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## OVERWEIGHT AND OBESITY IN BRAZILIAN ADULTS: EPIDEMIOLOGICAL STUDY BETWEEN 2006 AND 2020

Marcos Vinicius Santos Salvador\* Catia Suely Palmeira\*\* Tassia Teles Santana de Macedo\*\*\* Fernanda Carneiro Mussi\*\*\*\*

#### **ABSTRACT**

Objective: analyzing overweight and obesity among adults in Brazil from 2006 to 2020. Method: epidemiological, descriptive study. Data obtained in May 2022 from information published annually in the System of Surveillance of Risk and Protective Factors for Chronic Diseases. The variables included classification of body mass index, capitals, regions, age group, gender, and schooling, being analyzed by descriptive statistics. Results: in the period, there was an increase in overweight and obesity in all regions of Brazil. Overweight was higher inPorto Alegre-RS (53.5%) and lower in Palmas-TO (40.7%). Obesity was higher in Manaus-AM (19.3%) and lower in Palmas-TO (13.5%). Overweight predominated in men (53.6%) and obesity in women (16.7%). Overweight (61.3%) and obesity (22.3%) were prevalent in people aged 55 to 64. Regarding schooling, overweight (55.8%) and obesity (14.0%) were more frequent in people with 0 to 8 of schooling. Conclusion: overweight and obesity increased in the period in all capitals and Federal District. Varying according to gender, age group and of study. It is evident the need for articulated interventions of health managers and professionals, especially those at higher risk.

Keywords: Obesity. Weight Gain. Descriptive Epidemiology.

### INTRODUCTION

Excess body weight characterized overweight, and obesity has assumed alarming proportions worldwide due to uncontrolled urbanization, nutritional transition, easy access to highly palatable and hypercaloric foods and the increase in sedentary Projections for the year 2025 indicate worldwide growth in the number of overweight and obese adults, with about 700 million and three billion, respectively(1).

Excess weight is of multifactorial etiology and can be defined as the consumption of energy higher than expended, generating excess body fat<sup>(1)</sup>. It has a complex etiology, and its main causes are historical, ecological, political, social, cultural, genetic, metabolic, and psychic factors<sup>(2-3)</sup>. It occupies a prominent place in the profile of morbidity and mortality worldwide, since besides being a disease it is a risk factor for several others, especially cardiovascular. metabolic. respiratory,

musculoskeletal, diabetes mellitus and cancer<sup>(3-4)</sup>.

In the analysis of the Brazilian adult population, overweight is related to family history, hormonal diseases. psychological factors. consumption of industrialized foods, use of corticosteroid drugs and low level of education and physical activity<sup>(5)</sup>. The lack of awareness of the complexity of the etiology of overweight leads to some people attribute gluttony, laziness, selfindulgence, and lack of willpower of the obese individual as responsible for the disease<sup>(4)</sup>. In general, there is evidence that obesity negatively affects psychosocial aspects of the individual's life. Particularly, it can be harmful to mental health, as it is associated with stress, depressive symptoms, higher levels of anxiety, low self-esteem, discrimination, and social isolation<sup>(6)</sup>. In turn, the stigma associated with excess body weight is related to lower levels of

physical activity, consumption of unhealthy diets and increased sedentary behavior<sup>(7)</sup>.

The classification of an adult individual with

<sup>\*</sup>Graduating from the Bachelor of Nursing Course at the Bahiana School of Medicine and Public Health (EBMSP) Salvador, Bahia, Brazil. Email: marcosvinisalvador@gmail.com. ORCID: https://orcid.org/0000-0002-8126-5355

<sup>\*\*</sup>Nurse. PhD in Nursing. Professor of the Undergraduate Nursing Course at the EBMSP. Salvador Bahia Brazil. Email: catia\_palmeira@yahoo.com.br. ORCID: https://orcid.org/0000-0001-6328-8118

