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Abstract

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Keywords: Obesity; Weight Loss; Interventions; Body composition; Fat-Free Mass; Exercise; Protein Intake; Combat Sports

Authors:

Sheeraz Ilyas Shaikh: (Corresponding Author)
Assistant Professor, Department of Psychology, University of Sindh Jamshoro, Sindh, Pakistan.
(Email: sheeraz.ilyas@usindh.edu.pk)

Javed Ali Soomro: Assistant Professor, Centre for Physical Education, Health & Sports Science, University of Sindh Jamshoro, Sindh, Pakistan.

Karar Hussain Shah: M.Phil. Scholar, University of Sindh, Jamshoro, Sindh, Pakistan.

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Exploring Weight Loss Methods Among Male Combat Athletes and Their Psychological Ramifications

Abstract

Combat sports athletes are classified by their weight to ensure compatible matches in terms of size, strength and agility. Many athletes lose weight just before the fight to participate with lighter weight opponents. This study uses a correlational research design, with purposive sampling to select 300 male combat athletes from Karachi and Hyderabad. Data collected via a Urdu questionnaire with seven sections: (i) Demographic Information Questionnaire (DIQ), (ii) Sports Specific Information (SSI), (iii) Weight Loss History (WLH), (iv) Weight Loss Methods (WLM), (v) Physical Challenges during Weight Loss (PCWL), (vi) Psychological Challenges during Weight Loss (PSCWL), and (vii) Sources of Information about Weight Loss (SIWL). The results show a significant negative correlation -.450 of Weight loss techniques with Psychological wellbeing and a positive correlation .653 between Physical Health and Psychological Health. It is concluded that there is significant impacts of Weight Loss (WL) methods on psychological well-being of combat athletes.

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Sheeraz Ilyas Shaikh: (Corresponding Author)
Assistant Professor, Department of Psychology, University of Sindh Jamshoro, Sindh, Pakistan.
(Email: sheeraz.ilyas@usindh.edu.pk)

Javed Ali Soomro: Assistant Professor, Centre for Physical Education, Health & Sports Science, University of Sindh Jamshoro, Sindh, Pakistan.

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Contents

Introduction

Weight loss (WL) is an intense and quick weight loss a few days (up to a week) before a weigh-in, achieved by various WL methods, such as reducing food and water intake, extreme dieting, and/ or increasing exercise with dietary supplements, including tablets, capsules, gummies, and powders, as well as drinks and energy bars, and additional clothing. (sweat/sauna suits), which generates increased sweating. It also refers to the reduction in body weight, typically achieved by losing fat mass and, in some cases, muscle mass (US Department of Health and Human Services, 2017). It involves creating a calorie deficit, where the calories consumed are fewer than the calories burned. Weight loss can be pursued for various reasons, including Physical health benefits, improved mobility and fitness, enhanced self-confidence and body image, disease management, and sports performance (Haskell et al., 2007). Excess weight, particularly body fat, can increase the risk of various health conditions such as heart

disease, high blood pressure, type 2 diabetes, certain cancers, and joint problems. Losing weight can help improve these conditions or reduce the risk of developing them (National Diabetes Statistics Report, 2017).

Athletes or individuals engaged in sports and physical activities may aim for weight loss to optimize their performance. Shedding excess body weight can enhance agility, speed, and endurance. It is important to note that weight loss should be approached in a healthy and sustainable manner. Drastic diets or large prescriptions harm health, causing muscle wasting, nutrient depletion, and general metabolic disturbances (Jacqueline, 2014). A consultation with a doctor or nutritionist will give you personal advice and support so you can reach your weight loss goals safely and efficaciously.

In combat sports, power and strength are essential attributes for success. By maintaining an optimal weight for their division, athletes can enhance their power-to-weight ratio (Manore, 2015), allowing them to generate more force and explosiveness in their strikes, takedowns, and grappling techniques (Crossfield, 2019). Excessive weight hinders an athlete's agility and speed, making it more challenging to evade strikes, change directions quickly, or perform swift movements required in combat sports. By shedding excess weight, athletes can improve their agility and speed, which can provide a competitive advantage (Young, Dawson, & Henry, 2015). Achieving and maintaining an optimal weight for the competition can provide psychological benefits to combat sports athletes (Franchini, Brito, & Artioli, 2012). It can boost their confidence, enhance their self-image, and contribute to a positive mindset, all of which can have a positive impact on their performance (Eime, Young, Harvey, Charity, & Payne, 2013).

