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The Effects on Antimicrobial and Anticarcinogenic Activity of *Momordica charantia* L. fractions.

Yun-Ja Park and Song-Ja Bae[†]

Department of Food and Nutrition, Silla university.

This study was performed to determine the antimicrobial and anticarcinogenic activity of the Momordica charantia L.(MC) on several microorganisms and human cancer cell lines. In the paper disk test its antimicrobial activity was increased in proportion to its concentration. Among the various solvent fractions of Momordica charantia L., the ethylether partition layer(MCMEE) showed the strongest antimicrobial activity. Also ethylacetate partition layer (MCMEA) and butanol partition layer(MCMB) showed antimicrobial activity. We also determined the effect of on cytotoxicity and chemopreventive Momordica charantia L. extract and fractions on human cancer cells. The experiment was conducted to determine cytotoxicity of Momordica charantia L. partition layers on HepG2, HeLa and MCF-7 cells by MTT assay. Among various partition layers of Momordica charantia L., MCMEE and MCMEA was showed the strongest cytotoxic effects on all cancer cell lines. The chemoprevedive effect of quinone reductase activities of HepG2 cell, the hexane partition layer(MCMH) at a does of 50 µg/mL was 3.62 times more effective compared with the control valus of 1.0. Therefore, based on these studies, Momordica charantia L. may be developed into a potentially useful cancer chemopreventive agent.