

# Antioxidant therapies may help in the fight against neurodegenerative diseases

August 1 2016

---

A new review examines the potential of antioxidant approaches for the treatment of neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, and multiple sclerosis.

Certain compounds that are involved in oxidative stress look like promising therapeutic targets. For example, researchers are investigating the potential of increasing antioxidant capacity by targeting what's known as the Nrf2 pathway, as well as developing inhibitors of NADPH oxidases, which are key sources of reactive oxygen species. Other potential strategies for limiting oxidative stress in [neurodegenerative diseases](#) include reducing the production of nitric oxide, or preventing mitochondrial dysfunction.

"There are still several gaps in our understanding of the basis of [oxidative damage](#) in neurodegenerative disorders; however, it is increasingly accepted that many diseases share common pathways of oxidative stress-related damage, and it's likely that significant progress will be made in the design and implementation of effective therapeutic strategies in the next few years," said Dr. Gethin McBean, lead author of the *British Journal of Pharmacology* review.

**More information:** *British Journal of Pharmacology*, [DOI: 10.1111/bph.13551](https://doi.org/10.1111/bph.13551)

Provided by Wiley

Citation: Antioxidant therapies may help in the fight against neurodegenerative diseases (2016, August 1) retrieved 4 July 2023 from <https://medicalxpress.com/news/2016-08-antioxidant-therapies-neurodegenerative-diseases.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.