Utilization of banana peels for production of edible antimicrobial active food packaging film.

Malvika ,Dr Nilambari Dave

PhD student Foods and Nutrition Saurashtra University, Rajkot, India

Abstract

Fast development in the field of agriculture and food technology has held to production of large amount of industrial residues without proper treatment. So, their disposal becomes serious environment issue for developing countries. In the present study, this issue was focused and agro industrial banana peel waste was utilised for production of value added, industrially important product such as antimicrobial edible active food packaging films. The study was conducted at Foods and Nutrition department of Saurashtra University Rajkot Gujarat – 365601. Banana peels of (Musa acuminata) variety was procured from Saurashtra region of Amreli from which a novel product like antimicrobial edible active food packaging film was prepared. Biochemical, microbiological, sensory and statistical tests were performed for developed product. Significance of study was tested by T- test at 5 % level of significance with a t value of antimicrobial edible film was 2.45. After the complete analysis, it can be concluded that the present study was successful trial for utilization of agro waste for production of value added products. As conclusion, the produced films has promising applications for food packaging industry because of its high tensile strength and solubility or biodegradability. They can serve as an innovation to current food packaging industry because of their edible and antimicrobial nature.

Biography:

Ms.Malvika, PhD Scholar in Foods and Nutrition ,Graduated from Delhi University in Food Technology ,Diabetes Educator and Nutrition Consultant from 8 years ,specialized in insulin pumps and C.G.M.S (Continuous Glucose Monitoring System). She qualified UGC NET in 2012 .She worked as a visiting Assistant Professor in Government Dairy Science Amreli ,Gujarat.