



## Menstrual health knowledge amongst active females in Aotearoa/New Zealand

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Poor menstrual health literacy is a factor that contributes to females not seeking medical help for abnormal menstrual symptoms that may impact their mental, social, and physical health<sup>(1)</sup>. Few studies have focused on testing baseline functional knowledge of the menstrual cycle (MC) outside the context of pregnancy and menopause. The primary objective of this study was to investigate MC knowledge levels of physically active females residing in New Zealand. A secondary objective was to understand where females get their MC information from, what sources they consider to be trustworthy and what information on the MC they would like to know more about. A MC knowledge questionnaire was developed by the research team (n = 3), and reviewed by academics (n = 4), medical experts (n = 4), sporting organisation staff (n = 5), and target population (n = 10) to ensure content validity. Active females (n = 203) between the ages of 16-40 years completed an online questionnaire. The questionnaire included a total of 25 knowledge questions and was split into four categories: menstrual cycle (Q = 9), menstruation (Q = 7), symptoms (Q = 5), and health outcomes (Q = 6). Responses (single and multiple answer multi-choice questions) were analysed using descriptive statistics which were presented as mean, SD and frequency (%). The overall knowledge score was 51.8% (22.8 ± 3.4). The highest knowledge scores were noted for symptoms (80.5%), followed by menstruation (79.8%), and the menstrual cycle (64.2%). Females scored poorly when asked about health outcomes related to the MC (20.4%). 61.5% of participants (n = 123) identified the internet as their main source of MC information. Friends (n = 82, 41%), school sex education (n = 73, 36.5%) and social media (n = 73, 36.5%) were the next most common sources of MC information. The most trustworthy sources of information were doctors/GPs (n = 96, 48%) and healthcare professionals (n = 70, 35%). The most common topics that females wanted to know more about were diet and the MC (n = 115, 57.5%), training and the MC (n = 115, 57.5%), MC tracking (n = 78, 39%), MC and mood (n = 75, 37.5%) and RED-S/LEA/Female athlete triad (n = 71, 35.5%). Overall functional knowledge levels of the MC and associated health outcomes is low in active females. Healthcare professionals and doctors are the most trustworthy sources of information; however, they are not the most common sources of information that females will engage with. Developing online educational resources on the MC, associated health outcomes and lifestyle factors (diet, physical activity) with medical and healthcare professionals may be considered in future female health education.

**Keywords:** Menstrual cycle; awareness; education sources; premenopausal females

### Ethics Declaration

Yes

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### Reference

1. Garside R, Britten N & Stein K (2008) *Journal of Advanced Nursing* 63(6):550–62.