Chaper 4

EFFECT OF A KICKBOXING MATCH ON BODY COMPOSITION IN ELITE ATHLETES

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INTRODUCTION

Combat sports are very important in the sports world, which represented almost 25% of all Olympic games and they. At The Same Time, they have positive effect on fitness and health (Woodward, 2009; Tabben et al. 2013; Domínguez, Mata-Ordoñez and Sánchez-Oliver, 2017). Kickboxing is a combat sport (Karadağ, 2017). It has a full-contact sport that allows punching and kicking (Lystad, 2015). Kickboxers can use the hands, elbows, knees, shins and feet in competition at each other, and a kickboxing competition require high thresholds of several aspects of physical fitness (Buse, 2009; Slimani et al. 2017). There are three disciplines in the modern kickboxing competitions: Semi-contact, Light-contact (or medium-contact) and Full Contact (Saienko,Копилов and Гурмаженко, 2010).

The study of body composition requires the assessment of more than one body mass compartments (Heymsfield and Waki, 1991). In many body composition research, the human body has been divided into two separate chemical compartments, namely fat mass (FM) and lean mass (FFM) (Keys and Brozek, 1953).

Exercise training occurs favourable changes in body composition, such as fat loss and increased lean body mass (Tomas-Carus et al., 2016). Intensity and duration of exercises effective on reducing body weight because it will be crucial to promote lipid activity (Jabbour and Iancu, 2017). And also, fatty acids are essential energy substrates during endurance exercise, and acute endurance exercise is associated with skeletal lipid remodeling and neutral lipid storage during recovery (Bosma, 2014).

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