

Study shows lean beef aids in weight loss but decreases bone density

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On July 6, 2010, the *Journal of Gerontology: Medical Sciences* published a study funded in part by the Beef Checkoff and National Pork Board, which found that though higher-protein diets support weight loss in overweight and obese women, they may also lower bone density in postmenopausal women who were already trying to lose weight. Researchers from Purdue University analyzed data from two controlled diet studies. In the first study, women's individual daily diets were reduced by 750 calories to achieve a one-and-one-half-pound weight loss each week for 12 weeks. These postmenopausal women ranged in age from 43-80. About half of the women consumed meat-free diets with protein from vegetarian, dairy and egg sources comprising 18 percent of each woman's energy intake; the other half consumed high-protein diets (with 30 percent of energy coming from protein). The women, on average, lost about 19 pounds each, but those who ate the higher-protein, meat-containing diet lost bone mineral density.

In the second study, 43 postmenopausal women each ate a 1,250-calorie diet for nine weeks. All participants consumed the same 1,000-calorie vegetarian diet, but 15 women received 250 calories from chicken breast-meat, 14 women received 250 calories from beef tenderloin and 14 women received 250 calories from shortbread cookies and sugar-coated chocolates. Another 11 women served as the control group. The researchers saw again that all of the women who ate the energy-reduced diets successfully lost weight, but the groups that consumed the higher-protein meat-containing diets also lost bone mineral density compared to the control group.

Lead researcher Wayne W. Campbell noted in a [Purdue University press release](#) that, "It is also important to note that these two studies were relatively short, nine to 12 weeks, so studies to evaluate how protein intakes impact body composition and bone beyond the period of active weight loss would be helpful."

The university press release has been posted to media newswire and the story has been picked up by a number of publications, including [Lafayette Online](#) and [MeatingPlace](#).

The checkoff has developed a [statement to be used reactively for media inquiries](#), which puts this study into perspective. We have also developed [TALKING POINTS](#) that highlight additional research that shows benefit to including lean protein as part of a healthy diet and industry commitment to nutrition research, which are copied below. Further, we can connect media with appropriate spokespeople and experts if they have questions beyond what is provided in the resources; contact jmatsen@beef.org if you have questions or need assistance.

