

UNIVERSITI TEKNOLOGI MARA

**COMPARISON BETWEEN SWIMMERS AND
WATER POLO ATHLETES LUNG
FUNCTIONALITY AND THE RELATIONSHIP
WITH CHEST CIRCUMFERENCES**

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DECLARATION OF ORIGINAL WORK

UNIVERSITI TEKNOLOGI MARA (UiTM)

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ABSTRACT

Swimming and water polo is a sport that developing lung functionality. Even it share similar nature of sport, there will be different lung functionality due to different pressure. Swimmers pressure between chest walls and water resistant. While, water polo pressure is maintain the breathing and body from drowning by opponents. The greater lung functionality also relate with the size of chest circumference. To determined and compare the lung functionality between swimmers and water polo athletes, and to see the relationship between chest circumference and lung functionality. The lung functionality was measured between swimmers and water polo athletes. There were 20 subjects of swimmers and 20 subjects of water polo athletes. The range of aged is 12 to 16 years old. Recorded data had been analysed using SPSS software version 16.0. The results show that there is no significant different of lung functionality between swimmers and water polo athletes. However there is significant relationship between chest circumference and lung functionality. There is no significant different of lung functionality between swimmers and water polo athletes. Thus, null hypothesis is accepted. There is significant relationship between chest circumference and lung functionality. Thus, null hypothesis is rejected.

Keywords: *Chest Circumference, Lung Functionality, Spirometer Test, Swimmers, Water Polo*

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