

اثرات مفید مصرف آب آلبالو بر کاهش برخی عوامل خطر ساز بیماری‌های قلبی عروقی در بیماران مبتلا به دیابت نوع ۲

چکیده

مقدمه:

mg/dl ≤ LDL-C mg/dl ≤

روش‌ها:

g/day

یافته‌ها: (SD±) LDL-C / ± / mmHg / ± / mmHg / ± / mg/dl / ± / mg/dl / ± / / ± /

LDL-C

HDL-C

(P< /)

نتیجه‌گیری:

واژگان کلیدی:

* نشانی:

emrc@sina.tums.ac.ir :

تاریخ دریافت مقاله: ۸۴/۱۱/۲۹

تاریخ پذیرش مقاله: ۸۵/۵/۵

مقدمه

روش‌ها

...

[] []

(

mg/dl ≤ LDL-C mg/dl ≤

) mg/dl ≤ LDL-C (

.[] mg/dl > LDL-C .[]

(

(LDL-C

.[]

(.[]

...

Seca

.[] BMI .[]

SBM-600F

cc

HDL-C LDL-C .[] ... berries

[]

mean± SD
/ ± / / ± /

g

.()

mg/ g
BMI

(P= /) BMI

(P< /) LDL-C
HDL-C

/ SPSS

بحث

Two-dependent samples

P< /

LDL-C

g

یافته‌ها

جدول ۱- سطح شاخص های آنتروپومتری، فشار خون و چربی های خون در شروع و ۶ هفته پس از مصرف کنسانتره آب آلبالو در ۱۶ بیمار مبتلا به دیابت نوع ۲

متغیر	شروع مطالعه	پایان هفته ۶
وزن (kg)	/ ± /	/ ± /
BMI (kg/m2)	/ ± /	/ ± /
فشار خون سیستولیک (mmHg)	/ ± /	/ ± /
فشار خون دیاستولیک (mmHg)	/ ± /	/ ± /
کلسترول تام (mg/dl)	/ ± /	/ ± /
LDL-C (mg/dl)	/ ± /	/ ± /
HDL-C (mg/dl)	/ ± /	/ ± /
تری گلیسرید (mg/dl)	/ ± /	/ ± /
P		
(P< /)		
±	±	**

$\% / \pm$ (P= /)
 $\% / \pm / \text{LDL-C}$. (P< /) LDL-C
 .[]
 Preuss
 (/ \pm mg/dl) Esmailzadeh .
 .
 .
 g/day
 LDL-C (P< /)
 DASH /HDL LDL/HDL (P< /)
 .[] (P< /)
 / mmol/L \leq
 / mmol/L \leq
 Reshef .[]
 Sweetie :
 [] []
 I []
 Duthie .
 .[] cc/day
 (eNOS) []
 .
 .
 .[] NO LDL-
 C
 Bell .
 Preuss .
 .
 mg
 mg/dl

LDL-C

Tsuda
(C3G)

PCC

[]

Cornelian Cherry

سیاسگزارى

%

[]

مآخذ

1. American Diabetes Association. Management of dislipidemia in adults with diabetes (Position Statement). *Diabetes Care* 1992; 22 (suppl 1): 56.
2. American Diabetes Association. Treatment of hypertension in diabetes (Consensus Statement). *Diabetes Care* 1993; 16: 1394.
3. Bros W, Heller W, Michel C, Saran M. Flavonoids as antioxidants: determination of radical-scavenging efficiencies. *Methods Enzimol* 1990; 186: 343-55.
4. Cook NC, Samman S. Flavonoids-chemistry, metabolism, cardioprotective effects and dietary sources. *J Nutr Biochem* 1996; 7: 66-76.
5. Moline J, Bukharovich IF, Wolff MS, Phillips R. Dietary flavonoids and hypertension: is there a link? *Med Hypotheses* 2000; 55: 306-9.
6. Harborne J.B. & Grayer RJ. The anthocyanins. In: Harborne JB (editors). *The flavonoids*, 2nd edition. London, UK. Chapman and Hall; 1988: 1-20.
7. Sauebin L, Rossi A, Serraino I, Dugo P, Di Paola R, Mondello L, et al. Effect of anthocyanins contained in a blackberry extract on the circulatory failure and multiple organ dysfunction caused by endotoxin in the rat. *Planta Med* 2004; 70: 745-52.
8. Preuss HG, Wallerstedt D, Talpur N, Tutuncuoglu SO, Echard B, Myers A, et al. Effects of niacin-bound chromium and grape seed proanthocyanidin extract on the lipid profile of hypercholesterolemic subjects: a pilot study. *J Med* 2000; 31: 227-46.
9. Xu JW, Ikeda K, Yamori Y. Upregulation of endothelial nitric oxide synthase by cyanidin-3-glucoside, a typical anthocyanin pigment. *Hypertension* 2004; 44: 217-22.
10. Zern TL, Wood RJ, Greene C, West KL, Liu Y, Aggarwal D, et al. Grape polyphenols exert a cardioprotective effect in pre- and postmenopausal women by lowering plasma lipids and

