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To compare the impact of running and walking on physical health

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Objective Under the natural and comfortable condition of the private human body, explore which of the running and walking is more conducive to the physical health of the human body.

Methods Among the sports crowd of the NanMingRiver Rubber Exercise Road in Guiyang City, select 20 people who have walking exercise habits and who can take the running test under the age of 60 as group A and select 20 people who have running exercise habits and who can take the walking test under the age of 60 as group B. Inclusion criteria for the exercise habits is "Exercise at least 3 times a week for more than 30 minutes and for more than one year."

(1) Experimental method: Two groups of subjects with different exercise modes adopted the exercise mode of the corresponding group. Under the condition that other environmental conditions were unchanged, the health benefits of different exercise methods in the same group were compared before and after the experiment. The time of experiment lasts three months. The intensity of walking exercise is the intensity that the athlete feels natural and comfortable. The intensity of running exercise is the intensity that the athlete feels natural and comfortable. Before and after the experiment, the test contents of the two group subjects included height, weight, BMI, grip strength, reaction time, closed-eyes standing on a leg, sitting body flexion, step test, lung capacity, lung capacity index of body mass.

(2) Literature and Information method: Through the retrieval and review of relevant literatures on sports and physical health at home and abroad, this paper provides theoretical references and methodological basis for this research.

(3) Data analysis method: Paired sample t-test was used to analyze the changes of constitution of the two groups experimental people before and after the exercise modes.

Results After a 3-month walking in group A, the step test, lung capacity, and lung capacity index of body mass were higher than before, and the difference was statistically significant ($P < 0.01$). The grip strength, reaction time, closed-eyes standing on a leg decreased compared with prior exercise. The difference was statistically significant ($P < 0.05$); body mass, body mass index (BMI), and sitting body flexion were higher than before, but the difference was not statistically significant.

After three months of walking exercise in group B, the step test, lung capacity, lung capacity index of body mass, and grip strength decreased compared with the previous exercise, and the difference was statistically significant ($P < 0.01$); body mass, body mass index (BMI), reaction time, the closed-eye standing on one foot was lower than before, and the difference was statistically significant ($P < 0.05$). The anterior flexion of the sitting body decreased, but the difference was not statistically significant.

Conclusions In comfortable, natural conditions, running is more conducive to physical fitness than walking, and running is a more effective way to exercise.