



Pediatric Wellness & Activity Guide

The Role of Movement in Airway Resilience

Physical activity serves as a vital non-pharmacological intervention in managing Cystic Fibrosis (CF), directly influencing a child's exercise capacity (VO₂max). Clinically, VO₂max is a primary predictor of life expectancy; practically, it is the engine of childhood. Early, proactive management is the cornerstone of care because aerobic capacity is directly linked to reducing the *perceived* burden of daily treatments and improving emotional stability. By building fitness early, we ensure a child does not feel "out of breath" during daily play, reducing the emotional stress of the disease and transitioning from reactive care to a lifetime involving fitness and exercise.

Infancy Foundation (Ages 0–12 Months): Mobility & Strength

In the first year, developmental milestones are used strategically to improve lung expansion and postural support. Unlike passive play, "targeted mobility" such as reaching for bubbles or propping on forearms which may act as early-stage chest physiotherapy. These movements encourage the trunk rotation and core engagement essential for keeping airways clear.

Functional Target	Suggested Activities	Physiological Impact
Chest Mobility	"So Big" stretches; "Itsy Bitsy Spider"; reaching to each side for a rattle.	Trunk rotation creates the space needed for full lung expansion and efficient secretion movement.
Core Strengthening	Independent sitting; grabbing feet with hands; pushing/pulling toys.	Stabilizes the trunk to provide essential mechanical support for every breath.
Leg Strengthening	Crawling over cushions; standing on lap; squatting for puzzles.	Weight-bearing builds the postural foundation required for increased respiratory effort.
Endurance	Supervised stair crawling; water play; cruising along the coffee table.	Advances motor skills while building the early aerobic resilience needed for school-age activity.

Working with your child's CF multidisciplinary team is an important part of ensuring your child's growth and development. They are there to support your child and family through the stages of life with CF.