암 I			번호: II - F - 1
제 목	국문	유방암 발병에 있어 Methylenetetrahydrofolate Reductase (MTHFR) 유전자 다형성과 식이 섭취의 상호작용	
	영문	The Methylenetetrahydrofolate Reductase Genotypes, Diets, and Breast Cancer Risk	
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Objectives: to evaluate the interactive effect of methylenetetrahydrofolate reductase (MTHFR) genotype and dietary factors on the development of breast cancer

Materials and Methods: a hospital based case-control study was conducted in South Korean study population consisting of 189 histologically confirmed incident breast cancer cases and their 189 age-matched controls without present or previous history of cancer. A PCR-RFLP method was used for the genotyping of MTHFR (C677T) and statistical evaluations were performed by unconditional logistic regression analysis.

Results: consumption of some dietary factors, such as mushrooms (OR=0.4, 95%CI: 0.28-0.67), green vegetables (OR=0.3, 95%CI: 0.21-0.75), white vegetables (OR=0.3, 95%CI: 0.09-0.71), and meats (OR=1.7, 95%CI: 1.06-2.77) significantly decreased or increased the risk of breast cancer. Although the MTHFR genotype was not associated with breast cancer risk, the interaction was observed between MTHFR (C677T) genotype and mushroom or green vegetable intake in breast cancer development. Women with TT allele MTHFR

genotype and low mushroom intake increased 4.4-fold risk of breast cancer compared to high mushroom intake group containing at least one C allele MTHFR genotype. Women with TT allele MTHFR genotype and low green vegetable intake increased 5.6-fold risk of breast cancer compared to high green vegetable intake group containing at least one C allele MTHFR genotype.

Conclusion: our findings suggest that MTHFR polymorphism did not influence individual susceptibility to breast cancer. However MTHFR (C677T) genotype and some diet intakes appeared to have the interactive effect in breast cancer development.