BY DAY OR BY NIGHT

The human body undergoes daily cycles in gene expression, protein levels, enzymatic activity, and overall function. Light is the strongest regulator of the central circadian rhythm. When light strikes a mammal's eyes, it triggers an electrical impulse that activates neurons in the suprachiasmatic nucleus (SCN), the seat of the brain's timekeeping machinery. The SCN sets the pace for neuronal and hormonal signals that regulate body temperature, feeding behavior, rest or activity, immune cell functions, and other daily activities, which in combination with direct signals from the SCN keep the body's peripheral organs ticking in synchrony.