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Effects of kickboxing on body composition of adolescents with obesity

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Objective In order to find a scientific and effective way to lose weight, the effect of kickboxing exercise was studied by the method of experiment. Through research, it is found that kickboxing can effectively change the body shape and body composition of the human body and achieve a better weight loss effect. This study further enriches and improves the theory of exercise and fitness, which can provide scientific guidance for obese children and adolescents to lose weight and provide a good reference for obesity of other age groups and special populations.

Methods In this paper, 20 students of 12~14 years old in the summer class of Wuhan diet training camp were selected as the subjects. Through the test of height and weight, the 20 subjects of drug induced obesity or non secondary obesity were selected by BMI as the main basis, including 8 girls and 12 boys. kickboxing training time is 8 weeks, 3 times a week, each class 60 minutes, from warming up, basically, relax three parts. In order to study the effects of kickboxing on body composition of obese people, skin fold thickness, girth and body fat were monitored and tested.

Results After 8 weeks of kickboxing exercise, there was a significant difference in the thickness of the upper arm skin fold of the boys $P < 0.05$, and the thickness of the skin fold of the lower scapula was $P < 0.01$, but the changes in the abdomen were not obvious. While the skin thickness of the upper arm and the abdominal skin fold were $P < 0.05$, and there was no significant difference in the skin fold thickness of the scapula. Male hip circumference $P < 0.05$ had a very significant change, chest circumference, waist circumference and waist hip ratio $P > 0.05$ did not change significantly. The waist circumference and waist hip ratio were significantly changed, but there was no significant change in chest circumference and hip circumference. After exercise, the changes in fat content, muscle weight and BMI were the most significant. Girls' weight, fat content, body fat percentage and BMI were the most significant changes, followed by a slight change in muscle weight.

Conclusions From the qualitative point of view, it can be concluded that the practice of kickboxing exercises can effectively develop flexibility, balance, coordination and so on. It has a significant effect on improving human posture and sports ability. From a quantitative point of view, aerobics can also reduce fat content, increase muscle weight, make the percentage of BMI, body fat change significantly, and have a significant impact on maintaining muscle content and muscle / weight ratio and laying a solid foundation for future exercise. It can be concluded that kickboxing is a suitable exercise for obese people to lose weight.