THE RELATIONSHIP OF GLYCEMIC INDEX FOOD CONSUMED WITH VO₂ MAX FUTSAL PLAYERS

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ABSTRACT
Futsal is one of the sports that demands high cardiorespiratory resistance. Measurement of the resistance of cardiorespiratory to aerobic capacity is done by measuring the VO₂ max. VO₂ max is the maximum value of the body can use oxygen during exercise. One of the factors that influence VO₂ max is nutrients. Nutrients that are required for the sport one is carbohydrates. Carbohydrate intake before exercise can increase the amount of glycogen deposits so that it can delay fatigue during exercise. Carbohydrates based on the blood glucose response in the body are differentiated based on the glycemic index constants. Foods with different glycemic index is oxidized and absorbed with different speeds so it has a different impact on blood glucose and insulin. This research aims to know the relationship of glycemic index food consumed and VO₂ max futsal players.

The research type is analytic research with approach of cross sectional that describe the relationship between glycemic index food consumed against VO₂ max on futsal players. The samples were 20 futsal players were selected by purposive sampling. Statistics analysis using simple linear regression test to find out the relationship of glycemic index food consumed with VO₂ max futsal players.

Respondents consuming glycemic index food on average 46.6870 ± 8.9928. Respondents who have a value of VO₂ max are a number of 60% and an average value of 35.0995 ± 3.7351 VO₂ max. Analysis results using Simple Linear Regression test indicates the existence of a relationship between glycemic index food consumed and VO₂ max on futsal player (p value = 0.002). There is a relationship between glycemic index food consumed against VO₂ max on futsal player.

Keywords: futsal players, glycemic index, VO₂ max