

# Impact of Weight-Loss Strategies on Sports-Related Concussion in Elite Boxers

SHALINI BHATI<sup>1</sup>, KOMMI KALPANA<sup>2</sup>

## ABSTRACT

**Introduction:** Concussions are a significant concern in boxing, exacerbated by repeated head blows and rapid weight loss strategies. Despite growing research on concussion risk, there is a lack of studies on the impact of weight loss strategies on concussion risk in elite boxers.

**Aim:** This study aimed to examine the impact of weight loss strategies on sports-related concussion in elite boxers.

**Materials and Methods:** The study included 30 elite boxers (15 male, 15 female) aged 18-30 years, who underwent weight cutting and regular competitive training. A standardised questionnaire and Sports Concussion Assessment Tool 6 was used to collect data.

**Result:** The study examined boxers' nutritional habits and weight loss strategies, investigating the impact of rapid weight loss on concussion susceptibility, considering physiological effects like dehydration and cognitive impairment.

**Conclusion:** This study highlights the need to address the impact of weight loss strategies on sports-related concussion in elite boxers. Rapid weight loss, dehydration, and electrolyte imbalances can increase concussion risk, compromising athlete safety and performance.

**Keywords:** Athlete safety, Boxing, Concussion prevention, Weight management

## PARTICULARS OF CONTRIBUTORS:

1. MSc Student, Department of Nutrition and Dietetics, School of Allied Health Sciences, Manav Rachna International Institute of Research and Studies (Deemed to be University), Faridabad, Haryana, India.
2. Professor, Department of Nutrition and Dietetics, School of Allied Health Sciences, Manav Rachna International Institute of Research and Studies (Deemed to be University), Faridabad, Haryana, India.

## NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Shalini Bhati,  
MSc Student, Department of Nutrition and Dietetics, School of Allied Health Sciences, Manav Rachna International Institute of Research and Studies (Deemed to be University), Faridabad-121004, Haryana, India.  
Email: Shalinibhati2407@gmail.com