Omega-3 polyunsaturated fatty acid intake through fish consumption and prostate specific antigen level: Results from the 2003 to 2010 national health and examination survey.

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Abstract

The etiology of prostate cancer is uncertain, but intake of omega-3 polyunsaturated fatty acids (n-3 PUFAs) may play a role. We evaluated prostate specific antigen (PSA) levels with fish consumption (the primary source of n-3 PUFAs) and calculated PUFA intake. Serum PSA concentrations were available from 6018 men who participated in the 2003-2010 National Health and Nutrition Examination Survey (NHANES). Fish consumption was calculated via 30-day Food Frequency Questionnaire data, whereas n-3 PUFA intake was calculated from 24-h dietary recalls. We employed multivariable logistic and linear regression models to evaluate the association of these exposure variables with PSA levels while controlling for relevant covariates. PSA levels were lower in men who ate more breaded fish, but no other types of fish consumption or n-3 PUFA intake were associated with PSA levels. Our findings provide little evidence for a role of fish or n-3 PUFA consumption in influencing PSA levels.