

***Coronary Heart Disease Risk Perceptions in People with Type 2 Diabetes***  
***PI: William M.P. Klein, Ph.D.***

People with Type 2 diabetes mellitus are at increased risk for coronary heart disease (CHD). It is necessary for such individuals to engage in regular exercise and to limit consumption of sodium, cholesterol, and saturated fat, given that these behaviors are associated with atherosclerosis and hypertension. It is also important for such individuals to process health communications regarding these issues effectively and non-defensively. However, they are unlikely to do so if they do not perceive high CHD risk. The current study examines whether unrealistic optimism about CHD risk in this population is associated with less exercise and poorer food choices, and lowered retention and comprehension of related health communications. Unlike past work, this study measures unrealistic optimism at the level of the individual by comparing risk perceptions with an expert assessment of personal risk (using a risk engine developed using data from the United Kingdom Prospective Diabetes Study). Moreover, effects of unrealistic optimism are assessed in a prospective design. The second goal of the study is to determine whether providing feedback about personal CHD risk to people with Type 2 diabetes will influence their exercise levels and food choices. Participants will be randomly assigned to one of two arms -- an experimental arm in which risk feedback will be provided in the context of social comparison (thereby providing a context with which to interpret the feedback), self-affirmation (which protects the self-concept from threatening information, given that the CHD risk information is likely to be seen as threatening), and specific recommendations regarding how one might adopt a rigorous exercise regimen and make dietary changes. A control arm will receive only the risk feedback. It is hypothesized that risk feedback will be more likely to influence exercise and food choices (by a three-month follow-up) in the experimental condition.