**FREE THEMED ARTICLES** 



DOI: 10.12957/demetra.2015.13993

# Set the diet free

Elaine de Azevedo<sup>1</sup>

<sup>1</sup> Universidade Federal do Espírito Santo, Depto de Ciências Sociais, Centro de Ciências Humanas e Naturais. Vitória-ES, Brasil.

Correspondence Elaine de Azevedo E-mail: elainepeled@gmail.com

## Abstract

This essay aims to explore the restrictive diets - the so-called free diets (focusing on gluten and lactose-free diet) - from a sociocultural approach. To this end, different authors from the fields of Anthropology and Sociology of Food and Nutrition were mobilized. A brief retrospective on different foods that have undergone some sort of restriction by Nutrition experts - as breast milk, eggs, lard, butter, milk, wheat, meat - endorse the discussion. It can be seen that dimensions as culture, location and territorial adjustment were ignored in the social construction of the healthy diet concept under such restrictive view. This perspective overestimates nutrients at the expense of food and generated the feeling of guilt and the idea of a restrictive and individualized diet based on the biological view of health, apart from emotional, environmental, cultural, political and social values. Furthermore, this approach supports the food industrialization and the medicalization of Nutrition.

Key words: Culture. Eating. Diet. Gluten. Lactose.

#### Introduction

The science of nutrition, influenced by the prospect of reflexivity, comprises a large number of restrictions and food practices<sup>\*</sup> that significantly contribute to increase the scope of scientific controversies.<sup>1\*\*</sup> It is almost impossible to monitor the speed to which these practices are deployed – many of them dietotherapic, restrictive or reductionist – often disconnected from the social, environmental and cultural dimension that crosses the contemporary concept of healthy eating.

This essay, supported by different authors from the fields of Anthropology and Sociology of Food and Nutrition, aims to promote a reflection on the so-called free diets (with a focus on the gluten and lactose free diets), from a sociocultural approach.

The approach of these practices is concerned, first of all, on their intriguing condition of antagonism and "non-belongingness" in the field of Nutrition. Different controversial titles are around these restrictive practices, such as "scientifically proven; without scientific background and restrictive non-consensual;<sup>\*\*\*</sup> empirical; natural; alternative". This is because such free practices do not fit into categories that represent general practical nor the scientific ones. Even if these proposals, within the confines of common sense, are commonly related to an alternative suggestion to the scientific nutrition perspective, they ultimately endorse the Nutrition view,<sup>2,\*\*\*\*</sup> EThis vision, which strongly influences the clinical area of food science, overestimates the nutrients to the detriment of food, promotes the idea of an individualized and biologicist feeding, devoid of environmental, cultural, political and social values. However, the more orthodox nutritionists, despite using often the same restrictive logic, do not accept well this approach when it comes to certain foods, such as wheat and milk. These restrictions find support by the perspective of Functional Nutrition, a kind of a bastard child of Clinical Nutrition that finds allies on biochemical analysis and quantitative scientific research.

<sup>\*</sup> Named in the present article "food practices", as they are not short-term diets or dietary restrictions, but a daily dietary option. However, the term "diet" is frequently used to refer to the same, including in this essay.

<sup>\*\*</sup> The article "Risks and controversies in the social construction of the healthy food concept: the case of soybean" is recommended for those who intend to learn more about the sphere of scientific controversies in the Nutrition field.<sup>1</sup>

<sup>\*\*\*</sup> A reference to the positioning of the Regional Councils of Nutritionists (CRN3 and CRN5) about the restrictions on the consumption of milk and wheat. Available at: http://www.nutritotal.com.br/diretrizes/files/350--ParecerCRNLeite. pdfe http://crn5.org.br/wp-content/uploads/2013/05/th02\_23.08.12-PARECER\_CRN3\_GLUTEN.pdf Accessed on: November 6<sup>th</sup> 2014.

<sup>\*\*\*\*</sup> Term coined by Gyorgy Scrinis<sup>2</sup> and popularized by Michel Pollan<sup>3</sup>.

