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The 2014 Brazilian dietary guidelines

The guide based on food and meals for everybody now and in future



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Introduction

On 5 November the Brazilian Ministry of Health published the new *Dietary Guidelines for the Brazilian Population*, *now available in English*. A total of 60,000 copies are being distributed throughout the country to health professionals, health centres, schools and hospitals and other places. The *Guidelines* have been prepared by the Ministry of Health with the technical assistance of the Centre for Epidemiological Studies on Health and Nutrition at the University of São Paulo, and support from the Pan American Health Organization.

Preparation began in November 2011. The process has included two national meetings involving researchers, health professionals, educators, and representatives of civil society organisations from all regions of Brazil, and also regional meetings in the 26 Brazilian States and the Federal District. Earlier this year the *Guidelines* were subjected to public consultation. This resulted in 3,125 responses from universities, public bodies, professional representative organisations, the private sector, health professionals and members of the public. The *Guidelines* include a set of recommendations whose purpose is to protect and improve the health and well-being of people, families, communities and society as a whole, now and in future. Special attention is given to the prevention of under-nutrition, now rapidly decreasing everywhere in the country, and to the prevention of increasingly important public health problems in Brazil such as obesity, diabetes, and other chronic diet-related diseases.

Guidelines for everybody



Arthur Chioro, Brazilian Minister of Health, speaking at the UN International Conference on Nutrition in Rome two weeks after launching the new national official Brazilian dietary guidelines

The new Brazilian *Guidelines* address people and families directly and also health professionals, educators, community agents and all responsible for health promotion.

They are designed to give people, families and communities access to knowledge on characteristics and determinants of healthy eating. This should enable them to make better choices for themselves, reflect on everyday situations, seek changes in themselves and their environment, contribute to ensuring food and nutrition security for all, and demand compliance with the human right to adequate food. They distinguish between natural and minimally processed foods and food products, between food products used to season and cook foods and prepare fresh dishes and meals and ready-to consume products, and also between processed and ultra-processed ready-to-consume products. The overall Golden Rule of the *Guidelines* is shown below.

In Brazil, as in many other countries, cooking skills are not being passed on and learned by younger generations. For this reason the *Guidelines* give importance in their recommendations to valorising culinary skills, to encouraging all household members, men, women and children to join in acquiring, preparing and cooking meals, and to supporting the tradition of freshly prepared meals as part of the national social and cultural patrimony.

The Golden Rule

Always prefer natural or minimally processed foods
and freshly made dishes and meals to ultra-processed foods

Principles

The *Guidelines* are themselves guided by five principles in its first chapter. These are below. They begin by pointing out that all structured human activity is implicitly or explicitly guided by principles, and that dietary guidelines are not an exception to this rule.

The five principles presented are of different types. The first principle states that diet, as well as involving nutrients, is about foods, meals, and eating modes, and includes social and cultural aspects of dietary practices. The second states that sound dietary recommendations are tuned to changes in food supplies and population health patterns. The third acknowledges the interdependence between healthy diets and the social and environmental sustainability of food systems. The fourth states that reliable recommendations on diet come from a range of sources of evidence. The fifth states that dietary guidelines should enlarge people's choice of and right to adequate and healthy diets.

The five principles that shape these *Guidelines*

Diet is more than intake of nutrients

Diet refers to intake of nutrients, and also to the foods that contain and provide nutrients. Diet also refers to how foods are combined and prepared in the form of meals, how these meals are eaten, and also to cultural and social dimensions of food choices, food preparation and modes of eating, all of which affect health and well-being.

Dietary recommendations need to be tuned to their times

Dietary recommendations should respond to changes in food supplies and in patterns of population health and well-being.

Healthy diets derive from socially and environmentally sustainable food systems

Dietary recommendations need to take into account the impact of the means of production and distribution of food on social justice and environmental integrity.

Different sources of knowledge inform sound dietary advice

Diet has various dimensions and a complex relationship with population health and well-being. Therefore, the evidence required to construct recommendations on diet is generated from different sources of knowledge.

