

# Clinical Update

## **Vitamin A Compound Could Fight Rheumatoid Arthritis**

Mouse study shows retinoic acid can ease inflammation

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Research in mice suggests that a vitamin A derivative, retinoic acid, may fight autoimmune and inflammatory diseases such as colitis or rheumatoid arthritis, U.S. scientists say.

A team at the La Jolla Institute for Allergy & Immunology in California found that manipulating the amount of retinoic acid (a substance derived when vitamin A is broken down in the body) in the mice affected levels of pro-inflammatory T-cells.

These T-cells are a type of white blood cell that plays a role in several inflammatory and autoimmune diseases.

"We found that you can control inflammation in a living animal with retinoic acid or you can treat cells with retinoic acid in a test tube and transfer them to the organism to suppress inflammation," research leader Hilde Cheroutre said in a prepared statement.

The findings were published in the June 14 online issue of *Science*.

This is just the first step, the scientists say. However, if further research shows that retinoic acid has the same effect in humans, it may lead to new treatments for autoimmune and inflammatory diseases such as psoriasis, colitis and rheumatoid arthritis.

It may also lead to new ways to prevent the immune system from attacking tissue grafts, Cheroutre said.

