

Quiz-1?

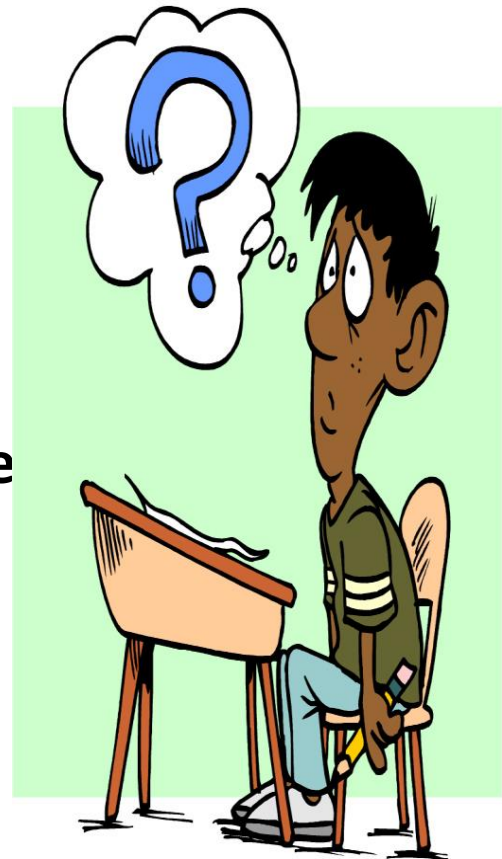
Which of the following is the mechanism of action of spironolactone?

- A) through osmotic effects
- B) through enzyme inhibition
- C) through interaction with hormonal receptors
- D) through inhibition of a co-transporter



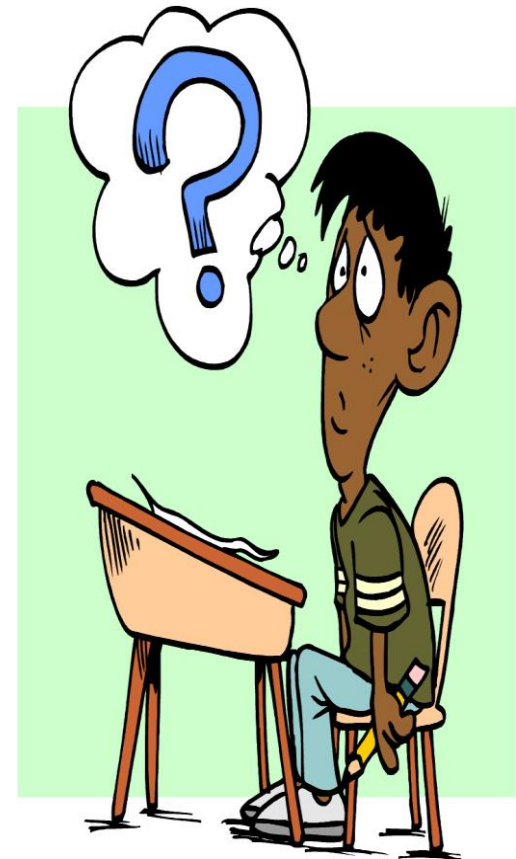
Quiz-2?

- **A 54-year-old male develops congestive heart failure after suffering his second myocardial infarction. His physician put him on a regimen of several medications, including frusemide. On follow-up, the patient is found to have hypokalemia. The addition of which medication would likely resolve the problem of hypokalemia, while helping to treat the underlying condition?**
 - A) hydrochlorothiazide
 - B) spironolactone
 - C) acetazolamide
 - D) ethacrynic acid



Quiz-3?

- **Which of the following diuretics act on specific membrane transport proteins?**
 - A) mannitol
 - B) indapamide
 - C) amiloride
 - D) spironolactone



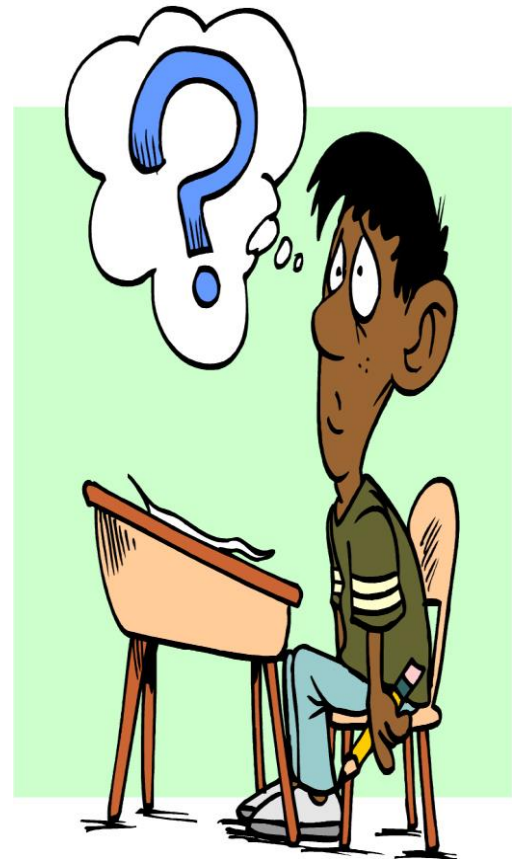
Quiz-4?

- **A 50-year-old-male with pitting edema of the ankles developed gynaecomastia and erectile dysfunction while being treated with which of the following drugs?**
 - A) hydrochlorothiazide
 - B) metolazone
 - C) spironolactone
 - D) triamterine



Quiz-5?

