

## Abstract

Not only the ageing population, but also the pitfalls of the current lifestyle represented by high caloric intake and negligible physical activity lead to a significant increase in civilisation diseases, the most prominent of which are obesity, type 2 diabetes and hypertension. All of these, but not exclusively, contribute to the rise in neurodegenerative diseases such as dementia.

This bachelor's thesis deals with the nutritional status and physical fitness of clients with dementia syndrome in a residential care home (one of the types of residential social care facility). The aim of the thesis was to perform nutritional screening, obtain body mass composition values and assess the nutritional status of this group of people. Another aim was to assess the physical fitness status and muscle volume.

The research was conducted in the beginning of 2023 (from January to April) among the clients of the residential facility in the Home Velké Březno near Ústí nad Labem. Self-managing clients with different degrees of dementia syndrome were included in the research. A total of 31 people participated in the research, 25 women and 6 men with an average age of 79 years. Each participant underwent a standardized nutritional MNA screening, body mass composition was measured using the InBody S10 device, and finally a physical fitness test called the TUG test was performed. The results were entered into a Microsoft Excel spreadsheet. Subsequently, the data obtained were evaluated and processed into tables and graphs.

On the basis of the measurements taken, it was found that the BMI of the clients did not differ from the values of the general population. However, there is a significant prevalence of overweight, and a high content of adipose tissue at the expense of muscle tissue. Physical fitness test results showed average values for almost half of the clients. Combined with the composition of body mass and the relatively limited opportunities to further build much needed muscle mass, the outlook for this group of clients with a diagnosis of dementia is not good.

The conclusion of the paper is therefore a clear support for the thesis that nutrition and physical exercise are the mainstays, prevention as well as supportive treatment for this type of disease. Nutritional screening at regular intervals along with nutritional interventions and a clear nutritional plan is a must in these patients. Similarly, care for physical fitness and further skeletal muscle building should become a routine and not overlooked part of the lives of residential service clients.

**Keywords:** nutrition, movement, dementia syndrome, nursing homes