

Research backs benefits of making exercise a priority

December 16 2022



Zen Yan. Credit: Virginia Tech

As the ball drops on the new year, exercise often tops the list of people's resolutions. According to Zhen Yan, whose research highlights the benefits of exercise in improving health and preventing disease, science

supports that choice for more than just getting in shape.

"Exercise is better than medicine," says Yan, a professor and director of the Center for Exercise Medicine Research at the Fralin Biomedical Research Institute at VTC. "We need to start thinking beyond extending our lifespan and focus on extending our health span." He is referring to that period of life free from chronic illness, pain and disease.

Yan's research provides scientific support for the role of exercise and its effect on mitochondria, which are critical to maintaining health. Yan has found connections between malfunctioning mitochondria and cardiovascular disease, metabolic disease, cancer and cognitive decline. Among his research findings:

- Exercise can [protect both muscles and nerves](#) before surgery and restore blood flow for [medical conditions](#) such as [heart attack](#) or stroke.
- Regular exercise can produce a [powerful antioxidant](#) that can reduce the risk of acute respiratory distress syndrome, a major cause of death in patients with COVID-19.
- Those who [exercise during pregnancy](#) may reduce their children's chances of developing diabetes and other metabolic diseases later in life.
- [Resistance training](#) leads to functional improvements such as balance, strength, mobility and [glucose metabolism](#) through muscle adaptation, insulin sensitivity and improved cellular turnover.

"Our body undergoes adaptations in response to exercise, not only to improve [physical performance](#), but also to induce many other health benefits," Yan says. "Physical activity and regular exercise are the best measures we have to promote good health and prevent disease."

Provided by Virginia Tech

Citation: Research backs benefits of making exercise a priority (2022, December 16) retrieved 23 February 2023 from <https://medicalxpress.com/news/2022-12-benefits-priority.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.