biological functions of the body.

In Uruguay, the construction process of nutrition as a discipline and the subsequent medicalization of the diet has a significant development in the first decades of the 20<sup>th</sup> century. In the year 1912, Dr. Justo González runs the National Hygiene Council, entity that brings relevance to the role of eating in society. In 1912, Uruguay takes part in the International Congress of Alimentary Hygiene and the Rational Feeding of Man in Brussels, which led to resolutions of events that mark the intervention of medicine in nutrition and the need for the State to seek for devices to control this activity.

[...] the need to medicalize the culinary art that, from being purely empirical, should become rational, logic and scientific. Public schools and press were assigned the task to "teach society, and especially popular classes, a complete course of food hygiene and rational eating", in order to improve the life conditions of the population.<sup>38</sup>

The fact of taking food as part of a medical act can be clearly observed and is institutionalized in this Council, being the State the one in charge of regulating it.

This biological construction of eating is also reflected in the words of Santin Carlos Rossi, who in 1919 introduces the concept of nutrition moral, defining it as:

[...] in nutrition it is not the desire, not even the appetite of men, what must dominate the election of food, but the requirements of cells. Then, an individual who feels a craving for appetizing delicious food and can satisfy his cravings, must wait for his tissues to be destabilized [...] There was then a nutrition moral that forces to sobriety and to distributive justice under penalty of suffering [...] <sup>38</sup>

The conception of eating as control mechanism over deprived sectors is evidenced in these statements, where the function of food is emphasized as well as the need to restrict desire. This is aligned with the expositions of Barrán<sup>37</sup> about the control over the people, where the upper class searches for ways to dominate lower classes, banning them the pleasures and indoctrinating through morality. <sup>37</sup>

In agreement with the above, the National Commission for the Proper Feeding of the People presided by Justo González is created in 1930. This may be considered a first attempt to instate the concept of healthy eating, constituted several decades later. <sup>37,38</sup>

The process of institutionalization of eating, which was within the family scope, is an object of study of science and then becomes nationalized as a bio-political strategy. During that consolidation, another significant event takes place when in 1930 Dr. María Luiza Saldún carries out the first nutrition study in 102 poor girls and boys in Montevideo. The findings of the study described a situation with significant malnutrition, an inappropriate quality of food and lack of nutrients

among other aspects. In response, a "Ladies Commission" is created to contribute to advise on care for girls and boys, under the charge of the role of the pediatrician. This landmark lay one of the foundations for the dietitian profession, which, as subsidiary of medicine, would be in charge of it a decade later.

In the year 1937, the Institute of Scientific Feeding was created, derived from the National Commission for the Proper Feeding of the People, which changes its name for National Feeding Institute ("INDA" for its acronym in Spanish) in 1942. This institute is intended to provide a rational way to feed the people based on available scientific knowledge as well as to assist the most deprived sectors with food.

In the academic sphere, in 1945 Alberto Munilla creates the course of dietitian under the Gastroenterology and Nutrition Department, starting its lessons on August 5<sup>th</sup> of that year, under the direction of Benigno Varela Fuentes. The academic scope then gives rise to the training of human resources devoted to foster the proper eating in the population, in order to standardize the consumption of food at an institutional level (mainly hospitals).

In this first stage, emphasis is put on the significance of nutrition in clinical treatments and in hospitalization. The Degree in Nutrition under the Gastroenterology and Nutrition Department is constantly evolving until becoming the School of Nutrition and Dietetics under the School of Medicine. With the creation of the nutritionist profession, the effective healthy eating model becomes more dynamic in our country by means globalized policies and programs of FAO and WHO through several projects intending to reaffirm the importance of a balanced diet for health. <sup>39-41</sup>

The emergence of this degree takes place at the peak of health and nutrition in the post-war society and in 1948 the First Latin American Conference on Nutrition was held in Montevideo. Coinciding that same year with the Universal Declaration of Human Rights, it places food as a right in the judicial hierarchy, legitimating its power from health and medicine.<sup>38</sup>

By 1962 the "First Eating Nutritional and Clinical Survey" is organized by the Ministry of Health which includes dietitians as part of the team of field research. Such survey is financed by the Interdepartamental Committee on Nutrition for National Defense (ICNND) of United States of America. These kind of projects from Unites States are ways of quantifying and obtaining information about nutrition in developing countries, in order to standardize eating and generate epidemiological data.