Combat sports, characterized by their rigorous physical demands and weight classifications, often necessitate athletes to manipulate their body weight to meet specific competitive requirements. Combat players, more often male athletes, use weight loss methods and are motivated and focused to achieve a targeted weight category to maximize their performance in their respective sports. There are various weight loss strategies including altering dietary practices, fasting, pursuing intensive workout plans, and at times even extreme techniques such as dehydration, forced starvation, or indulging in sauna practices. Other strategies including abnormal calorie restriction, using pharmaceutical drugs, and indulging in surgeries are also noticed.

Since there are substantial documented physical effects of weight loss, its psychological impacts are still minimally investigated. Although weight loss is generally targeted to provide athletes with benefits, there are also certain drawbacks or adverse effects including their physiological responses and psychological health. However, the limited awareness concerning weight loss practices among athletes often leads to adverse physiological, psychological, and even worse performance consequences. It is essential to assess the impact of these methods on athletes' mental health and their overall well-being. In terms of psychological health consequences, a few researches highlighted considerable negative effects on memory, concentration, mood, and self-esteem. This evidence-based study aims to explore rapid weight loss practices of male combat athletes and assess their psychological impacts. Moreover, the study also examines the potential connection between weight management and psychological health. It is also associated with fear of weight gain, obsessive weight monitoring, and disordered eating patterns. This research intends to provide clarity on the overall health of combat athletes and will help to design targeted interventions to facilitate their unique needs. It seeks to develop insight regarding combat sports psychology by considering minimally investigated aspects to promote awareness and support to male athletes for their specific athletic category. The study followed a mixed method of qualitative and quantitative methods (surveys and interviews) to gather the data from combat male athletes. The data was targeted to obtain information regarding their weight loss practices, the motivation behind that particular method, and the associated psychological adversities they experience while undertaking the process. By shedding light on these aspects, the study aims to contribute to the existing literature and raise awareness in adopting healthy practices which will lead to even better performance and contribute to athletes' general quality of life.

Review of Related Literature

A Brazilian study investigated the psychological effects of rapid weight loss on mood and burnout in 31 male jiu-jitsu athletes. The participants were divided into two groups: a rapid weight loss group and a control group. Data were collected at three-time points: 1) baseline (pre-weight loss), 2) weigh-in (competition day), and 3) recovery (7–10 days post-competition) using the Brunel Mood Scale (BRUMS) and Athlete Burnout

Questionnaire (ABQ). The study concluded that the level of weight loss in this research did not significantly affect the mood or burnout levels of athletes during the competition (Bueno, Silva, Diotaiuti, Andreato, & Andrade, 2023). Another study examined how weight loss methods affect wrestlers' performance. It involved 350 competitive wrestlers, using the Athlete Weight Loss Methodology and Effects Scale and Personal Information Form to collect data. Most wrestlers reported losing weight by avoiding fatty foods and carbohydrates. Common methods included jogging while wearing a raincoat (89.1%) and using a sauna (79.7%). The use of ergogenic aids like laxatives is merely 31.7% and diuretic pills are 28.0%. They reported experiencing physical and mental effects like muscle cramps, injuries, breathing difficulties, extreme fatigue, stress, reduced performance, and high irritability. Young wrestlers should be discouraged from losing weight before competitions. This can help protect those aged 17 to 20 from the physical and mental effects of weight loss during their developmental years (Seker, Isik, Durukan, Eraslan, Talaghir, & Dorgan, 2024). A meta-analysis of 26 studies reviewed weight loss (WL) practices in combat sports (CS). It found that WL is highly common among CS athletes, with most losing <5% of their body weight 7–14 days before competition. Many athletes began these practices as teenagers, typically two to three times a year. While their usual practices are generally safe, some athletes occasionally resort to extreme weight loss methods. Scientific practitioners have minimal impact on their weight loss practices, potentially leading to a cycle of unqualified guidance (Zhong, Song, Artioli, Gee, French, Zheng, Lyu, & Li,.2024).

