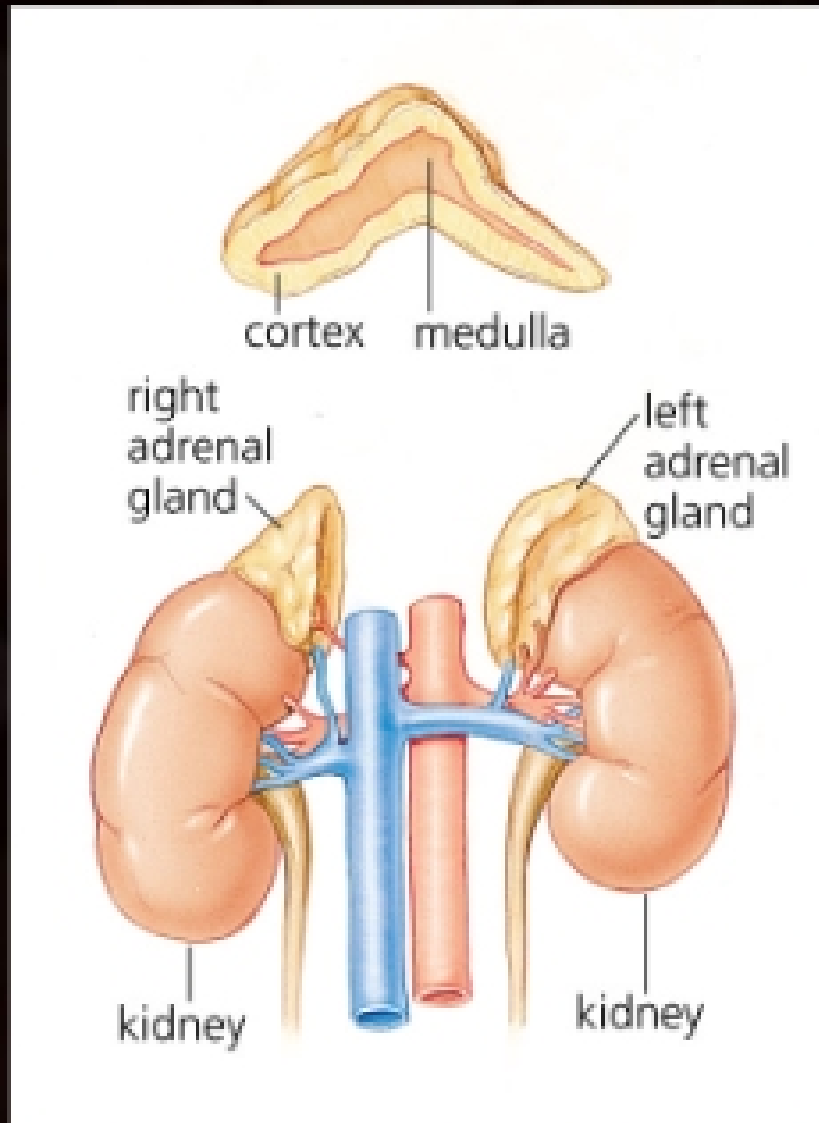


Steroid-based Drugs

- Adrenocortical Hormones



Cut section



Adrenocortical Hormones

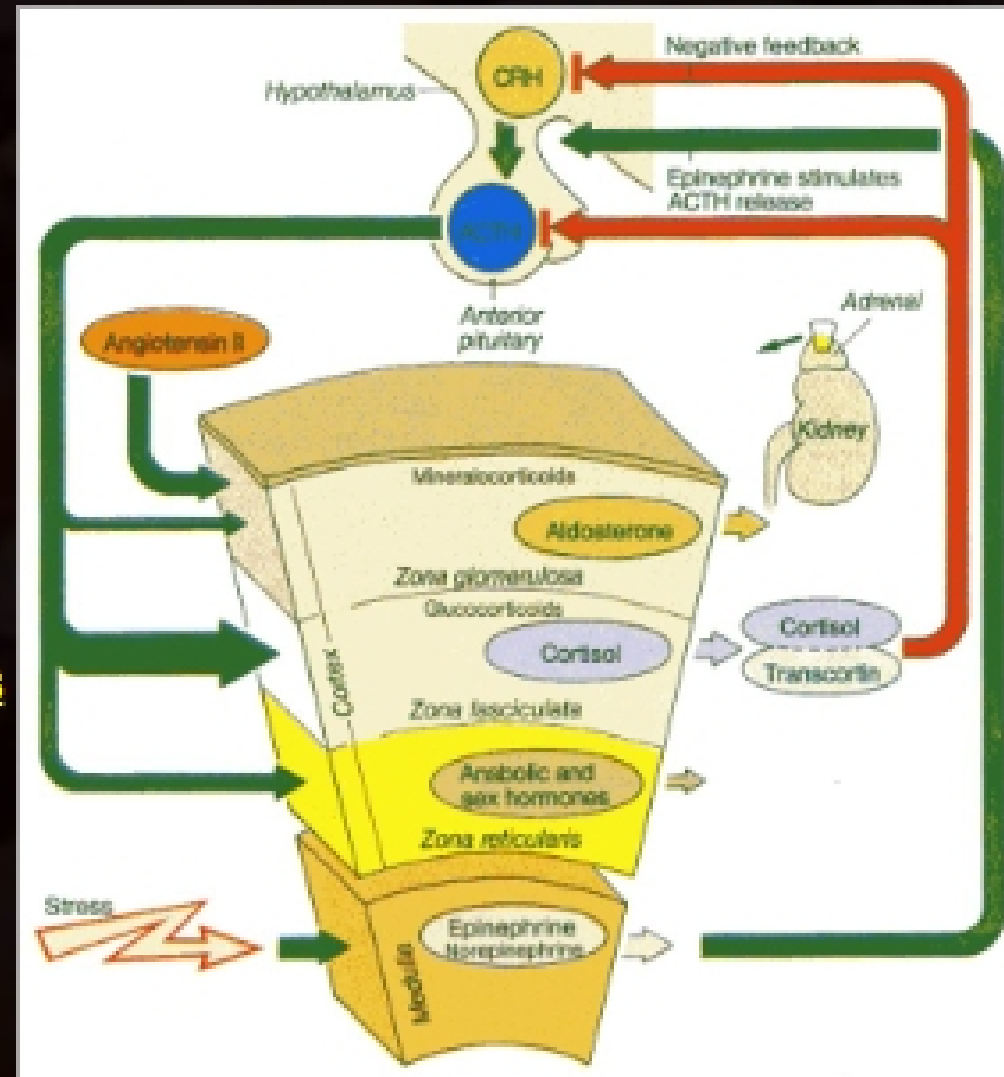
Adrenal gland:

- Medulla:

- produces Epinephrine
(stimulated by sympathetic impulse)

- Cortex:

- Zona glomerulosa – produces Aldosterone
(stimulated by Angiotensin II and ACTH)
- Zona fasciculata – produces Glucocorticoids
(stimulated by ACTH = Corticotropin)
- Zona reticularis – produces Androgens
(physiological role unclear)



Adrenocortical Hormones

Steroid hormone synthesis:

- Pregnenolone synthesis is rate-limiting step
- C21 hydroxylase:
 - Prevents hydroxylation of C17 (-> c)
 - => Only mineralocorticoids
- C17 hydroxylase:
 - Hydroxylation of C17 (-> f, g) can be followed by hydroxylation of C11 and C21 (-> h, j, k)
 - => Sex hormones and glucocorticoids
- P450_{C17α} hydroxylase:
 - Produces 17-Keto-steroids (-> l)
 - => Sex hormones