If, on the one hand, some of the free diets are rejected by the Nutrition science approach, which associate them with diseases or disorders, namely intolerance and specific allergies, other similar practices are commonly connected to a natural and culturally correct dietary choice that safeguards traditional knowledge. This view can be illustrated by a post on a social media\*\*\*\*\* about the eating habits of Brazilian Indians, defined as "gluten free, lactose free and based on plants", with reference to the letter of Pero Vaz de Caminha,\*\*\*\*\*\* dated 1500:

They neither reap nor farm. Nor are there here bulls or cows, goats, sheep or chickens, or any other animal which is used to a man's life. They only eat this 'yam', which is very plentiful here, and those seeds and fruits that the earth and the trees give of themselves. And with these they walk so wiry and glowing with health, much more than us, no matter how much wheat or legumes we eat...

There is no doubt that the letter strengthen valuable knowledge often forgotten by Nutrition experts: A healthy diet should keep its cultural component; traditional diets were rich in local vegetables; complex carbohydrates were consumed in the form of seasonal cereals and tubers; and traditional tropical diets had lower protein and fat content. Milk and wheat were not part of traditional Indian food in Brazil – although hunting and fishing are usual among them. However, this assumption should be complexified over other people's habits to consuming livestock meat, wheat and dairy products - local food for some societies in the Northern Hemisphere. Moreover, the statement disqualifies the importance of European and African migration that influenced the eating habits of a significant proportion of the population for over 500 years and included these products in the diet, generously incorporated into the daily diet of many Brazilian people.

Quite often, food, basic strategy for survival, promotion of pleasure and social and cultural integration, has become an amalgamation of vilified nutrients. Once disconnected from the geographical and cultural perspective, the act of eating in the contemporary world has become a complex reflex action, fraught with anxieties and doubts that science is far from dissipating. In fact, science plays a central role in the gastro-anomy dimension, discussed by the sociologist Claude Fischler in Goldenberger.<sup>4</sup>

<sup>\*\*\*\*\*</sup> Post published in the author's social media page, on July 4th 2014.

<sup>\*\*\*\*\*\*</sup> The full letter can be found at: http://educaterra.terra.com.br/voltaire/500br/carta\_caminha.htm Accessed on : September 4th 2014.

The idea of analytically exposing the nutritional and damaging parts of food expresses a rationalist and pessimistic outlook that is outside the scope of a pleasant, significant and shared meal. Examples? The egg, butter and lard, ingredients of *quindim*, butter cookies and Saturday's traditional feijoada, were reduced to a condition of "animal fat that saturates the blood"; Sunday's barbecue and Christmas turkey represent excess protein and putrefaction processes that cause intoxication in the herbivores' longer intestines of culturally omnivorous humans; cheese and wine parties and the Arab curd present in Syrian-Lebanese meetings became synonymous with allergies and lactose intolerance.

In fragile times of anthropocentrism and concerns regarding ethics and animal welfare, restrictions related to animal protein consumption could even reverberate in the concepts of "self-control culture and refinement", by Beardsworth & Keil,<sup>5</sup> "civilizing of appetite", by Mennel<sup>6</sup> and "the ideology of care opposed to the ideology of exploitation", by Fiddes,<sup>7</sup> cited by Azevedo.<sup>8</sup> But not always moderation in the consumption of animal-based food products dialogues with such noble sociological assumptions.

The interesting thing about this point is that gluten, lactose, animal fats and foods like wheat, meat and milk appear to cause more nutritional and media furor than the cumulative effects of pesticides, hormones, antibiotics and emulsifiers, colorings, sweeteners, preservatives, and other 3,000 synthetic additives on human health, products that are used to reduce costs and increase shelf life of processed products.

