

## **Comparison between the antioxidant properties of environment-friendly agro-produce and processed food**

Soo Mi Kim, Joo Hee Kim, Myoung Jin Son, Se Young Kim, Catherine Rico, Mi Young Kang†  
Department of Food Science & Nutrition, Kyungpook National University,  
Daegu 702-701, Korea

This study was conducted to investigate the effects of environment-friendly materials on garlic cultivation, and the methods for processing garlic at proper ripening stage to increase its antioxidant properties and market value. The functional properties of garlic and processed black garlic were analyzed in vitro and ex vivo. The ethanol extracts of garlic and black garlic were used in the antioxidant, linoleic acid autooxidation, lipid oxidation and RAW264.7 indicator cell using NO induced activity analyses. Also, toxicity tests by RBL-2H3 and RAW264.7 indicator cell using MTT assay were compared. Obesity inhibition test of garlic and black garlic were also studied.

†Corresponding author: [mykang@knu.ac.kr](mailto:mykang@knu.ac.kr)