Dietary calcium has little effect on mineral balance and bone mineral metabolism through twenty weeks of lactation in Holstein cows. By Taylor et al., page 223. Resorbed bone is an available source of Ca and P that, if accounted for, would increase the accuracy of dietary P recommendations, resulting in reduced excretion of P. Dietary Ca concentration had no effect on P retention or bone metabolism through the 140-d study; first-lactation cows had more active bone metabolism than older cows. Regardless of dietary Ca, serum markers indicated a shift from net bone resorption to formation after 35 d of lactation but mineral balance data did not reflect this change. Results suggest that dietary P requirements are independent of dietary Ca and that total collection, serum markers, and bone biopsy variables that were measured to define mineral status of lactating cows do not always align.