

## FCNT initiates joint research with National Longevity Medical Research Center

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**Towards developing a 'dementia risk prediction model' by investigating, verifying, measuring and tracking physical activity in aging population to build healthy and longevity society**



Japan based Fujitsu Connected Technologies Limited (FCNT), a national longevity medical research Institute at Obu City, has started joint research this year to realize a healthy and long-lived society.

In this collaborative research, FCNT will investigate, measure, and verify the relationship between physical activity in daily life and the risk of developing dementia, and will work to model the risk of developing dementia using information such as the amount of physical activity.

FCNT aims to contribute to the realization of a healthy and long-lived society using digital health care technology by equipping smartphones with functions that utilize this model and providing them to a wide range of customers.

FCNT has used digital health care technology to date, including the world's first pedometer on a mobile phone, heart rate measurement with a camera, blood vessel age/body stress measurement with a pulse wave sensor, etc. , Has been equipped with features that support customers' health maintenance and promotion in mobile phones and smartphones.

According to Japan's Ministry of Health, Labor and Welfare, about one in five elderly people will have dementia by 2025, which is a major social issue. FCNT's empirical researches scientifically verify whether non-drug therapies such as exercise and intellectual activities are effective in preventing dementia and frail.

This research focus on the amount, intensity, type, and frequency of various activities such as walking and walking speed, and model the relationship between physical activity in daily life and the risk of developing dementia. By visualizing the risk of dementia for physical activity by modeling, FCNT aims to develop a mechanism to improve the health behavior of customers toward the realization of a healthy and long-lived society.

**Implementations:**

1. Acquisition of various activity amount information such as physical activity amount/strength (Longevity Research Institute/FCNT)  
An activity amount calculation engine for calculating the amount of physical activity from physical activity allows the physical activity amount/strength such as walking and walking speed and various Acquire activity information such as the type and frequency of various activities.
2. Creating a predictive model of dementia risk based on activity information (Longevity Research Institute)  
FCNT model to study relationship between physical activity and the risk of developing dementia.
3. Development of an application using a predictive model of dementia risk (FCNT)

FCNT plans to contribute to the realization of a healthy and long-lived society by installing the dementia risk prediction application developed in this research on smartphones.