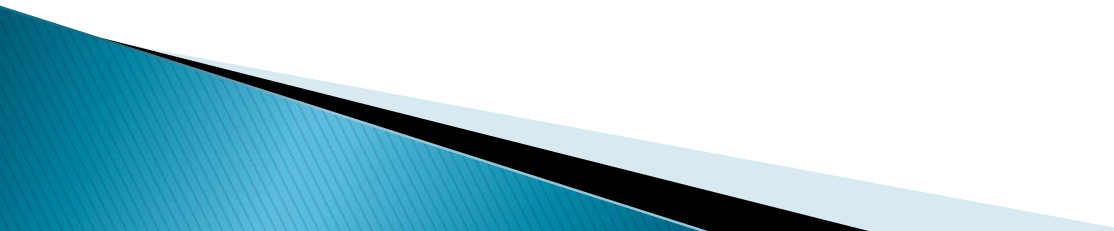


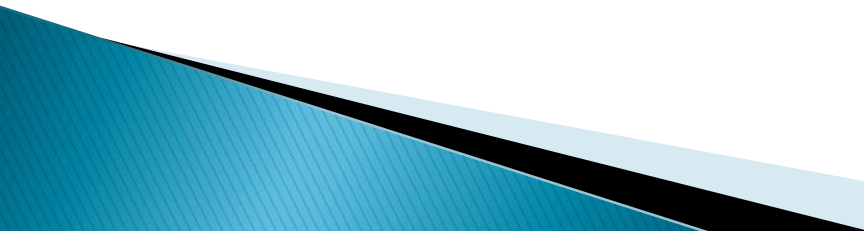
7-1

Sleep and Dreams

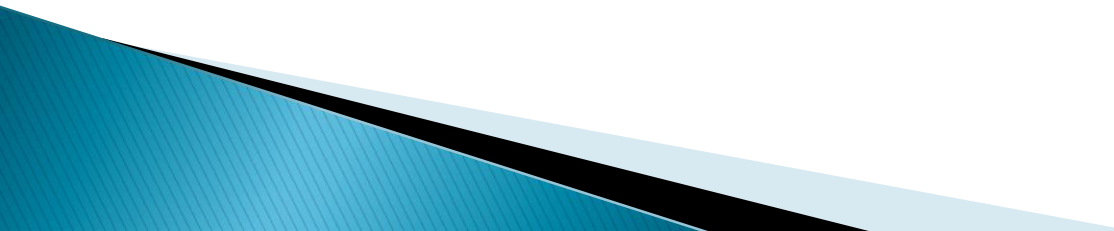
7-1 Sleep and Dreams

- ▶ Why do we sleep?
 - ▶ Stages of sleep
 - ▶ How much sleep do we need?
 - ▶ Sleep disorders
 - ▶ Dreams
- 

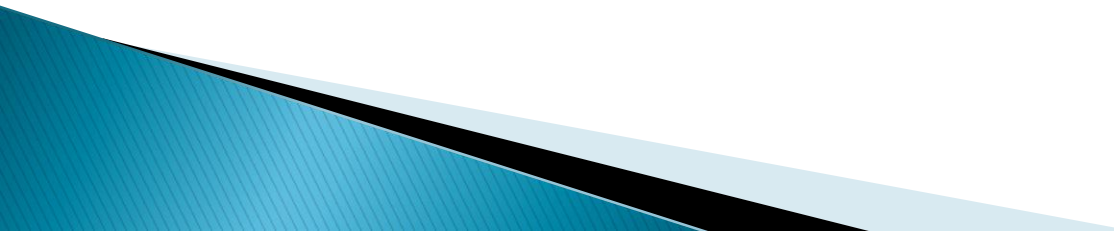
Consciousness

- ▶ State of awareness
 - Feelings
 - Sensations
 - Ideas
 - Perceptions
 - ▶ Altered state of consciousness = different levels of awareness
 - ▶ Brain is never completely “off”
 - ▶ EEG (electroencephlogram) helps us study sleep
- 

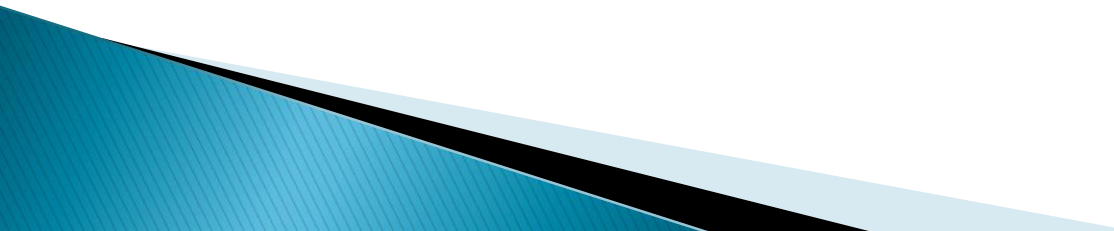
Why Do We Sleep?

- ▶ Restoration?
 - ▶ Hibernation?
 - ▶ Adaptive?
 - ▶ Clear our LTM?
 - ▶ To dream?
- 

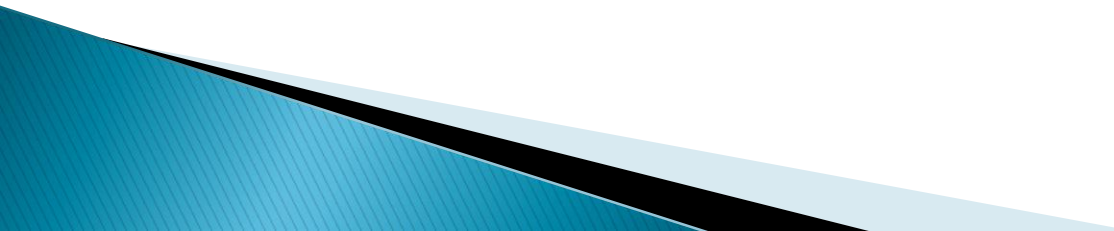
Stages of Sleep

- ▶ Stage 1
 - Brain waves irregular
 - Report “drifting”
 - ▶ Stage 2
 - Slightly larger brain waves
 - ▶ Stage 3
 - Even larger brain waves
 - ▶ Stage 4
 - Deepest sleep, difficult to waken
- 

REM Sleep

- ▶ Pulse rate and breathing irregular
 - ▶ Increased adrenalin and sex hormones in blood
 - ▶ Arms, legs paralyzed
 - ▶ Rapid eye movement
 - ▶ Dreaming
 - ▶ First round of REM 15 min, last round 45 min
- 

How Much Sleep?

- ▶ Babies 16 hours
 - ▶ Teens 9–12 hours
 - ▶ Adults 6–9 hours
 - ▶ Seniors 4–6 hours
- 

Circadian Rhythms

- ▶ Biological clock
- ▶ Governs:
 - Blood pressure
 - Heart rate
 - Appetite
 - Hormone secretion
 - Sleep cycles
- ▶ 24–25 hour cycle

Sleep Disorders

- ▶ Insomnia
 - Chronic, 2 hrs sleep/night
- ▶ Sleep Apnea
 - Choking
- ▶ Narcolepsy
- ▶ Nightmares
 - REM sleep
- ▶ Night Terrors
 - Stage 4 sleep
- ▶ Sleepwalking and Sleep talking
 - Usually in stage 4, can be REM

Dreams

- ▶ Content
 - Usually benign
 - Unusual dreams are remembered
- ▶ Interpretation
 - Cultural