

# Muscular Endurance Improvement

Annual Conference of the Japan Society for Bioscience, Biotechnology and Agrochemistry (2015)

The fermented vegetable extract OM-X (OM-X extract) is effective in prolonging swimming duration and enhancing the muscle endurance of mice.

## Objective

We examined mice to see if they can extend their swimming duration, which is an index of their athletic ability (muscle endurance), by giving them the OM-X extract.

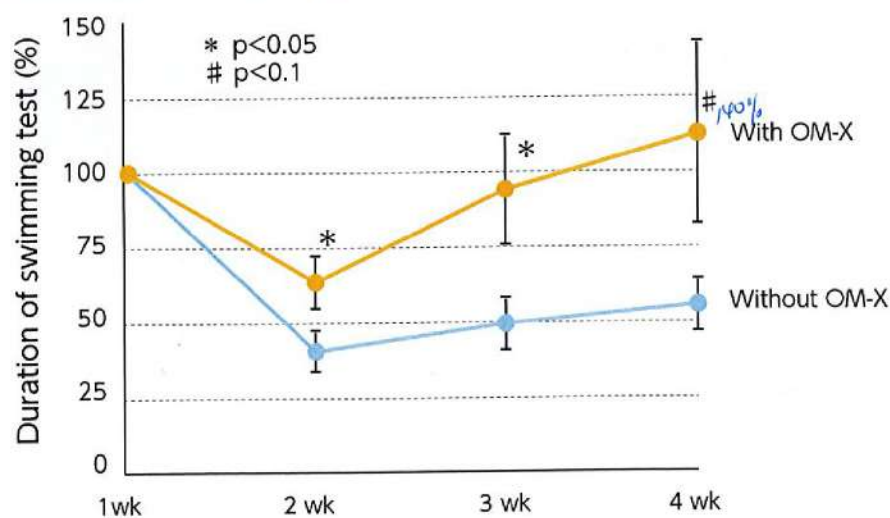
## Methods

We divided the test mice into 2 groups: with and without the administration of the OM-X extract, and recorded their swimming duration. The mice in the administered group received the OM-X extract for four consecutive weeks. Both groups underwent the swimming test once a week for four weeks. We set their swimming duration recorded at the first week as 100% and evaluated results of each test.

## Results

The group without the OM-X extract decreased their swimming duration to approx 40% at the second week and the duration became around 50% at the fourth week. In contrast, the swimming duration of the group with the OM-X extract became about 65% at the second week which was significantly extended compared with the group without the OM-X extract. At the fourth week, the swimming duration of the group with the OM-X extract extended 2 times longer than the other group. This record showed a longer swimming duration than their records measured at the first week. On the basis of these results, the OM-X extract contributed to enhance the muscle endurance of mice.

The evaluation of swimming duration in mice with the OM-X extract



The fermented extract OM-X is effective to enhance muscle endurance.