

role in the pathophysiology of CVD and its associated risk factors (El-sayed 2005). Habitual, regular physical activity has been postulated to reduce the incidence of CVD (Johansson and Sundquist 1999). However, strenuous exercise augments the risk of vascular thrombotic events and primary cardiac arrests through an occlusive platelet-rich thrombus (Bartsch 1999). In addition, it has been shown that flavanol-rich foods, such as cocoa promote health and attenuate, or delay the onset of CVD (Rimm 2002). The present study designed to evaluate if cocoa attenuate the effect of an incremental exhaustive exercise on platelet count (Plt), mean platelet volume (MPV) and platelet distribution width (PDW). Eleven athlete male (mean age: 23 ± 1 years; height: 1.75 ± 0.23 m; body mass: 66.1 ± 9.5 kg; BF%: 21.98 ± 2.1 ; $\text{VO}_{2\text{max}}$: 51.6 ± 2.4 ml/kg/min) provided written informed consent. Bruce exercise test was performed as an incremental exhaustive protocol on two occasions, 1 week apart. In a double-blind design, each participant received either a volume of cocoa solution or flavoured solution based on his body mass before exercise trial. Venous blood samples were collected 2-h prior to exercise (baseline), pre-, post- and 1-h after completion of each trial. Differences were examined using a two-factor analysis of variance with repeated measures as appropriate. Platelet counts increased (cocoa: from 188.30 ± 33.28 to 244.00 ± 41.03 ; placebo: from 178.14 ± 22.07 to 251.36 ± 42.22) significantly ($p < 0.001$) after exercise compared with before exercise in both trials, but was not significantly different between conditions. MPV and PDW were unaffected by condition and did not differ at any time after exercise protocol ($p > 0.05$). This study did not show that increased platelet activity in response to an incremental exercise could be decreased with oral supplementation of cocoa that is line with Singh (2006). Murphy *et al* (2003) and Rein *et al* (2000) have reported decreases in platelet activation, but with a higher concentration of 900 mg/day. In conclusion, short-term cocoa supplementation did not decrease platelet activity in response to an incremental exhaustive exercise.

153 EFFECT OF COCOA SHORT-TERM SUPPLEMENTATION ON PLATELET FACTORS (PLT 'MPV' PDW) OF ATHLETE MALE'S BLOOD AFTER AN AEROBIC EXHAUSTIVE EXERCISE

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Cardiovascular disease (CVD) and special coronary heart disease is the main indicator of cardiac arrests and mortality and is the most common complication in the contemporary world (Willoughby and Holmes 2002). Platelets play an important

Corrections

Effect of cocoa short-term supplementation on platelet factors (PLT 'MPV' PDW) of athlete male's blood after an aerobic exhaustive exercise (*Br J Sports Med* 2010;**44**:i46). The correct author names are as follows: Vahid Sari-Sarraf, Saeed Nikookheslat, Ramin Amir Sasan, Mehdi Soleimani, they are all affiliated to the Faculty of Physical Education and Sport Sciences, Tabriz University, Tabriz/Iran. Corresponding author is Dr Vahid Sari-Sarraf, Faculty of Physical Education and Sport Sciences, Tabriz University, Tabriz/Iran; sarraf@tabrizu.ac.ir

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