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**COMPARISON OF THE EFFECT OF DARK AND**

**WHITE CHOCOLATE ON APO B, APOA-1,LIPID**

**PROFILE,HS-CRP,GLYCAEMIC CONTROL AND**

**BLOOD PRESSURE IN HYPERTENSIVE TYPE 2 DIABETICS**

*S. Eghtesadi1, A. Rostami1, I. Heidari2, F. Shidfar1, F. Hosseini3*

1Department of Nutrition and Biochemistry,Tehran

University of Medical Sciences ,Tehran, Iran

2Institute of Endocrinology and Metabolism,Tehran

University of Medical Sciences,Tehran,Iran

3Department of Biostatistics,School of Health Management

and Bioinformatics,Tehran University of

Medical Sciences,Tehran,Iran

**Background and objectives:** Given the inverse correlation

between the dietary intake of flavanols and the mortality of cardiovascular

disease, the aim of this study was to examine the

effects of high flavanol chocolate on lipid profile,weight, blood

pressure, glycaemic control and inflammation in individuals

with Type 2diabetes and hypertension.

**Methods:** Sixty nine individuals with Type 2 diabetes on

stable medication were enrolled in a randomized, placebocontrolled

double-blind study,receiving either 25 g dark chocolate

(DCG) or white chocolate (WCG) for 8 weeks. Changes

in weight, blood pressure, glycaemic control, lipid profile and

highsensitivity C-reactive protein(hsCRP) were measured at

the beginning and at the end of intervention.

**Results:** Energy intake, macronutrient and micronutrient

composition of the diet were not different between groups

at baseline and did not change in the DCG or WCG during

the intervention period. Fasting blood glucose (FBG), blood

pressure, HbA1c, triglyceride levels, Apo-lipoprotein A-1 and

Apo-lipoprotein B and hsCRP levels in the DCG was significantly

changed after the intervention compared with baseline

(p<0.05); however no such effects were observed in the WCG.

Systolic and diastolic blood pressure decreased significantly

(P=0.002 and P=0.001 respectively) and TG levels were also

reduced meaningfully in DCG compared with WCG (P=007).

There were not any significant changes in Body weight and

BMI in both groups at the end of the study.

**Conclusions:** High polyphenol chocolate is effective in improving

TG levels and decreasing blood pressure in hypertensive

diabetic patients.

**Key words:** chocolate, Polyphenols, type 2 diabetes \*This

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