

# Reported foodborne outbreaks due to fresh produce in the United States and European Union: Trends and causes

Callejón R.M.

Rodríguez-Naranjo M.I.

Ubeda C.

Hornedo-Ortega R.

García-Parrilla M.C.

Troncoso A.M.

The consumption of fruit and vegetables continues to rise in the United States and European Union due to healthy lifestyle recommendations. Meanwhile, the rate of foodborne illness caused by the consumption of these products remains high in both regions, representing a significant public health and financial issue. This study addresses the occurrence of reported foodborne outbreaks associated with fresh fruits and vegetables consumption in the United States and European Union during the period 2004-2012, where data are available. Special attention is paid to those pathogens responsible for these outbreaks, the mechanisms of contamination, and the fresh produce vehicles involved. Norovirus is shown to be responsible for most of the produce-related outbreaks, followed by Salmonella. Norovirus is mainly linked with the consumption of salad in the United States and of berries in the European Union, as demonstrated by the Multiple Correspondence Analysis (MCA). Salmonella was the leading cause of multistate produce outbreaks in the United States and was the pathogen involved in the majority of sprouts-associated outbreaks. As is reflected in the MCA, the pattern of fresh produce outbreaks differed in the United States and European Union by the type of microorganism and the food vehicle involved. © 2015 Mary Ann Liebert, Inc.