Kimchi Bacterial Affects against Common Sinusitis Bacteria

Kelson, Tristen

Sinusitis is very common condition in the United States, afflicting 15% of the population each year. This study tested the antimicrobial/ inhibitory effects of Kimchi against the common Gram positive sinusitis bacteria Staphylococcus aureus ATCC 25923 and Staphylococcus epidermidis ATCC 12228, as well as the Gram negative bacterium, Pseudomonas aeruginosa ATCC 27853. The effects on Exiquiobacterium Mexicanum ATCC 49676 (Corynebacterium ssp.) a normal gram positive nasal flora bacteria was also tested. Solid and Liquid Extractions were performed on whole Kimchi and used to test against the various organisms at varying concentrations in a microwell plate incubated for 24 hours aerobically at 37C.. This study succeeded in showing that Kimchi Solid and Kimchi Liquid extract have inhibitory effects against the common sinusitis bacteria Staphylococcus Aureus and a normal flora bacteria Staphylococcus epidermidis at a concentration of 25% or above. Kimchi Extract also showed increasing bacterial growth in the normal nasal flora Exquiobacterium Mexicanum at a 25% concentration, and no effects on the gram negative bacteria Pseudomonas aeruginosa. This could be due to active biological ingredients present in the Kimchi, and thus allow for a possible treatment for sinusitis without antibiotics.

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