

## **Ibuprofen Extends Lifespan In Several Species**



According to a Texas A&M AgriLife Research scientist, ibuprofen may hold the key to a longer and healthier life. The research has been published in the journal *Public Library of Science, Genetics* and claims that regular doses of ibuprofen extended the lifespan of multiple species.

"We first used baker's yeast, which is an established ageing model, and noticed that the yeast treated with ibuprofen lived longer," said Dr. Michael Polymenis, an AgriLife Research biochemist in College Station. "Then we tried the same process with worms and flies and saw the same extended lifespan. Plus, these organisms not only lived longer, but also appeared healthy."

According to Dr. Polymenis, the species were given doses comparable to the recommended human dose and added 15 percent to the species lives. If one applies this on humans, it could be equivalent to another dozen or so years of healthy living. The drug was also shown to extend the health span in worms and made them live not just longer but also healthier.

Ibuprofen has been in use since the early 1960s and has been available as an over-the-counter drug since the 1980s. The WHO includes ibuprofen on its List of Essential Medications. It is a non-steroidal inflammatory drug that is commonly used for relieving pain, fever and inflammation.

This research was conducted over a period of three years and shows that ibuprofen interferes with the ability of yeast cells to pick up tryptophan, an essential amino acid for humans.

Dr. Polymenis believes that these results are worth exploring and prove that common and relatively safe drugs in humans can extend the lifespan of diverse organisms. It may be possible to find other drugs like ibuprofen which might have even better ability to add healthy years of life in people.

Dr. Brian Kennedy, the President and CEO of the Buck Institute for Research on Ageing in Novato, California and several researchers from Russian and the University of Washington collaborated with Dr. Polymenis in this research.

According to Dr. Kennedy, this research was undertaken to identify drugs that have unique properties and they have found not just ibuprofen but other drugs as well that affect ageing. He points out that the ultimate goal of the research is to find out why people get sick when they get old and ways to intervene in this process and extend human health span.

Chong He, a postdoctoral fellow at Buck Institute and lead author on the paper writes: "Ibuprofen is something that people have been taking for years, and no one actually knew that it can have some benefits for longevity and health span."

Source: Texas A&M AgriLife Communications

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