

Spreading of foodborne bacterial pathogens by synanthropic flies

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Insects are vectors of foodborne pathogens and play an important role in the transmission of food-related diseases because they can spread pathogens to food or food contact surfaces. Synanthropic flies mechanically spread foodborne bacteria by transferring pathogens from their contaminated body surfaces. The aim of this study was to detect foodborne pathogens from individual flies. The standardized protocol was subsequently used to survey 130 flies for the presence of foodborne pathogens from their body surfaces. Collected flies were representative of species: *M. Domestica* (74%), *Lucilia cuprina* (22%), *L. sericata* (4%). Five bacterial species were detected on the external surfaces of studied flies: *Staphylococcus aureus* (12%), *Enterococcus faecalis* (16%), *Enterobacter cloacae* (22%), *Escherichia coli* (33%), and *Salmonella enterica* (17%). This study showed that synanthropic flies transmit foodborne pathogens. Regularly cleaning food preparation areas and keeping flies from getting inside are essential to preventing foodborne illnesses.