\*\*\* Nurse. PhD in Nursing. Professor of the Undergraduate Nursing Course at the EBMSP. Salvador Bahia Brazil. Email: tassiateles85@gmail.com. ORCID: https://orcid.org/0000-0003-2423-9844

Nurse. PhD in Nursing. Professor of the Undergraduate Nursing Course at the EBMSP. Salvador Bahia Brazil. Email femussi@uol.com.br. ORCID: https://orcid.org/0000-

overweight and obesity is made from the body mass index (BMI) obtained by dividing body mass (in kilograms) by height (in square meters), providing a value in kg/m². In the adult population, BMI values equal to or greater than 25 kg/m² and less than 30 kg/m² correspond to overweight, and the value equal to or greater than 30 kg/m² is the confirmation of obesity<sup>(4)</sup>.

Since 2006, the Surveillance System for Risk and Protective Factors for Chronic Diseases by Telephone Survey (Vigitel), of the Ministry of Health, has been consolidating and making available national data on various health indicators, data on overweight among adults in Brazil. Considering the relevance of the theme, we highlight the need for scientific production that analyzes evolutionarily the health status of the Brazilian population about overweight, consisting of the object of this investigation. It is believed that this research will gather relevant epidemiological information on overweight in Brazil, from 2006 to 2020, which may help health professionals, academics, public authorities, health managers and society in general to know the evolution of this disease and to direct public policies and multisectoral interventions for the prevention and control of the disease.

In this sense, this research aimed to analyze excess body weight and obesity among adults in Brazil from 2006 to 2020.

## **METHOD**

This epidemiological and descriptive study used data from annual epidemiological reports of the Surveillance System of Risk and Protective Factors for Chronic Diseases (Vigitel), which are derived from a cross-sectional, population-based research, conducted by the Department of Health and Environment Surveillance (DHES) to assess the health status of the Brazilian population.

The Vigitel research has evaluated annually and since 2006, through telephone interviews conducted by researchers linked to the DHES, the Brazilian adult population aged 18 or older, living in the capitals of the 26 Brazilian states and the Federal District<sup>(8)</sup>.

Initially by probabilistic sampling, a draw is made of at least 5,000 telephone lines per city from the electronic register of fixed residential lines of telephone companies, and then the lines drawn in each city are drawn again and divided into replicas

of 200 lines, each replica reproducing the same proportion of lines per ZIP code of the original register. From 2019, 197,600 telephone lines were initially drawn (on average 7,200 per city, distributed in 36 replicas of 200 lines each). In parallel is held the draw of one of the adults ( $\geq$  18) resident in the house drawn. The following lines are not eligible for the system: they correspond to companies, no longer exist or are out of service; in addition to lines that do not respond to six attempts of calls made on different days and times, including Saturdays and Sundays and night periods<sup>(8)</sup>.

The number of complete interviews conducted each year by Vigitel ranged from 2006 to 2020, from 45,448 to 52,443, totaling a sample of 757,386 thousand people in the period analyzed, 288,279 men and 469,107 women.

The questionnaire used by Vigitel was composed of questions related to demographic and socioeconomic characteristics (age, gender, marital status, race/color and level of education); eating patterns and physical activity; cigarette and alcohol consumption; self-reported weight and height; self-assessment of health status; reference to previous medical diagnosis of hypertension and diabetes; use of medications; conducting tests for early detection of cancer in women, exponential evolution of overweight and obesity, among others<sup>(8)</sup>.

Regarding overweight and obesity, Vigitel presents the values of body mass index (BMI) in percentages, calculated from weight in kilograms divided by the square of height in meters (kg/m²), both authors referred to by the interviewees, according to the questions: "Does the lord know his weight (even if it is approximate value)?" "The lord knows his height?". For this study, the individual with BMI  $\geq$  25 kg/m² was considered as overweight and the individual with BMI  $\geq$  30 kg/m² as obesity.

