**How our lungs respond during asthma attacks**

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Scientists have discovered a new biochemical process, which reveals how the lungs operate during normal functioning and during asthma -- a chronic respiratory condition marked by difficulty in breathing.  
  
The study conducted in mouse model reveals how air enters and leaves the lungs.  
  
The findings showed that disrupting these biochemical pathways in a mouse model could prevent airway narrowing and maintain normal lung function.  
  
"The fundamental biochemical process that we have discovered will ultimately allow us to better design ways to develop new treatments for those suffering from asthma and chronic obstructive pulmonary disease (COPD)," said one of the researchers Andrew Tobin, professor at the University of Leicester in Britain.  
  
It is too early to say whether these results apply to humans, the researchers maintained in the study published in the journal Proceedings of the National Academy of Sciences.  
  
The lung is made up of tiny tubes called airways, surrounded by muscles that allow air in and out of the lung.  
  
In asthma and other airway diseases such as COPD, the airway muscle contracts causing the airways to become narrow and restricting the flow of air in and out of the lung.  
  
"This breakthrough will lay the essential foundations on which to build new strategies to combat airway diseases such as asthma," added Tobin.  
  
According to the World Health Organisation estimates, 235 million people worldwide currently suffer from asthma with over 80 percent of asthma deaths occurring in low and lower-middle income countries. The disease is predicted to increase worldwide over the next 10 years.