



Appraisal of Nutritional Values and Antimicrobial Activities of Garlic, Cinnamon, Black Pepper and Aloe Vera Powder

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Abstract: The present study was conducted to evaluate the nutritional value of Garlic, Cinnamon, Black pepper and Aloe vera powder along with their in vitro antimicrobial activities. Analysed values of the herbs reflected the appreciable contribution toward nutritional basket of the user. Crude protein content of these herbs varies from 3.16 (aloe vera) to 13.69 per cent (garlic powder). Black pepper has comparatively high fat percentage (3.66%). Aloe vera Powder was identified as good source of calcium, zinc and iron. Antimicrobial properties of these herbs powder were checked by using disc diffusion method against the most common pathogen *E. coli* and *Salmonella spp.* Ethanolic extract at three different levels for each herb was used, garlic and aloe vera extracts were used at 1.0, 1.5 and 2.0 percent levels and cinnamon and black pepper extracts at 0.5, 1.0 and 1.5 per cent levels. *E. coli* is sensitive to black pepper at 1.5 per cent level and show intermediate to low sensitivity to 1.0 and 0.5 percent black pepper extract. *E. coli* exhibited intermediate sensitivity to 1.0 and 1.5 per cent ethanol extract of cinnamon. Ethanolic extract of black pepper at 1.0 and 1.5 per cent levels also exhibited antimicrobial properties against *S. typhimurium*. The black pepper and cinnamon beside having nutritional value for consumer possess antibacterial activities against *E. coli* and *S. typhimurium*.

Keywords: Aloe vera, Black pepper, Cinnamon, Garlic, Antimicrobial activity, Nutritional composition