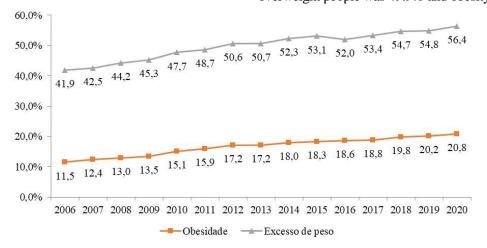
The variables and respective categorizations considered in this research were some of those existing in the Vigitel survey, namely: capitals, Federal District and macro-regions of Brazil (north, northeast, central west, southeast and south), year of the survey (2006 to 2020), gender (male and female), age group in old (18-24, 25-34, 35-44, 45-54, 55-64 and 65 and more) and schooling (0 to 8, 9 to 11, 12 and more of study).

Data referring to these variables were collected in the Department of Informatics of the Unified Health System (DATASUS) in March 2022 and processed in specific spreadsheets prepared in the Microsoft Excel program. The results related to the included in the study were grouped by quinquenniums (2006-2010; 2011-2015; 2016-2020) for better visibility in the tables. The analysis was performed using descriptive statistics with relative frequencies, means and calculation of the percentage variation of the data set.

Considering that this study used secondary, anonymous, and public domain data, it dispensed with submission to the Research Ethics Committee, as recommended in the rules of Resolution N 466, of December 2012, of the National Health Council of Brazil.

### **RESULTS**

Figure 1 describes the annual evolution of the percentage of adults (≥ 18) with overweight and obesity in the capitals of the 26 Brazilian states and the Federal District between 2006 and 2020. There was an increase in the prevalence of overweight, from 41.9% in the first year analyzed (2006) to 56.4% in the last year (2020), representing a percentage change of 34.6%. As for obesity, there was also an increase in percentage, being 11.5% in 2006 and reaching 20.8% in 2020, with a percentage change of 80.9%. The average percentage of overweight people was 49.9% and obesity 16.7%.



**Figure 1.** Annual evolution of the percentage of adults (≥ 18) with overweight and obesity in the capitals of the 26 Brazilian states and the Federal District, 2006 to 2020. Brazil, 2022 **Source:** Elaborated by the authors from Vigitel data. Brazil, 2022.

In the analysis by capitals and old, the percentage of overweight people was higher in Porto Alegre–RS (53.5%) and lower in Palmas–TO (40.7%). There was an increase in these indicators in practically all capitals, as an exception in Aracaju–SE between 2011 and 2015, and Palmas–TO between 2016 and 2020. As for obesity, the highest percentage (19.3%) in Manaus–AM and the lowest (13.5%). In Palmas–TO. It was found that there was

an increase in the percentage of obesity in all Brazilian capitals over the analyzed (Table 1).

About the percentage variation of overweight in the period, Maceió (AL) presented greater variation (33.5%) and Palmas the lowest (8.5%). As for obesity, the greatest variation was with the Federal District (DF) (75.2%) and the lowest with Fortaleza–CE (36.7%).

**Table 1.** Percentage of adults ( $\geq$  18) with overweight and obesity, according to the capitals of the Brazilian states and the Federal District from 2006 to 2020. Brazil, 2022.

Capitals	<b>Overweight</b> BMI*≥25 kg/m²				Obesity BMI*≥30 kg/m²				
	Período total (%)	2006–2010	2011–2015	2016-2020 (%)	Período total (%)	2006-2010 (%)	2011-2015	2015-2020 (%)	
Aracaju	46,9	42,7	41,3	56,6	17,0	13,9	17,0	20,1	
Fortaleza	52,3	46,5	53,8	56,6	18,1	15,0	18,9	20,5	
João Pessoa	50,1	44,7	51,5	54,2	17,2	13,8	17,5	20,4	

