

Title: Sources of and adequacy of protein intake among pregnant women in the United States – **NPB #19-046**

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Scientific Abstract: Limited information is available on protein intake and adequacy of protein intake among pregnant women. Using data from a sample of 528 pregnant women in the National Health and Nutrition Examination Surveys (NHANES) 2003-2012, usual intake of protein (g/day and g/kg body weight (bw)/day) and prevalence of intake below the Estimated Average Requirement (EAR) by trimester of pregnancy were calculated using the National Cancer Institute method. Percent contributions to protein intake by source (i.e., plant and animal, including type of animal source) were also calculated. Mean usual intake of protein was 88 ± 4.3 , 82 ± 3.1 , and 82 ± 2.9 g/day among women in trimester 1, 2, and 3 of pregnancy, respectively, or 1.30 ± 0.10 , 1.35 ± 0.06 , and 1.35 ± 0.05 g/kg bw/day, respectively. An estimated 4.5% of women in the first trimester of pregnancy consumed less protein than the EAR of 0.66 g/kg bw/day; among women in the second and third trimesters of pregnancy, 12.1% and 12.8% of women, respectively, consumed less protein than the EAR of 0.88 g/kg bw/day. Animal sources of protein accounted for approximately 65% of total protein. Findings from this study show that one in eight women in the second and third trimesters of pregnancy have inadequate intake of protein. Pregnant women should be encouraged to consume sufficient levels of protein from a variety of sources.

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