

4. States of Consciousness

We will now review different states of consciousness.

4.1. Sleeping and dreaming

4.2. Hypnosis and meditation

4.3. Psychoactive drug effects

4.1 Sleep and Dreaming

- **Consciousness**
 - **A state of awareness about ourselves and our environment**
 - **Many varieties of consciousness, both natural and induced**

- **Circadian Rhythms**
 - **Body's natural cycle of fluctuations of natural processes**
 - **Temperature**
 - **Hormone levels**
 - **Level of wakefulness**
 - **~25 hour clock when under "Free Running" conditions**

- **Biological rhythms of sleep as measured by EEG**
- **Five stages of sleep and differing brain waves**
 - **Stage 1: Alpha waves**
 - **hypnagogic sensations**

 - **Stage 2: Theta waves**
 - **sleep spindles,**
 - **K-complexes**

- **Brain waves –cont.**
 - **Stage 3: delta waves**
 - **Stage 4: slow wave sleep**
 - **REM- paradoxical sleep**

- **Sleep disorders**
 - **insomnia**
 - **hypersomnia**
 - **narcolepsy**
 - **sleep apnea**

- **Dreams occur during REM**
- **REM rebound**
 - **dreams appear necessary**
 - **if REM deprived, longer periods will occur**

- **Freud's theory of dreams**
 - manifest content disguised as latent content
- **Activation- synthesis theory**
 - Constructed story to explain images from random neural activation
- **Information- processing model**
 - dreams are a way to consolidate information

- **Hypnosis**
 - **induced state of consciousness**
 - **deep relaxation and heightened suggestibility**
 - **dissociation- split in consciousness**

4.2. Hypnosis and meditation

- **Meditation**
 - awareness
 - practice of acknowledging content of the mind
 - promote relaxation, energy and compassion

4.3. Psychoactive Drug Effects

- **Produce a different state of consciousness by mimicking, inhibiting or stimulating activity of neurotransmitter**

- **Depressants**
 - alcohol, barbiturates, opiates
- **Stimulants**
 - cocaine, amphetamines
- **Hallucinogens**
 - LSD, mescaline, psilocybin