

Hormoner hører sammen

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Seksjonsoverlege, Hormonlaboratoriet, OUS

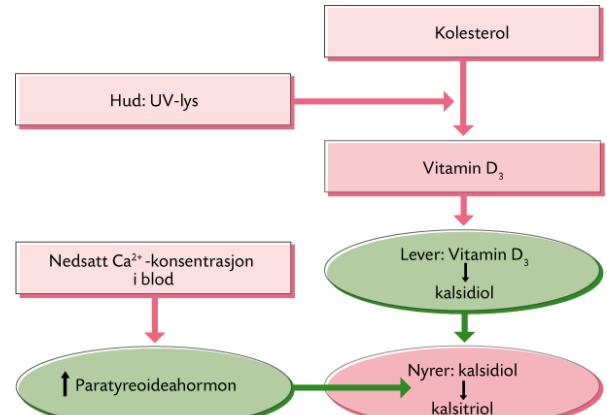
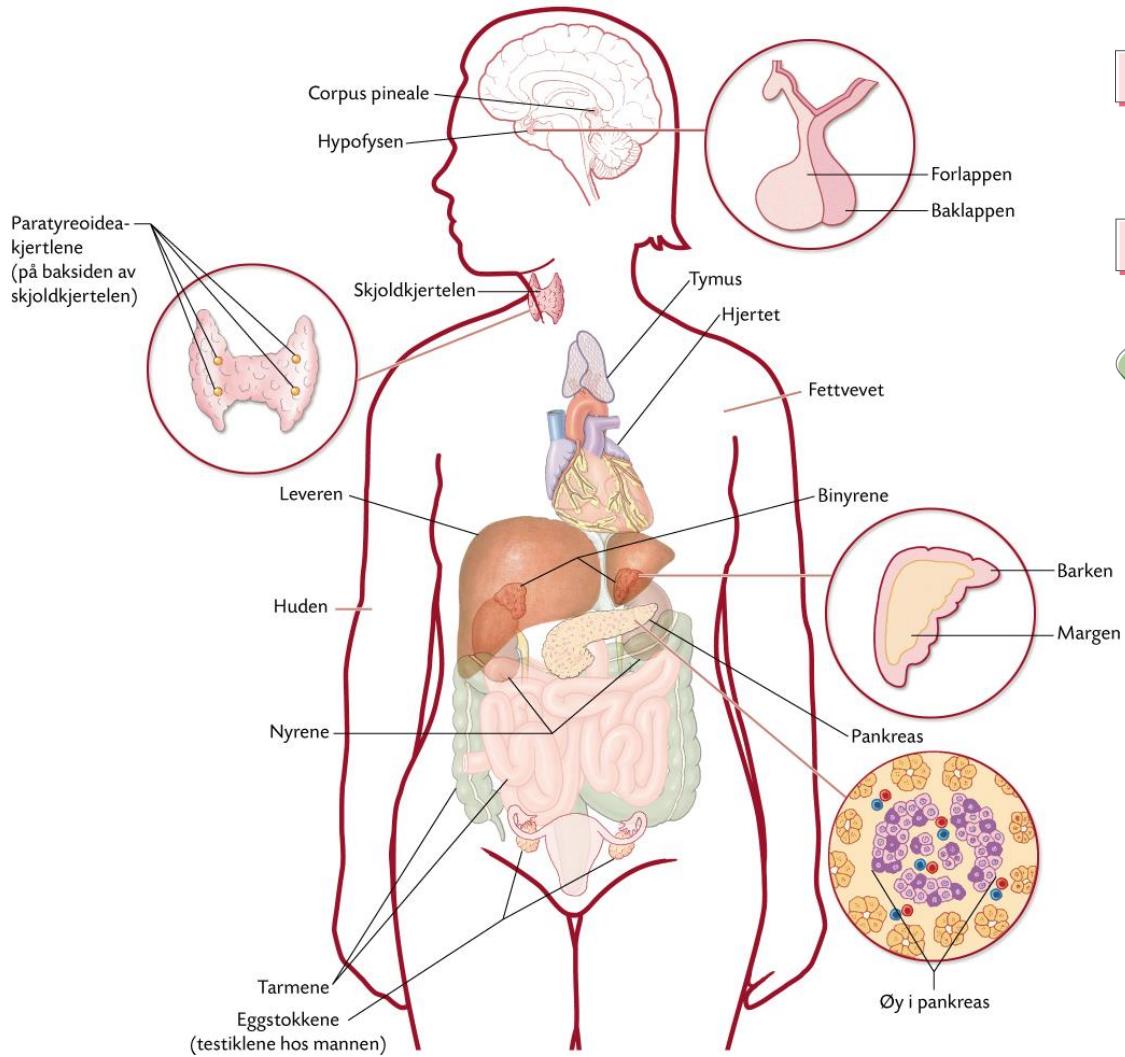
1.ammanuensis OsloMet

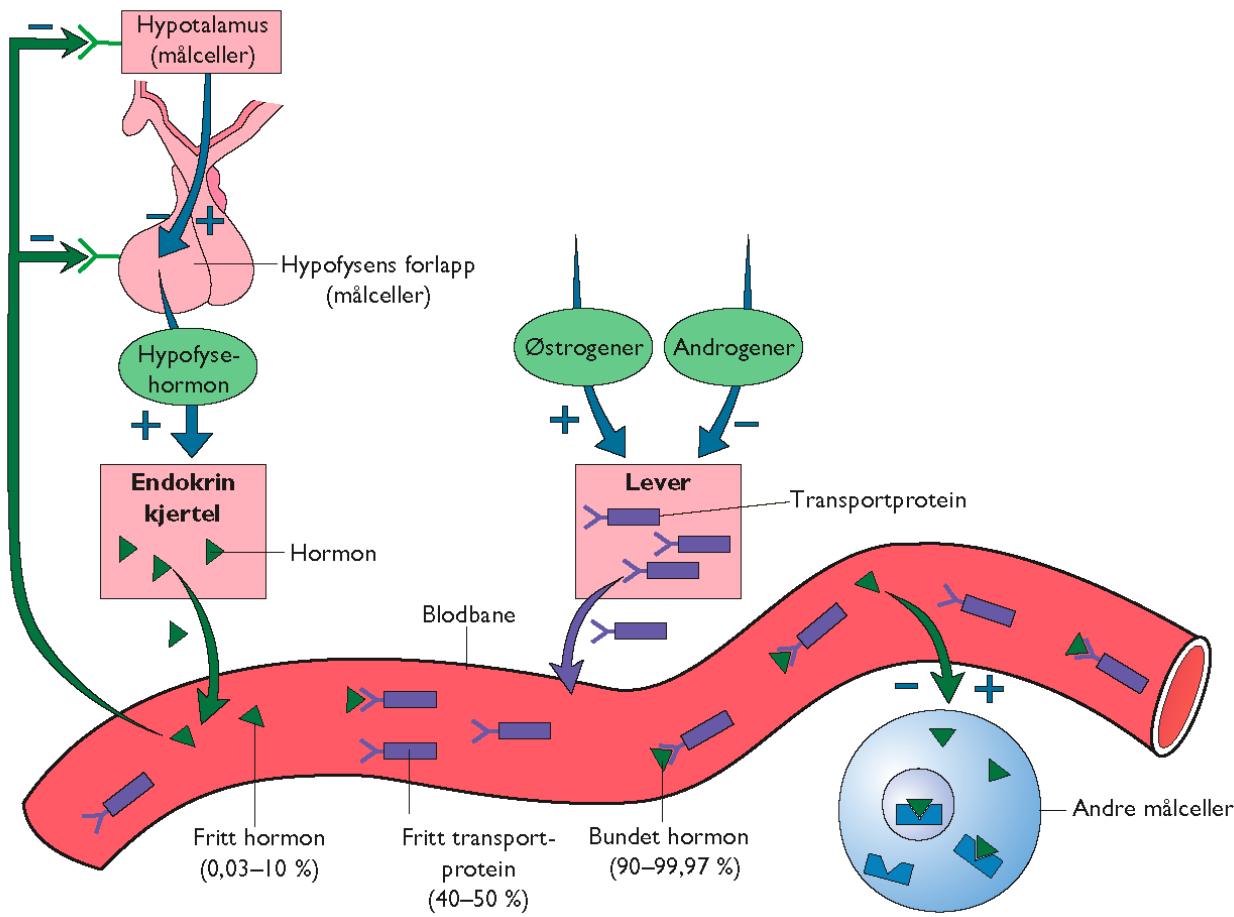
