

**THE EFFERCT OF PASSION FRUIT JUICE (*Passiflora edulis*)
FAVICARPA VARIETIES ON VO₂MAX AND BLOOD PRESSURE
IN FOOTBALL TEAM PALAGAN JEMBER**

Daniar Rizqi Maghfirah

Clinical Nutrition Study Program

Department of Health

ABSTRACT

Good physical condition is an important factor that every soccer player must have. Good physical condition is one of the requirements for achieving maximum sporting performance. Health-related fitness assessments can be done using maximum oxygen volume (VO₂Max) and blood pressure. In order stabilizing physical condition of the soccer player, rehydration fluid is needed which contains glucose and electrolytes. Passion fruit contains carbohydrates and potassium. The aim of this study was to examine the effect of giving passion fruit juice (*Passiflora edulis*) on VO₂Max and blood pressure in the Palagan football team. This research used a Quasi Experimental pretest-posttest design with control group. The research subjects were 26 players who met the inclusion criteria and were divided into 2 groups, namely the treatment group given mineral water and the control group passion fruit juice with a concentration of 50% (50 grams/100 mL water) before training. Measurement of VO₂Max with the Balke Test and blood pressure with a sphygmomanometer. There was no difference in the VO₂Max value before and after the intervention in the control group ($p = 0.195$) and there was a difference in the treatment group ($p = 0.015$). There was no difference in blood pressure values before and after the intervention in the control group, systolic blood pressure ($p = 0.893$) and diastolic blood pressure ($p = 0.593$), whereas in the treatment group there was a difference in systolic blood pressure ($p = 0.021$) and there was no difference in diastolic blood pressure ($p = 0.649$). From the result of the study it can be concluded that there was an effect of giving passion fruit juice on VO₂Max but it gave no effect on blood pressure.

Keywords: Blood pressure, Carbohydrates, Endurance, Passion fruit juice, Potassium, VO₂Max.

**PENGARUH PEMBERIAN JUS MARKISA (*Passiflora edulis*)
VARIETAS FLAVICARPA TERHADAP VO₂MAX DAN TEKANAN
DARAH PADA TIM SEPAK BOLA PALAGAN
KABUPATEN JEMBER**

Daniar Rizqi Maghfirah
Program Studi Gizi Klinik
Jurusan Kesehatan

ABSTRAK

Kondisi fisik prima merupakan faktor penting yang harus dimiliki oleh setiap pemain sepak bola. Fisik yang prima merupakan salah satu syarat untuk mencapai prestasi didalam olahraga. Penilaian kebugaran dapat dilakukan menggunakan volume oksigen maksimal (VO₂Max) dan Tekanan darah. Untuk menstabilkan dibutuhkan cairan rehidrasi yang mengandung glukosa dan elektrolit. Markisa mengandung karbohidrat dan kalium. Tujuan dari penelitian ini mengkaji pengaruh pemberian jus markisa (*Passiflora edulis*) terhadap VO₂Max dan Tekanan darah pada tim sepak bola Palagan. Penelitian menggunakan *Quasi Eksperimental* desain *pretest-posttest with control group*. Subjek penelitian 26 orang yang memenuhi kriteria inklusi dibagi 2 kelompok yaitu kelompok perlakuan diberikan air mineral dan kelompok kontrol jus markisa dengan konsentrasi 50% (50 gram/100 mL air) sebelum latihan. Pengukuran VO₂Max dengan Tes *Balke* dan Tekanan darah dengan alat tensimeter. Nilai VO₂Max sebelum dan sesudah intervensi tidak terdapat perbedaan pada kelompok kontrol ($p = 0,195$) dan kelompok perlakuan terdapat perbedaan ($p = 0,015$). Nilai Tekanan darah sebelum dan sesudah intervensi tidak terdapat perbedaan pada kelompok kontrol tekanan sistole ($p = 0,893$) dan tekanan darah diastole ($p = 0,593$), sedangkan pada kelompok perlakuan terdapat perbedaan pada tekanan darah sistole ($p = 0,021$) dan tidak terdapat perbedaan pada tekanan darah diastole ($p = 0,649$). Kesimpulan penelitian ini terdapat pengaruh pemberian jus markisa terhadap VO₂Max dan tidak terdapat pengaruh pada Tekanan darah.

Kata kunci: Daya tahan, Jus markisa, Kalium, Karbohidrat, Tekanan darah, VO₂Max.