

## **Stability of phenolic compounds in dry fermented sausages added with cocoa and grape seed extracts**

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### **Abstract**

The level of eleven target phenolic compounds was evaluated in dry fermented sausages added with vegetable extracts. Grape seed (GSE1 and GSE2) and cocoa extracts, rich in phenolic compounds, were added in the formulation of dry fermented sausages (“salchichón” and “fuet”). Evolution of the major monomeric and oligomeric phenolic compounds of these extracts was evaluated during sausage shelf life by UHPLC-MS/MS. Kind of sausage did not affect significantly overall stability of the target compounds. At the end of the ageing process, catechin and epicatechin were at 54-61%, gallic acid and galloylated flavan-3-ols at 59-91%, oligomeric flavan-3-ols at 72-95% and glycosylated flavonols at 56-88% (in cocoa treatment) and 82-94% (in GSE treatment) of the contents that were added to the meat batter. All phenolic compounds levels did not decrease further significantly after ageing until the end of shelf life. Sensory analyses showed no important differences between control and cocoa added products, while grape seed addition gave these products abnormal sensory profiles. The 0.5% (w/w) addition of vegetal extracts was suitable to enrich dry fermented sausages with health-beneficial polyphenols.