Recent literature primarily focuses on the prevalence of weight loss methods in combat sports and the factors influencing athletes' decisions to adopt these extreme weight loss techniques. Research indicates that athletes frequently employ weight loss techniques to gain a perceived edge, enhance their chances of success, and secure an advantage within their weight class (Khodaee, Olewinski, Shadgan, & Kiningham, 2015; Söderlund, & Ferm, 2015). Several other studies (Alderman, Landers, Carlson, & Scott, 2004; Horswill, Scott, Dick, Hayes, 1994; & Wroble, Moxley, 1998) have examined the relationship between weight loss (WL) and success in competitions in real combat sports tournaments. Since competitive success depends on various factors and cannot be accurately assessed through a single variable, the findings of these studies offer valuable insights and enhance our understanding of the impact of weight loss on competitive performance.

Several studies have reported a high prevalence (60-90% of athletes) of the use of one of Weight loss techniques in high school, collegiate, and international-style wrestling (Steen & Brownell, 1990; Oppliger, Steen, Scott, 2003; Alderman, Landers, Carlson, & Scott, 2004). A comparable pattern emerged in judo: 90% of athletes (excluding heavyweights) indicated undergoing weight loss before competition, with a slightly lower percentage doing so before returning to regular competition (Artioli, Franchini, Takesian, Lancha, 2010). For weight loss, athletes often use more than one method (Langan-Evans, Close, Morton, 2011; Artioli, Gualano, Franchini, Scagliusi, Takesian, Fuchs, Lancha, 2010), such as decreased fluid intake, use of saunas, sweaters, and plastic suits, reduced energy intake, fasting one day before weighing themselves, reduce the consumption of carbohydrates and fats. These include (Filaire E, Rouveix M, Pannafieux C, Ferrand C. 2007) self-induced vomiting, diet pills including prescribed as well as unprescribed, along use of laxatives or diuretics.

Many athletes follow their coaches' recommendations for Weight loss (Artioli, Gualano, Franchini, Scagliusi, Takesian, Fuchs, Lancha, 2010; Artioli, Franchini, Nicastro, Sterkowicz, Solis, Lancha, 2010; Kordi, Ziaee, Rostami, Wallace, 2011), so it is the relatively better approach to educate coaches and athletes about the hazards related Weight loss (WL) techniques and uses. Hence it is recommended and urged to combat athletes to follow gradual weight loss strategies step-by-step, which are resilient, physical and mental health beneficial, and adaptive in nature (Kordi, Ziaee, Rostami, & Wallace, 2011). According to Burke and Cox (2009), athletes and coaches should receive information about calorie charts, how each portion of food should be prepared; how to avoid weight gain (especially fat) after the competition, how to prepare meals with non-HDL cholesterol, how to prepare low-calorie snacks from fruits and vegetables; how to avoid stress from overeating, how to avoid gastronomic novelties in high-level competitions abroad or in the Olympics, the importance of avoiding fast food while traveling, how to increase satiety by eating low glycemic index foods; how to avoid overeating and drinking at parties, how to keep a food diary and how to identify the main problems in maintaining proper nutrition.

Research Design

This is an empirical study, using the survey method to retrieve the desired data. The present study aims to find out the frequency of weight loss techniques used in combat sports among male
participants in Hyderabad and Karachi, Pakistan. It further explores correlations between the Weight loss (WL) technique on the psychological health of combat sports athletes.

Population and Sample

The population of the study includes male Combat Athletes belonging to the province of Sindh. 300 male Combat Athletes were selected by using the purposive Sampling Technique of non-probability sampling from the Karachi Division and Hyderabad Division.

Instruments

A self-designed questionnaire in Urdu comprised of seven parts was used to retrieve the data.

1. Part 01: Demographic Information Questionnaire (DIQ)
2. Part 02: Sports-Specific Information (SSI)
3. Part 03: Weight Loss History (WLH)
4. Part 04: Weight Loss Methods (WLM)
5. Part 05: Physical Challenges during Weight Loss (PCWL)
6. Part 06: Psychological Challenges during Weight Loss (PSCWL)
7. Part 07: Sources of Information about Weight Loss (SIWL)

Procedure

A sample of 300 male Combat Athletes from Karachi and Hyderabad divisions were contacted for data collection. An informed consent was sought in black and white before giving them proforma to get it filled. They were debriefed on the objectives of the present study and assured them the privacy of the data. This is academic research, the names and identity marks are codified well ahead before the analysis of the data. Participants were approached personally and data was collected individually.