Oppsummering

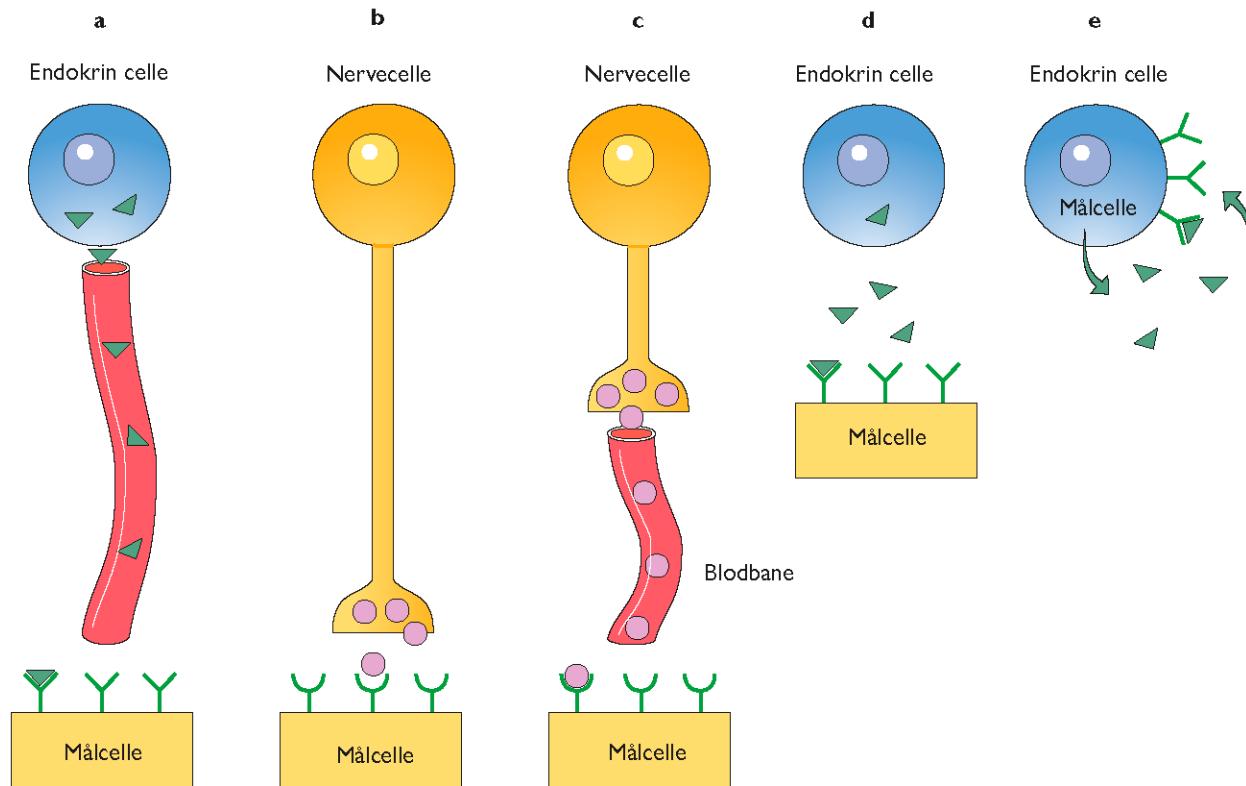
- Hormoner
 - To-nivå diagnostikk
 - Vurdere kompleksitet
