

Fighting Food-Poisoning Bacteria with Leaves of Carob Tree

Leaves of the plant that yields carob - the substitute for chocolate that some consider healthier than chocolate - are a rich source of antibacterial substances ideal for fighting the microbe responsible for listeriosis, a serious form of food poisoning, according to a report in ACS' *Journal of Agricultural and Food Chemistry*.

Nadhem Aissani and colleagues explain that the increase in antibiotic-resistant bacteria has fostered a search for new natural substances to preserve food and control disease-causing microbes. They cite a need for new substances to combat *Listeria monocytogenes*, bacteria that caused food poisoning outbreaks in a dozen states with three deaths so far this year. Carob has attracted attention as a potential antibacterial substance, but until now, scientists had not tested it against *Listeria*. Carob may be best-known as a substitute for chocolate that does not contain caffeine or Theobromine, which makes chocolate toxic to dogs.

Their report describes tests in which extracts of carob leaves proved effective in inhibiting the growth of *Listeria* bacteria growing in laboratory cultures. Further, it offers a possible explanation for the antibacterial action. The results were promising enough for the scientists to plan further tests of carob extracts on *Listeria* growing in meat and fish samples.