Results

Table 1

Correlation among Weight Loss Methods, Physical and Psychological Health (N=300)

Scales	Mean	St. Deviation	Pearson Correlation
Weight Loss Methods	54.2133	9.47243	-.450**
Psychological Health	40.1867	10.01630	

***. Correlation is significant at the 0.01 level (2-tailed).*

Table 2

Concerned Combat Sport

	Frequency	Percent	Cumulative Percent
Boxing	107	35.7	35.7
Kick Boxing	80	26.7	62.3
Wushu	38	12.7	75.0
Karate	75	25.0	100.0
Total	300	100.0	

Table 3

Weight category

	Frequency	Percent	Cumulative Percent
45-48 kg	31	10.3	10.3
48-51 kg	26	8.7	19.0
51-54 kg	48	16.0	35.0
54-57 kg	26	8.7	43.7

	Frequency	Percent	Cumulative Percent
57-60 kg	32	10.7	54.3
60-63.5 kg	20	6.7	61.0
63.5-67 kg	25	8.3	69.3
67-71 kg	22	7.3	76.7
71-75 kg	19	6.3	83.0
75-80 kg	15	5.0	88.0
80-86 kg	18	6.0	94.0
86-92 kg	5	1.7	95.7
92+ kg	13	4.3	100.0
Total	300	100.0	

Table 4

Favorite approach for weight loss

	Frequency	Percent	Cumulative Percent
Weight Loss	168	56.0	56.0
Slow Weight Loss	132	44.0	100.0
Total	300	100.0	

Table 5

The number of days required for specific weight loss in Weight Loss Technique

	Frequency	Percent	Cumulative Percent
7 Days	69	23.0	23.0
14 Days	113	37.6	60.6
21 Days	70	23.3	83.9
More Than 21 Days	48	16.0	100.0
Total	300	100.0	

Table 6

Weight Loss Methods Scale with frequencies of each item.

Statements of the Scale	Responses and their frequencies					
	Never	Rarely	Sometimes	Nowadays	Always	Total
1. Gradual Dieting	10	2	188	20	80	300
2. Skipping 1 or 2 meals	19	0	199	24	58	300
3. Fasting throughout the day	69	0	194	27	10	300
4. Restricting Fluid Intake	33	3	227	23	14	300
5. Increase exercise	9	2	207	18	64	300
6. Training in heated rooms	24	1	133	7	135	300
7. Saunas	128	4	101	45	22	300
8. Training with rubber/plastic suits	42	0	152	11	95	300
9. Laxative	232	11	33	21	3	300
10. Low-calorie diet	130	3	97	47	23	300
11. Carbohydrate restriction	123	6	90	52	29	300
12. Fats restriction	150	5	61	34	50	300
13. Self-induced vomiting	239	11	18	21	11	300
14. Diuretic	273	16	8	3	0	300
15. Diet pills	273	12	7	7	1	300
16. Spitting	254	16	22	8	0	300
17. hot bath	150	5	129	13	3	300
18. Water loading (intake of large volumes of fluid for days, followed by sudden fluid	252	13	22	12	1	300

Statements of the Scale	Responses and their frequencies					
	Never	Rarely	Sometimes	Nowadays	Always	Total
restriction on the day before weigh-in)						
19. Use of nutritional supplements	212	8	56	14	10	300
20. Blood withdrawal before reweigh-in (for reinfusion post-weigh-in)	275	10	11	1	3	300
21. Enemas (liquid injection through anus)	271	12	5	4	8	300
22. Caffeine and/ or green tea	36	4	62	3	195	300
23. Oiling the body with almond oil.	59	4	186	10	41	300

Table 7

Physical Challenges during Weight Loss scale with frequencies of each item.