The clinical perspective of Nutrition, whose restrictive and dietary premises squandered the gastronomic delight, has been playing the role of guillotine of pleasures for a long time – at least in countries that have food available for their people. In early 1890, the U.S. Department of Agriculture has supported research relating human agriculture and nutrition, and pointed to the dangers of a diet rich in meat, carbohydrates and sugars, as was the case of the North American.<sup>9</sup>

Brazil has followed in the footsteps of the US proposal, but the Nutrition and Public Health was very concerned about hunger and lack of food. However, there has still been little discussion about controversies related to dietary restrictions, which have many political and social dimensions inserted into different historical moments that disqualify culture. This means that, for a long time, healthy foods are sacrificed at the stake of a science deprived of culture, incited by the economic interests of the modern food system.

#### The demonization of food – a brief retrospective

In Brazilian lands, during the 1960s, perhaps the most peculiar demonization of food took place – breast milk. Supported by scientific studies anchored in the food industry and in the modern agriculture founded on extensive grain monoculture – the basis for feeding that promoted increased bovine milk production – pediatricians began recommending the substitution of the "weak" breast milk from human mammalian by dehydrated and maternalized milk. This scientific oversight was quickly rectified when powder milk began to be mixed with low-quality water, consequently, babies fell sick because of diarrhea and lack of immunoglobulins, the children's mechanisms of immune protection. The situation was reversed among experts, but nowadays the country invests in breastfeeding promotion to sensitize supposedly informed mothers that their milk is the best for their children. Of course, this is not the only reason that led to the disqualification of breastfeeding among women, but this scientific gaffe was of great relevance in the scenario.

After this episode, the need to drain the surplus of extensive grain monocultures continued. From soybean and corn seeds, which now cover Brazilian soils, two food products were created and then praised by inattentive experts: vegetable oil and margarine. And even today, these oils occupy a privileged role in the eating habits and are valued as vascular health-promoting foods. Such products with a strong dietary and healthy appeal, replaced harmful animal fat, the new focus of nutritional restriction. This includes eggs, whole milk, lard, butter and cream – natural foods from free livestock, base for the small farmer's diet. This worker, driven into extinction, expelled from their land by the modern food system, by going into exile in cities, incorporated the urban lifestyle; He began to consume more processed and refined foods, replaced the occasional roll-up cigarettes by manufactured cigarettes, started working in sedentary activities, and these changes, combined with the level of dissatisfaction and urban stress and cultural disengagement, contributed to the onset of cardiovascular diseases.

The urban lifestyle was configured, but only the animal fat was eventually condemned by the reductionist research with stressed and sedentary lab mice, in partnership with vegetable oils and hydrogenated fats industries. These connections are not always manipulated polls, but when a corporation supports science, it is more likely that favorable effects will be emphasized according to the interests of companies, neglecting negative results.

Well, the end of the animal fat story is well-known. Cardiovascular diseases continue to kill millions of urban citizens who are deprived of the pleasures of the table, under the dictatorship of low-fat and light foods, vegetable oil, hydrogenated fats and margarine.<sup>10,\*\*\*\*\*\*</sup>

To the chagrin of the lucrative food marketing that promotes margarine advertisements, scientists recently discovered that this artificial mass contains trans fatty acids which stimulate cholesterol production by inhibiting the HDL – a high-density lipoprotein involved in cholesterol transport in the blood – and increasing the level of LDL, a type of unwanted cholesterol.

Diet survivors, also deprived of whole milk, egg and lard, retrieve today, without compensation, the pleasure of consuming these villains acquitted by the controversies of science. These days, some experts stimulate their consumption in a rural traditional Brazilian diet based on fresh, whole foods such as tropical fruits and local vegetables, whole-grain rice, corn, legumes, cassava and derivatives, types of yam, dairy, meat and eventual fishing, coconut, palm and açaí fats, whole cane sugar and brown sugar. A diet that should be the food staple of Brazilian people, a melting pot of indigenous, European and African influences, according to Câmara Cascudo.<sup>11</sup>

But the overproduction of grains has partnerships with the food industry and research in nutrition and, besides expelling the remaining farmers in the rural areas, continues to foster the development of other technofoods, such as the soy extract and textured soy protein (nostalgically called soy milk and meat) or processed lactose and gluten-free foods, efficient substitutes for the current targets of dietary crucifixion: meat, milk and wheat. A negative character has been assigned to these traditional foods, especially by functional nutritionists fond of supporting biochemical studies, without considering the quantity and quality of food, the changes they have undergone during the agrifood industrialization process and the food's cultural context.

