

**Dr Sanjay Gupta:** The New York City marathon is 37-year-old Cris Dopher's Mount Everest. Even more remarkable considering Dopher's lung capacity is 30% less than normal.

**Cris Dopher:** Maybe, my body isn't built for the marathon distance, but to me, I need a goal.

**Gupta:** So while he's often forced to walk to catch his breath, he's determined to train.

**Dopher:** It feels really good in those moments, just to be able to run free.

**Gupta:** Dopher was just four years old when he was diagnosed with cystic fibrosis, a genetic disease defined by a steady<sup>(1)</sup> decline in lung function.

**Dopher:** Most cystic fibrosis patients were kids and would die as kids.

**Gupta:** In fact, when Dopher had a breathing attack in college, he could only find a pediatrician to treat him.

**Dopher:** Adult clinics were few and far between.

**Gupta:** Because?

**Dopher:** There just weren't enough adults.

**Gupta:** Because they died?

**Dopher:** Right.

**Gupta:** From the 1950s to the 1980s, kids barely made it out of their teens. Now, the average life expectancy is 37. Key reasons why? Experimental drugs that don't just treat infection and inflammation but target the disease itself.

**Dr Emily Di Mango:** They catch the disease early on and either prevent or significantly delay the onset<sup>(2)</sup> of lung disease.

Can you hear wheezing when you run?

**Dopher:** Yeah.

**Gupta:** Exercise is another reason Dopher is still alive, on course to run his second marathon, with one goal...

**Dopher:** Finish!

**Gupta:** Marathon day! Dopher's struggling, walking much of the way. By mile 23, forcing himself to keep going. After 5 hours 50 minutes and 12 seconds he crosses the finish line. Revived by memories of friends who'd lost their own fight to cystic fibrosis.

**Dopher:** The last two miles, it's more about them than me.

**Gupta:** Eventually, Dopher will need a lung transplant. He knows his next five or 10 years may be his last but he's not giving up.

**Dopher:** After finishing New York, I just like, you know I think I could do that one last time, I really do.

**Gupta:** Grateful for every breath it took to cross the finish line.

Since the discovery of the cystic fibrosis gene in 1989, researchers have been making amazing progress developing therapies that may potentially correct that faulty gene. And hopefully address the root cause of the disease one day as well.

**Catie Couric:** But meanwhile, lots of strides<sup>(3)</sup> are being made with additional medications or new therapies, right? But running a marathon, Sanjay, one might think that this would only exacerbate a condition that involves the lungs.

**Gupta:** It seems exactly, it seems kind of, but that's exactly what I thought as well. But there are two things: once somebody gets beyond the first few strides, it actually starts to improve the overall airway clearance<sup>(4)</sup> so they can actually breathe a little better but also just the pounding<sup>(5)</sup> back and forth helps them clear some of those secretions which are such a culprit<sup>(6)</sup> when it comes to cystic fibrosis.

**Catie:** Really interesting, thanks Sanjay, good to see you.  
**CBSnews.**

### Lexical helpline:

1. **steady:** regular
2. **onset:** beginning
3. **stride:** long step taken energetically
4. **clearance:** removing obstruction
5. **pounding:** running with heavy steps
6. **culprit:** cause of a problem