Abstract
Whole-body vibration training (WBVT) has been shown to be an extremely useful tool for increasing muscle mass, bone tissue, muscle power, flexibility, and strength, among others. However, to date, there are few studies on the effects of WBVT on energy metabolism and whether this tool could be able to enhance weight loss in addition to a nutritional plan and/or exercise. Objective: The aim of this review is to analyse the most recent studies on vibration training in order to determine whether this method constitutes a reliable complement to programs aimed at weight loss. Methods: An updated literature search was conducted using PubMed, SciELO and SPORTDiscus. In addition, a detailed search was also performed from references given in selected studies. Results: WBVT appears to be associated with three pathways involved in weight loss: inhibition of adipogenesis and reduction of fat mass, increased energy expenditure, and increase in muscle mass. After analysing the literature, none of the results for the proposed pathways are consistent, and indeed are often contradictory. Conclusion: Further in-depth research is required on this subject. However, WBVT would appear to be a safe method, and may possibly yield benefits, mainly as regards muscle mass, which in turn might promote weight loss when combined with a nutritional plan and a traditional exercise program.

Keywords
Key words, Whole-body vibration training, Adipogenesis, Fat mass, Muscle mass, Energy expenditure.