

## Assistive aid that gives power back to people with impaired hand function

**Carbonhand** is a revolutionary aid that gives back power to people with impaired hand function. Pressure sensors and advanced technology ensure the glove adds power in cases where the user's own muscles are inadequate.

An assistive aid in the form of a grip-strengthening glove with pressure sensors in the fingers that sense when the user needs support. The pressure sensors detect when the user initiates a hand grip and the glove then applies the power needed to ensure a firm grip. Carbonhand comes in five different sizes for right and left hands.

**Improves grip and endurance**  
Artificial tendons and electric motors add power to the glove ensuring endurance for people with impaired hand function. This enables activities in everyday life, at work or during rehabilitation.

**Personal settings**  
Use the app to create and customise your own profiles. For example, you may need more support for leisure activities and less for simpler household activities. You can then easily switch between your profiles with the push of a button.

*More Info!*

[www.bioservo.com/us/news-media/videos-1](http://www.bioservo.com/us/news-media/videos-1)



### One glove, many possibilities

In addition to the actual glove, Carbonhand consists of a small power unit that distributes the power as required. You can wear Carbonhand on your back or around your waist, which allows it to be customised to suit the situation or your preferences.

### Available for US Veterans

Are you or a loved one a US veteran with impaired hand function who like to know if Carbonhand would help to regain a stronger grip and perform daily activities?

Carbonhand may be available at your local VA Medical Center under order of prescription.

### Carbonhand may mean everything

The impact of Carbonhand is immediate. With an applied force of up to 20 Newtons (N) per finger, a large proportion of patients with impaired hand strength are able to regain the majority of their hand function and resume activities and household activities. In addition, multiple studies conclude that many patients enjoy a stronger grip, improved hand function and a more independent life.

## Blended antioxidant supplement may help boost memory and cognition

By Robby Berman - Medical News Today



A new study in mice finds that supplements containing a blend of antioxidants may improve spatial cognition, short-term memory, and — surprisingly — muscle durability in older mice.

Antioxidants help promote the health of cells by reducing an excess of unstable free radical molecules that can damage healthy cells. While free radicals occur naturally, too many of them can overwhelm healthy cells, causing what's called oxidative stress. Oxidative stress has been linked to a wide range of health issues.

Antioxidants are molecules that can help inhibit or prevent cell damage in the body. They are often found in plants, and some occur in the human body, although there are also synthetic antioxidants consumed as supplements.

The researchers in Japan used a blended antioxidant product, Twendee X, a product currently marketed in that country. It contains eight different types of antioxidants and was formulated by Professor Haruhiko Inufusa of the Department of Antioxidant Research, Center for Scientific Research and Innovation at Gifu University in Japan.

For the new study, 18-month-old genetically modified mice were given a blended anti-

oxidant in water that they were allowed to drink or not drink at will for a month.

Their spatial cognition and short-term memory improved during the test period, as measured by their success in a Morris water maze Trusted Source and Y-maze Trusted Source, compared to mice in the control group provided plain filtered tap water.

Treadmill tests showed that by the end of the study, the blended antioxidant mice increased their running distance significantly more than their normal, control counterparts who were not taking blended antioxidants.

Further attempts to train mice on the treadmills with additional supplement administration showed no discernible effects between the two groups, suggesting the blended antioxidant may not improve exercise capacity or strength, but may help prevent age-related muscle decline.

In post-mortem examination of the blended-antioxidant mice's brains, the researchers observed a significant decrease in aspartate aminotransferase — an enzyme indicating muscle damage — alanine aminotransferase, as well as total cholesterol values.

The study is published in MDPI.