A brief analysis of gluten. From an almost anonymous vegetable protein dimension, cereals once considered pure and healthy, such as wheat, barley and rye, started to be considered "triggers to obesity and inflammatory processes". This restriction affects other helpless grain, oat, contaminated by gluten during the industrial refining process. First, it is important to reflect on the amount

<sup>\*\*\*\*\*\*\*</sup> It is important to know its origin and processing to understand the criticism of the unrestrained consumption. Polyunsaturated oils are typically extracted from conventionally produced grains, GMO and contaminated with pesticides. During the extraction process, beans are subjected to high pressure and temperature, while petroleum-based solvents are used to maximize the removal of the fat part. As a result of this process, the chains of unsaturated fatty acids are destabilized, vitamin E is denatured and these oils oxidize or go rancid. Chemical additives are added to restore vitamin E, prevent oxidation and obtain an oil of greater durability. These oils, when subjected to heat, oxygen and moisture during processing, produce free radicals. Finally, the product undergoes a refining process to maximize the removal of heavy metal residues from solvents used during extraction. The oils are commercially extracted in the form of linoleic omega-6, doubly unsaturated and containing small amounts of linolenic omega-3, triply unsaturated. After this process, vegetable oils subjected to chemical hydrogenation and that received at least seven additives and synthetic vitamins to mimic butter consistency and flavor, are transformed into margarine.<sup>10</sup>

of refined wheat we eat today in our (a) Normal tropical Eurocentric diet: the French bread for breakfast, pasta for lunch, a cracker, a cereal bar, a Brazilian drumstick (*coxinha*) or snack pie for afternoon meal and pizza or sandwich for dinner – mixtures of the same white wheat. This gluten overdose derives from a type of wheat – the *Triticum aestivum* – developed in laboratories with the blessing of the Green Revolution. This grain, besides producing "more and better", contains higher gluten content, very different from the wheat of ancient times. Moreover, the wheat was traditionally consumed whole, with fresh grains sprouted or fermented before making or baking bread. These processes helped reduce the effects of gluten and other anti-nutritional factors present in cereal grains. That is, the wheat today is not the same as it was before. So the problem is not only the wheat, but what kind of wheat? How to prepare it and how much?

A glimpse into milk. The most consumed milk in Brazil comes packaged in aseptic cartons, despite the fact it was previously contaminated by veterinary drugs, pesticides and synthetic conservatives and produced under sterile processes affecting the quality and bioavailability of the nutrients. In face of such change, there is no doubt that there are potential allergies related to this imbalance; withdrawing milk, improvements can be observed. However, there are no comparative studies on the quality of raw, pasteurized and sterilized milk, or incentives for this research subject that would involve heated discussions about the biological contamination of milk. And how to produce milk with the same quality as that consumed by the ancient Egyptians and Hindus, without historical mentions to epidemic inflammatory or allergic processes? A question that involves complex issues such as food supply, the rural-urban gap and the prevalence of a biologicist vision of health that can hinder health surveillance, the dairy production system and a network of major commercial interests.

Also, it is important to stress that milk has transitional and ethnic-racial components. It is, archetypally, an important food for a healthy bone development in children. In the adult stage, it becomes biologically unnecessary, but culturally relevant and can be dispensed at the old age, given the natural deficiency of enzymes that digest milk in this phase of the life cycle. Naturally, if osteoporosis has already manifested itself at the old age sterilized milk consumption will not be a solution, nor it was caused by underconsumption of milk products in adulthood, but due to different aspects associated with the diet as a whole and the lifestyle that should considered in conjunction: poor calcium intake during the development of the human skeleton; low intake of saturated acids that aid the absorption of calcium; high sugar and animal protein consumption that promote progressive decalcification processes; hormone imbalance and lack of physical activity.