Statements of the Scale	Responses and their frequencies					
	Never	Rarely	Sometimes	Often	Always	Total
1. No energy	13	100	149	21	17	300
2. Dizziness	1	78	171	26	24	300
3. Muscle spasm	5	77	166	25	27	300
4. Heat	20	79	154	30	17	300
5. Nose bleed	2	21	75	27	155	300
6. Facial glow	24	90	127	28	31	300
7. Headache	7	61	169	36	27	300
8. Cold sweat	1	37	144	49	69	300
9. Body shivering	3	41	177	40	39	300
10. Nausea	4	50	173	33	40	300
11. Cramps	12	78	157	24	29	300
12. Fainting	1	15	43	31	210	300
13. Sudden rise in temperature	2	32	172	39	55	300
14. Sudden rise in heartbeat	4	48	166	33	49	300
15. Decrease in Speed	6	142	113	13	26	300
16. Decrease in strength	7	174	92	7	20	300
17. Decrease in reaction	6	164	93	13	24	300
18. Decrease in balance	8	139	92	23	38	300

Table 8

Psychological Challenges during Weight Loss Scale with frequencies of each item.

Statements of the Scale	Responses and their frequencies					
	Never	Rarely	Sometimes	Often	Always	Total
1. Frustration	37	69	137	18	39	300
2. Depression	20	75	134	30	41	300
3. Anxiety	21	82	144	20	33	300
4. Fear	15	62	140	29	54	300
5. Mental Fatigue	21	79	153	19	28	300
6. Increased Tension	18	76	140	29	37	300
7. Sleepiness	45	141	75	8	31	300
8. Headaches	17	62	167	24	30	300
9. Anger	23	75	122	44	36	300
10. Irritation	4	15	101	108	72	300
11. Decrease in Cognition	2	39	103	99	57	300
12. Reduced vigor	5	156	106	10	23	300
13. Risk of developing eating disorders	6	27	64	39	164	300

Discussion

Many researchers have examined the psychological impact of Weight loss (WL) techniques on male combat athletes. A study by Artioli, G. G. et al. (2016) explored the psychological consequences of extreme weight-cutting in MMA fighters. The findings revealed that the use of drastic weight loss methods was associated with increased levels of stress, anxiety, and depression among male athletes. The study also emphasized the negative effects on body image and self-esteem, which can lead to eating disorders and unhealthy relationships with the food they eat (Pettersson, S. et al. 2013). Another study by Kordi, Ziaee, Rostami, and Wallace (2011) explored the psychological effects of weight loss in male wrestlers. Other studies have also shown the adverse effects of rapid weight loss on short-term memory and irritability. The findings show statistical significance and indicate an associated link between weight loss exercises and psychological distress including a decrease in motivation and mood disorders. The findings of the present study correlate with Slater et al. (2016) and Petterson et al. (2018) research that athletes who indulge in extreme weight loss practices are found to be more dissatisfied with their own body image. Santos et al. (2018) conducted an investigation on the effects of rapid weight loss on body composition, performance, and psychological state. It was observed in their study that athletes who used extreme weight loss techniques like dehydration and likewise methods reported greater levels of depression and anxiety and lower body satisfaction.

The pressure to achieve a perfect body weight not only leads to body dissatisfaction, beside, disordered eating, low self-esteem, stress, and anxiety are also linked with it. Somatic complaints due to dehydration and other extreme practices such as fatigue, headaches, and dizziness are also proven from the existing research. Ultimately the pressure endangers the career and a toll on the general quality of life, as the adverse effects cause hindrances in the athlete's attention to the task, spontaneous responses, and overall performance and competence.

As extreme weight loss practices pose significant disadvantages for physical and mental health, these are considered "hidden dangers" of rapid and extreme weight loss practices among athletes. In recent years, several organizations and governing bodies have implemented proactive steps while recognizing the associated risks of extreme weight loss. To address the potential psychological effects on athletes, the International Olympic Committee (IOC) has established certain rules and regulations for body composition, along with the training program prominence to be given to safe weight loss practices (IOC, 2011). National Eating Disorders Association (NEDA), 2000 has placed more emphasis on the risks of extreme weight loss particularly the development of eating disorders (NEDA, 2000). The National Collegiate Athletic Association (NCAA) highlighted the crucial aspect of promoting healthy body image and self-esteem among athletes. NCAA also dissuades the extreme weight loss practices (NCAA, 2022).

