## Kajian Keamanan Pangan Bumbu Dapur Bubuk Ditinjau dari Sitotoksisitas, Aktivitas Antioksidan dan Antimikroba

Food Safety Study of Powdered Kitchen Spices in View of Cytotoxicity, Antioxidant and Antimicrobial Activity Dr. Titik Budiati, S. TP., MT.,M. Sc.,

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## **ABSTRACT**

Spices have a very important role in society as a complement to the taste of food because of their distinctive aroma. In general, almost all Indonesian dishes contain a lot of seasoning consisting of spices. However, excessive use of this spice can cause health problems in people who consume it. This research aims to find out the cytotoxicity of powdered kitchen spices, the antioxidant activity of powdered kitchen spices and the antimicrobial activity of powdered kitchen spices. The research method used is the experimental laboratory method. Based on research that has been carried out, samples of powdered kitchen spices are not toxic to Vero cells because the samples cannot kill 50% of the cell population. The results showed that the powdered kitchen spice samples had an influence on antioxidant activity. It was found that the antioxidant activity value of garlic was 78.0440%, pepper was 73.3873%, nutmeg was 72.3397%, cloves were 70.7323% and cinnamon was 69.8510%. The kitchen spices pepper powder, nutmeg, cloves, garlic and cinnamon can inhibit the growth of pathogenic bacteria such as E.coli, Listeria Monocytogenes, Bacillus cereus and Pseudomonas aeruginosa. And samples of cloves, garlic and cinnamon can inhibit the growth of the fungus Aspergilus niger.

**Keywords**: Powdered kitchen spices, Food Safety, Cytotoxicity, Antioxidants, Antimicrobials