# Oral Movement Exercise and Lower Limb Exercise for Seniors

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#### Background:

According to the definition of the World Health Organization, a society is called " aged society " when people above 65 years old (seniors) account for more than 14 percent of the total population. The demographic data of Taiwan shows that the percentage of the seniors reached 7.0% as of September, 1993., with the present seniors' population in Yilan County even constitutes 14.51%, which makes it an " aged society ".

The aging process will gradually decrease people's physical activities and their abilities to adapt to daily life, thus, leading to injuries, or, in turn, making physical and mental dysfunctions more rapidly.

"Swallowing" is the most basic and important function of acquiring nutrition and sustaining human life, Difficulty in swallowing (dysphagia) could have many negative effects on anyone, including social isolation, malaise, malnutrition, dehydration, and aspiration pneumonia. As a result, improvement in quality of life can be easily achieved through the prevention and treatment of oral diseases, as well as the strengthening of oral muscles to improve their oral motor functions

On the other hand, basic body motor functions can be maintained by doing lower limb muscle strengthening exercise in order to help prevent seniors from taking falls. Body motor functions, nutrition and oral functions are closely related, so education on nutrition (proper diet), oral health, and gymnastics, are deemed to be crucial in maintenance and enhancement of the quality of life.

This study deals with seniors' oral health and body motor functions only.

#### Methods:

Thirty seniors participated in this study, in which they were taught to do oral movement exercise and body balance exercise for about 20-30 minutes weekly to determine whether these two kinds of exercise help improve the participants' well-being in four areas: general physical fitness, difficulty in swallowing, happiness, and participation in various programs for seniors after 3 months and after 6 months.

Then, they undergo weekly collective reviews and daily self-reviews. . The data was analyzed by means of frequency and description data, using Wilcoxon Signed-Rank test (Nonparametric Test) of statistical methods.

### Result:

The study discovers:

1. With regard to general physical fitness: the seniors have shown improvement when they were asked to do various exercise/movements.

- 2. With regard to difficulties in swallowing: the seniors feel there is improvement when swallowing hard, solid food.
- 3. Overall, the seniors feel they are happier, being able to manage their own daily life affairs more easily.

## **Conclusions:**

Through the discovery of this study, we could provide community medical professionals with the exercise of oral movement promotion and lower limb movement for them to teach the seniors in their care. Hopefully, in addition to improving the relationship between the seniors and their families, it will help seniors maintain and enhance their physical functions for the purpose of increasing their sense of well-being, slowing down their degradation and improving their quality of life.