The sports world is linked with physical fitness, competition, and achievement. However there is a hidden reality behind athletic achievement which is mostly overlooked. Mental health counseling services are considered important in helping combat athletes to navigate the psychological distress of weight loss. To support this stance, educational and training programs are crucial for raising awareness on effective management or reducing weight strategies while maintaining psychological health. The psychological state of athletes is highly important for their preparedness, competitiveness, productivity, and efficiency. It holds utmost importance for their self-esteem and overall well-being. Hence, the current study is concurrent with these aspects in regard to male combat athletes. Existing literature, governing bodies, and sports organizations also acknowledge the requirement to target these risks and support the promotion of healthy weight management.

The voyage of athletes is marked by their firm passion, but most of the time it is surpassed by silent struggles of weight loss and psychological well-being. Thus, it is highly important for athletes, coaches, trainers, and medical professionals to prioritize athletes' physical as well as psychological well-being. Coaches and training designers can play a key role in addressing the risks of weight loss (WL), a better training plan and identification of early warning signs of mental health problems like changes in mood and behavior are extremely crucial in the management. Incorporating evidence-based weight loss and management techniques including gradual weight loss, necessary nutrition, a balanced diet, and a healthy lifestyle, enables athletes to acquire their weight goals safely while maintaining their well-being. An additional protective factor would be discouragement by coaches for reducing extreme weight can contribute more positively to athletes' mindset regarding weight loss. Altogether the managerial factors are grouped into two domains; 1) Educational plans for raising awareness and 2) Regulation plans for safer weight reduction.

Conclusion

This research has addressed one of the significant topics within the Pakistani context. It has contributed to the limited literature by highlighting athletes' mental health in the context of acquiring a perfect body. Based on research findings, it is inferred that extreme weight loss practices and negligence of mental health among male combat athletes have significant negative effects on athletes' psychological health. Recognition of harmful practices and regulation of safer practices by sports organizations and governing bodies is a fundamental step in protecting both the physical and psychological health of athletes.

The adverse impacts of extreme weight loss strategies on athlete's mental health have been discussed in detail with reference to research. It includes negative effects on their short-term memory, stress, and low self-esteem which can lead to poor performance, serious physical health issues, and mental health issues/disorders like cognitive impairment, depression, anxiety, and body dysmorphic disorder. Considering its significant impacts, it is necessary to address the risks associated with these harmful and destructive WL practices. These findings highlighted the immediate requirement for safer weight management strategies.

It is evident that in order to function effectively and perform efficiently, working on both physical and psychological health is necessary for the maintenance of their professional as well as personal life. Weight management practice is a multifaceted problem that demands a structured plan. By establishing comprehensive and thorough standards, and holistic regulations, along with providing mental health services, healthy strategies can be built that will prioritize athletes' well-being and safety. By adopting this approach, we as a community, will make a contribution to the enduring sustainability of athlete's career and overall quality of life.

References

Alderman, B., Landers, D. M., Carlson, J., & Scott, J. R. (2004). Factors related to rapid weight loss practices among international-style wrestlers. *Medicine and science in sports and exercise*, *36*(2), 249–252. https://doi.org/10.1249/01.MSS.0000113668.03443.66
Google Scholar Worldcat Fulltext

Artioli, G. G., Franchini, E., Nicastro, H., Sterkowicz, S., Solis, M. Y., & Lancha, A. H., Jr (2010). The need for a weight management control program in judo: a proposal based on the successful case of wrestling. *Journal of the International Society of Sports Nutrition*, *7*, 15. https://doi.org/10.1186/1550-2783-7-15
Google Scholar Worldcat Fulltext

Artioli, G. G., Saunders, B., Iglesias, R. T., & Franchini, E. (2016). It is Time to Ban Rapid Weight Loss from Combat Sports. *Sports medicine (Auckland, N.Z.)*, *46*(11), 1579–1584. https://doi.org/10.1007/s40279-016-0541-x
Google Scholar Worldcat Fulltext

Artioli, G. G., Scagliusi, F., Kashiwagura, D., Franchini, E., Gualano, B., & Junior, A. L. (2010). Development, validity and reliability of a questionnaire designed to evaluate rapid weight loss patterns in judo players. *Scandinavian journal of medicine & science in sports*, *20*(1), e177–e187. https://doi.org/10.1111/j.1600-0838.2009.00940.x
Google Scholar Worldcat Fulltext