- **A 45-year-old female with a long history of alcohol abuse is being treated for cirrhosis –associated ascites. Her physician decided to give her amiloride , a diuretic helpful in edema caused by cirrhosis. What common side effect should be monitored in this patient?**
 - A) hyponatremia
 - B) hypercalcemia
 - C) hypermagnesemia
 - D) hyperkalemia



Quiz-6?

A 45-year –old male with history of medication –controlled hypertension presented to you with complaints of a painful swollen big toe. You suspected gout and checked his uric acid levels, which were elevated. Upon looking at the list of his medications you realized that one of them might be the cause. Which medication might that be?

- A) spironolactone
- B) hydrochlorothiazide
- C) acetazolamide
- D) amiloride



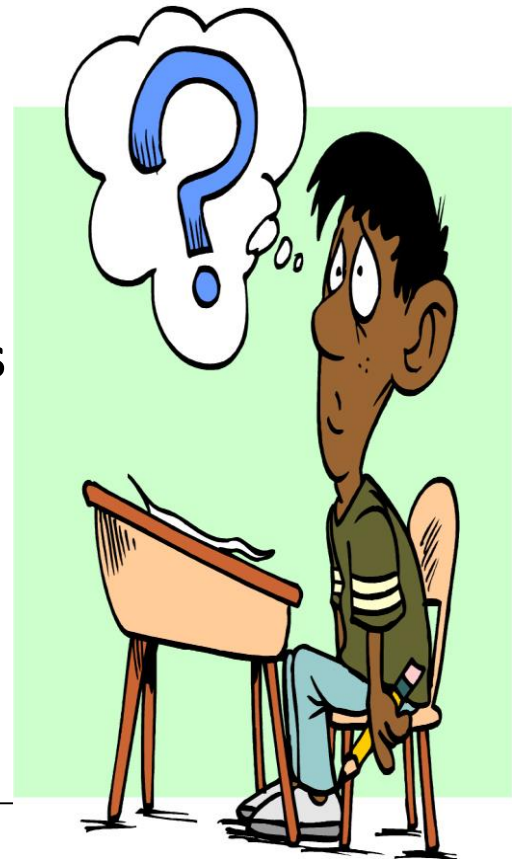
Quiz-7?

- **Spironolactone can be characterized by which of the following properties?**
 - A) It binds to a transmembrane receptor
 - B) It inhibits aldosterone synthesis
 - C) It is biotransformed to an active metabolite
 - D) It is more potent than hydrochlorothiazide



Quiz-8?

- **A 55-year-old-female of a blood pressure of 170/105 mmHg has pitting edema of the lower extremities and an elevated serum creatinine associated with a normal serum potassium. Which of the following agents is contraindicated in this patient?**
 - A) acetazolamide
 - B) hydrochlorothizide
 - C) torsemide
 - D) triamterine



Quiz-9?

A 50-year-old man with mild hypertension treated with spironolactone complains of discomfort in his chest. He has slightly enlarged fat deposits in his breasts with prominent nipples. His physician decide to switch this patient to a drug that has the same mechanism of action but will avoid this adverse effect. Which of the following drugs would he use?

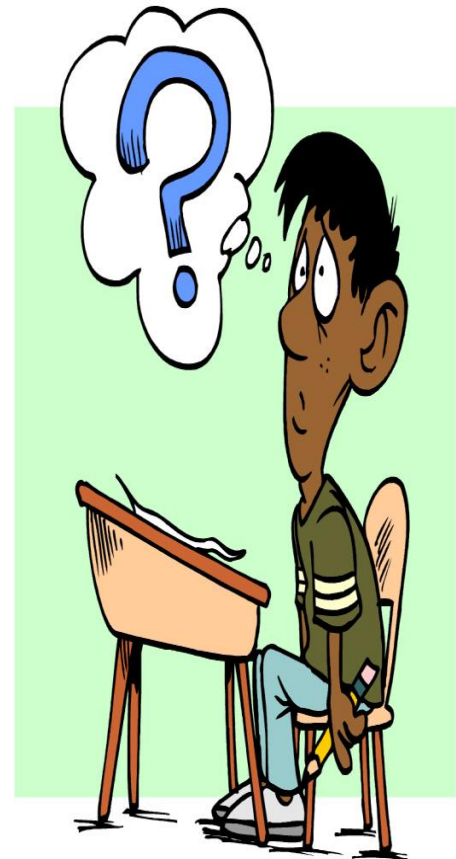
- (A) Amiloride
- (B) Eplerenone
- (C) Chlorthalidone
- (D) Aldosterone
- (E) Allopurinol



Quiz-10?

Which of the following should be avoided in a patient with a history of severe anaphylactic reaction to sulfa medications?

- A. Amiloride.
- B. Hydrochlorothiazide.
- C. Mannitol.
- D. Spironolactone.
- E. Triamterene.



Quiz-11?

Match the diuretics with changes in urinary electrolyte patterns & blood pH

1. Loop diuretics + thiazide
2. Thiazide
3. Loop diuretic
4. Potassium- sparing
5. Carbonic anhydrase inhibitor

Group	Urinary Electrolytes			Body pH
	NaCl	NaHCO ₃	K ⁺	
A	+	+++	+	↓
B	++++	0	+	↑
C	++	+	+	↑
D	+++++	+	++	↑
E	+	(+)	-	↓