 - Eksempler
 - Stoffskifte, gynækologi, binyre
- Laboratorielegen må se helheten for å gi råd

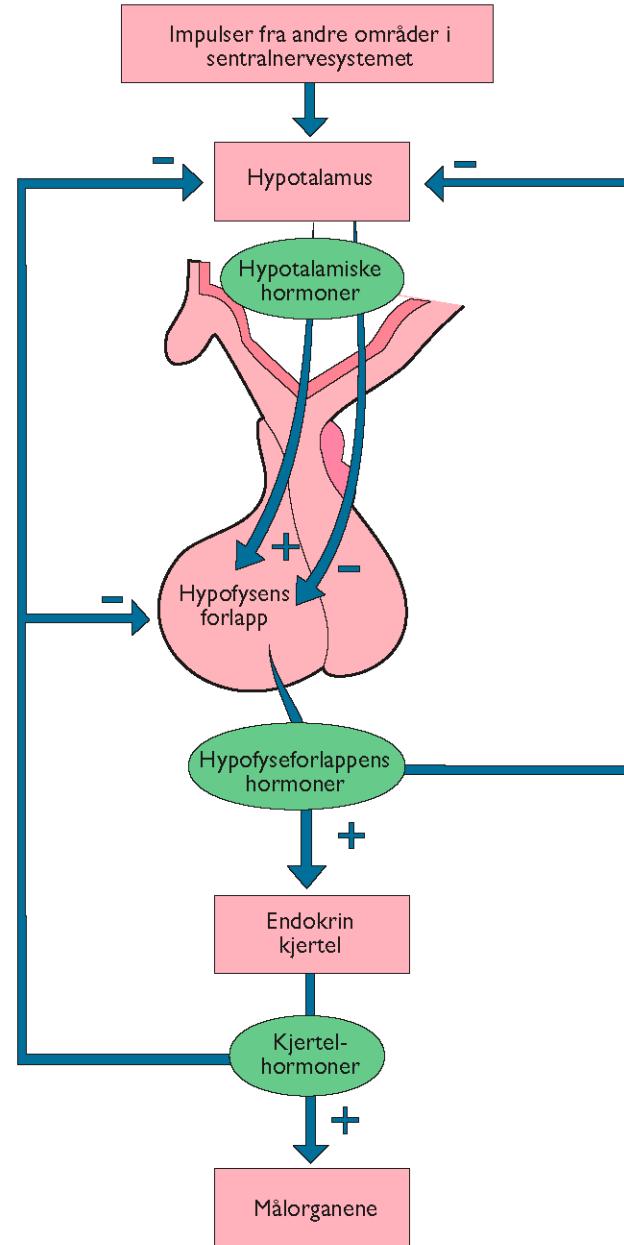
