P229 Fiber disappearance and nitrogen flow from the rumen of cows fed differing amounts of grain with or without fungal addition. R. Wanderley*, A. Al-Dehneh, C.B. Theurer, D.W. DeYoung and J.T. Huber, University of Arizona, Tucson.

Five duodenally cannulated Holstein cows (2 dry and 3 lactating) were fed differing grain to forage ratios (1:2 and 2:1 for dry cows and 1:1 and 2:1 for lactating cows) in 2 trials. Experimental periods of 42 d were divided into 21 d with and 21 d without addition (3 g/d) of fungal spores (Aspergillus oryzae). Chromic oxide (24 g/d) was administered twice daily. At the end of each 21 d subperiod, digesta samples were collected every 6h for 4 d and daily composites were analyzed. High grain diets decreased rumen disappearance of ADF (25 vs. 46% of intake) and cellulose (44 vs. 62%). but increased nitrogen flow (118 vs. 92% of intake) and percent undegraded feed protein (66 vs. 50%) passage. Efficiency of protein synthesis was not affected by diet. Fungi slightly increased protein flow. Passage estimates for dry matter and protein using Cr_2O_2 as a marker were consistently lower than when acid detergent lignin was used. Amino acid profiles for duodenal protein fractions will be presented.

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