

## Abstrak

**PENGARUH PEMBERIAN JUS KOMBINASI SEMANGKA  
KUNING - PISANG RAJA TERHADAP GLUKOSA  
DARAH DAN DAYA TAHAN AEROB  
(Studi *In Vivo* pada Tikus *Sprague Dawley*)  
Indah Sekar Pujawati, Hesti Permata Sari, Farida**

**Latar Belakang:** Kelelahan otot akan mempengaruhi performa atlet. Semangka kuning dan pisang raja mengandung glukosa, kalium, dan sitrulin yang dapat membantu menunda kelelahan otot. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian jus kombinasi semangka kuning – pisang raja terhadap glukosa darah dan daya tahan aerob pada tikus *Sprague Dawley*.

**Metode:** Penelitian *true experimental* ini menggunakan rancangan *post test only with controlled group design*. Menggunakan 28 tikus jantan galur *Sprague Dawley*, dibagi menjadi empat kelompok, yaitu K(+), K(-), P1, dan P2, diberikan jus kombinasi semangka kuning – pisang raja berbagai variasi dosis. Tikus di uji lama renang dan glukosa darah pasca olahraga anaerob. Data dianalisis menggunakan uji *One Way Anova* dan uji lanjutan *Post Hoc LSD*.

**Hasil Penelitian:** Kelompok P2 memiliki rata -rata kadar glukosa darah pasca olahraga anaerob tertinggi dan daya tahan aerob yang paling lama. Terdapat perbedaan kadar glukosa darah pasca olahraga anaerob ( $p < 0,05$ ) dan daya tahan aerob ( $p < 0,05$ ) pada setiap kelompok setelah diberikan intervensi jus kombinasi dengan berbagai variasi dosis.

**Kesimpulan:** Terdapat perbedaan kadar glukosa darah pasca olahraga anaerob dan daya tahan aerob pada setiap kelompok setelah diberikan intervensi jus kombinasi dengan berbagai variasi dosis.

**Kata Kunci:** Semangka kuning, pisang raja, kadar glukosa darah pasca olahraga anaerob, daya tahan aerob, tikus *Sprague Dawley*.

## Abstract

### THE EFFECT OF GIVING COMBINATION JUICE OF YELLOW WATERMELON - PLANTAIN AGAINST BLOOD GLUCOSE AND AEROB ENDURANCE (Study *In Vivo* on *Sprague Dawley* Rats) *Indah Sekar Pujawati, Hesti Permata Sari, Farida*

**Background:** Muscle fatigue will affect muscle performance. Yellow watermelon and plantain are foods that contain calcium, potassium, and citrulline which can be delay as muscle fatigue. This study aims to knowing combination juice of yellow watermelon - plantain against blood glucose and aerob endurance in *Sprague Dawley* rats.

**Methods:** This true experimental study used a post test design only with a controlled group design. Using 28 male *Sprague Dawley* rats, divided into four groups, are K(+), K(-), P1, and P2, were given a combination juice of yellow watermelon - plantain in various dosage. Rats do swimming test and blood glucose after anaerob exercise. Data was analyzed using *One Way Anova* test and *Post-Hoc* LSD advanced test.

**Results:** The P2 group had the the highest mean blood glucose after anaerob exercise and the longest aerob endurance. There was differences in blood glucose after anaerob exercise ( $p < 0.05$ ) and aerob endurance ( $p < 0.05$ ) in each group after being given a combination juices with various dosage.

**Conclusion:** There was differences in blood glucose after anaerob exercise and aerob endurance in each group after being given a combination juices with various dosage.

**Keywords:** Yellow watermelon, plantain, blood glucose after anaerob exercise, aerob endurance, *Sprague Dawley* rats.