EFFECT OF FASTING GLUCOSE (PER 20 MG/DL)

	Systolic BP (mmHg)		Diastolic BP (mmHg)		Hypertension (Odds ratio)
Women					
White	0.1	(−0.5,0.7)	0.0	(−0.4,0.4)	1.08 (0.98, 1.18)
Black	1.1	(0.5,1.6)†	0.5	(0.1, 0.9)	1.15 (1.06, 1.25)
Hispanic	1.6	(1.1, 2.1)†	0.5	(0.1, 0.8)	1.11 (1.03, 1.20)
Latin American	1.3	(1.0, 1.5)†	0.6	(0.4, 0.7)†	1.07 (1.03, 1.11)
All*	—		0.5	(0.3, 0.6)	1.08 (1.05, 1.12)
Men					
White	0.0	(−0.5,0.5)	−0.6	(−0.9, −0.2)	1.03 (0.95, 1.10)
Black	−0.1	(−0.7,0.5)	0.1	(−0.4, 0.5)†	1.00 (0.92, 1.09)
Hispanic	0.9	(0.5, 1.3)†‡	0.1	(−0.2, 0.4)†	1.09 (1.03, 1.15)
Latin American	2.4	(2.1, 2.7)†‡§	1.1	(0.9, 1.3)†‡§	1.15 (1.11, 1.21)†‡
All*	—		—		—

* In absence of interaction. P<0.05 compared to Whites (†), Blacks (‡) and Hispanics §).

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Factors Predicting Blood Pressure Control in Older Chinese Immigrants

Wen-Wen Li, San Francisco State Univ, San Francisco, CA; Margaret I Wallhagen, Erika S Froelicher; Univ of California, San Francisco, San Francisco, CA

Background: One-third of older Chinese immigrants have hypertension (HTN) and those with HTN have inadequate blood pressure (BP) control, compared to the US population. **Purpose:** To examine if demographics, medication-related factors, HTN-related knowledge and medication adherence predicted systolic BP (SBP) and diastolic BP (DBP). **Methods:** Ninety Chinese immigrants ≥65 years old were recruited between 2006–2007. The baseline independent variables included: age, gender, length of a HTN diagnosis; number of prescribed oral medications, frequency of prescribed oral medications taken per day; HTN-related knowledge and medication adherence. SBP and DBP were measured at baseline and 3 months. **Data analysis:** Multiple linear regression analysis (SPSS 12) was used to evaluate the independent effects of the seven baseline variables on SBP and DBP at 3 months (alpha level=0.05). **Results:** Subjects ranged in age from 66–92 years (Mean 76.7, SD 6.6). Half were men (50.0%) and less than half had a high school education (43.3%). A majority was married (72.2%). The overall regression model for SBP was significant (R^2=0.32, F=4.37, df=7, 65, P<0.01). One-third (32%) of the total variance in SBP was explained by a combination of optimally weighted independent variables. When all other independent variables were held constant, only the greater number of prescribed oral medications (sr^2=0.06, t=2.42, P=0.02) and lower adherence (sr^2=0.07, t=−2.60, P=0.01) predicted a higher level of SBP. The overall regression model for DBP was significant (R^2 =0.21, F=2.39, df=7, 65, P=0.03). One-fifth (21%) of the total variance in DBP was explained by this combination of optimally weighted independent variables. However, when all other independent variables were held constant, only male gender (sr^2=0.06, t=2.26, P=0.03) and lower adherence (sr^2=0.11, t=−3.03, P<0.01) predicted a higher level of DBP. **Conclusion:** The greater number of prescribed medications and lower adherence predicted a higher level of SBP. Male gender and lower adherence were significantly associated with a higher level of DBP. It is essential that these predictors be considered when designing interventions to help older Chinese achieve better control of their HTN.

