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## Screening of Antibacterial Activities of Edible Plants against Streptococcus mutans

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The antibacterial activities of 81 edible plants against the dental caries pathogen *Streptococcus mutans* were investigated. The fresh vegetative crude extracts were subjected to the paper disc method. Furthermore, in order to fractionate the active component, hexane, ethyl acetate and methanol extracts from freeze-dried samples were also examined. Antibacterial activities were positive in 17 samples, including cinnamon and Japanese ginger. Among these, the stabilities of the active components against heat treatment or storage at 4 °C for one week were also investigated. Following these treatments, the activities of balsam pear and garlic extracts were lost, while the active components in ginger, Japanese ginger, clove and cinnamon appeared. Samples of the genus *Zingiberaceae*, including Japanese ginger and ginger, contained abundant and stable antibacterial components acting against *S. mutans*.

Keywords: <u>Streptococcus mutans</u>, antibacterial activity, paper disc, ginger, Japanese ginger

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