

**THE DIFFERENCE IN EFFECTIVENESS OF RED GINGER AND  
DARK CHOCOLATE ADMINISTRATION ON THE REDUCTION  
OF PRIMARY DYSMENORRHEA AMONG STUDENTS AT  
SMKN 1 MEMPAWAH HILIR**

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**ABSTRACT**

**Background:** Primary dysmenorrhea is menstrual pain commonly experienced by adolescent girls, which can disrupt learning activities and concentration. Non-pharmacological management options include the use of red ginger and dark chocolate. Red ginger contains gingerol and shogaol, which have anti-inflammatory and analgesic properties, while dark chocolate is rich in magnesium, which helps relax muscles and stimulates the release of endorphins. **Objective:** To compare the effectiveness of red ginger and dark chocolate in reducing primary dysmenorrhea among students at SMKN 1 Mempawah Hilir. **Methods:** This study employed a quasi-experimental design with a pretest-posttest approach. The sample consisted of 30 respondents, divided into two intervention groups of 15 participants. Pain levels were measured using the Numeric Rating Scale (NRS). Data were analyzed using paired *t*-tests for each group and independent *t*-tests to compare the groups. **Results:** Both red ginger and dark chocolate were found to be effective in reducing primary dysmenorrhea ( $p < 0.05$ ). However, there was a significant difference in effectiveness between the two interventions ( $p\text{-value } 0.037 < 0.05$ ), with red ginger showing a greater reduction in pain intensity compared to dark chocolate. **Conclusion:** There is a significant difference between red ginger and dark chocolate. Nevertheless, both interventions have an impact on reducing primary dysmenorrhea and can be used as alternative non-pharmacological therapies.

**Keywords:** Adolescents, Primary dysmenorrhea, Red ginger, Dark chocolate