POOR GLUCOSE REGULATION IS ASSOCIATED WITH LOWER WELL-BEING AMONG OLDER MEN, BUT NOT WOMEN

Konstantinos Mantantzis,[1] Johanna Drewelies,[2] Gert G. Wagner,[3] Ilja Demuth,[4] Elizabeth Steinhagen-Thiessen,[4] Ulman Lindenberger,[5] Sandra Düzel,[5] and Denis Gerstorf[2], *1. Humboldt University of Berlin, Berlin, Germany, 2. Humboldt University of Berlin, Berlin, Berlin, Germany, 3. German Institute for Economic Research, Berlin, Berlin, Germany, 4. Charité University Hospital, berlin, Berlin, Germany, 5. Max Planck Institute for Human Development, berlin, Berlin, Germany*

Glucose regulation is a key aspect of healthy aging, but little is known about gluco-regulatory capacity and older adults' well-being. In this study, we examine whether gluco-regulatory capacity is predictive of within-person age-related trajectories of three major well-being indicators. We applied growth models to multi-year longitudinal data obtained in the Berlin Aging Study II (N = 1437; age 60-89; 53% women) and used insulin resistance as an index of glucose regulation capacity. Poor glucose regulation was associated with lower levels of well-being in men, but not women. These associations among men emerged for two of the three well-being indicators, were maintained across old age, and were independent of the other cognitive and physical factors examined. We discuss how sexual dimorphism may have contributed to our findings, and conclude that our results provide initial evidence for the relevance of glucose regulation for quality of life among older men.

NUMBER OF FRIENDS AND THE RISK OF DEVELOPING DIABETES: A REPLICATION USING NSHAP AND HRS

Louise Hawkley,[1] Phil Schumm,[2] Elbert Huang,[3] and Martha McClintock[4], *1. NORC, Chicago, Illinois, United States, 2. Biostat Consulting Lab, University of Chicago, Chicago, Illinois, United States, 3. General Internal Medicine, University of Chicago, Chicago, Illinois, United States, 4. Institute for Mind & Biology, University of Chicago, Chicago, Illinois, United States*

The epidemic increase in diabetes prevalence (primarily type 2) is a public health crisis. We hypothesized that the rates of movement among diabetic states depend in part on one's social relationships and environment. Using population-based samples from both NSHAP and HRS, collected in 2005–15, we found that having more friends was associated with a lower risk for acquiring diabetes over the next 4-5 years. As an independent replication, separate logistic models for NSHAP and HRS data yielded similar odds-ratios for the protective effect of having friends (OR = 0.82 and 0.92 respectively), adjusting for gender, age, race/ethnicity, and BMI. This effect was concentrated entirely between 0–4 friends; differences in the number of friends above 4 were not associated with differences in diabetes risk.

FOR BETTER AND WORSE? THE IMPORTANCE OF CLOSENESS AND AGE FOR SPOUSES' CARDIOMETABOLIC SIMILARITY

Stephanie J. Wilson,[1] Juan Peng,[2] Rebecca Andridge,[2] Lisa M. Jaremka,[3] Christopher P. Fagundes,[4] William B. Malarkey,[5] Martha A. Belury,[2] and Janice K. Kiecolt-Glaser[1], *1. The Ohio State University College of Medicine, Columbus, Ohio, United States, 2. The Ohio state University, Columbus, Ohio, United States, 3. University of Delaware, Newark, Delaware, United States, 4. Rice University, Houston, Texas, United States, 5. The Ohio State College of Medicine, Columbus, Ohio, United States*

Spouses share age-related disease risks: a person's diabetes or hypertension raises the partner's odds for the same condition. To probe the importance of partners' closeness, marital satisfaction, and age for spouses' similarity in cardiometabolic health, 43 disease-free couples ages 24-61 provided fasting glucose, fat and carbohydrate oxidation, and blood pressure at two study visits. Couples who felt closer had more similar rates of carbohydrate oxidation compared to those who felt less close. Likewise, happier couples had more similar carbohydrate and fat oxidation. Fasting glucose and blood pressure were more similar within middle-aged couples compared to younger pairs. In follow-up analyses, partners' health behavior concordance did not explain these effects. In sum, closer, happier, and older couples shared more similar cardiometabolic profiles, perhaps driven by joint stress and emotional spillover. Findings suggest that closer, happier relationships may confer both larger health risks and benefits, and increasing age may raise the stakes.

LINKS BETWEEN PARTNER INTERACTIONS, EMPATHY, AND EVERYDAY PHYSIOLOGICAL SYNCHRONY IN OLDER COUPLES

Theresa Pauly,[1] Victoria I. Michalowski,[2] Johanna Drewelies,[3] Denis Gerstorf,[3] Maureen C. Ashe,[2] Kenneth M. Madden,[2] and Christiane A. Hoppmann[2], *1. University of British Columbia, Vancouver, Canada, 2. University of British Columbia, Vancouver, British Columbia, Canada, 3. Humboldt-Universität Zu Berlin, Berlin, Berlin, Germany*

Romantic partners exhibit dyadic covariation (synchrony) in physiological parameters. This study aims to link everyday cortisol synchrony to daily partner interactions and empathy. We conducted coordinated multilevel analysis using data from two independently collected samples of older couples (Study 1: N = 85 couples, aged 60-87 years; Study 2: N = 77 couples, aged 66-85 years) who completed questionnaires and provided salivary cortisol samples 5 to 7 times daily for 7 days. Cortisol levels were significantly correlated among partners in both studies. Cortisol synchrony was higher when partners were present (Study 1), and when partner interactions involved feeling understood and valued (Study 1) and seeking help or closeness (Study 2). Higher cortisol synchrony was further related to greater empathic accuracy (Study 1) and greater empathy (Study 2). Thus, social bonding processes and the ability to consider other's thoughts and feelings may be intertwined with physiological synchrony in everyday life.