

# UNC Alumni Heart Study NEWSLETTER

Number 9	2004
2212 Elder Street, Durham, NC 27705	(800) 233-5912

As of this Newsletter, there are 5,711 individuals currently participating in the UNCAHS – 90% of the 6,340 who have ever participated. Of the 629 persons who are no longer participating, 204 have passed away, 309 have decided to withdraw from the study, and 116 are in other non-participating categories.

The UNCAHS membership has evolved over time. A small group joined in 1986, when we enrolled members from the UNC Alumni Association membership to act as a “pilot” or test group in developing our first questionnaires. The second group of members was made up of individuals who had completed the MMPI (Minnesota Multiphasic Personality Inventory) at UNC, in 1964-66. This group, our largest, enrolled in the UNCAHS in 1986-87. A third group, spouses of the first two groups, accepted our invitation to join the study in 1991-92. Since 1992, all three groups have received the same questionnaires. Of the 5,711 study members who will be invited to complete the next questionnaire, 171 belong to the first group (pilot members), 4,488 belong to the second (MMPI members) and 1,052 belong to the third (spouse members).

The table below shows some of the data we’ve collected/plan to collect and the timing of questionnaires (Qs).

## UNCAHS Data collection:

	At UNC/ MMPI	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Years collected	64-66	86-87	88	89	91	92-93	94-96	97	98-00	01-02	04
Mean Age	18	40	41	43	45	46	48	51	53	55	58
Hostility	X		X							X	
NEO Personality			X		X			X			
Life Events								X			
Family History	X	X				X					X
Heart Disease		X	X	X	X	X	X	X	X	X	X
Weight/Height	X	X				X	X			X	
Smoking		X		X			X			X	
Alcohol		X		X			X			X	
Exercise		X		X		X				X	
Socioeconomic status				X						X	
Marital Status		X		X			X			X	X
Dietary intake							X				
Health Rating		X	X			X				X	X

## Major Findings Since Our Last Newsletter:

### Findings regarding Hostility:

***Patterns of Change in Hostility from College to Midlife in the  
UNC Alumni Heart Study Predict High-Risk Status  
Published 2003 in Psychosomatic Medicine***

Ilene C. Siegler, PHD, MPH, Paul T. Costa, PHD, Beverly H. Brummett, PHD, Michael J. Helms, BS, John C. Barefoot, PHD, Redford B. Williams, MD, W. Grant Dahlstrom, PHD, Berton H. Kaplan, PHD, Peter P. Vitaliano, PHD, Milton Z. Nichaman MD, SCD, R. Sue Day, PHD, and Barbara K. Rimer, DRPH

**Objective:** To examine hostility measured in college and patterns of change in hostility from college to midlife as predictors of high health-related risk later in midlife.

**Methods:** Logistic regression models were used to test hostility/risk associations.

**Results:** College hostility predicted being a current smoker, consuming more than two drinks of alcohol, low social support, achieving less than expected in career and in relationships, risk for depression, and appraisal of life changing for the worse in terms of family events at midlife. Change in hostility did not predict smoking and drinking; however, it did significantly predict social isolation, lower income (only for women), obesity, avoidance of exercise, high-fat diet, and negative changes in economic life, work life, and physical health events—all risk indicators measured during the next decade. Appraisals of social support, lowered expectations, risk for depression, and reports of family life changing for the worse were predicted at both time periods. When change in hostility was modeled with college hostility, all risk indicators were significantly predicted by college hostility.

**Conclusions:** High hostility in college and change in hostility from college to midlife predicts a full range of health risk indicators. When compared with the average population decline in hostility, gains in hostility at midlife are related to increased risk while declines in hostility are related to reduced risk. Higher midlife hostility is associated with increased odds of being in the higher risk group. Future research should focus on developing interventions to reduce hostility.

The full text of this article can be found on our website, [www.uncahs.org](http://www.uncahs.org)

Since the previous paper was published, we have started to evaluate patterns of change in hostility utilizing an additional/third time of measurement. Based on the initial 1,049 persons who have complete data on all 37 items at all 3 times of measurement, hostility continues to decline with a mean (scaled to the full 50 item score) of: 19.04 at age 19, 14.21 at age 41 and 11.69 at age 55. Looked at another way, the proportion of the sample at each point in time with high hostility (> 21) is: 41.18% at age 19, 16.11% at age 41, and 8.77% at age 55.

If we categorize our sample into patterns of change from 1964-65 to 2001-2002 – spanning the full 38 year time period:

- 57% of the group had a large change (declining from 6 – 36 points)
- 17.7% had an average change (a decline of around 4 points)
- 13% remained stable (around a mean of 0, with + and – 2 points)
- 13% increased in hostility

Of those who increased, 53% of them were initially low in hostility (1-12), 38% were average (12-21), and 9% were high (> 21) in college.

**Your continued participation is very important so that we may determine if these changes in hostility predict disease outcomes in addition to the risky behaviors that have been associated with heart disease.**

## Findings regarding Diet:

Wine drinkers in the UNCAHS have healthier diets than those who preferred beer or spirits or had no preference, or were non-drinkers.