- reducing oxidative stress. *J Nutr* 2005; 135: 1911-7.
11. Duthie SJ, Jenkinson AM, Crozier A, Mullen W, Pirie L, Kyle J, et al. The effects of cranberry juice consumption on antioxidant status and biomarkers relating to heart disease and cancer in healthy human volunteers. *Eur J Clin Nutr* 2006; 45: 113-22.
 12. Hansen AS, Marckmann P, Dragsted LO, Finne Nielsen IL, Nielsen SE, Gronbaek M. Effect of red wine and red grape extract on blood lipids, haemostatic factors, and other risk factors for cardiovascular disease. *Eur J Clin Nutr* 2005; 59: 449-55.
 13. Esmailzadeh A, Tahbaz F, Gaieni I, Alavi-Majd H, Azadbakht L. Concentrated pomegranate juice improves lipid profiles in diabetic patients with hyperlipidemia. *J Med Food* 2004; 7: 305-8.
 14. Mennen LI, Sapinho D, de Bree A, Arnault N, Bertrais S, Galan P, et al. Consumption of foods rich in flavonoids is related to a decreased cardiovascular risk in apparently healthy French women. *J Nutr* 2004; 134: 923-6.
 15. Blando F, Geradi C, Nicoletti I. Sour Cherry (*Prunus cerasus* L) Anthocyanins as Ingredients for Functional Foods. *J Biomed Biotechnol* 2004; : 253-8.
 16. Hammond KA. Dietary and clinical assessment. In: Mahan LK., Escott-Stump S. (editors). *Food, Nutrition & Diet Therapy*, 11nd edition. Philadelphia. Saunders; 2004: 407-35.
 17. Harats D, Chevion S, Nahir M, Norman Y, Sagee O, Berry EM. Citrus fruit supplementation reduces lipoprotein oxidation in young men ingesting a diet high in saturated fat: presumptive evidence for an interaction between vitamins C and E in vivo. *Am J Clin Nutr* 1998; 67: 240-5.
 18. Aviram M, Dornfeld L, Rosenblat M, Volkova N, Kaplan M, Coleman R, et al. Pomegranate juice consumption reduces oxidative stress, atherogenic modifications to LDL, and platelet aggregation: studies in humans and in atherosclerotic apolipoprotein E-deficient mice. *Am J Clin Nutr* 2000; 71: 1062-76.
 19. Lavy A, Fuhrman B, Markel A, Dankner G, Ben-Amotz A, Presser D, et al. Effect of dietary supplementation of red or white wine on human blood chemistry, hematology and coagulation: favorable effect of red wine on plasma high-density lipoprotein. *Ann Nutr Metab* 1994; 38: 287-94.
 20. Duthie SJ, Jenkinson AM, Crozier A, Mullen W, Pirie L, Kyle J, et al. The effects of cranberry juice consumption on antioxidant status and biomarkers relating to heart disease and cancer in healthy human volunteers. *Eur J Clin Nutr* 2006; 45: 113-22.
 21. Most MM. Estimated phytochemical content of the dietary approaches to stop hypertension (DASH) diet is higher than in the Control Study Diet. *J Am Diet Assoc* 2004; 104: 1725-7.
 22. Reshef N, Hayari Y, Goren C, Boaz M, Madar Z, Knobler H. Antihypertensive effect of sweetie fruit in patients with stage I hypertension. *Am J Hypertension* 2005; 18: 1360-3.
 23. Xu JW, Ikeda K, Yamori Y. Upregulation of endothelial nitric oxide synthase by cyanidin-3-glucoside, a typical anthocyanin pigment. *Hypertension* 2004; 44: 217-22.
 24. Bell DR, Gochenaur K. Direct vasoactive and vasoprotective properties of anthocyanin-rich extracts. *J Appl Physiol* 2006; 100: 1164-70.
 25. Tsuda T, Horio F, Uchida K, Aoki H. and Osawa T. Dietary cyaniding 3-o-β-D-Glucoside-Rich purple corn color prevents obesity and ameliorates hyperglycemia in Mice. *J Nutr* 2003; 133: 2125-30.
 26. Jayaprakasam B, Olson LK, Schutzki RE, Tai MH, Nair MG. Amelioration of obesity and glucose intolerance in high-fat-fed C57BL/6 mice by anthocyanins and ursolic acid in Cornelian cherry (*Cornus mas*). *J Agric Food Chem* 2006; 54: 243-8.