Dietary guidelines broaden autonomy in food choices

Access to reliable information on characteristics and determinants of healthy diets contribute toward people, families, and communities increasing their autonomy in making good food choices; it also contributes to leading them to demand the compliance to the human right to adequate food.

Foods



The second chapter of the *Guidelines*, 'choosing foods', includes general recommendations about food choices. Following the principles of the *Guidelines*, these propose that natural or minimally processed foods, of different types and in great variety, and predominantly of plant origin, are the basis of healthy diets.

There are many reasons to base diets on many varieties of natural or minimally processed foods mainly of plant origin. For a fuller list please see the *Guidelines* themselves. In most traditional cuisines, meat, fish, eggs and other animal foods are consumed sparingly, as part of dishes and meals that are based on plant foods. Animal foods add flavour and also enhance the flavour of grains, beans, vegetables and tubers, and improve the nutritional composition of the overall diet. Combination of a plentiful variety of foods of plant origin with small quantities of foods of animal origin results in nutritious, delicious and appropriate diets, which therefore are satisfying biologically, sensorially, and culturally.

Choosing diets based on a variety of foods of plant origin with sparing amounts of foods of animal origin implies food systems that are relatively equitable, and less stressful to the physical environment, for animals and biodiversity in general. Such diets encourage family farming and local economies, and living and producing in solidarity. They also promote biodiversity and reduce the environmental impact of food production and distribution. Reduced consumption and thus production of animal foods will reduce emissions of the greenhouse gases responsible for global warming, of deforestation caused by creation of new grazing areas for cattle, and of intensive use of water. It will also reduce the number of intensive animal production systems, which are particularly harmful to the environment.

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Oils, fats, sugar, salt



Although nutritionally balanced diets could be made up solely from natural or minimally processed foods, diets all over the world and throughout history have been and still are made from a combination of foods with culinary ingredients like oils, fats, salt and sugar. These products are used in home or restaurant kitchens for seasoning and cooking natural or minimally processed foods and to create with them delicious as well as nourishing dishes and meals.

Oils, fats, sugar and salt contain high amounts of dietary constituents that in small amounts are harmless but in large amounts are harmful. Some of the reasons why they should be used in small amounts include the following.

As well as being energy-dense, various oils and fats contain substantial amounts of saturated fats, which increase the risk of heart diseases. When consumed in large amounts, free sugar from any source including table sugar increases the risk of dental caries as well as obesity, and other chronic diseases. The sodium in salt is an essential nutrient but only in small amounts. In large amounts, it increases the risk of heart diseases.

However, these products are essentially used to season and cook food. They are not consumed by themselves. Their impact on the nutritional quality of diets depends on the amount used in freshly prepared dishes and meals. It is true that oils, fats, salt, and sugar tend to be quite easily accessible. They can be stored for a long time and are usually not expensive. This encourages their excessive use. Yet, if used with restraint and appropriately combined with natural or minimally processed foods, they enable the creation of varied, delicious, and nutritionally balanced freshly prepared dishes and meals.

Processed foods



Processed foods include canned foods preserved in salt or vinegar or by pickling, fruits preserved in sugar, meat that is salted, smoked or cured, fish canned in salt or oil, cheeses made from milk, salt and fermenting agents, and breads simply made of wheat flour, yeast, water and salt. In all such examples, the purpose of industrial processing is to increase the duration of natural or minimally processed foods and, frequently, to render more enjoyable.

Reasons to consume processed food only in small amounts, include the following. They retain the basic identity and most of the nutrients of the foods from which they are derived. But the added ingredients and the processing methods used in their manufacture compromise their nutritional composition.

The addition of salt and sugar, in quantities generally greater than used in culinary preparations, transforms the original food into a source of nutrients whose excessive consumption is associated with heart disease, obesity, and other chronic diseases. The loss of water in the their manufacture and the addition of sugar or oil transform foods with low or medium energy density, such as milk, fruits, fish, and wheat, into foods with high energy density, such as cheeses, sugared fruits, canned fish in oil, and breads. Diets that have high energy density increase the risk of obesity.

Therefore, the consumption of processed foods should be limited to small quantities, either as ingredients in culinary preparations, or as a side dish in meals based on natural or minimally processed foods. They should not displace freshly prepared meals. When processed foods are chosen, it is important to consult the labels on the foods to opt for those with a lower content of salt or sugar.

