

primary studies - published RCT

## **Exenatide corrects postprandial hyperglycaemia in young people with cystic fibrosis and impaired glucose tolerance: A randomized crossover trial.**

**Code:** PM30259623

**Year:** 2019 **Date:**

**Author:** Geyer MC

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

Randomized, double-blind, and placebo-controlled study

### **Participants**

22 pediatric patients with cystic fibrosis (CF). The mean age was 11.7 years.

### **Interventions**

Dietary supplementation with high-rich docosahexaenoic acid (DHA) (Tridocosahexanoin-AOX(®) 70%) at 50 mg/kg/day. The duration of supplementation was 12 months. A total of 22 patients were included, with 11 in the DHA group and 11 in the placebo group.

### **Outcome measures**

Pulmonary function, exacerbations, sputum cellularity, inflammatory biomarkers in sputum and peripheral blood, and anthropometric variables.

### **Main results**

In the DHA group, there was a significant increase in FVC ( $p = 0.004$ ) and FVE(1) expressed in liters ( $p = 0.044$ ) as compared with placebo, and a lower median number of exacerbations (1 vs. 2). Differences in sputum cellularity (predominantly neutrophilic), neutrophilic elastase, and sputum and serum concentrations of resolvin D1 (RvD1), interleukin (IL)-8 (IL-8), and tumor necrosis factor alpha (TNF- $\alpha$ ) between the study groups were not found. Significant increases in weight and height were also observed among DHA-supplemented patients. The administration of the study product was safe and well tolerated.

### **Authors' conclusions**

The use of a highly concentrated DHA supplement for 1 year as compared with placebo improved pulmonary function and reduced exacerbations in pediatric CF.

<http://dx.doi.org/10.1111/dom.13544>

### **See also**

Diabetes Obes Metab. 2019 Mar;21(3):700-704. doi: 10.1111/dom.13544. Epub 2018 Oct 25.

### **Keywords**

Adult; Aged; Child; Docosahexaenoic Acid -DHA-; non pharmacological intervention - diet; Oral; placebo; Supplementation; essential fatty acids; omega-3;