Maceió	50,6	42,4	52,9	56,6	17,5	13,0	19,3	20,3
Natal	51,3	45,0	52,8	56,0	17,6	13,6	18,7	20,5
Recife	51,4	45,6	51,8	56,9	17,6	13,7	17,6	21,6
Salvador	47,8	40,9	48,8	53,7	15,6	12,1	15,7	19,0
São Luís	43,7	38,0	44,0	49,2	13,6	10,5	13,6	16,6
Teresina	45,9	39,0	47,5	51,2	14,7	11,7	15,0	17,5
Belém	49,8	43,5	51,0	54,9	16,8	13,2	17,1	20,0
Boa Vista	50,3	45,0	51,0	54,8	16,9	13,6	17,3	19,8
Macapá	50,3	44,7	51,6	54,7	18,5	15,0	19,2	21,4
Manaus	52,7	44,9	54,9	58,3	19,3	14,4	20,5	23,1
Palmas	40,7	36,6	45,9	39,7	13,5	9,8	15,0	15,8
Porto Velho	51,8	46,0	52,9	56,5	18,4	15,1	18,6	21,5
Rio Branco	53,1	48,1	53,1	58,1	18,8	14,6	19,7	22,0
Campo Grande	53,0	47,6	54,3	58,1	19,0	14,8	20,2	21,9
Cuiabá	53,4	48,0	53,5	58,6	19,1	14,9	19,5	22,8
Distrito Federal	46,6	39,6	48,6	51,5	14,2	10,1	14,9	17,7
Goiânia	47,1	42,5	47,9	50,9	14,1	10,9	14,4	17,0
Curitiba	50,6	46,2	52,5	53,1	17,4	14,4	17,2	20,7
Florianópolis	48,1	43,5	49,4	51,4	14,6	12,0	15,2	16,5
Porto Alegre	53,5	47,8	55,1	57,5	18,0	14,3	19,5	20,2
Belo Horizonte	47,0	41,1	47,9	52,0	14,6	11,1	15,4	17,4
Rio de Janeiro	53,0	48,4	53,0	57,6	18,5	14,7	18,9	21,8
São Paulo	51,5	46,4	51,7	56,3	17,0	13,2	17,8	20,0
Vitória	47,9	42,6	48,9	52,1	15,1	12,3	15,5	17,5

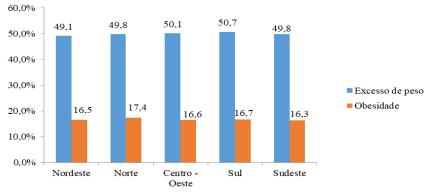
<sup>\*</sup> Body mass index, † Value referring to the arithmetic average of all analyzed.

**Source:** Prepared by the authors based on data from Vigitel. Brazil, 2022

Comparing overweight between the Brazilian regions, it was found that the South Region had the highest percentage (50.7%) and the Northeast the lowest (49.1%). However, obesity was more frequent in the North (17.4%) and less in the

Southeast (16.3%). It is worth mentioning that the differences between regions did not exceed 1.7% regarding the percentage of overweight and obesity (Figure 2).

Figure 2. Distribution of the percentage of adults ( $\geq$  18) with overweight and obesity in the period from 2006 to 2020 according to the Brazilian regions. Brazil, 2022



Source: Prepared by the authors based on data from Vigitel. Brazil, 2022

Table 2 shows the percentage of adults (≥ 18) with overweight and obesity, according to Brazilian regions, gender, age group and level of education. There was a higher frequency of overweight in men (53.6%) than in women (45.9%) and an increase in the percentage of overweight, between 2006 and 2020, in all Brazilian regions, for both genders. Regarding obesity, the frequency was higher in

women (16.7%) than in men (16.5%), with an increase in the percentage in both genders in all regions of Brazil during the respective.