Brito, C. J., Roas A, F. C., Brito I, S. S., Marins J, C. B., Córdova, C., & Franchini, E. (2012). Methods of body mass reduction by combat sport athletes. *International journal of sport nutrition and exercise metabolism*, *22*(2), 89–97. https://doi.org/10.1123/ijsnem.22.2.89
Google Scholar Worldcat Fulltext

Bueno, J. C. A., Silva, R. B., Diotaiuti, P., Andreato, L. V., & Andrade, A. (2023). Effect of rapid weight loss on mood states and burnout of Brazilian jiu-jitsu athletes during a competitive process. *Frontiers in Psychology*, *14*. https://doi.org/10.3389/fpsyg.2023.1114816
Google Scholar Worldcat Fulltext

Burke, L. M., & Cox, G. R. (2009). Nutrition in combat sports. In W. A. Wallace, R. R. Wroble, N. Maffulli, & R. Kordi (Eds.), *Combat sports medicine* (1st ed., pp. 1-20). Springer-Verlag London Ltd. https://doi.org/10.1007/978-1-84800-354-5_1
Google Scholar Worldcat Fulltext

Langan-Evans, C., Close, G. L., & Morton, J. P. (2011). Making weight in combat sports. *Strength and Conditioning Journal*, *33*(6), 25–39. https://doi.org/10.1519/ssc.0b013e318231bb64
Google Scholar Worldcat Fulltext

National Eating Disorders Association. (2000). *Eating disorders: A guide to medical care and complications*. https://www.psychiatry.org/patients-families/eating-disorders/what-are-eating-disorders
Google Scholar Worldcat Fulltext

Oppliger, R. A., Steen, S. A., & Scott, J. R. (2003). Weight loss practices of college wrestlers. *International journal of sport nutrition and exercise metabolism*, *13*(1), 29–46. https://doi.org/10.1123/ijsnem.13.1.29
Google Scholar Worldcat Fulltext

Pettersson, S., Ekström, M. P., & Berg, C. M. (2013). Practices of weight regulation among elite athletes in combat sports: a matter of mental advantage?. *Journal of Athletic Training*, *48*(1), 99–108. https://doi.org/10.4085/1062-6050-48.1.04
Google Scholar Worldcat Fulltext

Santos, A. M. C., et al. (2018). The effects of rapid weight loss on body composition, performance, and psychological state in athletes. *Journal of Sports Sciences, 36*(12), 1345-1353.
Google Scholar Worldcat Fulltext

Seker, R., Isik, O., Durukan, E., Eraslan, M., Talaghir, L., & Dorgan, V. (2024). Determination of weight loss methods and effects among wrestlers before an official championship. *Frontiers in Nutrition*, *11*. https://doi.org/10.3389/fnut.2024.1505759
Google Scholar Worldcat Fulltext

Söderlund, K., & Ferm, A. (2015). Effects of weight loss on sports performance: A systematic review. *The Swedish School of Sport and Health Sciences Master Degree Project, 45:2017*, Master Education Program in Sport Science, 2015-2017.
Google Scholar Worldcat Fulltext

Steen, S. N., & Brownell, K. D. (1990). Patterns of weight loss and regain in wrestlers: has the tradition changed?. *Medicine and science in sports and exercise*, *22*(6), 762–768. https://doi.org/10.1249/00005768-199012000-00005
Google Scholar Worldcat Fulltext

Young, W. B., Dawson, B., & Henry, G. J. (2015). Agility and change-of-direction speed are independent skills: Implications for training for agility in invasion sports. *International Journal of Sports Science & Coaching, 10*(1), 159-169.
Google Scholar Worldcat Fulltext

Zhong, Y., Song, Y., Artioli, G. G., Gee, T. I., French, D. N., Zheng, H., Lyu, M., & Li, Y. (2024). The Practice of Weight Loss in Combat Sports Athletes: A Systematic Review. *Nutrients*, *16*(7), 1050. https://doi.org/10.3390/nu16071050
Google Scholar Worldcat Fulltext