Cognitive, emotional, and behavioral impairments

Accumulation of many neuromodulators and neurotransmitters

Cellular abnormalities and damage

Increased appetite

Altered gene expression profiles

Changes in appetite-hormone levels

Disrupted brain wave patterns

Increased risk for hypertension, heart attack, and stroke

Type II diabetes

Insulin resistance

Obesity

UNDER THE COVER OF DARKNESS
Strange things happen at night, especially when we’re not sleeping. Results from observational studies of people who don’t sleep much (blue icons) and from experiments on human volunteers (pink icons) have revealed that the consequences of sleep deprivation are far-reaching, from molecules and cells to organs and behavior.