

**Hubungan Pengetahuan, Status Gizi, Massa Lemak dan Massa Otot dengan Status Hidrasi Atlet Karate Usia Remaja (*Relationship between Knowledge, Nutritional Status, Fat Mass and Muscle Mass with Hydration Status of Adolescent Karate Athletes*)**

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***ABSTRACT***

*Dehydration occurs when body fluids are out of balance. Karate athletes tend to have an abnormal hydration status risk during exercise due to increased physical activity. This study aims to determine the relationship between knowledge, nutritional status, fat mass and muscle mass with the hydration status of adolescent karate athletes at INKAI Jember. This study is a quantitative study using an analytical survey design type using a cross-sectional time approach, using 109 karate athletes from a total of 8 branches as research subjects. The results of the chi-square test showed that there was a relationship between knowledge and hydration status ( $p = 0.026$ ), there was a relationship between nutritional status and hydration status ( $p = 0.008$ ), there was no relationship between fat mass and hydration status ( $p = 0.542$ ), and there was a relationship between muscle mass and hydration status ( $p = 0.004$ ). Therefore, it is recommended to increase education about hydration and nutrition and to monitor body composition to support optimal hydration status.*

***Keywords:*** *Knowledge, Nutritional Status, Fat Mass, Muscle Mass and Hydration Status*