

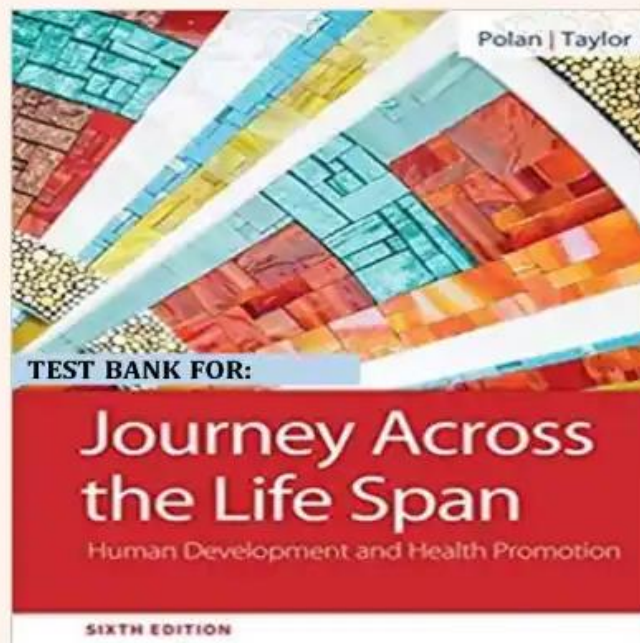
# TEST BANK

**JOURNEY ACROSS THE LIFE  
SPAN:**

**Human Development and Health Promotion**

**6TH EDITION**

**By: Polan|Taylor**



# TEST BANK

# ATI Pharmacology Across the Lifespan Test Questions with Correct & Verified Marking Scheme 2023\2024.

Pregnancy and Renal pharmacokinetics - **Verified Answer:** renal blood flow doubles, GFR increased by 3rd trimester and this will accelerate drug clearance, so there needs to be an increase in dosage

Pregnancy and Hepatic metabolism pharmacokinetics - **Verified Answer:** Increases for some drugs and an increased dosage may be needed to time schedule compressed (give dose more frequently)

Pregnancy and GI system pharmacokinetics - **Verified Answer:** Tone and motility are decreased (may have problems with constipation), takes longer for contents to pass...leads to more time available for drugs to absorb and to go through enterohepatic recirculation. May have prolonged drug effects and there may be a need to reduce dosage

Placental drug transfer - **Verified Answer:** Assume that all drugs cross the placenta! This is more prevalent with lipid soluble drugs but is more difficult with ionized, highly polar protein bound drugs.

Teratogenesis - **Verified Answer:** Produces birth defects; physical defects occur between 1-8 weeks gestation; effect of a teratogen is highly dependent on when the drug/substance was given during the pregnancy

Breast feeding and medication - **Verified Answer:** Use the lowest effective dose for the shortest time, lipid soluble drugs are the ones to worry most about, avoid drugs with long half-lives, and dose immediately after feeding

Pharmacokinetics and infants - **Verified Answer:** there is an increased sensitivity related to five immature processes in infants (drug absorption, renal excretion, hepatic metabolism, protein binding, blood-brain barrier).

Drug distribution in infants - **Verified Answer:** protein binding is limited in infants bc of low albumin levels and competition for binding site so the result is that there are high free drug levels which intensifies the effects...dosages must be reduced

Geriatric prescribing principles - **Verified Answer:** secure a thorough drug history, choose the simplest regimen and only make one change at a time! Promote adherence to regimen

Absorption and older adults - **Verified Answer:** There is decreased acidity, surface area, and GI motility, gastric emptying is delayed but % of oral dose absorbed does not change

Distribution in older adults - **Verified Answer:** there is an increased percentage of body fat which increases storage for lipid soluble drugs so their half-lives increase, there is a decreased total body water so water soluble drugs in smaller volume will lead to more intense effect and there is a reduction in albumin so drugs have fewer binding sites and there will be more drug in plasma

metabolism and older adults - **Verified Answer:** decreased hepatic metabolism r/t blood flow, less liver mass, and decreased activity of hepatic enzymes. This leads to an increased half-life of drugs.

excretion and older adults - **Verified Answer:** there is a reduction in renal excretion, leads to decreased ability to conserve sodium and concentrate urine

promoting adherence in older adults - **Verified Answer:** encourage use of pill boxes, family support, written schedule, keep in visible place where routine is consistent, journaling, putting drugs into simple terms, literacy problems that may need to be addressed

An older adult patient will often experience a reduction in the stomach's ability to produce gastric acid. The nurse knows that this change:

- A. causes delayed gastric emptying.
- B. results in an increase in gastric acidity.
- C. causes decreased intestinal absorption of medications.

D. may alter absorption of drugs that require acidity to dissolve. - **Verified Answer:**  
D. may alter absorption of drugs that require acidity to dissolve.

Gastric acidity is reduced in the elderly and may alter the absorption of drugs that require high acidity to dissolve.

While assessing the medications taken by an elderly woman, you determine that she is experiencing polypharmacy. This indicates that she:

- A. takes only prescription medications for her illnesses.
- B. takes medications for a single illness several times a day.
- C. takes multiple medications for several different illnesses.
- D. risks problems only if she also takes over-the-counter medications. - **Verified Answer:** C. takes multiple medications for several different illnesses.

Polypharmacy is defined as treatment with multiple drugs and is often a factor in drug therapy in the elderly

When considering the effect of renal function on drug excretion, the nurse recalls that adult levels of renal function are achieved by what age?

- A. 1 month of age
- B. 3 months of age
- C. 6 months of age
- D. 12 months of age - **Verified Answer:** D. 12 months of age

Adult levels of renal function are achieved by 1 year of age.

When considering drug dosages for the older adult, the nurse recognizes that which is an age-related change that may affect pharmacokinetics?

- A. Decreased body fat
- B. Decreased GI motility
- C. Increased hepatic blood flow
- D. Increased serum albumin - **Verified Answer:** B. Decreased GI motility

Age-related changes include decreased GI motility, increased body fat, decreased hepatic blood flow, and decreased serum albumin.

When considering the age-related changes in the kidney of the older adult, the nurse recalls that which drug response is possible?

- A. Drug half-life is lengthened.
- B. Drug half-life is shortened.
- C. Drug excretion is accelerated.
- D. Drug effect is diminished. - **Verified Answer:** A. Drug half-life is lengthened.

Decreased renal excretion causes drug accumulation and is the most important cause of adverse drug reactions in the elderly.

When evaluating renal function in the elderly, the nurse knows that the best indicator of renal function is:

- A. blood urea nitrogen (BUN).
- B. serum creatinine.
- C. creatinine clearance.
- D. uric acid. - **Verified Answer:** C. creatinine clearance.

Creatinine clearance is the proper indicator of renal function in an elderly person; the serum creatinine level does not reflect kidney function in the elderly because the source of creatinine, lean muscle mass, is reduced in parallel with the decline of kidney function. Therefore, the creatinine level may appear to be "normal" even when renal function is reduced.

When considering the physiologic changes that affect pharmacokinetics in the elderly, the nurse recognizes that which factors occur? Select all that apply.

- A. Decreased gastric pH
- B. Increased gastric pH
- C. Decreased body fat
- D. Increased body fat
- E. Decreased hepatic mass
- F. Increased hepatic mass - **Verified Answer:** B. Increased gastric pH
- D. Increased body fat
- E. Decreased hepatic mass