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## Survival of *Shigella* and *Salmonella* in ready-to-eat Mediterranean vegetable salads

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Salads form an indispensably healthy part of the Mediterranean diet. Recently, salads have served as a transmission mode for pathogens. This study investigated the growth behavior of *Salmonella* and *Shigella* in different types of salads namely: tomato cucumber (TC) salad without additives, TC with additives (1.0% lemon juice and 0.5% salt), TC with tahini (10% w/w), coleslaw, and toum sauce. Salads were inoculated with ca. 5-6 log<sub>10</sub> CFU/g of either a cocktail of 5 serotypes of *Salmonella* or 2 *Shigella* spp. The salads were stored at 4°C, 10°C or 24°C for 5 d. The pathogens were able to grow or survive in the different salad types except for coleslaw and toum

sauce, where the numbers in these salads declined sharply at 24°C but slowly at 4 and 10°C. *Shigella* spp. survived in higher numbers in the different salads at low temperatures and low pH salads compared to *Salmonella* spp. This study shows that *Salmonella* and *Shigella* spp. are able to survive and potentially grow in different types of salads. Therefore, proper control of storage temperature, strict hygienic practices, and application of decontaminative washing steps for the food ingredient, utensils and food contact surfaces prior to preparation are crucial.

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