As previously mentioned, having data allows to create indicators to classify countries and obtain information to globalize strategies and generate control processes on food production. These types of projects, which provide information about other countries, are usual at present as

part of multicentric studies characteristic of FAO and WHO. That first survey in 1962 uses the recommendations of United States about nutritional requirements—as "normality" classification pattern, thus creating a covered up control method over developing countries.<sup>4,27</sup>

In the year 1975, amidst the military-civic intervention in our country, FAO contributes to the improvement of the infrastructure of the Nutrition and Dietetics School through a project. It is possible to identify then a strong bond between international entities and the development of a model that prevailed in our country. As the nutritionist profession evolves, it reproduces the model of standardizing and institutionalizing the diet of the population. As decades pass, growth in the academic sphere implies greater scientific production, and more globalized strategies, which are part of the healthy eating model worldwide.

In 1992 it emerges the concept of Food-Based Dietary Guidelines (FBDGs) and nutritional pyramid within a context of expansion of health policies. In this process the Nutrition and Dietetics School, the National Feeding Institute and the Nutrition Program of the Ministry of Health have a key role in the construction of the healthy lifestyle for our country.<sup>41</sup>

As it was mentioned before, FBDGs are strategies to instate healthy eating in several countries, funded by international projects. In Uruguay, the launching process took 10 years and was presented in the year 2005 in the Ministry of Health.

The School of Medicine, School of Nutrition, INDA and Ministry of Health appear as key actors in the consolidation of the healthy eating model in Uruguay, the academic sphere contributing with a validation of nutrition surveys about the nutritional-eating situation in the country. Also, together with international entities they create productions which are part of the medicalization process of eating. 37,38

The healthy eating model controls everything related to food, considering all stages of the life cycle, since conception, birth up to older adults, taking boys and girls as one of its intervention fields <sup>9,29,30,35,36</sup>

The healthy eating model currently effective in Uruguay is a device consolidated from scientific knowledge, present in the public agenda and reinforced through regulations at different levels, with laws and decrees intending to regulate and control this aspect of everyday life.

This model expects to, through messages about healthy lifestyles, change habits that are harmful to health, giving advice in "tip" format to stay healthy, active and, above all, productive. The previous is framed within a capitalist system of consumption, where the lifestyle is part of the "offered menu": control the bodies, through a standard of beauty, impose -through a medical message- the healthy life to obtain vigorous bodies, they may consume to stay healthy or otherwise

do it to achieve a body adapted to socially accepted guidelines. All this, within the framework of immediacy and fluency, that is to say, without effort and without resorting to structure or eating patterns, the diet is not enough, it is necessary to have a healthy lifestyle 24,25,28,42

To sum up, the healthy lifestyle resulting in part from the eating model is effective worldwide and linked to the phenomena of medicalization of society and of eating, which cover up several interests in favor of the improvement of life quality.

# Implications of the Effective Eating Model. The Family as Producer of Healthy Lifestyle

As it was previously mentioned, eating has a central role in the modern life, where the consumer intends to find increasingly healthy food and to avoid then the risk of getting sick. In this sense, the healthy eating model constructed by the adult world seeks to emancipate the society suffering from non-communicable chronic disease, by the generation of future healthy adults. This implies a subjectivation process of childhood, where the institutions visualize girls and boys as future, so they are no longer a social category as such, to become the scope of a paradigm that seeks to create health promoters.

In other words, to take care of the future of a county , of its economically active population, it is necessary to generate consumers, clients for a healthy lifestyle and nothing better for its promotion than childhood as conscience and promoter of the health of adults.  $^{1.29-32}$ 

Childhood has historically been addressed by medicine, being the quintessential target population to foster and work on certain health habits. Girls and boys are the target of state institutions as school and polyclinics, among others, that make up the bio-political device that rules from its conception to its development and growth.<sup>29</sup>

The healthy eating model is oriented to the family, childhood and state institutions, from a medicalization process in the search for standardizing this social category. There is an overlapping then of visions about what is a boy or a girl and about what is expected from them. Institutions, particularly family, must produce children who are health promoters to be able to take the message to society and be part of a certain social class. 30-33

As previously explained, today there is access to detailed information about the effects of food on health, causing the generation of products adapted to new ways of life. An example of this are products supplemented with vitamins and minerals that enable a performance in accordance with demands. In girls and boys, this process is even more exacerbated as they are the future and with current technologies they can be the perfect expression of the adult world. With the

development of biotechnology, it is possible to know genetic disorders beforehand and this opens a range of opportunities for researchers. Producing a new childhood, an ideal childhood, where genes are reprogrammed in order to obtain genetically modified girls and boys.<sup>1,29,31</sup> This type of technology, that takes years of scientific production and billions of dollars, is the paroxystic expression of the medicalization process. As a consequence, producing a childhood in the image and likeness of adults increasingly closer not only in the social aspect but also in the biological.<sup>1,29</sup>