Regarding the age range stipulated by the description of Vigitel, it was noted that the percentage of both overweight (61.3%) and obesity (22.3%) was higher in the range of 55 to 64 and lower for overweight (28.8%) and obesity (7.1%) in

the range between 18 and 24. Regarding schooling, the highest percentage of overweight (55.8%) and

obesity (14.0%) was identified for those who had less study time (0 to 8) (Table 2).

**Tabela 2.** Percentual de adultos (≥ 18 anos) com excesso de peso e obesidade no período de 2006 a 2020 segundo as regiões brasileiras, o sexo, a faixa etária em anos e a escolaridade em anos de estudo. Brasil, 2022.

Capitals			weight 25 kg/m²		Obesity BMI* ≥ 30 kg/m²				
	Período total (%)	2006–2010 (%)	2011–2015 (%)	2016-2020 (%)	Período total (%)	2006-2010 (%)	2011-2015 (%)	2015-2020 (%)	
Regiões									
Northeast	49,1	42,7	50,3	54,4	16,5	13,0	17,0	19,6	
North	49,8	44,1	51,4	53,8	17,4	13,6	18,2	20,5	
Midwest	50,1	44,4	51,1	54,7	16,6	12,7	17,2	19,8	
South	50,7	45,8	52,3	53,9	16,6	13,5	17,3	19,1	
Southeast	49,8	44,6	50,3	54,4	16,3	12,8	16,9	19,2	
Sex									
Masculine	53,6	49,1	53,4	58,2	16,5	13,1	17,1	19,4	
Feminine	45,9	39,4	47,1	51,2	16,7	13,5	17,4	19,2	
Age range									
18–24	28,8	25,4	30,1	31,0	7,1	5,3	7,4	8,7	
25-34	47,1	41,5	47,6	52,3	15,2	11,9	15,6	18,1	
35-44	56,6	50,6	57,3	61,8	19,6	14,8	20,9	23,1	
45–54	60,3	56,7	60,8	63,4	21,6	18,5	22,0	24,4	
55-64	61,3	59,1	61,8	62,9	22,3	20,0	22,8	24,1	
65 and more	57	54,2	57,1	59,7	18,8	16,6	19,2	20,6	
Education (in of study)									
0 - 8	55,8	48,8	57,6	60,9	20,4	15,4	21,6	24,2	
9 - 11	47,4	39,8	48,3	54,1	15,2	10,8	15,7	19,2	
12 e mais	47,2	43,8	46,6	51,3	14,0	11,4	13,9	16,6	

\*Body mass index; †Value referring to the arithmetic average of all analyzed.

Source: Prepared by the authors. Brazil, 2022.

## **DISCUSSION**

From the systematic survey of data published by Vigitel it was possible to analyze overweight and obesity in the country and bring an overview of these diseases in Brazilian capitals in the period from 2006 to 2020, considering the distribution by Brazilian regions, age group and educational level of the affected population. The results showed a high percentage of people with overweight and obesity throughout the national territory, as well as an increase in percentages over the. The 34.6% increase in the percentage of overweight and 80.9% of obesity indicate the difficulty of controlling this condition in the country.

Although weight accumulation has been occurring globally<sup>(9)</sup>, in the last five there has been a modest or practically stable growth of overweight and obesity in countries such as Canada, England, Italy, South Korea, Spain and the United States. On the other hand, Australia, France, Switzerland, and Mexico had growth of 2% to 3%, with no indication

of the reduction or containment of this epidemic in these countries<sup>(10)</sup>.

The increasing accumulation of weight in Brazil can be explained by the high prevalence of people who do not meet the recommendation of active or very active level of physical activity, the increase of average daily time in the sitting, lying, or reclining position using computers, watching television and other screen-based devices(11) and the worsening in food quality<sup>(12)</sup>. Although the diet of the Brazilian people remains characterized by the consumption of traditional foods such as rice and beans, the frequency of ingestion of ultra-processed foods such as biscuits, sandwiches and soft drinks is high(12-13). There is a reduction in the consumption of rice, breads, processed meats and soft drinks in the higher income group, and a less marked reduction in the consumption of these foods in the low-income population(12).

