

# Exploitation of the biologically active substances in germinating Mung bean and Buckwheat seeds

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## Abstract

This study was carried out to investigate of the biologically active components in germinating Mung bean (*Phaseolus radiata* L.) and Buckwheat (*Fagopyrum esculentum* Moench) seeds. During the initial germination, germination ratio of 24 hours pre-soaking Mung bean and Buckwheat seeds were higher about 2~3% than that of non-soaking. This experiment also was performed to observe cytotoxic effect of the germinating seeds (germination length : 2, 5, 10mm) extracts against cancer cell lines including human lung carcinoma (Calu-6), human breast adenocarcinoma (MCT-7), human great intestine carcinoma (Caco-2) and human leukemia carcinoma (AML-2/WT). The growth of the cancer cells in medium containing Mung bean and Buckwheat extracts were significantly inhibited degree in proportion to the length of germination seeds. Especially, the results show that a significant shrinkage of Calu-6 cells was observed when the cells were exposed into extract of 10mm germination seeds in germinating Mung bean and Buckwheat seeds.