The existence of a technology to genetically program human beings trigger a series of questionings that exceed the aim of this article but serve for arguing the vision of childhood as future and desire of mothers and fathers. A new society may emerge to couple with the risk society; genetic modification will allow to rule out risks of getting sick and at the same time provide skills to descendants. In this same sense, it is possible to discard the intervention to achieve healthy lifestyles, suppressing genes that promote certain consumption of food, entering into a new era where life will be "genetically healthy". 14,27,29

Perfect, healthy and consumer bodies will be planned not only with regard to the production of subjectivities, but also in the biological aspect. Accessing total control is feasible for a small group of society, which has the resources to finance its own healthy lifestyle, from DNA itself. The existing social gap today could be exponentially increased, where those who do not access to the modification and planning of their genes will be excluded majorities. The healthy eating model, in its hegemonic message, proposes to stay healthy by consuming lifestyles.<sup>1,23,29,42</sup>

Families as shapers of subjects who play a key role as these are shaping agents. The current family seems invaded by several messages about health. With the technification of everyday life, everything is solved by means of advice by professionals, in this case, eating and the ways of avoiding risk. Such message responds to corporate logics where achieving healthy and perfect bodies is a matter of money.<sup>1,27,29</sup>

### References

- 1. Bustelo E. El recreo de la infancia. Argumentos para otro comienzo. Buenos Aires: Siglo XXI; 2007.
- 2. Domingo-Bartolomé M, López-Guzmán J. La «Medicalización» de los Alimentos. Persona y Bioética. 2014; 18(2):170-183.
- 3. Foucault M. Historia de la medicalización. Educación Médica y Salud. 1977; 11(1):3-25.
- 4. Martinez JE. Construyendo los cuerpos « perfectos ». Implicaciones culturales del culto al cuerpo y la alimentación en la vigorexia. Universitas. 2014; (21):77-99.

- 5. Rodriguez Zoya P. La compleja trama de la medicalización alimentaria. XXIX Congreso de la Asociación Latinoamericana de Sociología; 29 set. a 4 out. 2013; Santiago de Chile.
- 6. Muñoz-Sánchez V, Pérez Flores AM. Acercamiento a las implicaciones existentes entre alimentación, calidad de vida y hábitos de vida saludables en la actualidad. Revista de Humanidades. 2015; (25):11-30.
- Rodriguez Zoya P. Alimentación y medicalización: análisis de un dispositivo de cuidado personal y potenciación de la salud. Sociologica. 2015; 86:201-234.
- 8. Garcia-Arnaiz M. Comer bien, comer mal: la medicalización del comportamiento alimentario. Salud Pública de México. 2007; 49(3):216-242.
- 9. Affonso Moysés MA, Lima Collares CA. Control y medicalización de la infancia. Desidads, 2013; 1(1):11-21.
- 10. Vivas E. La cadena agroalimentaria: un monopolio de origen a fin. Boletín ECOS. 2008; 4:14-17.
- 11. Carpio C, Pacheco V. Calidad de vida: un análisis de su dimensión psicológica. Rev Son Psicol. 2000; 14(1,2):3-15.
- 12. Fennema O. Food chemestry. Kentucky: CRC Press; 2008.
- 13. Foucault M. Dietética. In: Foucault M. Historia de la sexualidad. v. 2: el uso de los placeres. Buenos Aires: Siglo XXI; 2014. p. 87-107.
- 14. Foucault M. Historia de la sexualidad. v. 1: la voluntad del saber. 2 ed. Buenos Aires: Siglo XXI; 2016.
- 15. Lejavitzer Lapoujade A. Dieta saludable, alimentos puros y purificación en el mundo grecolatino. Nova Tellvs. 2016; 33(2):109-121.
- 16. Weinstein L. El concepto de salud. In: Weinstein L. Salud y autogestión. La antimedicina puesta a examen. Montevideo: Nordan-Comunidad; 1978. p. 11-21.
- 17. Organización Mundial de la Salud. 57a Asamblea Mundial de Salud. Resoluciones y decisiones. Ginebra: OMS; 2004.
- 18. Gómez Candela C. Estrategia mundial sobre régimen alimentario, actividad física y salud. Nutricion Clinica y Dietetica Hospitalaria. 2004; 24(4):10-13.
- 19. Pereira P, Curuchet MR, Turra Sergio RAM, Severi Cecilia N, Huerto M. Aportes para la discusión de las políticas de alimentación y nutrición en Uruguay. Montevideo: AUDYN; 2011.
- 20. Becoña E, Vázquez F, Oblitas L. Promoción de los estilos de vida saludables. Investigacion en Detalle [Internet]. 2004; (5). Disponível em: https://www.yumpu.com/es/document/view/14821055/promocion-de-los-estilos-de-vida-saludables-alapsa
- 21. Jorge DP, Yngrid C. Politicas alimentarias y nutricionales en los sistemas nacionales de salud. An Venez Nutr. 2014; 27(1):143-152.
- 22. Gómez Candela C. Estrategia mundial sobre régimen alimentario, actividad física y salud. Nutricion Clinica y Dietetica Hospitalaria. 2004; 24(4):10-13.

