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**Fundamental questions
Elemental answers**



Showcasing research from Professor Lili Sheng's laboratory, School of Pharmacy, Shanghai University of Traditional Chinese Medicine, Shanghai, China.

Aronia melanocarpa extract extends the lifespan and health-span of *Caenorhabditis elegans* via mitogen-activated protein kinase 1

Authors found that *Aronia melanocarpa* extract significantly extended lifespan and health-span in *Caenorhabditis elegans*. Transcriptome and metabolome results showed that the expression of *pmk-1* gene and levels of 4-hydroxyproline, rhamnose, and cysteine were significantly upregulated after *Aronia melanocarpa* extract intervention. Further study indicated that these beneficial effects of extract on extending lifespan of *C. elegans* was *pmk-1* dependent and the role of three metabolites on prolonging the lifespan of *C. elegans* was also partly dependent on *pmk-1*.

As featured in:



See Liang Chen, Lili Sheng *et al.*,
Food Funct., 2024, **15**, 11020.