Biogenic amines in Spanish fermented sausages as a function of diameter and artisanal or industrial origin

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Abstract

The distribution of biogenic amines in three types of fermented meat sausages (chorizo, fuet and salchichón) was examined with respect to the degree of acidification. The aim was to determine whether low-acid sausages (artisanal/traditional) have a different biogenic amine profile than more acidic products (industrial). Despite wide variability, tyramine was always found and was generally the major amine, followed by putrescine. Their contents in both industrial and artisanal sausages were similar, but correlated with the diameter of the product. In contrast, industrial sausages showed a higher average content of cadaverine and histamine, especially in chorizo, which also showed the highest content of free amino acids. Moreover, a multiple analysis of variance confirmed that the processing plant had a significant influence on the overall biogenic amine composition of products, histamine being the most important amine accounting for this effect. Copyright © 2005 Society of Chemical Industry

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