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New research shows that vitamin D present in the lungs stimulates the killing of bacteria, and improves the body's ability to reduce inflammation.

CELLS IN LUNG TISSUE ACTIVATE VITAMIN D AND INCREASE IMMUNE FUNCTION

A recent issue of the *Journal of Immunology* reports that vitamin D, which is primarily activated by the kidneys, is also converted to its active form in lung tissue. This conversion is essential for the beneficial activity of the vitamin in the body.

Researchers studying human lung tissue samples found that an enzyme called 1 alpha-hydroxylase helps convert vitamin D stored in the cells of the lungs into the active form of the vitamin.

The team found that activated vitamin D increased the activity of a compound that destroys bacteria, as well as producing a protein that assists cells in their ability to fight infections.

The researchers noted that controlling inflammation through vitamin D is important because too much inflammation can cause problems related to sepsis (blood poisoning) and contribute to certain autoimmune diseases.

< *The Journal of Immunology*, 2008, 181: 7090-7099 >