

PREVALENCE OF PROTEINURIA IN THE U.S. ADULT POPULATION: RESULTS FROM NHANES SURVEYS (2001-2004)

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Proteinuria, defined as either microalbuminuria (MicroAlb) with a microalb/creatinine ratio of 30 – 300 or macroalbuminuria (MacroAlb) with a microalb/creatinine ration of > 300, is now being accepted as not only a risk factor for the progression of chronic kidney disease (CKD) but also for cardiovascular disease (CVD). Proteinuria is primarily associated with diabetic patients. The prevalence in the United States general population was looked at utilizing the data from the 2001-2004 National Health and Nutrition Examination Surveys (NHANES).

	Age			
MicroAlbum	20-39	40-49	50-69	70+
None	94.9%	94.2%	88.6%	77.8%
MicroAlb	4.7%	5.2%	9.4%	19.3%
MacroAlb	0.3%	0.7%	2.0%	3.0%

The prevalence of MicroAlb in the 2001-2004 NHANES surveys was 7.6 % and for MacroAlb was 1.1%. The presence of diabetes increased the prevalence of MicroAlb by 3.9 fold and of MacroAlb by 9.6 fold. The prevalence of both increases with age (p = 0.001). Abdominal obesity is associated with a greater prevalence of MicroAlb (8.8 % vs. 5.8 %, p = 0.001) and MacroAlb (1.6 % vs. 0.6%, 0.001).

Hypertension , defined as a blood pressure > 140/90 mm/Hg whether treated (Tx) or untreated (UnTx), increased the prevalence of both MicroaAb (Tx by 2 fold, UnTx by 1.7 fold) and MacroAlb (Tx by 2 fold, UnTx by 5.7 fold), demonstrating the importance of controlling blood pressure. The prevalence of CVD in subjects with MicroAlb was 16.3% and 4.4% in subjects with MacroAlb. Proteinuria in the NHANES population clearly was a predictor of CVD.