Key Characteristics of Greek Moderate Coffee Drinkers

	Coffee Consumption	
	1-2 cups/day	Rarely or never
Prevalence of diabetes	22%	34%
Prevalence of dyslipidemia	41%	55%
Prevalence of diagnosed cardiovascular disease	19%	26%
Mean BMI (kg/m^2)	28	29
Creatinine clearance (mL/min per 1.73 m^2)	70	65

Notes: Data from a study of 465 Ikaria residents aged 65-100 years on current treatment for hypertension. All differences are statistically significant.
Source: Dr. Chrysohoou

Greek-Style Coffee May Aid Arterial Elasticity

BY BRUCE JANCIN

FROM THE ANNUAL CONGRESS OF THE EUROPEAN SOCIETY OF CARDIOLOGY

STOCKHOLM – The fountain of youth just might be a basin filled with rich, strong coffee, a study of one of the world's longest-lived people has shown.

"Our results suggest that drinking coffee in moderation should be encouraged even in elderly hypertensive subjects, as it seems it may improve arterial aging. Maybe regular coffee consumption is one of the key elements of the longevity we have noticed in the Ikaria Islanders, Dr. Christina Chrysohoou said at the congress.

The Aegean Sea island of Ikaria has one of the world's highest proportions of

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individuals who survive into their 90s and 100s. Residents of the isolated Greek island were featured in "The Blue Zones: Lessons for Living Longer From the People Who've Lived the Longest," by Dan Buettner (National Geographic Books, 2008).

Seeking an explanation for the Ikarians' exceptional longevity, last year Dr. Chrysohoou led a 5-month University of Athens–sponsored in-depth study of 343 male and 330 female longtime residents aged 65-100 years. As a cardiologist, Dr. Chrysohoou said, one of the factors she was particularly eager to examine was coffee consumption, since it is a deeply embedded part of the Ikarian way of life, and also because coffee – especially Greek-coffee – is a rich source of antioxidants and anti-inflammatory compounds, which could have a salutary effect on cardiovascular risk.

This indeed appeared to be the case. Among the 465 study participants being treated for hypertension, those who were moderate coffee drinkers – averaging 1-2 of the traditional small 50-mL cups daily – had a significantly lower prevalence of diabetes, dyslipidemia, and cardiovascular disease as well as a lower mean body mass index and higher creatinine clearance than did hypertensive non–coffee drinkers (see box, p. 16).

Of particular interest was the finding that hypertensive moderate coffee drinkers had significantly greater aortic distensibility, as measured echocardiographically, than did hypertensive subjects who consumed coffee rarely or never.

Consumption of 1-2 cups/day remained an independent predictor of enhanced arterial elasticity after adjustment for potential confounders including age, physical activity, body mass index, blood pressure, education, diabetes, smoking, and diet.

Islanders who drank less than 1 cup or at least 3 cups of coffee per day did not derive any benefit in terms of aortic distensibility compared with coffee teetotalers. This is probably because modest quaffers do not obtain adequate quantities of the beneficial polyphenolic compounds and other micronutrients, while people who consume 3 or more cups daily ingest so much caffeine that the pressor response outweighs the positive effects of the micronutrients, according to Dr. Chrysohoou.

Traditional Greek coffee is very strong and dark. It is made by boiling the beans for 2-3 minutes. The resultant beverage contains up to 50 times greater concentrations of cafestol, kahweol, and other diterpenes than those of filtered coffee. Greek coffee also is rich in flavonoids, niacin, magnesium, potassium, and vitamin E, she explained.

'Drinking coffee in moderation should be encouraged, even in elderly hypertensive subjects.'

DR. CHRYSOHOOU

One caveat regarding the study findings is that coffee drinking on Ikaria is very much a social experience. The elderly study participants generally take their coffee while socializing in the morning or early afternoon with longtime friends in tavernas and cafes, or with family at home. Coffee consumption on the island is a relaxing, unhurried experience enjoyed while discussing daily events.

"The psychological and social circumstances play an important role," she said.

"I'm a clinical cardiologist, and most clinicians forbid coffee for their hypertensive patients," noted Dr. Xavier Bosch of the University of Barcelona, who added he will reconsider his stance as a result of the Greek study.

The other key factor Dr. Chrysohoou and her coworkers identified as likely to contribute to the extended life expectancy of Ikaria Islanders is that these oldest residents are of a generation that tends to adhere most strictly to the traditional Mediterranean diet as popularized by the late University of Minnesota cardiovascular epidemiologist Ancel Keys.

Dr. Chrysohoou declared having no financial conflicts. ■

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