It is also noteworthy that milk is better digested by people who domesticated cattle and incorporated milk into their diets as a traditional practice – which is not the case of Asian people, for example. Therefore, the problem of the quality is quite serious, but the racial intermixture interferes with the capacity to digest milk. However, milk faces imminent extinction with the support of Harvard experts, who have limited milk consumption in their standardized food pyramid<sup>\*\*\*\*\*\*\*\*</sup> – one less aliment. The losers will be the Brazilian small farmers and consumers, who will pay more for industrialized rice or oat milk. Another option would be other "embellished" products with the "natural blush": the transgenic soybean extract, industrially manipulated with flavorings, colorings and artificial sweeteners to change its bitter taste and original gray color, or almond or nuts milk from somewhere in Europe or the Middle East, with at least six thousand kilometers of oil energy expenses on the environmentally questionable product. It can be said that long-life packaging companies and industries that produce calcium supplements to combat the inevitable osteoporosis are the main beneficiaries of these strategies.

It is well-known that many individuals feel good, improve allergies and lose weight by adopting gluten/lactose-free diets. In fact, a monitored and temporal desensitization to these proteins prevailing in the diet is nonetheless positive and impactful. Furthermore, by removing the white wheat and sterilized milk, various industrial calorie dense food products are eliminated. Another advantage is that consumers pay more attention to the quality of food when they are on a diet and also rediscover new local corn, rice and cassava-based sources of carbohydrates (unfortunately GM). It is a matter of concern the fact that one cannot think in healthier forms of wheat and milk, which could be reincorporated after the detoxification phase. Or that they should be demanded by consumers and politicized experts. Simply, they are excluded from the diet and incorporated into a list of banned foods.

Finally, meat. Tender meats, like no healthy muscle should be, injected with veterinary drugs from caged animals, under the premises of the wicked conventional management are not appropriate for the dishes contemporary healthy eaters. The success of proteins has accomplished to transform a occasionally consumed food products among traditional peoples in an edible social status. The result? An excessive meat intake, and the higher the income, the higher the consumption. Not surprisingly, the major issue with meat (also) is its origin and the unbalanced amount whose form of production impacts the environment and jeopardizes food and nutritional security.<sup>8</sup>

<sup>\*\*\*\*\*\*\*</sup> It has been questioned whether a pyramid is able to express the nutritional needs of so many different cultures and regions. Certainly, many pyramids would be necessary to show that people living in the frozen poles of the Earth need to eat large amounts of animal fat and meat to survive the constant cold. And that a tropical food pyramid would not praise the Mediterranean olive oil or transgenic canola oil, but incorporate the palm oil or coconut oil as healthy fats.

### **Concluding remarks**

In general, many healthy diets incorporate, in addition to a restricted dimension, an element of food non-identification that proposes a conditional separation of the hedonistic dimension of eating. Slavoj Zizek<sup>12</sup> (s/w) summarizes this condition when he says that "enjoyment is tolerated, solicited even, but with the condition that it is healthy, that it does not threaten our psychic or biological stability: chocolate, yes, but fat-free; Coca-Cola, yes, but diet; coffee, yes, but without caffeine; beer, yes, but without alcohol; mayonnaise, yes, but without cholesterol (...)". And the list is endless ...pizza without cheese; pasta without wheat; barbecue without meat...

In the contemporary world, the need for diversification and the coexistence of different proposals for healthy eating are constantly stressed, but without the certainty that the cultural element transmitted to traditional societies. Fischer<sup>13</sup>establishes the concept of paradox of pleasure in stating that, nowadays, the eater lives between pleasure and functionality. Such functionality is permeated by the notion of healthiness and, between these two dimensions, the contemporary eater experiences guilt and fear.

Ascher<sup>14</sup> contributes to the debate with his concept of food hypermodernity, a reflection on the (alleged) freedom of hypermodern eclectic eater in the face of the food industry control, the guilt of eating what they want and restrictions imposed by their choices that come in the form of eating disorders such as obesity and anorexia.

