

Body Mass Index, Liquid Consumption, Hydration Status Physical Activity and Vo2max Level  
of Aspac Jakarta Basketball Player Jakarta

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Abstract

**Introduction:** Among Athletes, good nutritional status and good nutrient intake will help to improve their performance. One of the important nutrient is liquid. Low intake of liquid will influence physical exhausted, dehydration and athletes' performance. Basketball is one of sport that need strong physical endurance and high speed, thus dehydration was very common among them if fluid intake is not fulfilled. This study aimed to understand the correlation between liquid consumption, physical activity, and hydration status of Aspac Jakarta basketball athlete in 2017

**Methods:** A cross sectional study design with total sample of 14 professional basketball player. Height and weight were measured to determined BMI, multiple 24 hours Food and Activity recall was performed to assess liquid consumption and physical activities, while urine density was assessed to determine their hydration status. Bleep test was performed to assess VO2Max level. Pearson correlation was conducted to assess correlation among variables.

**Results:** There are significant positive correlation between Urine density, Physical activity to VO2 Max ( $p < 0,005$ ) on the other hand, there is negative significant correlation between BMI and VO2max, while there is no significant correlation between Liquid Consumption to VO2Max. ( $p > 0,005$ )

**Conclusions:** Urine density, physical activity and BMI were determinant factor to VO2max Level among Aspac Basketball Player Jakarta.

**Keywords:** BMI, Basketball, Hydration, VO2Max