primary studies - published RCT

Effects of Oral Amino Acid Supplementation on Physical Activity, Systemic Inflammation, and Quality of Life in Adult Patients with Cystic Fibrosis: A Single-Center, Randomized, Double-Blind, Placebo-Controlled Pilot Study.

Code: PM40218996 **Year:** 2025 **Date:** **Author:** Petraglia L

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

Randomized, double-blind, placebo-controlled pilot trial

Participants

60 adult CF patients, aged 18 or older.

Interventions

Participants were randomly assigned to receive either amino acid supplementation or a placebo for 4 weeks.

Outcome measures

Physical function tests and self-assessment questionnaires on quality of life, global health, and sleep status, as well as blood samples to measure pro-inflammatory cytokines, were performed at baseline and after the treatment period.

Main results

The amino acid supplementation group showed a significant improvement in self-perceived physical performance and health status. Interleukin-6 serum levels were significantly reduced in this group compared to those who received the placebo ($p = 0.042$).

Authors' conclusions

Amino acid supplementation in adult CF patients improves self-perception of health status and may reduce systemic inflammation, significantly decreasing serum levels of Interleukin-6. This suggests potential benefits for the overall well-being of CF patients and a reduction in their inflammatory status.

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See also

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Keywords

Adult; Drug Administration Schedule; non pharmacological intervention - diet; Oral; placebo; Supplementation; Amino Acids; Proteins;