Our study was featured as the news of the day January 12, 2004 in a wine lovers calendar given to Dr. Siegler as a Christmas present. What a nice surprise when she flipped to that day! Here's what the calendar said:

The abstract for the article based on these findings is below, and the full text of the article can be found on our website, [www.uncahs.org](http://www.uncahs.org)

***Alcoholic Beverage Preference, Diet, and Health Habits  
in the UNC Alumni Heart Study***  
*Published 2002 in the American Journal of Clinical Nutrition*

John C Barefoot, Morten Grønbaek, John R Feaganes, R Sue McPherson, Redford B Williams, and Ilene C Siegler

**Background:** Moderate alcohol intake is related to better health, and additional benefits may be associated with wine. However, beverage preference may be confounded by lifestyle factors related to health.

**Objective:** The goal was to describe the associations between alcoholic-beverage preferences and indicators of a healthy diet and other health habits.

**Design:** This cross-sectional study included data from 2864 men and 1571 women enrolled in the UNC Alumni Heart Study. Self reports of drinking habits were used as predictors of health behaviors and of intakes of nutrients and food groups.

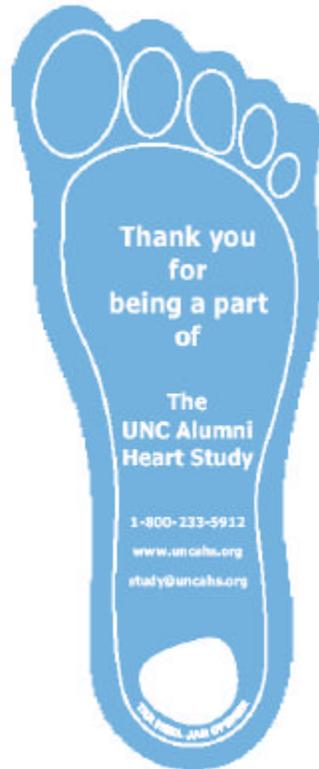
**Results:** Subjects who preferred wine had healthier diets than did those who preferred beer or spirits or had no preference. Wine drinkers reported eating more servings of fruit and vegetables and fewer servings of red or fried meats. The diets of wine drinkers contained less cholesterol, saturated fat, and alcohol and more fiber. Wine drinkers were less likely to smoke. Compared with all drinkers, those who drank no alcohol consumed fewer vegetables but more fiber. Nondrinkers were less likely to exercise regularly and had a higher mean body mass index. Controlling for income and education had little effect on these associations.

**Conclusions:** The apparent health benefits of wine compared with other alcoholic beverages, as described by others, may be a result of confounding by dietary habits and other lifestyle factors. Confounding by lifestyle variables could also be a factor in the previously observed health differences between drinkers and nondrinkers, although the evidence for this association is not as strong.

**LOOK FOR Q10 IN YOUR MAILBOX  
THIS WINTER/SPRING OF 2004!**

We are planning to offer a web-based version of Q10 as well as our usual printed/paper version. As of the writing of this newsletter, we are evaluating new software and designing the web questionnaire. If you are interested in completing your questionnaire this way, look for details and instructions in the letter accompanying the mailed Q10. Updates on this will also be available on the Study website, [www.uncahs.org](http://www.uncahs.org) as well.

**Watch for your 10<sup>th</sup> Questionnaire in the mail soon. Included will be a neat Tar Heel foot jar opener!**



**<<CONTACTING US>> <<CONTACTING US>> <<CONTACTING US>>**

Visit our website [WWW.UNCAHS.ORG](http://WWW.UNCAHS.ORG) for:

Current Study News

Full versions of published studies

Information on reporting Heart Disease events & consent forms so that we may obtain copies of your medical records.

Study contact info

(Future) Web versions of our Questionnaires

**The UNCAHS Team is:**

Ilene Siegler, Ph. D., MPH (Adult Developmental Psychologist, Behavioral Epidemiologist) MPH (1988) from UNC (Go Heels!). Dr. Siegler welcomes contact from study members at any time. If you have questions, suggestions, or just want to talk about the study, send email to [ilene.siegler@duke.edu](mailto:ilene.siegler@duke.edu) or call toll free (800) 233-5912. She is generally available from 10-12 and 3-5 EST.

Robin French: Robin has been with the UNCAHS since 1987 and is our Study Coordinator, dealing with all aspects of the study. When you email our general study email address [study@uncahs.org](mailto:study@uncahs.org), Robin will receive and deal with your email and can answer any questions you might have about data and day to day operations.

Shirley Austin: Shirley was hired as Robin's assistant in August of 2003 and is the general phone contact for the study. She enjoys speaking with any and all members and will usually be your first contact with our office when calling. If she doesn't know the answer to your questions, she'll be sure find out! To reach Shirley, call our toll free number any time, (800)233-5912. If we're not in, please just leave a message and we'll contact you as soon as possible.

**ARE YOU PLANNING A MOVE SOON? PLEASE SEND US A NOTE OR CALL WITH ANY ADDRESS CHANGES. WE DON'T WANT TO LOSE ANY OF OUR WONDERFUL STUDY MEMBERS!**

**The UNC Alumni Heart Study**

[www.uncahs.org](http://www.uncahs.org)

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