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Researchers Discover An Efficient and Inexpensive Weapon Against Cystic Fibrosis

Aerosolized saltwater

Two research teams from the US and Australia have discovered a simple, efficient and inexpensive method to reduce the lung problems associated with cystic fibrosis, the leading fatal genetic illness among whites. According to the statements made by the researchers, by inhaling a saltwater aerosol solution almost twice as salty as the Atlantic Ocean for between 10 and 15 minutes at least twice a day, young patients should be able to avoid a significant part of the damage the disease causes to their lungs. Aerosolized saltwater restores the thin lubricant layer of water that normally coats airway surfaces. This water layer promotes the clearance of the naturally occurring mucus the body uses to trap harmful bacteria, viruses and other foreign particles. "We are very excited that this simple and inexpensive therapy turned out to be so effective and well-tolerated in patients with CF (cystic fibrosis)," Scott H. Donaldson of the University of North Carolina - the paper's first author said. "These results could change how physicians elsewhere care for patients with CF. As we look at the combined results of our study and those of our Australian colleagues, it gives us great hope that use of this therapy will reduce how often patients feel ill, will slow the decline of lung function over time and will help these people live longer," Dr. Donaldson added. Cystic fibrosis appears on average in one of four children of parents who both carry a defective copy of a gene known as CFTR. Children born with the disease soon develop chronic lung damage, since their lungs cannot clear excessively sticky mucus. "Salt essentially sucks water from the lung tissues out onto the airways. The irony is that the therapy works better in CF subjects than non-CF subjects," Richard C. Boucher from the Australian Cystic Fibrosis Research and Treatment Center explained.