

Effects of Black Rice Bran Extract Supplementation on Circulating Leukocyte Counts to
Moderate-intensity Exercise in Dyslipidemic Subjects

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Abstract

Introduction: This study investigated the effects of black rice bran extract supplementation (BRE) on leukocyte counts at rest and after exercise in dyslipidemic individuals.

Methods: Fifteen subjects performed two 5-wk phases with daily ingestion of either 100 mL BRE or placebo with a 5-wk washout. One day pre- (acute effect) and post- (prolonged effect), subjects randomly ingested the drink before a 20-min moderate-intensity exercise followed by a 30 min rest.

Results: Comparing with PLA, acute effect of BRE showed lower monocyte count at recovery. The prolonged effect showed higher neutrophils count immediately after exercise.

Conclusions: Findings indicate that the acute effect of BRE seems to be anti-inflammatory induced by moderate-intensity exercise, while the prolonged effect is unclear whether this represents an immune activation or pro-inflammatory response to exercise in the dyslipidemic subjects.

Keywords: Activity, Anthocyanin, Lipid Profile, White Blood Cell