

## Review Article

### Risk of Breast Cancer in Women and working on night shifts

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There is little information about the direct effect of night work on the risk of cancer. Melatonin, the "hormone of the darkness," has only recently gained substantial attention from the scientific community with regard to its potential oncostatic actions and its possible effect on breast cancer risk. Melatonin serum levels in humans decrease when people are exposed to light at night. Suppressed serum melatonin levels might enhance tumor development. The evidence of a relation between melatonin and oncogenesis in humans is conflicting, but the majority of reports indicate protective action. Several mechanisms have been hypothesized to explain an association between melatonin and breast cancer. In this review article, we evaluate the relationship between night work, as a surrogate for light exposure at night, and breast cancer risk in women. We attempted to explain the slight differences in the association of shiftwork duration and breast cancer risk between premenopausal and postmenopausal women by examining whether the effects of shiftwork varied in specific subgroups.