

## Association of DAPK1 gene methylation with the prognosis in epithelial ovarian carcinoma (EOC) patients

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**Background:** Novel strategies for early detection of EOC, the most common and second most lethal cancer in Indian women, are urgently needed. Silencing tumor suppressor genes via DNA methylation has established hypermethylation as one of the most frequent molecular alterations that may initiate and drive many types of human neoplasia including EOC. To determine the alterations of tumor suppressor gene DAPK1 gene in EOC patients to explore the possibilities of identifying potential minimally invasive markers in blood of the patients, which could help in the clinical practice as a diagnostic and prognostic marker.

**Methods:** Fifty EOC patients with primary epithelial ovarian cancer were selected for the study; Genomic DNA extracted from fresh peripheral blood & serum followed by sodium bisulfate modification. The p16 methylation was detected using methylation-specific PCR (MSP). The DAPK1 gene methylation status was correlated with age, stage, menopause, Ca125.5 and clinic pathological features.

**Results:** The frequencies of DAPK1 gene methylation in EOC patients were found to be 68%. The significant association was seen with age at diagnosis, menopause and stage ( $P = 0.043$ ). Patients with high methylation indices had poor prognosis ( $p < 0.001$ , Hazards ratio=14.58) with age ( $P = 0.043$ ), and tumor stage ( $P = 0.033$ ). Aberrant methylation of DAPK1 gene was strongly associated with EOC patients ( $P = 0.037$ ).

**Conclusions:** Our results that the methylated loci of TSGs (DAPK1 gene) may be employed as clinically useful biomarkers for prognosis and diagnosis of EOC noninvasively using readily available body fluid by MS-PCR and proved to be efficient and cost-effective method.

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## Study of fast food eating behaviour among girls living in hostels in relation to their health

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Fast food is considered to be one of the fastest growing and popularized foods in view of the fact that it is easy to prepare within short span of time and is an economic alternative to home cooked foods. It is considered as a good source of energy and with a considerable percentage of fat along with high quantity of saturated fatty acids, cholesterol and sodium. Fast food culture has been gaining popularity especially due to altered demographic patterns with nuclear families since working parents have fewer time for meal preparation at home. Research indicates that fast food consumption is turning the females a victim of sterility and this is also now the major cause of an assortment of digestive problems. So by keeping this view in mind, the study was conducted in Lovely Professional University girl's hostels to know about their fast food eating behaviour in relation to their health. Chi-square, which is a non-parametric test, was applied for studying the sample size of 465 girl students. The survey provides converging evidence of a direct causal link between fast food consumption patterns of the hostel girls in relation to their health. The study concludes that fast food eating trend among girls residing in the hostels, is very common. Despite the fact that study did not find a momentous correlation between fast food consumption and BMI, but the fast food intake openly pointed out its ill effects on females' health.

**Keywords:** Fast food, hostel girls, eating behaviour, health.

### Biography

Aanchal vasudev has been pursuing her M. Sc in Biotechnology in the batch of 2010- 2012 from Lovely Professional University and her research in fast food consumption in relation to girls health with the guidance of Mr. Harsh Kumar, Lecturer in the department of Biotechnology and Biosciences in Lovely Professional University.

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