Increasing energy intake of prepubertal heifers increases BW gain and decreases time to puberty, but may impair mammary development and future milk production. Somatotropin administration and incorporation of additional dietary protein, which is supplied as protein not effectively degraded in the rumen, into a heifer-rearing program provided for rapid body growth and larger framed heifers, without decreased prepubertal mammary development or subsequent milk production. We speculate that such regimens can be used to achieve early calving with maximal or near maximal milk production, and sufficient body size to limit calving difficulties.