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CLASSIFICATIONS OF BODY FAT MASS IN ATHLETES: A SCOPING REVIEW

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Protocol status: Working
We use this protocol and it's working

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Keywords: body composition, anthropometry, sports, body fat mass, classification, classifications of body fat mass, body fat mass, body fat in the general public, obesity classification table, body fat, bmi, fat, athletes with an emphasis, athlete, such as athlete, classification, muscle tissue, misclassification of certain group, misclassification

Disclaimer

Funding sources/sponsors: None
Conflicts of interest: None

Abstract

Since the non-athletic population statistics were used to compile the obesity classification tables, it was noted that BMI correlated strongly with body fat in the general public; however, this index does not differentiate between fat and muscle tissue and may contribute to misclassification of certain groups of people, such as athletes. The aim of the study is to analyze the classifications of body fat mass in athletes with an emphasis on the percentage of AT.

Guidelines

The study was conducted in accordance with:
Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (**PRISMA-ScR**) [Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, Moher D, Peters MDJ, Horsley T, Weeks L, Hempel S, Akl EA, Chang C, McGowan J, Stewart L, Hartling L, Aldcroft A, Wilson MG, Garritty C, Lewin S, Godfrey CM, Macdonald MT, Langlois EV, Soares-Weiser K, Moriarty J, Clifford T, Tunçalp Ö, Straus SE. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Ann Intern Med. 2018 Oct 2;169(7):467-473. doi: 10.7326/M18-0850.]
Preferred Reporting Items for Systematic Review and Meta Analysis Protocols (**PRISMA-P**) [Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA; PRISMA-P Group. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. BMJ. 2015 Jan 2;350:g7647. doi: 10.1136/bmj.g7647.]

The literature search was performed in the following databases: PubMed, Epistemonikos, Google Scholar and Elibrary using the following keywords (table)

	A	B
	Database	Key words and terms
	PubMed	((((("body composition"[MeSH Terms] OR ("body"[All Fields] AND "composition"[All Fields]) OR "body composition"[All Fields]) AND ("fat"[All Fields] AND ("molecular weight"[MeSH Terms] OR ("molecular"[All Fields] AND "weight"[All Fields]) OR "molecular weight"[All Fields] OR "mass"[All Fields])))) OR ("fat"[All Fields] AND ("percentage"[All Fields] OR "percentages"[All Fields])))) AND ("athletes"[All Fields] OR "athletes"[MeSH Terms] OR "athletes"[All Fields] OR "athlete"[All Fields] OR "athletically"[All Fields] OR "athlets"[All Fields] OR "sports"[MeSH Terms] OR "sports"[All Fields] OR "athletic"[All Fields] OR "athletics"[All Fields])) AND (observationalstudy[Filter] OR review[Filter])
	Epistemonikos	(title:((title:(body composition) OR abstract:(body composition)) AND (title:(fat mass) OR abstract:(fat mass)) OR (title:(fat percentage) OR abstract:(fat percentage)) AND (title:(athlete) OR abstract:(athlete))) OR abstract:((title:(body composition) OR abstract:(body composition)) AND (title:(fat mass) OR abstract:(fat mass)) OR (title:(fat percentage) OR abstract:(fat percentage)) AND (title:(athlete) OR abstract:(athlete))))
	Google Scholar	body composition, fat percentage, fat mass, athlete
	Elibrary	состав тела, жировая масса тела, процент жира, спортсмены

Safety warnings

This systematic could potentially include trial authored by one/more than one of the review authors.

Abstract

1 Traditionally, obesity and its less extreme form, overweight, are now measured by the body mass index (BMI). In 1997, the World Health Organization (WHO) decided to use BMI as an index to assess overweight and obesity in adults , and later, WHO experts proposed an international classification of excess body weight based on BMI . Since the statistics of the non-athletic population were used to compile the obesity classification tables , it was noted that BMI correlates strongly with body fat in the general public; however, this index does not differentiate between fat and muscle tissue and may contribute to the misclassification of certain groups of people, such as athletes . As an alternative, it was proposed to measure and classify obesity by the percentage of body fat (BF), since it is well known that a high percentage of body fat is associated with cancer progression and mortality . Based on the analysis of the current problem, generalization of modern scientific research and taking into account the needs of sports specialists, such as nutritionists, coaches and athletes, the purpose of this study was formulated. The purpose of the study is to analyze the classifications of body fat mass of athletes with an emphasis on the percentage of AT.

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2 05.05.2025

Anticipated completion date

3 05.06.2025

Stage of review at time of this registration

4 Pilot screening has completed

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Inclusion Criteria

9 A cohort study assesses the fat component in healthy, skilled male and female athletes (regardless of training stage)

Original language title

10 In Russian: **КЛАССИФИКАЦИИ ЖИРОВОЙ МАССЫ ТЕЛА У СПОРТСМЕНОВ: ОБЗОР ПРЕДМЕТНОГО ПОЛЯ**

Selection and extraction

11 In parallel by two authors

Protocol references

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