

## **Night shifts can cause cancer**

The International Agency for Research on Cancer, the cancer arm of the World Health Organization, has just classified overnight work as a probable cause of cancer.

The move is based on studies which showed a higher rate of breast and prostate cancer among people doing night shifts.

Why working overnight increases the chance of developing cancer?

Scientists suspect night shifts disrupt the circadian (body clock) rhythm. In addition, light suppress the production of melatonin produced by the pineal gland located in the brain. Suppressing melatonin production is a cancer risk.

Its synthesis is stimulated by darkness and suppressed by light. Levels of melatonin in the blood are highest before bedtime. It works together with another compound called serotonin to regulate the sleep cycle.

Melatonin has been used for treating jet lag and insomnia. Studies have shown that melatonin also inhibits the growth of cancer, and may someday play a role in treating breast, prostate and colorectal cancer.

In general, clinical trials suggest that melatonin acts synergistically with chemotherapeutic agents (drugs used to treat cancer) to enhance their anti-tumour effects. However, more studies are needed before the anti-cancer effect of melatonin can be confirmed.