Maturity acceleration of Italian dried sausage by *Staphylococcus carnosus* - Relationship between maturity and flavor compounds

The mature flavor of Salame Milano, an Italian dried sausage, was increased in two ways: by increasing maturation time or with a strain of *Staphylococcus carnosus*. The sensory and volatile profiles of the sausages were determined and the data analyzed by analysis of variance and chemometrics. Sausages with *S. carnosus* 833 matured more than 2 wk faster than control sausages. Maturity correlated significantly with higher amounts of branched-chain aldehydes and alcohols and both branched- and straight-chain methyl ketones—compounds arising from the breakdown of the amino acids leucine, isoleucine, and valine, or from microbial beta-oxidation of fatty acids. Also, sulfur compounds arising from added garlic correlated positively with mature flavor.