Wether sheep were fed on (a) green maize stalks, (b) maize cobs, (c) sugarcane stalks and (d) sugarcane tops. All were low in N except (a) with 1.36%. A positive N balance of 3.4 and 1.4 g and a negative balance of 3.6 and 0.4 g was given by (a), (d), (c) and (b), resp. All the feeds were rich in Ca and K except for (b) which contained only 0.8% K, but Na and P content was low. All sheep had positive Ca and K balances, sheep fed (d) had a positive Na balance and all P balances were negative.