

primary studies - published RCT

## **Conventional physiotherapy and forced expiration manoeuvres have similar effects on tracheobronchial clearance.**

**Code:** PM3234521

**Year:** 1988 **Date:** 1993

**Author:** van Hengstum M

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

Parallel design RCT

### **Participants**

20 children with CF and mild to moderate lung disease, aged 7 - 15 years: 20 randomised, 16 studied

### **Interventions**

No intervention in control groups Dietary supplements, drink powders, milk shakes, tinned puddings to achieve 25% of normal energy recommendations in addition to normal diet for six months

### **Outcome measures**

Pulmonary function\* and respiratory muscle strength Skeletal muscle strength and power Laboratory measures of nutritional status (e.g. albumin, amino acids) Height\*, weight\* and anthropometric measurements\* Habitual physical activity Dietary energy\* and nutrient intake\* Energy\* and nutrient\* intake from supplements Body composition

### **Main results**

Stepwise-regression analysis indicated that changes in skeletal muscle strength and energy intake correlated significantly with growth [weight (kg) = 1.90 - 0.60 (Tanner Stage) + 0.49 (maximum voluntary strength (Nm) + 0.03 (energy intake, % RNI),  $r = 0.76$ ,  $P$

<http://www.mrw.interscience.wiley.com/cochrane/clcentral/articles/593/CN-00395593/frame.html>

### **See also**

European Respiratory Journal YR: 1988 VL: 1 DE: RCT NO: 8

### **Keywords**

Adolescent; Caloric Intake; Child; exercise; non pharmacological intervention - diet; non pharmacological intervention - devices OR physiotherapy; Supplementation; Powders;