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CVD and Its Relation to Risk Factors in Alaska Eskimos: The GOCADAN Study

Barbara V Howard, Medstar Rsch Institute, Hyattsville, MD; Anthony Comuzzie, Southwest Foundation for BioMed Rsch, San Antonio, TX; Richard B Devereux, Weill Med College of Cornell Univ, New York, NY; Sven O Ebbesson, Norton Sound Health Corp, Nome, AK; Richard R Fabsitz, National Heart, Lung, and Blood Institute, Bethesda, MD; Wm James Howard, Washington Hosp Cntr, Washington, DC; Sandra Laston, Jean W MacCluer, Southwest Foundation for BioMed Rsch, San Antonio, TX; Angela Silverman, Hong Wang, Neil J Weissman, Medstar Rsch Institute, Hyattsville, MD; Charlotte R Wenger; Southwest Foundation for BioMed Rsch, San Antonio, TX

Background: Alaska Eskimos, like many other populations, have undergone rapid lifestyle change in the past century. Unlike others, a significant proportion report substantial physical activity and a traditional diet. State and Indian Health Service data, however, suggest that a high proportion of Eskimo deaths are from CVD. However, no analyses of associations with risk factors have been done. **Methods:** A population-based sample of 1,214 predominantly Inupiat Eskimos (537 men and 677 women) ≥age 18 from the Norton Sound Region of Alaska were examined in 2000–2004 for CVD and associated risk factors. Anthropometry, blood pressures, and ECG were measured using standardized criteria; behavioral risk factors assessed by validated questionnaires; and lipoproteins, glucose, and CRP assessed in fasting blood samples. Medical records were abstracted and reviewed to determine prevalent CVD (MI, PTCA/CABG, stroke, and CHF) via standardized criteria. These analyses focused on the 214 men and 285 women>age 45. **Results:** Average age was 58 y in both genders; rates of diabetes were low (3% and 8% in men and women, respectively) and HDL concentrations were relatively high (57 mg/dL and 69 mg/dL, respectively), but a high proportion smoked (56% and 47%, respectively) and there were high concentrations of CRP and prevalence of pathogen both. Thirteen percent of men and 5% of women met the criteria for definite CVD; rates were significantly higher in men (PR 2.4 [1.3–4.9]). Six percent of men and 2% of women had definite documented stroke (PR 3.46 [1.25–9.56]). CHD (MI plus CABG/PTCA) was documented in 6% of men and 2% of women (PR 2.47[1.00−1.69]). In univariate analyses of CVD (n=46) age, male gender, hypertension, diabetes, high LDL-C, high apoB, low HDL-C, and smoking were significantly related. In a multivariate model, CVD was independently related to age (OR/yr

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Ovarian Conservation and Long-Term Health Outcomes in the Nurses' Health Study

William H Parker, John Wayne Cancer Institute, Santa Monica, CA; Michael S Broder, UCLA Sch of Medicine, Los Angeles, CA; Eunice Chang, Partnership for Health Analytic Rsch, Los Angeles, CA; Diane Feskanich, Channing Laboratory, Brigham and Women's Hosp and Harvard Med Sch, Boston, MA; Cindy Farquhar, Sch of Medicine, Univ of Auckland, Auckland, New Zealand; Zhimae Liu, Cerner Health Insights, Beverly Hills, CA; Donna Shoupe, Keck Sch of Medicine, Univ of Southern California, Los Angeles, CA; Jonathan S Berek, Stanford Univ Sch of Medicine, Palo Alto, CA; Susan Hankinson, Brigham and Women's Hosp and Harvard Med Sch, Harvard Sch of Public Health, Boston, MA; JoAnn E Manson; Harvard Sch of Public Health, Brigham and Women's Hosp and Harvard Med Sch, Boston, MA