Regarding the capitals, the highest percentage of overweight was identified in Porto Alegre–RS (53.5%) and the lowest in Palmas–TO (40.7%).

Obesity, the highest frequency fell in Manaus–AM (19.3%) and the lowest in Palmas–TO (13.5%). What is noteworthy is that there was an increase in excess weight in almost all capitals and increased obesity in all capitals in the period analyzed, showing the growing and worrying expression of this public health problem in the country. All macro-regions of the study showed a percentage increase over the

15. Regarding the comparison by region, although there are no major differences in the percentages of overweight and obesity between them, it is known that Brazil is a country of great socioeconomic and cultural diversity, which may interfere with the patterns of access and consumption of healthy foods and regular physical activity, hindering or facilitating weight control for some regions and capitals<sup>(13)</sup>.

The literature shows that, in addition to the physiological characteristics of everyone that predispose to weight gain and body fat quickly, other factors such as the geography of the place of residence in different regions of the country, their culinary characteristics, the social conditions of life and the political and economic factors of the region are facilitators for weight gain<sup>(14)</sup>.

Although the behaviors related to higher weight are evaluated individually, they are influenced by various social determinants, such as environmental, cultural, psychological, and social factors, as changes in the agrarian system and the growth of industry that promote changes in food patterns. The built environment, including food environments and neighborhood structure, has been seen as an important determinant of health, including food consumption and activity<sup>(15)</sup>.

The data found on the rates of overweight and obesity call attention to the need to implement new control measures that are more effective. In this sense, the Ministry of Health elaborated and published guidelines by which priority actions were proposed, ranging from the identification of individuals with overweight and obesity from the classification of their nutritional status to the guarantee of the offer of support, diagnosis and therapeutic suitable for the treatment of each user<sup>(16)</sup>.

The percentage of overweight and obesity increased throughout the period for both males and females. Higher percentages of overweight in men compared to women are in line with the literature<sup>(17)</sup>. Regarding obesity, the relative frequencies were practically equal between men and women, being higher in the female population. The perception of

not having enough time available for personal care and leisure due to household tasks and family demands is an explanation for women developing overweight<sup>(18)</sup>.

This study identified the prevalence of overweight and obesity in adults aged 55 to 64. Study findings on the prevalence of overweight and obesity performed by the Brazilian Birth Cohort Consortium in three Brazilian cities, Ribeirão Preto–SP, Pelotas–RS, and São Luís– MA, Brazil showed that the increase in these prevalences also occurred with advancing age<sup>(17)</sup>. The aging process is accompanied by a reduction in levels of muscle mass, bone, and strength, with concomitant increase in fat mass of the whole body, especially visceral fat mass <sup>(19)</sup>.

The data analyzed also revealed that overweight and obesity were more frequent in people with less study time. These findings are, in the majority, aligned with results observed in national and international studies<sup>(17,20)</sup>. The relationship of schooling (proxy of socioeconomic status) with overweight can be explained by the possibility that the level of formal education established since the beginning of adulthood of a person exerts interference throughout his life, among them access to healthier foods, the opportunity for physical activity in leisure time, access and understanding of information on preventive measures. There is also an inverse association between schooling and risk of obesity, especially in females during aging<sup>(17)</sup>.

One point to be emphasized is that since education, social class and income are generally positively associated factors, it is possible to assume that the consumption of fruits and salads is lower among lower income individuals, which may contribute to increased overweight and obesity. Thus, the highest percentage of these diseases in the poorest adults may be related to food consumption. According to the Brazilian Family Budget Survey (FBS) from 2008 to 2009, the Brazilian has consumed high-energy foods with low amount of nutrients, setting a dietary risk standard for overweight and other chronic non-communicable diseases<sup>(13)</sup>.

