# 107 - BMI ANALYSIS OF OLDER MEMBERS OF A GROUP OF GYMNASTICS

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## INTRODUCTION

According to the Statute of the Elderly: Law No. 10.741, of October 1, 2003, meant for elderly person or the elderly, individuals with over 60 years of age (BRAZIL, 2003).In 2025 Brazil will be one of the countries oldest in the world, thanks to the geriatric trend that is 15.6 times greater than the population of young people and the country with a population 13% of seniors (IBGE, 2000); and Porto Alegre presenting the second largest elderly population in Brazil, with 11.8%, second only to Rio de Janeiro (IBGE, 2002). The elderly already represent a large group of global significance, since along with the increase in life expectancy, there was also an increased population coming of new generations (MEZZAROBA; PRATI, 2010). For Meirelles (1997), aging is a dynamic and progressive where there is both morphological and functional, biochemical and psychological process modifications that determine the progressive loss of adaptability of the individual to the environment, resulting in greater vulnerability and greater incidence of pathological processes culminating lead them to death.

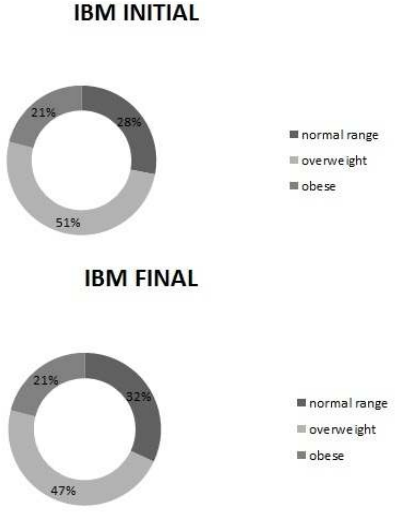
Matsudo and Matsudo (2000) refer to as the main health benefits of the elderly arising from the practice of physical activity in both anthropometric features as the psychological dimension, but also in the reduction of drug consumption. According to data from the US population, men reach their maximum BMI value between 45 and 49 years, presenting then a slight decline. On the other hand, women only reach their peak between 60 and 70 years, which means they continue to increase their weight in relation to height, for 20 years, after the men had stabilized its value. (MATSUDO & MATSUDO; Neto, 2000) One can say that BMI has two major theoretical goals: promoting easily interpretable and comparable estimates of body weight by height and promote standardized estimate of body fat and body composition. (CERVI; Franceshini; Priore, 2005) Based on this information the study seeks to answer the question: "What is the BMI of Elderly Participants in a Group Exercise?".

## METHODOLOGY

This study aimed to evaluate the BMI of the elderly participants of a group of fitness of a particular institution of Porto Alegre. Exercise sessions were held 2x (twice) a week lasting one (01) hours during one (01) years. The methodological design characterized by an almost experimental methodology, the type of before and after the study with only one group. Survey participants were in agreement with the resolution CNS 196/96 The sample consisted of 47 elders over 60 years. To determine the body mass index (BMI), the results of anthropometric variables, obtained by dividing body weight by high stature squared (kg / m²) (WHO, 1995) will be used. For the measurement of body weight a scale of Caumaq brand, manual calibration, accurate to 100 g maximum capacity of 150 kg will be used. The height will be measured by the same scale stadiometer.

## DISCUSSION OF RESULTS

The results show that the Body Mass Index (BMI) Initial, ie before starting the program, this study found that 28% of students were within the normal range, however, the vast majority, 72%, had some kind of abnormality such as overweight (51%) and obese (21%). Regarding the comparative results 2013 Initial and Final 2013 shows that after 5 months of exercise performed 2x per week, BMI scores improved. It was observed that malnutrition continues with 0%, the normal achieved an improvement of 28% to 32%, overweight had decreased from 51% to 47% and obesity continued with the same percentage of 21%. According to studies LIpschi (2011) observed that 16% are underweight, 52.7% and 31.3% have Eutrophia are at the level of overweight / obesity I and II. For Cabrera; Wajngarten; Gebara and Diament (2005), BMI was also categorized by the classification of the World Health Organization: underweight (BMI <18.5 kg / m2), normal weight (BMI ≥ 18.5 and <25kg / m2), overweight (BMI ≥ 25kg / m2 and <30 kg / m2) and obesity (BMI ≥ 30 kg / m2)