Context: The overall health benefits and risks of preserving ovarian function at the time of hysterectomy for benign disease have not been established in a large population of women. **Objective:** To report long-term health outcomes and mortality following oophorectomy or ovarian conservation. Design and Setting: The Nurses' Health Study, a prospective cohort study of 121,700 registered nurses. Subjects: We included 29,380 women having a hysterectomy for benign disease; 13,035 (44.4%) had hysterectomy without oophorectomy (simple hysterectomy) and 16,345 (55.6%) had hysterectomy with bilateral oophorectomy. **Main Outcome Measures:** Incident events or death due to coronary heart disease, stroke, breast cancer, ovarian cancer, lung cancer, colorectal cancer, total cancers, hip fracture, pulmonary embolus, and death from all causes. **Results:** Over 24 years of follow-up, for women with hysterectomy and bilateral oophorectomy, compared with ovarian conservation, the multivariate relative risks (RR) were 1.12 (95% CI 1.03, 1.21) for total mortality, 1.17 (95% CI 1.02, 1.35) for fatal plus nonfatal coronary heart disease (CHD), and 1.14 (95% CI 0.98, 1.33) for stroke. Although the risks of breast, ovarian, and total cancers decreased following oophorectomy, lung cancer incidence (RR=1.26, 95% CI 1.02, 1.56) and total cancer mortality (RR=1.17, 95% CI 1.04, 1.32) increased. For never-users of estrogen therapy, bilateral oophorectomy before age 50 was associated with an increased risk of all-cause mortality (RR=1.40 95% CI 1.01, 1.96), CHD (RR=1.98 95% CI 1.18, 3.32), and stroke (RR=2.19 95% CI 1.16, 4.14). **Conclusions:** Compared with ovarian conservation, bilateral oophorectomy at the time of hysterectomy for benign disease is associated with increased risk of all-cause mortality and fatal and non-fatal coronary heart disease and lung cancer. With oophorectomy before age 50, never-users of estrogen have an increased risk of coronary heart disease, stroke and all-cause mortality. In no analysis or age-group does oophorectomy increase survival.

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Triggering of Myocardial Infarction by Ambient Fine Particle Concentration, Differences in Response by MI Type and Presence of Chronic Obstructive Pulmonary Disease

David Q Rich, Univ of Medicine and Dentistry of New Jersey, Sch of Public Health, Piscataway, NJ; Howard M Kipen, Environmental and Occupational Health Sciences Institute, UMDNJ-RWJMS and Rutgers Univ, Piscataway, NJ; Junfeng Zhang, Leena Kamat, Univ of Medicine and Dentistry of New Jersey, Sch of Public Health, Piscataway, NJ; Alan Wilson, John Kostis; Univ of Medicine and Dentistry of New Jersey, Robert Wood Johnson Med Sch, Piscataway, NJ

Previous studies have reported increased risk of MI following increases in particulate air pollution (PM) concentrations in the hours and days before MI onset, with some reporting greater effects for those with pre-existing diabetes and/or chronic obstructive pulmonary disease (COPD). However, none have evaluated whether any response to PM differs between non-subendocardial (transmural) MI's and subendocardial (non-transmural) MI's. We hypothesized that acute increases in $PM_{2.5}$ would be associated with an increased rate of MI, and that MI type, COPD, and/or diabetes would confer increased susceptibility to $PM_{2.5}$. We studied all emergency room (ER) admissions for first MI's (2004–2006) to residents of New Jersey living within 10 km of a pollutant monitoring site (N=6808). Using a time-stratified case-crossover design and conditional logistic regression models adjusted for apparent temperature, each 10.8 $\mu g/m^3$ increase in $PM_{2.5}$ concentration in the 24 hours before ER arrival for MI was not associated with an increased rate of MI. However, each 10.8 $\mu g/m^3$ increase was associated with an increased rate of non-subendocardial MI's (OR=1.10; 95% CI=1.01, 1.20; 35% of all n=6808 MI's), but not subendocardial MI's (OR=0.99; 95% CI=0.94, 1.05; 65%). Moreover, this acute $PM_{2.5}$ association (within 24 hours of ER arrival) was independent of previous lagged $PM_{2.5}$ concentrations and other gaseous pollutant concentrations. For non-subendocardial MI's, subjects with COPD had larger rate estimates associated with the 24 hour moving average $PM_{2.5}$ concentration than those without COPD, but there was no difference between diabetics and non-diabetics. Given the secular changes in clinical presentation of MI (increasing proportion of subendocardial versus non-subendocardial MI's over time), these findings are consistent with previous epidemiologic studies using MI data from 10–20 years ago, human panel studies reporting associations between particulate pollution and ST-segment depression, and animal models demonstrating decreased arterial blood flow associated with PM exposure/ concentrations. Future studies should explore these and other mechanistic explanations, as well as whether specific PM species are individually responsible for these findings.

1.06 [1.02–1.09]), hypertension (5.10 [2.00–12.5]), high LDL-C (3.54 [1.73–7.24]), and male gender 3.40[1.60–7/26]). **Conclusion:** The prevalence rates support the public health data indicating that despite traditional lifestyles, CVD rates, particularly for stroke, are high in Alaska Eskimos. Initial analyses indicate that aggressive blood pressure and lipid lowering and smoking cessation may be warranted.