



Irregular routines

Transcript: Video clip from '10 Things You Need To Know About Sleep', presented by Kate Silverton.

KATE SILVERTON:

When our eyes are open, light passes through the eye to the retina at the back of the eyeball. These tiny cells in the retina contain a pigment that reacts to daylight.

PROF ALAN BIRD, MOORFIELDS EYE HOSPITAL:

These cells send signals to the brain that then regulates melatonin production. And its melatonin levels in blood that determine whether you're sleepy or whether you're wide awake.

KATE SILVERTON:

At night the body increases the supply of the sleep hormone melatonin to help us sleep. As daylight peeks through the curtains, a relay race begins around the brain. Even though the eyelids are closed, the cells in the retina react to blue light.

They send a signal to the brain's biological clock that alerts the pineal gland to reduce the production of the sleep hormone melatonin. As a result, the body becomes more alert and wakes up. We can use this knowledge to make sure we sleep through the night by keeping the curtains tightly shut to block out any daylight.