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primary studies - published RCT

## **Strength vs aerobic training in children with cystic fibrosis: a randomized controlled trial.**

**Code:** PM15486384

**Year:** 2004 **Date:** 2004

**Author:** Orenstein DM

### **Study design (if review, criteria of inclusion for studies)**

1-year randomized clinical trial.

### **Participants**

67 patients with CF, aged 8 to 18 years

### **Interventions**

Participants in both exercise conditions were encouraged to exercise at least three times per week for 1 year. Each child in the aerobic group was given a stair-stepping machine, and each child in the upper-body strength training group was given an upper-body-only weight-resistance machine. Counselors conducted in-home visits with the participants once per week for the first 8 weeks followed by monthly visits for the remainder of the study

### **Outcome measures**

Aerobic fitness, pulmonary function, quality of life, and strength were measured at baseline, at 6 months, and at 12 months.

### **Main results**

Strength training increased the maximum weight lifted for biceps curls significantly more than aerobic training (p

### **Authors' conclusions**

We concluded that strength and aerobic training may increase upper-body strength, and that both types of training may increase PWC for children with CF. Future trials should be conducted with no-training control subjects and larger samples to increase statistical power.

<http://dx.doi.org/10.1378/chest.126.4.1204>

### **See also**

Chest. 2004 Oct;126(4):1204-14.

### **Keywords**

Adolescent; Child; exercise; non pharmacological intervention - devices OR physiotherapy; training; Home; Aerobic training; Chest physiotherapy; strength training;