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The Synergy Effect of Deep Sea Water on the Cytotoxicity of Onion Peel

Kwang-Hye Jeon* and Song-Ja Bae.

Dept. of Food and Nutrition, Silla University

We investigated the cytotoxicity effects of Onion peel(OP) on the cancer cell lines by MTT assay. We extracted of OP with metanol and the metanol extract(OPM) was partitioned with n-hexane(OPMH), ethylether(OPMEE), ethylacetate(OPMEA), butanol(OPMB) and aqueous(OPMA) solvent. Among partition layers, the ethylether partition layer (OPMEE) was showed the strongest cytotoxic effects on cancer cell lines. And we also determined the synergy effect of deep sea water on the cytotoxicity of OP on cancer cell lines. These results suggest that potentially useful anticarcinogenic chemicals could be isolated from OPMEE of the onion peel and also we found the synergy effect on the cytotoxicity of various partition layers of OPM with deep sea water.

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Antimicrobial Activity of Various Food

Kwang-Hye Jeon, Soung-Young Park and Song-Ja Bae*.

Dept. of Food and Nutrition, Silla University

This study was performed to determine the antimicrobial activity of the *Solanum tuberosum* Peel(SP) and *Allium cepa* L peel(AP) on several microorganisms. The SP and AP extracts from methanol were fractionated to five different types, which are Hexane, ethylether, ethylacetate, butanol and water. Among the various fractions, ethylether fractions of AP showed the strongest antimicrobial activity. AP was showed the strongest antimicrobial activities against *Pseudomonas aeruginosa* and *Staphylococcus aureus*, SP was showed the high effect of antimicrobial activities from *Escherichia coli*. The extract *Solanum tuberosum* Peel(SP) at 2000 µg/mL per disc showed 10.30 mm fractions against *Escherichia coli*, ethylether extract of *Allium cepa* L. peel(AP) at 2000 µg/mL per disc showed 17.72 mm fractions against *Pseudomonas aeruginosa*.