



Title

Impact of one-year CrossFit training on performance of soldiers and civilian employees – results of the controlled, prospective, interventional trial MedXFit.

Abstract

INTRODUCTION

The physical performance requirements for soldiers in the Bundeswehr are divergent and require a wide range of training. In principle, CrossFit offers both great variance and the possibility of very individual adaptation. The training concept of CrossFit is characterized in its diversity by combining powerlifting, weightlifting techniques, and gymnastics as well as endurance components such as rowing, running, swimming in an high intensity interval training. Scaling allows the adaption from elite soldiers to people with disabilities. Functional movement is always the focus. As part of the MedXFit study, the CrossFit training concept was used to investigate whether soldiers and civil employees can be trained, whether their physical fitness can be increased, and whether physical problems like back pain can be decreased after a long period of sedentary work.

METHODS

Members of the Bundeswehr who primarily did sedentary work could take part in this study. The participants in the intervention group had to take part in MedXFit training twice a week. The training took place in person or via video during the lockdowns. The control group continued to train on their own terms. The study was designed for one year. The following data was measured (0, 6 and 12 months): Weight, height, force, force symmetry, flexibility, as well as further information from surveys.

RESULTS

53 people in the intervention group and 34 in the control group completed. Participants in the intervention group showed a significantly increased strength in the core, in the extremities, improvement in the functional movement screen, movement execution, less need for scaling, improvement in subjective back pain, and increased leisure activity. The participants in the control group showed no significant changes at the same time.

DISCUSSION AND CONCLUSION

This study proves for the first time within the scope of a prospective, controlled study the broad benefits of adapted CrossFit for employees of the Bundeswehr. The participants in the study came from a wide

variety of backgrounds. Young soldiers, as well as injured veterans or civilian employees shortly before retirement, took part. All participants showed an astonishing increase in physical performance and everyday fitness.

Practical Implications

Due to the increasingly clear relevance, it should be considered whether CrossFit should be included as a CISM sport.

References

No References included.

Figures and tables

Conflict of interest

The authors declare no conflict of interest.

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