Ultra-processed foods



Ultra-processed foods include confectionery, drinks that are sweetened with sugar or artificial sweeteners, powders for juices, sausages and other products that are derived from meat and animal fat, pre-prepared frozen dishes, dried products such as cake mix, powdered soup, instant noodles, ready-seasonings, and an infinity of new products that arrive at the markets every year including packaged snacks, morning cereals, cereal bars, and 'energy' drinks. Breads and baked goods become ultra-processed foods when, in addition to wheat flour, yeast, water, and salt, their ingredients include substances such as hydrogenated vegetable fat, sugar, starch, whey, emulsifiers, and other additives.

The manufacturing of ultra-processed foods, generally done by large industries, involves several stages of processing techniques and many ingredients, including salt, sugar, oils and fats, and several substances for exclusive industrial use.

These include soy and milk proteins, meat extracts, substances obtained from the additional processing of oils, fats, carbohydrates, and proteins, and substances synthesised in laboratories from food substrates or other organic sources, like petroleum and coal. Many of these synthesised substances serve as food additives whose function is to extend the duration of the ultra-processed products or, more frequently, to give them hyper-attractive colour, flavour, aroma, and texture.

Most ultra-processed foods are consumed throughout the day. They therefore tend to limit the consumption of natural or minimally processed foods. There are many reasons to avoid ultra-processed foods. Some follow here. A longer list is contained in the *Guidelines*.

The main ingredients of ultra-processed foods make them fatty or sugary, or both. It is common that these products have a high content of sodium because of the addition of a lot salt. They tend to be low in dietary fibre, and in vitamins and minerals in the forms found in natural and minimally processed foods. Their unbalanced nutritional composition favours heart disease, diabetes, and common cancers, and contributes towards increasing the risk of nutritional deficiencies.

On average they are much more energy-dense than dishes and meals made from food together with culinary ingredients. Additional reasons why they promote obesity are that they are typically hyper-palatable, are designed to be consumed mindlessly, are packaged in gigantic sizes, and in the form of soft drinks are 'liquid calories'.

Ultra-processed foods also damage culture, social life, and the environment

Impact on culture

Brands, packages, labels, and the contents of ultra-processed foods tend to be identical throughout the world. Leading brands are promoted often using the same entertainers, models, music and slogans everywhere, including on television, the internet and social media. They are disseminated by means of intensive and aggressive advertising campaigns. All this pushes a sense especially to children and young people that the culture and identity of their own country, region, ethnicity and tradition including food culture and patterns, are boring. Young people especially are being induced by major manufacturers, in effect acting in concert, to have a false sense of belonging in a superior, modern, high cost and expense consumer culture.

