



## Baropodometric and stabilometric evaluation of active and sedentary elderly

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The National Policy for the Elderly (PNI), the Statute for the Elderly and the World Health Organization characterize the elderly as those aged 60 or over. The aging process of the somatosensory system, the central and peripheral nervous systems can undergo fundamental changes to compromise autonomy. Within this condition, it is known that these changes increase the threshold for the detection of movement and hinder the precise reproduction of joint movements, an event known as proprioceptive deficit, which can be aggravated by sedentary lifestyle in the elderly, resulting in falls. In this sense, Measure and compare the distribution of plantar pressure, as well as the stabilometric behavior in groups of elderly, practitioners of physical activity and non-practitioners, with and without a history of falls in the last 12 months, to see if there is a common or divergent pattern plantar support, biomechanical aspects and its relationship with the occurrence of falls. 100 elderly people registered at the aging secretariat will be selected at random, of these 50 will be drawn from the elderly who are part of the healthy aging program (practitioners of physical activity) and the other 50 will be drawn from the group of elderly people who only follow up by the secretariat (sedentary). Elderly people over 60 years old, able to remain in bipedal support for 1 minute and with cognitive preservation to understand the study will be included. Elderly people with any level of amputation of both lower and lower limbs, with moderate to severe visual or auditory impairment, and with impaired vestibular system will be excluded. A computerized baropodometry system will be used to capture plantar pressure in real time point to point and the oscillation of the center of gravity in real time (stabilometry). Finally, the history of falls will be evaluated with Questionnaires of falls in the last 12 months. This study hopes to identify what the main changes can be found in the feet of the elderly, as well as changes in the center of gravity to reduce the risk of falls in the elderly.

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