Such considerations indicate that the socioeconomic situation of the country may be responsible for the high increase in the number of overweight people in some strata of society, considering that weight accumulation is linked to the financial conditions of each individual<sup>(5,20-21)</sup>. It is important to emphasize that obesity should be

understood in a context of sociocultural, physical, and economic unhealthy environments that impact on the main causal factors, physical activity, and food intake. Still about assistance to people with obesity, it is essential to form a bond and relationship with the health team, with welcoming, dialogue and interest on the part of the professional, favorable aspects to adherence to therapy<sup>(22)</sup>.

One point to be highlighted is the importance of weight control, considering that overweight is a predisposing factor for a variety of comorbidities, including *diabetes mellitus*, dyslipidemia, hypertension, cardiovascular disease, obstructive sleep apnea, chronic obstructive pulmonary diseases, and cancer, as well as for morbidity and mortality from chronic diseases<sup>(3,19)</sup>.

Given the findings, it should be thought that the development and execution of projects for health promotion and weight control should focus on the entire population and special treatment for the most vulnerable people, such as those with lower education and more. These projects should be implemented through public policies and health services in specific areas, such as schools, workplaces, as well as in leisure areas, offering opportunities for the entire population of the country.

Although ministerial policies have sought to address the problem of overweight, they have not been effective in reducing its prevalence, mainly because the approaches are still particularized and materialize in the individual and privilege biomedical interventions focused on the treatment of an already installed disease<sup>(23)</sup>. It is also noteworthy that adherence to individualized treatment is low, mostly because individuals continue to be subjected to the same pressures of an obesogenic environment<sup>(23-24)</sup>.

In Brazil, it is at the level of primary health care, essentially in basic health units, that the potential lies to enable actions to prevent and control excess weight. Therefore, they are the places of initial and direct contact with individuals and their families. allowing to obtain necessary information from their entire socioeconomic. cultural. environmental. clinical. and behavioral context implementation of actions of prevention and control of weight accumulation<sup>(16)</sup>. Health professionals, and especially nurses who work in primary health care. need to discuss with users and their families about the importance of adherence to a healthy eating pattern and the practice of physical activity in free time,

considering its limits and possibilities and perspectives for self-care.

Another fundamental aspect is the reduction of prejudices and judgments by health professionals, recalling that people with obesity may be psychologically weakened due to their health condition, and therefore in need of comprehension and integral and humanized care<sup>(25-26)</sup>.

As for the limitations in this study, it is worth mentioning the use of secondary data and the fact that they were collected by the original surveys, in which information on weight and height for BMI evaluation were self-reported. However, it is important to consider that the data analyzed have relevance, because they allow to know the panorama of overweight and obesity in a representative sample of the Brazilian population, serving as a subsidy for the direction of health promotion programs, prevention, and control of these diseases.

### **CONCLUSION**

The prevalence of overweight and obesity, in addition to having increased from 2006 to 2020, varied with gender, age group and of study. There was an increase in the percentage of the Brazilian adult population with overweight and obesity in all 26 capitals of Brazil and the Federal District. The cities with the highest percentage were Porto Alegre–RS, Cuiabá–MT, Rio Branco–AC, Campo Grande–MS and Rio de Janeiro–RJ, Manaus–AM, and Fortaleza–CE. Among the regions with an increase in the percentage of overweight and obesity, the South Region stood out, followed, in order, by the Midwest, Southeast, North and Northeast regions of Brazil.

Overweight was more frequent in the male population, while the percentage of obesity was similar in both genders. The age group of 55 to 64 and people with fewer of schooling had a higher frequency for both overweight and obesity.

The study highlights the need for public policies and articulated interventions of health professionals, government entities and social sectors aimed especially at high-risk groups, at all levels of health care and especially in primary health care. To this end, it is essential to qualify the professionals and managers of the SUS to carry out individual and collective actions to promote comprehensive health care, prevention, and control of overweight.