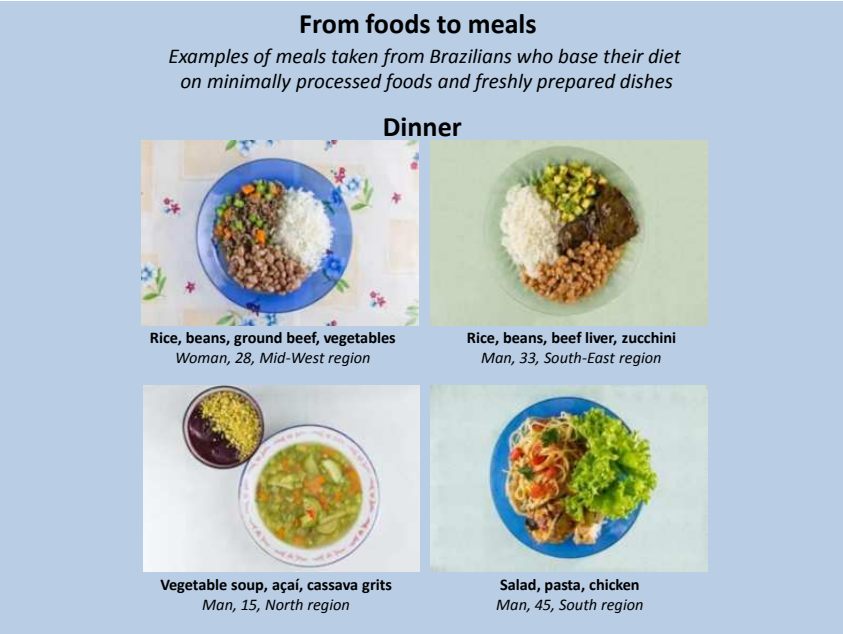
Impact on social life

Ultra-processed foods are formulated and packaged to be ready-to-consume. This makes meals and sharing of food at table unnecessary. Ultra-processed products can be consumed anytime, anywhere, often when being entertained or when working, walking in a street, driving, or talking on a phone. These are mostly isolated situations, which are disguised by advertisements suggesting that such products promote social interaction, which they do not.

Impact on environment

The need for cheap oils, sugar and other raw materials for ultra-processed foods creates monocultures and farms producing for export and not for local consumption. Intensive farming of raw materials is dependent on pesticides and intensive use of fertilisers and water. The manufacture and distribution of most ultra-processed foods involves long transport routes, and thus excess use of non-renewable energy and water, and emission of pollutants. This all results in environmental degradation and pollution, loss of biodiversity, and draining and loss of water, energy and other natural resources. Production and consumption also causes creation of vast amounts of waste and garbage, dumped in disgusting and dangerous landfill sites. Overall, ultra-processed foods are a serious threat to the sustained survival of the planet.

From foods to meals



The third chapter offers specific guidance for the Brazilian population on how to combine foods in the form of meals. This guidance is based on the dietary patterns of Brazilians who give priority to natural or minimally processed foods in their meals. The chapter includes actual examples of meals consumed by these Brazilians.

The team at the University of São Paulo divided the Brazilian population as identified in recent national dietary surveys into five quintiles. The diets of the 20 per cent who consumed most freshly prepared dishes and meals and least ready-to-consume products were examined. Above are four examples, of dinners actually eaten by a woman in our Mid-West region (rice, beans, meat, vegetables); a man in the South-East region (rice, beans, beef liver, eggplant); a man in the North region (vegetable soup, *açaí* and cassava grits); and a man in the South region (salad, pasta and chicken).

What the team found, is that the nutritional profile of this 20 per cent, corresponding to 40 million Brazilian people, is close to what is recommended in World Health Organization and other authoritative international nutrient-based goals. There is some room for improvement – traditional Brazilian cooking is rather salty, for example. But this finding was exciting and reassuring. The recommendations in the *Guia* are not based on abstract calculations which might not relate well to realities. One fifth of all Brazilians are now more or less 'getting it right' already, and are good examples in their families and communities.

The examples given in the chapter are of the three main meals of the day: breakfast, lunch, and dinner. Among the Brazilians who base their meals on natural or minimally processed foods, these three meals provide about 90% of the total calories consumed throughout the day.

The meals shown in this chapter are not in any sense 'set menus' or rigid recommendations (and of course there is no suggestion that that populations of other countries should eat the same food as Brazilians do!). Variations among the combinations presented are crucial. These variations substituting types of foods with similar nutritional composition and culinary use (such as replacing beans for lentils or chickpeas, potatoes for cassava or yam, and okra for eggplant or pumpkin) render the meal even healthier, because varieties within the same food group imply a greater diversity in the supply of nutrients. The variations among the foods of the same group are also pleasing to the senses: they create diversity of flavours, aromas, colours, and textures. They also allow for regional and personal preferences.

There is no emphasis on the amount of each food or the total calories in each meal. The nutritional needs of people, particularly with regard to calories, are very variable depending on age, sex, size (weight and height), and level of physical activity. Furthermore, there is considerable variability between people regarding how they distribute their foods through their daily meals. The control of body weight (and not the counting of calories) is a simple and efficient way to determine whether the amount of food being consumed is suitable.

Modes of eating

The fourth chapter of the *Guidelines* is all about how to eat. Three aspects are considered. These are the time and attention devoted to eating, the environment where it occurs, and the sharing of meals. Following the recommendations below will result in several benefits. These include improved digestion and use of foods, more efficient control of what and how much food is consumed, enhanced family and social life – and in particular, more pleasure in eating.

