Effect of Forage:Concentrate Ratio on Fatty Acid Composition on Rumen Bacteria Isolated from Ruminal and Duodenal Digesta. By Vlaeminck et al., page 2668. This study examined the effect of forage:concentrate ratio on fatty acid composition of rumen bacteria. Dietary polyunsaturated C18 fatty acids are only incorporated in bacterial matter to a minor extent with the preferential incorporation of C18:2n-6 over C18:3n-3. A decrease in forage:concentrate ratio increased bacterial $\text{trans}$-10 C18:1; this increase was 3.4 times higher in bacteria associated with the liquid phase compared with those in the solid phase. High dietary forage favored the synthesis of odd- and branched-chain fatty acids in rumen bacteria.