

The Chewing Gum Confectionary Development for Oral Hygiene with Nine Hour Oral Antibacterial Activity

Authors : Yogesh Bacchaw, Ashish Dabade

Abstract : Nowadays oral health is raising concern in society. Acid producing microorganisms changes the oral pH and creates a favorable environment for microbial growth. This growth not only promotes dental decay but also bad breath. Generally Recognized As Safe (GRAS) listed component was incorporated in chewing gum as an antimicrobial agent. The chewing gum produced exhibited up to 9 hours of antimicrobial activity against oral microflora. The toxicity of GRAS component per RACC value of chewing gum was negligible as compared to actual toxicity level of GRAS component. The antibacterial efficiency of chewing gum was tested by using total plate count (TPC) and colony forming unit (CFU). Nine hours were required to microflora to reach TPC/CFU of before chewing gum consumption. This chewing gum not only provides mouth freshening activity but also helps in lowering dental decay, bad breath, and enamel whitening.

Keywords : colony forming unit (CFU), chewing gum, generally recognized as safe (GRAS), microbial growth, microorganisms, oral health, RACC, total plate count (TPC), antimicrobial agent, enamel whitening, oral pH

Conference Title : ICFME 2017 : International Conference on Food and Microbial Engineering

Conference Location : Rome, Italy

Conference Dates : September 18-19, 2017