

PHARMACEUTICAL DRUGS

CHEMICALS
THAT ALTER BODY
FUNCTIONS



HOW DO DRUGS WORK?



- ◆ ATTACH TO SPECIFIC RECEPTOR SITES
- ◆ SITES ARE SPECIALIZED CELLS THAT MATCH THE DRUG'S SIZE, SHAPE ETC
- ◆ BRAIN IS COMMON RECEPTOR SITE
- ◆ DRUGS RESEMBLE CHEMICALS NATURALLY PRODUCED BY THE BODY

TYPES OF DRUGS

- PRESCRIPTION DRUGS
 - Rx BY LICENSED PHYSICIAN
- OVER-THE-COUNTER
 - PURCHASED W/O Rx
- RECREATIONAL
 - RELAXATION OR SOCIALIZATION
- HERBAL PREPARATIONS
 - PRODUCTS OF BOTANICAL ORIGIN
- ILLICIT (ILLEGAL) DRUGS
- COMMERCIAL PREPARATIONS



ROUTES OF ADMINISTRATION

- ◆ ORAL INGESTION (MOST COMMON)
- ◆ INJECTION
 - INTRAVENOUS...3 MIN'S - BLOODSTREAM (MOST DANGEROUS)
 - INTRAMUSCULAR...ANTIBIOTICS/VACCINATION
 - SUBCUTANEOUS...LOCAL ANESTHETICS
- ◆ INHALATION...IMMEDIATE
- ◆ INUNCTION...ABSORPTION
- ◆ SUPPOSITORIES...MELT @ BODY TEMP...

DEFINITIONS

- ◆ MISUSE:
 - USE FOR PURPOSE NOT INTENDED
- ◆ ABUSE:
 - EXCESSIVE USE
- ◆ ADDICTION:
 - HABITUAL RELIANCE SUBSTANCE TO PRODUCE A DESIRED MOOD
- ◆ SET:
 - INTERNAL ENVIRONMENT - MINDSET
- ◆ SETTING:
 - EXTERNAL ENVIRONMENT

DEFINITIONS...

- ◆ SYNERGISM (POTENTIATION) $1+1=3$
 - 2 OR MORE DRUGS PRODUCING MORE PROFOUND EFFECTS
- ◆ ANTAGONISM
 - 2 OR MORE DRUGS WORK AT SAME RECEPTOR SITE & CANCEL EACH OTHER
- ◆ INHIBITION
 - EFFECT OF ONE DRUG IS REDUCED OR ELIMINATED
- ◆ INTOLERANCE:
 - INTERACTION CAUSES SYMPTOMS

DEFINITIONS...

- ◆ **CROSS-TOLERANCE:**
TOLERANCE OF ONE DRUG
THAT REDUCES EFFECT OF
ANOTHER DRUG (SIMILAR
DRUG)
- ◆ **GRAE...GENERALLY**
RECOGNIZED AS EFFECTIVE
- ◆ **GRAS...GENERALLY**
RECOGNIZED AS SAFE



KNOW THE FACTS

1. CHEMICAL IN THE DRUG?
2. RECEPTOR SITES?
3. MAIN EFFECTS OF THE DRUG?
4. SIDE EFFECTS?
5. ADVERSE REACTIONS?
6. 85% OF ALL HEALTH PROBLEMS
TREATED WITH DRUGS
7. PRESCRIPTIONS OFTEN NOT TAKEN OR
NOT TAKEN ACCORDING TO
DIRECTIONS.

TYPES OF DRUGS

- ◆ **ANTIBIOTICS: FIGHT BACTERIA**
- ◆ **ANALGESICS: PAIN RELIEVERS**
 - ◆ ASPIRIN, ACETAMINOPHEN, IBUPROFEN
- ◆ **SEDATIVES: SLEEP, ANXIETY**
- ◆ **TRANQUILIZERS: MAJOR OR MINOR**
 - ◆ DEPRESSION
- ◆ **OTC: COLD, ALLERGY, SLEEP, DIET**