

**DEPARTMENT OF COMMUNITY AND PREVENTIVE MEDICINE  
RESEARCH PROPOSAL**

**Metabolic Syndrome and Diet in Middle Aged and Elderly Population  
Ayesha Khan**

Metabolic Syndrome (MetS) is a cluster of interrelated risk factors of metabolic origin --*metabolic risk factors* - that appear to directly promote the development of atherosclerotic cardiovascular disease (ASCVD). An estimated 47 million U.S. residents have the metabolic syndrome. The age adjusted prevalence for adults is 23.7 percent. The age-adjusted prevalence is similar for men (24.0 percent) and women (23.4 percent). Diet and dietary habits have been projected to play an important role in the prevalence of MS. A unified dietary recommendation for MetS has yet to be determined.

The aim of this study is to look at the diet of middle aged and elderly men and women with MetS who participated in 2005-2006 National Health and Nutrition Examination Survey (NHANES III).

We will use predefined dietary patterns derived by factor analysis- **prudent pattern** and **western pattern**- based on 40 predefined foods or food groups and apply it to the foods in the NHANES Food Frequency Questionnaire (FFQ). For each participant, the Prudent dietary pattern score and the Western dietary pattern score will be calculated by summing the standardized intakes of the component foods, weighted by the factor loadings of the foods. The diagnosis of MetS will be based on NCEP-ATP III criteria.

Findings will help us identify the specific components of diet in those with MetS that may be amenable to intervention.

**Committee Chair:  
Edwin van Wijngaarden, PhD**

**Committee Members:  
Thomas A. Pearson, MD, MPH, PhD  
Diana Fernandez, MD, PhD, MPH**

**Friday, December 11, 2009  
12:00PM – 12:30 PM  
Helen Wood Hall, Room 1W502**

**EVERYONE IS WELCOME**