How to eat

Eating regularly and carefully

Always when possible, eat daily meals at similar times. Avoid 'snacking' between meals. Eat slowly, with full attention, and enjoy eating without engaging in another activity

Eating in appropriate environments

Always prefer to eat in clean, comfortable, and quiet places, and where there is no stimulus to consume unlimited amounts of food

Eating in company

Prefer eating with family, friends, or colleagues. At home, share in acquisition, preparation, cooking, and arrangements before and after eating

Understanding and overcoming obstacles

The fifth and final chapter of the Guidelines identifies six general obstacles to following its recommendation, and gives information, ideas and advice on how these obstacles can be overcome. It addresses people personally, and also as citizens. For the full list please consult the Guidelines.

Overcoming obstacles

Information

There is a lot of information on diet and health, but there are few reliable sources

Read, use, publicise, and discuss the findings and recommendations of these Guidelines with your family, friends and colleagues... Be an advocate.

Supply

Ultra-processed food products are on sale everywhere, promoted by advertisements and discounts on all media. By contrast, natural or minimally processed foods get little publicity, and some are not even available in locations close to people's homes.

Shop mindfully. Avoid places that sell or serve mainly or only ultra-processed products. In supermarkets take and use a shopping list. Support farmers' markets, municipal markets, specialist retailers, and other places that sell varieties of natural and minimally processed foods... Join organisations that press for healthy food production and sale.

Cost

Although the total cost of diets based on natural or minimally processed foods is still lower in Brazil than the cost of diets based on ultra-processed products, some natural and minimally processed foods are not cheap.

Be aware that many staple minimally processed foods are cheap. These can be bought in bulk. Prefer vegetables and fruits that are in season and are locally produced... Campaign for policies that support local food farmers and growers.

Culinary skills

Cooking and other culinary skills are no longer being shared between generations. This favours consumption of ultra-processed products.

Develop, practice, and share your culinary skills and value the art of preparing and cooking food. Press for the inclusion of cooking and other culinary skills as part of formal school curriculum. Engage with civil society associations committed to promotion of the Brazilian cultural heritage, gastronomy, and regional and local cuisines.

Time

The recommendations in these Guidelines are likely to take additional time.

Yes, they do**....**Work should be shared among the family... Appreciate that exchanging time taken for entertainment like watching television, for time together before and after meals and at table, brings deeper satisfaction and improves family life, especially for children.

Advertising

The advertising of ultra-processed products dominates commercial advertising of food; it often conveys incorrect or incomplete information about diet and health...

Explain to children and young people that the essential purpose of advertising is to increase product sale, and not to inform or educate people. Study the Brazilian legislation, which protects consumer rights, and denounce those who do not follow it.

Ten steps to healthy diets

Ten steps to healthy diets
for everybody, everywhere

1 Make natural or minimally foods the basis of your diet
2 Use oils, fats, salt, and sugar in small amounts when seasoning and cooking natural or minimally processed foods and to create culinary preparations
3 Limit consumption of processed foods
4 Avoid consumption of ultra-processed products
5 Eat regularly and carefully in appropriate environments and whenever possible in company
6 Shop in places that offer a variety of natural or minimally processed foods
7 Develop, exercise and share culinary skills
8 Plan your time to make food and eating important in your life
9 Out of home, prefer places that serve freshly made meals
10 Be wary of food advertising and marketing

Finally, here above are the *Ten Steps to a Healthy Diet*. These are being made into brochures, leaflets and posters to be used everywhere in Brazil. We believe that they encapsulate the strength and practicality of the *Guidelines,* in language everybody can understand, relate to, and act on. We also believe that the *Guidelines* as one part of general policies and programmes, will help to preserve, protect and enhance the health and well-being of the Brazilian people, from now on and in the future. We are proud of what we have achieved so far, with the support of very many experts and advisors throughout Brazil. The *Guidelines*, their principles, findings, conclusions and recommendations, are offered to colleagues and readers everywhere in the world, to adapt to suit their circumstances.

Status

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