

## Comparison of Various Extraction Methods to Analyze Volatile Compounds of Comminuted Sausages

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The quality of regular-fat and low-fat sausages can be determined by various factors, such as, flavor and taste. In the area of food flavor research, most approaches were focused on the volatile compounds which were highly associated with food flavor. However, each food system had very complex matrix and extraction yields for flavor determination depended on food components. Thus, the objective of this study was to determine the best isolation technique of flavor components, as compared by their volatile compounds extracted in sausage samples. Three methods, purge and trap (P&T), simultaneous distillation extraction (SDE) and organic solvent extraction (SE) methods were performed to isolate the volatiles. Then, extracted volatile components were analyzed by gas chromatography and mass spectrophotometry (GC/MS). Some fat components interfered to analyze the volatiles by SE method, if the sample contained a high fat contents in the samples. P&T method only extracted specific volatile fraction in sausage samples. Since SDE method had a stable baseline, low noise intensity and higher peak areas, as compared to P&T and SE counterparts, it was most proper extraction technique for the determination of volatile compounds in comminuted sausages.