## CONCLUSION

With these results it is possible to realize that fitness contributes to the improvement and maintenance of the BMI scores of its practitioners. Including promoting an increase in quality of life, due to much of the epidemiological evidence sustain positive effects of an active lifestyle and / or individuals engaging in physical activity and exercise programs to prevent and

minimize the deleterious effects of aging (AMERICAN COLLEGE OF SPORTS MEDICINE, 1998, cited in Matsudo, 2002) with regard to physical activity and how it affects the biological, psychological and social log-factors is virtually impossible to distinguish between the decline in functional capacity resulting from inactivity and decline resulting from the aging process itself (DO, MARINE, 2004) making the physiological declines that occur due to aging are less noticeable.

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**BMI ANALYSIS OF OLDER MEMBERS OF A GROUP OF GYMNASTICS**

**ABSTRACT**

In 2025 Brazil will be one of the countries oldest in the world, with a population 13% of seniors. Recalling that, in accordance with the Statute of the Elderly: Law No. 10.741, of October 1, 2003, meant for elderly person or the elderly, individuals with over 60 years of age. Aging is a dynamic and progressive process that make the progressive loss of adaptability of the individual to the environment. Due to much of the epidemiologic evidence supporting a positive effect of an active lifestyle and / or individuals engaging in physical activity and exercise in preventing and minimizing the deleterious effects of aging programs. This study aimed to evaluate the BMI of the elderly participants of a group of fitness of a particular institution of Porto Alegre. Exercise sessions were held 2x (twice) a week lasting one (01) hours during one (01) years. The methodological design characterized by an almost experimental methodology, the type of before and after the study with only one group. Survey participants were in accordance with Resolution 196/96 of the CNS. The sample consisted of 47 elders over 60 years. The results show that the Body Mass Index (BMI) Initial, ie before starting the program (2012), this study found that 0% of the students were within the normal range, however, the vast majority, 72 % presented some kind of abnormality such as overweight (51%) and obese (21%). Regarding the comparative results 2013 Initial and Final 2013 shows that after 5 months of exercise performed 2x per week, BMI scores improved. It was observed that malnutrition continues with 0%, the normal achieved an improvement of 28% to 32%, overweight had decreased from 51% to 47% and obesity continued with the same percentage of 21%.

**KEYWORDS:** BMI, Fitness, Seniors.

**ANALYSE DES PERSONNES ÂGÉES IMC PRATICIENS DE GYMNASTIQUE**

**RÉSUMÉ**

En 2025 le Brésil sera l'un des pays les plus anciens dans le monde, avec une population de 13% des personnes âgées. Rappelant que, conformément au Statut de la personne âgée: la loi n ° 10,741, 1 Octobre 2003, destiné à la personne âgée ou les personnes âgées, les personnes ayant plus de 60 ans. Le vieillissement est un processus dynamique et progressif qui font de la perte progressive de la capacité d'adaptation de l'individu à l'environnement. Dans ce procédé, le rôle de l'activité physique a modifié la composition et des changements de poids; sujets qui sont classés comme les plus actifs ont un poids corporel inférieur, indice de masse corporelle, le pourcentage de graisse corporelle que les personnes sédentaires du même âge. Cette étude visait à évaluer l'IMC des participants âgés d'un groupe de remise en forme d'un établissement particulier de Porto Alegre. Les séances d'exercice ont eu lieu 2x (deux fois) par semaine durant un (01) heures pendant un (01) ans. La conception méthodologique caractérisé par une méthodologie expérimentale près, le type d'avant et après l'étude avec un seul groupe. Les participants au sondage ont été conformément à la Résolution 196/96 du SNC. L'échantillon était composé de 47 anciens de plus de 60 ans. Les résultats montrent que l'indice de masse corporelle (IMC) initial, soit avant le début du programme (2012), cette étude a révélé que 0% des élèves étaient dans la fourchette normale, cependant, la grande majorité, 72 % présentaient une sorte d'anomalie, comme étant en surpoids (51%) et d'obésité (21%). En ce qui concerne les résultats comparatifs 2013 initial et final 2013 montre que, après 5 mois de l'exercice effectué 2 fois par semaine, un IMC améliorées. Il a été observé que la malnutrition continue à 0%, la normale atteint une amélioration de 28% à 32%, en surpoids avaient diminué de 51% à 47% et l'obésité continue avec le même pourcentage de 21%.