- 23. Menéndez E. Modelo hegemónico, modelo alternativo subordinado, modelo de autoatención. Caracteres estructurales. In: Campos R. La antropología médica en México. tomo 1. México: Instituto Mora-Universidad Autónoma Mora; 1992. p. 97-114.
- 24. Giddens A. La tercera vía. La renovación de la socialdemocracia. Buenos Aires: Taurus; 2000. Capítulo 2.
- 25. Giddens A. El capitalismo y la moderna teoría social. Barcelona: Labor; 1985
- 26. Giddens A. Modernidad e identidad del vo. Barcelona: Península; 1995.
- Sibilia P. El hombre postorganico. Cuerpos, subjetividad y tecnologías digitales. Buenos Aires: FCE;
  2005.
- 28. Bauman Z. Modernidad líquida. Buenos Aires: Fondo de Cultura Económica; 2002.
- 29. Leopold Costábile S. Los laberintos de la infancia: discursos, representaciones y crítica. Montevideo: Ediciones Universitarias; 2014.
- 30. Corea C, Lewkowicz I. Pedagogía del aburrido: escuelas destituidas, familias perplejas. Buenos Aires: Paidos; 2013.
- 31. Corea C, Lewkowicz I. ¿Se acabó la infancia? Ensayo sobre la destitución de la niñez. Buenos Aires: Lumen-Humanitas; 1999.
- 32. Duschatzky S. Tutelados y asistidos. Programas sociales, políticas públicas y subjetividades. Buenos Aires: Paidos; 2008.
- 33. Duschatzky S, Corea C. Las instituciones en la pendiente. In: Duschatzky S, Corea C. Chicos en banda: los cambios de la subjetividad en el declive de las instituciones. Buenos Aires: Paidos; 2014. p. 69-94.
- 34. Zoila Santiago A. Los enfoques historiográficos de la infancia. Takwá. 2007; (11-12):31-50.
- 35. Alzate Yepes T, Cánovas Leonhardt P. Estado nutricional infantil y estilos educativos familiares: apreciación de expertos. Perspect Nutr Humana. 2013; 15(2):185-199.
- 36. Truninger M, Horta A, Teixeira J. School meals in Portugal: governing children's food practices. Revista de Humanidades. 2015; (25):31-35.
- 37. Barran JP. Historia de la sensibilidad. Tomo 1: la cultura bárbara. Tomo 2: el disciplina miento. 2 ed. Montevideo: Banda Oriental; 2015.
- 38. Bragaña S, Carbajal S, Gonet A, Saravia L. Para alimentar la memoria. El licenciado en nutrición en el Uruguay: desde sus orígenes hasta nuestros días. Montevideo: Universidad de la República, Escuela de Nutrición; 2008.
- 39. Sánchez Solé L. La medicalización de las infancias, ¿ hacia una coerción de sus proyectos de vida ? Temas de Educacion. 2014; 20(1):49-63.

- 40. Pérez-López IJ, Tercedor P, Delgado-Fernández M. Efectos de los programas escolares de promoción de actividad física y alimentación en adolescentes españoles : revisión sistemática. Nutricion Hospitalaria. 2015; 32(2):534-544.
- 41. Del Castillo SE, Patiño GA, Herrán OF. Inseguridad alimentaria: variables asociadas y elementos para la política social. Biomédica. 2012; 32(4):545-556.
- 42. Freire P. Pedagogía del oprimido. 36 ed. Rio de Janeiro: Paz e Terra; 2003. Capítulo 3.

Received: March 19, 2018 Revised: May 24, 2018 Accepted: June 03, 2018