To sum-up. Seasonality, culture, locality, territorial adjustments are concepts radically apart from the social construction of healthy food concept in modern times – at least within the scope of the so-called free diets. And the elements that have always determined the healthy diets in their specific locations. Site specific diets is what needs to be stressed out.

In the search for an individualized diet and specific to their needs, humans only eat at the table and avoid social relationships with those who do not share their dietary beliefs. Besides stimulating the guilt and fear of eating, such orthorexia contributes to a social breakdown and fosters intolerance.

Traditional and truly natural foods are vilified in speculative, reductionist and decontextualized scientific premises, which do not question cultural elements, origin, quality, changes they have undergone and their quantitative imbalance in the diet. The real victims of this food system are blamed, and an environmental imbalance and the social exclusion of family farmers producing traditional foods are generated.

As a result, instead of changing the system, one colludes with the loss of the most traditional and healthy foods, through the erosion of territorial eating habits and the development of new industrialized food products. And the act of eating is medicalized through supplements and pill capsules to make good the damage caused by table habits and farm tractors, strengthening actors that are not committed to the production of fresh, local and healthy foods.

This indigestible perspective is generated within an area that should be questioned on its vested right to use its main adjective. This is due to the fact that all health sciences today deal primarily with the pathogenesis and diseases. They are essential in an increasingly sick society, but it is time to rethink that to foster healthy eating habits it is necessary to share the construction of healthy diets, salutogenesis and promote health through family farmers, traditional peoples and communities, ecological farmers, environmentalists, social scientists, geographers and historians, chefs and cooks and all those who still intend to maintain some sort of ties with traditional knowledge, with emotional food and the idea of sharing healthy food from a socioenvironmental point of view.

Consequently, perhaps, it is still possible to avoid the loss of many threatened food products and not limit the enjoyment of barbecue with meat, lasagna with wheat and pizza with cheese. Preferably with a good wine. And without anguish, exactly like everyone should eat.

#### References

- Azevedo E. Riscos e controvérsias na construção social do conceito de alimento saudável: o caso da soja. Revista de Saúde Pública 2011; 45(4):781-788.
- 2. Scrinis G. On the ideology of nutritionism. Gastronomica 2008; 8(1):39-48.
- 3. Pollan M. Em defesa da comida. Rio de Janeiro: Intrínseca; 2008.
- Goldenberg M. Cultura e gastro-anomia: psicopatologia da alimentação cotidiana. Entrevista com Claude Fischler. Horizontes Antropológicos 2011; 17(36):235-256.
- 5. Beardsworth A, Keil T. Sociology on the menu. London: Routdedge; 1997.
- 6. Mennel S. On the civilizing of appetite. In: Featherstone M, Hepworth M, Turner B, editors. The body: social process and cultural theory. London: Sage; 1991. p.126-56.
- 7. Fiddes N. Meat: a natural symbol. London: Routdlege; 1991.
- 8. Azevedo E. Vegetarianismo. Revista Demetra. Alimentação, Nutrição & Saúde 2013; 8(Supl.1):275-288.
- 9. Neste M. Food politics. Los Angeles: University of California Press; 2002.
- 10. Azevedo E. Alimentos orgânicos: ampliando conceitos de saúde humana, social e ambiental. São Paulo: Senac; 2012.

- 11. Cascudo LC. História da alimentação no Brasil. São Paulo: Editora da Universidade de São Paulo; 1983.
- Zizek, S. Fat-free chocolate and absolutely no smoking: why our guilt about consumption is allconsuming. 2014. [Acesso em: 20 Ago 2015]. Disponível em: http://www.theguardian.com/ artanddesign/2014/may/21/prix-pictet-photography-prize-consumption-slavoj-zizek
- 13. Fischler, C. A "McDonaldização" dos costumes. In: Flandrin, J-L; Montanari, M (Orgs.). História da Alimentação. São Paulo: Estação Liberdade; 1998.
- 14. Ascher, F. Le Mangeur Hypermoderne. Odile Jacob, Paris 2005.

Received: December 09, 2014 Revised: April 06, 2015 Accepted: June 28, 2015