**MOTS-CLÉS:** IMC, sportifs, personnes âgées.

**ANÁLISIS DE PROFESIONALES DE MAYORES DE GIMNASIA BMI**
**RESUMEN**

En 2025 Brasil será uno de los países más antiguos del mundo, con una población 13% de las personas mayores. Recordando que, de conformidad con el Estatuto de las Personas de Edad: Ley N ° 10.741, de 1 de octubre de 2003, destinado a personas mayores o los ancianos, las personas con más de 60 años de edad. En este proceso, el papel de la actividad física ha modificado la composición y los cambios de peso; sujetos que se clasifican como más activos tienen menor peso corporal, índice de masa corporal, porcentaje de grasa corporal que las personas sedentarias de la misma edad. Este estudio tuvo como objetivo evaluar el índice de masa corporal de los participantes de edad avanzada de un grupo de la aptitud de una institución particular de Porto Alegre. Las sesiones de ejercicio se llevaron a cabo 2 veces (dos veces) a la semana uno (01) horas de duración durante uno (01) años. El diseño metodológico caracterizado por una metodología casi experimental, el tipo de antes y después del estudio con un único grupo. Los encuestados estaban de acuerdo con la Resolución 196/96 de la CNS. La muestra estuvo constituida por 47 ancianos mayores de 60 años. Los resultados muestran que el Índice de Masa Corporal (IMC) inicial, es decir, antes de iniciar el programa (2012), este estudio encontró que 0% de las estudiantes estaban dentro del rango normal, sin embargo, la gran mayoría, 72 % presentó algún tipo de anomalía como sobrepeso (51%) y la obesidad (21%). En cuanto a los resultados comparativos 2013 Inicial y Final 2013 muestra que después de 5 meses de ejercicio realizaron 2 veces por semana, las puntuaciones mejoraron IMC. Se observó que la desnutrición continúa con 0%, lo normal logra una mejora de 28% a 32%, exceso de peso había disminuido de 51% a 47% y la obesidad continuado con el mismo porcentaje de 21%.

**PALABRAS CLAVES:** IMC, Fitness, Gente de tercera edad.

**ANALISE DO IMC DOS IDOSOS PARTICIPANTES DE UM GRUPO DE GINÁSTICA**
**RESUMO**

Em 2025 o Brasil será um dos países com mais idosos do mundo, tendo o país uma população com 13% de idosos. Lembrando que, de acordo com o Estatuto do Idoso: Lei n° 10.741, de 1º de outubro de 2003, entende por idoso ou pessoa da terceira idade, indivíduos com mais de 60 anos de idade. O envelhecimento é um processo dinâmico e progressivo que fazem a progressiva perda da capacidade de adaptação do indivíduo ao meio-ambiente. Nesse processo, a atividade física tem papel de modificação das alterações de peso e composição. Este estudo teve como objetivo avaliar o IMC dos Idosos participantes de um grupo de ginástica de uma instituição particular de Porto Alegre. As sessões de Ginástica foram realizadas 2x (duas vezes) por semana com duração de 01 (uma) hora, durante 01 (um) ano. O delineamento metodológico caracterizou-se por uma metodologia quase experimental, do tipo de estudo antes e depois com apenas um grupo. Os participantes da pesquisa estiveram de acordo com a resolução 196/96 do CNS. A amostra foi composta por 47 idosos acima de 60 anos. Os resultados mostram que o Índice de Massa Corporal (IMC) Inicial, ou seja, antes de iniciar o programa, este estudo observou-se que 28% dos alunos encontravam-se dentro da normalidade, porém, a grande maioria, 72%, apresentou algum tipo de anormalidade, tais como, sobrepeso (51%) e obesidade (21%). Em relação aos resultados comparativos Inicial 2013 e Final 2013, nos mostra que após 5 meses de ginástica realizada 2x por semana, os índices de IMC melhoraram. Observou-se que a desnutrição continua com 0%, a normalidade obteve uma melhora de 28% para 32%, o sobrepeso teve uma diminuição de 51% para 47% e a obesidade continuou com o mesmo percentual de 21%.

**PALAVRAS-CHAVE:** IMC, Ginástica, Idosos.