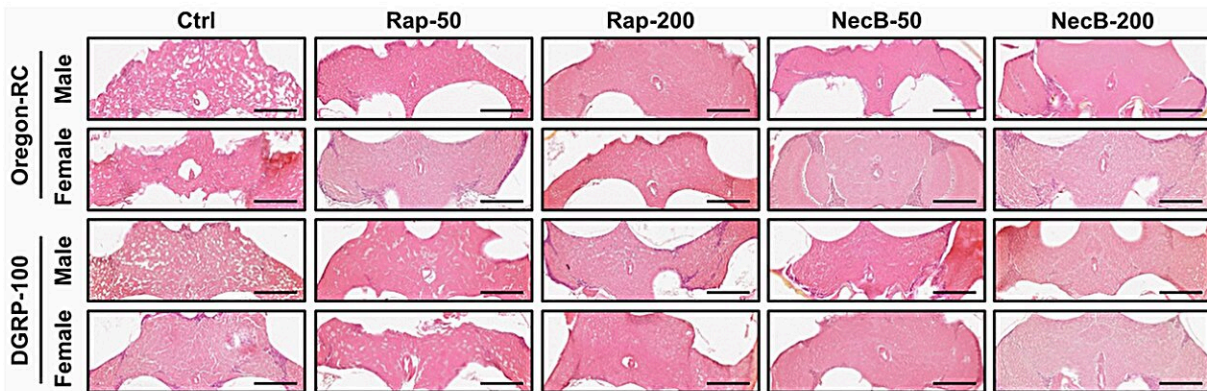


Nectandrin B in nutmeg found to significantly increase lifespan of fruit flies

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NecB inhibited age-related neurodegeneration in *D. melanogaster*'s brain morphology. Credit: *Aging* (2023). DOI: 10.18632/aging.205234

A new research paper titled "[Nectandrin B significantly increases the lifespan of *Drosophila*—Nectandrin B for longevity](#)" has been published in *Aging*.

Phytochemicals are increasingly recognized in the field of healthy aging as potential therapeutics against various aging-related diseases. Nutmeg,

derived from the *Myristica fragrans* tree, is an example. Nutmeg has been extensively studied and proven to possess antioxidant properties that protect against aging and alleviate serious diseases such as cancer, [heart disease](#), and liver disease. However, the specific active ingredient in nutmeg responsible for these [health benefits](#) has not been identified thus far.

In this new study, researchers Ji-Seon Ahn, Nasir Uddin Mahbub, Sura Kim, Han-Byeol Kim, Jong-Soon Choi, Hea-Jong Chung, and Seong-Tshool Hong from Korea Basic Science Institute, Jeonbuk National University Medical School and Chung-Ang University present evidence that Nectandrin B (NecB), a bioactive lignan compound isolated from nutmeg, significantly extended the lifespan of the fruit fly *Drosophila melanogaster* by as much as 42.6% compared to the control group.

In discussing their research, the authors write, "[...] we hypothesized that NecB might possess anti-aging efficacy."

The dramatic reduction of intracellular ROS levels by NecB captured the researchers' attention. NecB also improved age-related symptoms including locomotive deterioration, body weight gain, eye degeneration, and neurodegeneration in aging *D. melanogaster*. The researchers wrote that this result represents the most substantial improvement in lifespan observed in [animal experiments](#) to date, suggesting that NecB may hold promise as a potential therapeutic agent for promoting longevity and addressing age-related degeneration.

"We strongly believe that NecB urgently needs further attention and research, as we believe it has made a potential contribution to our understanding of the aging process as well as its application as a potential therapeutic agent for longevity and age-related [sic]," the researchers conclude.

More information: Ji-Seon Ahn et al, Nectandrin B significantly increases the lifespan of *Drosophila*—Nectandrin B for longevity, *Aging* (2023). [DOI: 10.18632/aging.205234](https://doi.org/10.18632/aging.205234)

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