

ples were collected at approximately 1-month intervals and tested quantitatively for bacteriuria and the presence of white blood cells.

The subjects randomized to receive the cranberry beverage had odds of bacteriuria (defined as organisms numbering $\geq 105/\text{mL}$) with pyuria that were only 42% of the odds in the control group. Their odds of remaining bacteriuric-pyuric, given that they were bacteriuric-pyuric in the previous month, were only 27% of the odds in the control group.

These findings suggest that the use of cranberry beverage reduces the frequency of bacteriuria with pyuria in older women.

Avorn J, Monane M, Gurwitz JH, et al: Reduction of bacteriuria and pyuria after ingestion of cranberry juice. *JAMA* 1994;271:751-754.

Metabolic effects of two diets on hyperlipidemia

The optimal diet for treating hyperlipidemia is still not known, largely because of the lack of long-term studies. In this trial, the authors studied the long-term (6 months) clinical effects of two diets on 63 subjects (44 completed the trial) with type IIa and IIb primary hyperlipoproteinemia.

The two test diets (reduced saturated fat [8%] and cholesterol [$\sim 200 \text{ mg/d}$]) were compared to determine their long-term effects in decreasing plasma cholesterol concentrations. One diet was low in total fat and rich in carbohydrate and fiber, and the other was low in carbohydrate and fiber and rich

in polyunsaturated and monounsaturated fats.

The subjects were on a normal (control) diet for 3 weeks, after which they were randomly assigned to one of the two test diets and followed up for 6 months.

Unlike the control diet, both test diets induced significant and similar decreases in low-density lipoprotein cholesterol concentrations. High-density lipoprotein cholesterol concentrations after fasting and plasma glucose and insulin concentrations during test meals were not modified by either diet.

The authors conclude that both test diets are suitable (alone or in combination) for treatment of hypercholesterolemia.

Rivellese AA, Auletta P, Marotta G, et al: Long term metabolic effects of two dietary methods of treating hyperlipidaemia. *BMJ* 1994;308:227-231.

Blood pressure control and concomitant MI risk

To analyze the relation between treated blood pressure and concomitant acute myocardial infarction (MI) risk, 1121 men and 1453 women with no evidence of previous MI and who were between 40 to 69 years of age were studied.

The subjects were followed up for an average of 7.4 years. They were undergoing treatment with drugs to lower blood pressure or had blood pressure that exceeded the systolic or diastolic limits, or both, for diagnosis (170/105 mm Hg [patients aged 40 to 60 years] and 180/110 mm Hg [older than 60 years]) on three different occasions, or both.

A negative relation between treated diastolic blood pressure and risk of acute MI was found in men but not in women. Left ventricular hypertrophy and smoking were contributory risk factors in both sexes, as was serum cholesterol concentration in men.

In men with normal electrocardiograms, risk increased with increasing diastolic pressure, whereas the opposite was found in men with electrocardiograms suggesting ischemia or hypertrophy, or both. With a diastolic blood pressure reading of 95 to 99 mm Hg, the relative risk was 0.30; at $>100 \text{ mm Hg}$, it was 0.37. No similar relations were seen in women or for systolic blood pressure.

The authors conclude that it may be hazardous to lower diastolic blood pressure below 95 mm Hg in hypertensive men with possible ischemia or hypertrophy, or both. They suggest that electrocardiographic findings be considered when treatment goals are decided for men with hypertension.

Lindblad U, Råstam L, Rydén L, et al: Control of blood pressure and risk of first acute myocardial infarction: Skaraborg hypertension project. *BMJ* 1994;308:681-686.