## EXCESSO DE PESO E OBESIDADE EM BRASILEIROS ADULTOS: ESTUDO EPIDEMIOLÓGICO ENTRE 2006 E 2020

### **ABSTRACT**

**Objetivo:** analisar o excesso de peso corporal e a obesidade entre adultos no Brasil no período de 2006 a 2020. **Método:** estudo epidemiológico, descritivo. Os dados obtidos em maio de 2022 a partir das informações publicadas anualmente no Sistema de Vigilância de Fatores de Risco e Proteção para Doenças Crônicas. As variáveis incluíram classificação do índice de massa corporal, capitais, regiões, faixa etária, sexo e escolaridade, sendo analisadas pela estatística descritiva. **Resultados:** no período, houve aumento de excesso de peso e obesidade em todas as regiões do Brasil. O excesso de peso foi maior em Porto Alegre–RS (53,5%) e menor em Palmas–TO (40,7%). A obesidade foi maior em Manaus–AM (19,3%) e menor em Palmas–TO (13,5%). O sobre peso predominou em homens (53,6%) e a obesidade, em mulheres (16,7%). O excesso de peso (61,3%) e a obesidade (22,3%) foram prevalentesem pessoas de55 a64 anos. Quanto à escolaridade, o excesso de peso (55,8%) ea obesidade (14,0%) apresentaram maior frequência em pessoas com 0 a 8 anos de estudo. **Conclusão:** o excesso de peso e a obesidade aumentaram no período em todas as capitais e Distrito Federal. Variando de acordo com sexo, faixa etária e anos de estudo. Evidencia-se a necessidade de intervenções articuladas de gestores e profissionais de saúde, especialmente aos grupos de maior risco.

Palavras-chave: Obesidade. Aumento de Peso. Epidemiologia Descritiva.

# SOBREPESO Y OBESIDAD EN BRASILEÑOS ADULTOS: ESTUDIO EPIDEMIOLÓGICO ENTRE 2006 Y 2020

### **RESUMEN**

**Objetivo**: analizar el exceso de peso corporal y la obesidad entre adultos en Brasil en el período de 2006 a 2020. **Método**: estudio epidemiológico, descriptivo. Los datos obtenidos en mayo de 2022 a partir de las informaciones publicadas anualmente en el Sistema de Vigilancia de Factores de Riesgo y Protección para Enfermedades Crónicas. Las variables incluyeron clasificación del índice de masa corporal, capitales, regiones, franja etaria, sexo y escolaridad, siendo analizadas por la estadística descriptiva. **Resultados**: en el período, hubo aumento de exceso de peso y obesidad en todas las regiones de Brasil. El exceso de peso fue mayor en Porto Alegre-RS (53,5%) y menor en Palmas-TO (40,7%). La obesidad fue mayor en Manaus-AM (19,3%) y menor en Palmas-TO (13,5%). El sobrepeso predominó en hombres (53,6%) y la obesidad, en mujeres (16,7%). El exceso de peso (61,3%) y la obesidad (22,3%) fueron prevalentes en personas de 55 a 64 años. En cuanto a la escolaridad, el exceso de peso (55,8%) y la obesidad (14,0%) presentaron mayor frecuencia en personas con 0 a 8 años de estudio. **Conclusión**: el exceso de peso y la obesidad aumentaron en el período en todas las capitales y Distrito Federal, variando según sexo, franja de edad y años de estudio. Se evidencia la necesidad de intervenciones articuladas de gestores y profesionales de salud, especialmente a los grupos de mayor riesgo.

Palabras clave: Obesidad. Aumento de Peso. Epidemiología Descriptiva.

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**Corresponding author:** Marcos Vinicius Santos Salvador. Rua Erotildes, 49, Pernambués, Salvador, BA. CEP: 41130-130. E-mail: marcosvinisalvador@gmail.com

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