

**THE EFFECT STRAIGHT LEG RAISE EXERCISE AND CLAMSHELL  
EXERCISE ON INCREASING LOWER EXTREMITY MUSCLE STRENGTH  
IN THE ELDERLY**

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**ABSTRACT**

**Background:** *The aging process is one of the life cycles where the body's tissue's ability to maintain normal structure and function is gradually lost, experienced by every human being. As we age, muscles and muscle fibers will weaken. Loss of muscle mass is caused by a decrease in the number of muscle fibers and motor units and a decrease in muscle fiber size. Exercise interventions such as straight leg raise exercise and clamshell exercise have been proven effective in increasing lower extremity muscle strength, as well as helping muscle relaxation and improving motor function in the elderly.* **Objective:** *To increase knowledge about how to increase lower extremity muscle strength in the elderly by introducing exercises in the form of straight leg raise exercises and clamshell exercises.* **Method:** *This type of research uses a quasi-experimental method with a one-group pre-test and post-test research design, which means that measurements are taken before treatment (pre-test) and after treatment (post-test).* **Results:** *The results of the Wilcoxon test show a p value = 0.000 (p value < 0.05), so H<sub>0</sub> is rejected and H<sub>a</sub> is accepted, so it can be concluded that giving straight leg raise exercise and clamshell exercise affects the increase in lower extremity muscle strength.* **Conclusion:** *Straight leg raise exercise and clamshell exercise have an effect on increasing lower extremity muscle strength in the elderly.*

**Keywords:** *Straight leg raise exercise, Clamshell exercise, muscle strength, elderly, Manual muscle testing.*