Effects of Garlic Oil and Four of its Compounds on Rumen Microbial Fermentation. By Busquet et al., page 4393. The use of garlic oil has been evaluated as a natural alternative to modify rumen microbial fermentation. The effects of garlic oil and 4 of its compounds on rumen microbial fermentation were evaluated in vitro. Changes in volatile fatty acid proportions and methane production confirmed that garlic oil, diallyl disulfide, and allyl mercaptan have the ability to inhibit methanogenesis, and suggested the potential of these compounds to improve rumen microbial fermentation by increasing the amount of energy obtained per unit of fermented substrate.