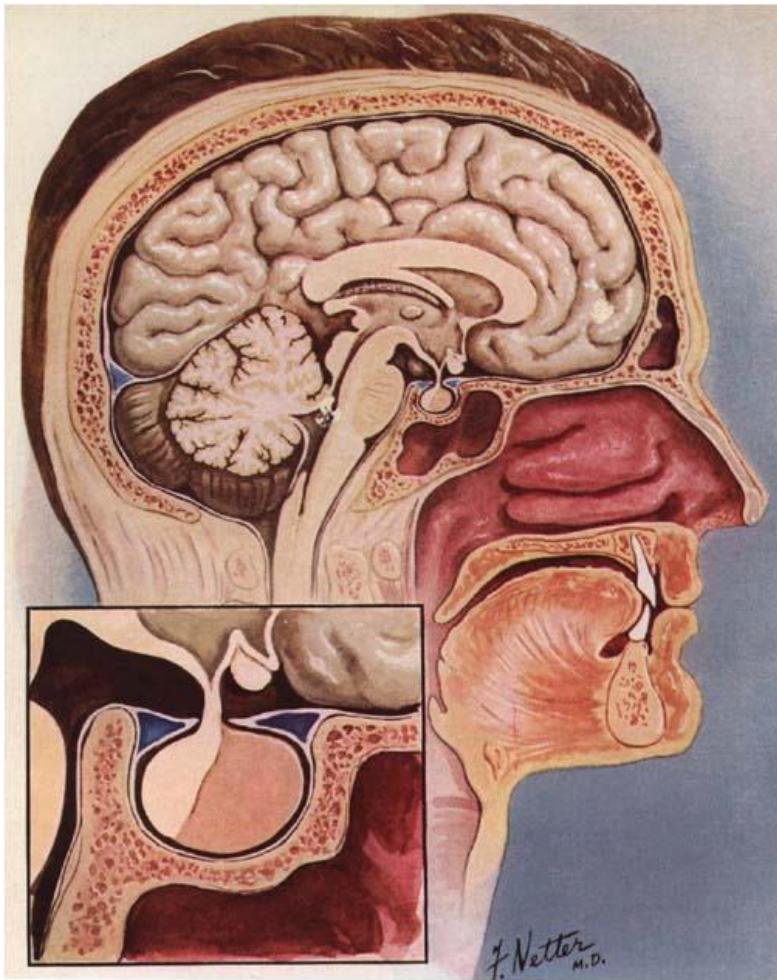
"Fra 0 til 100 hormoner på 50 år"



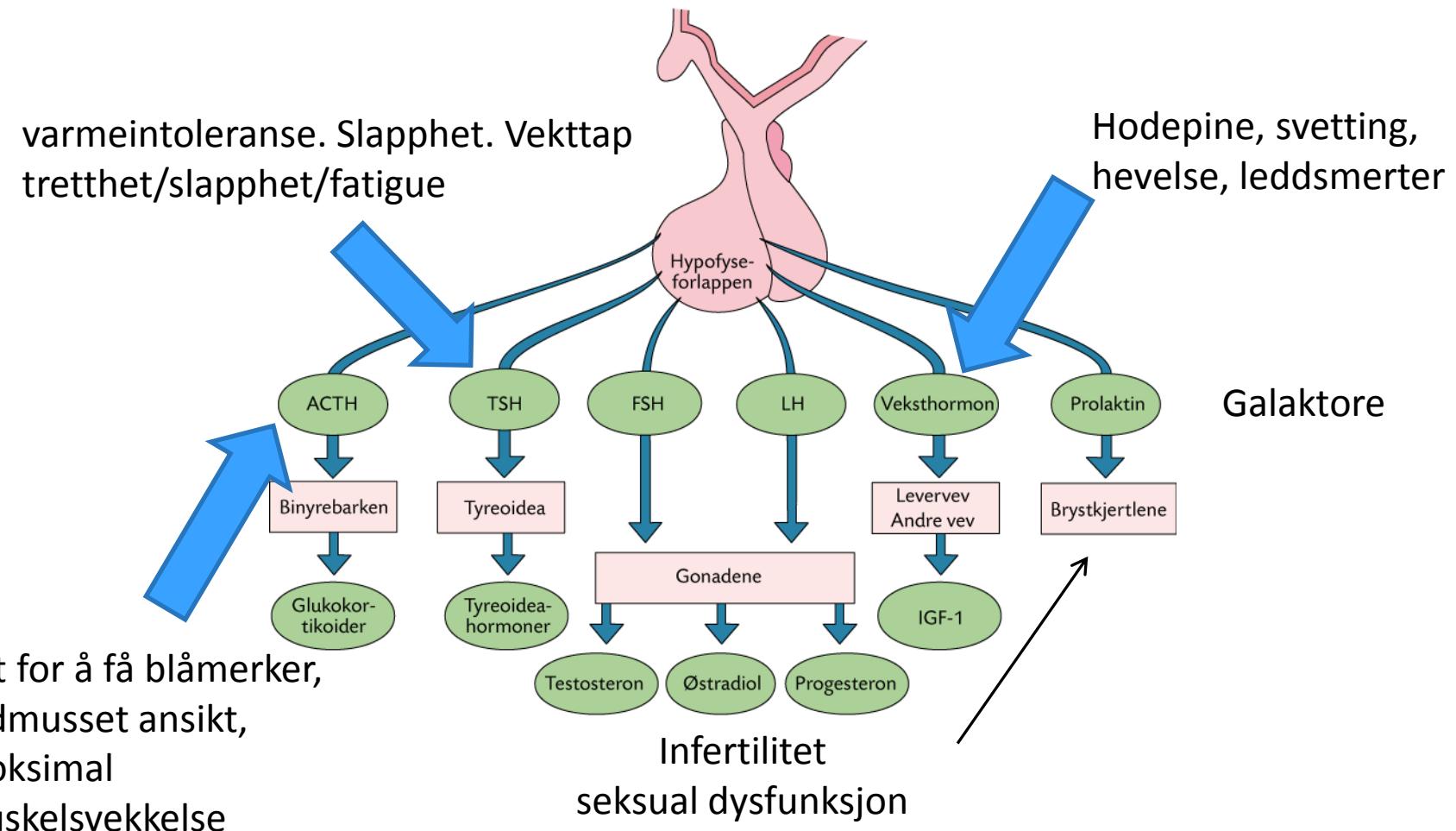




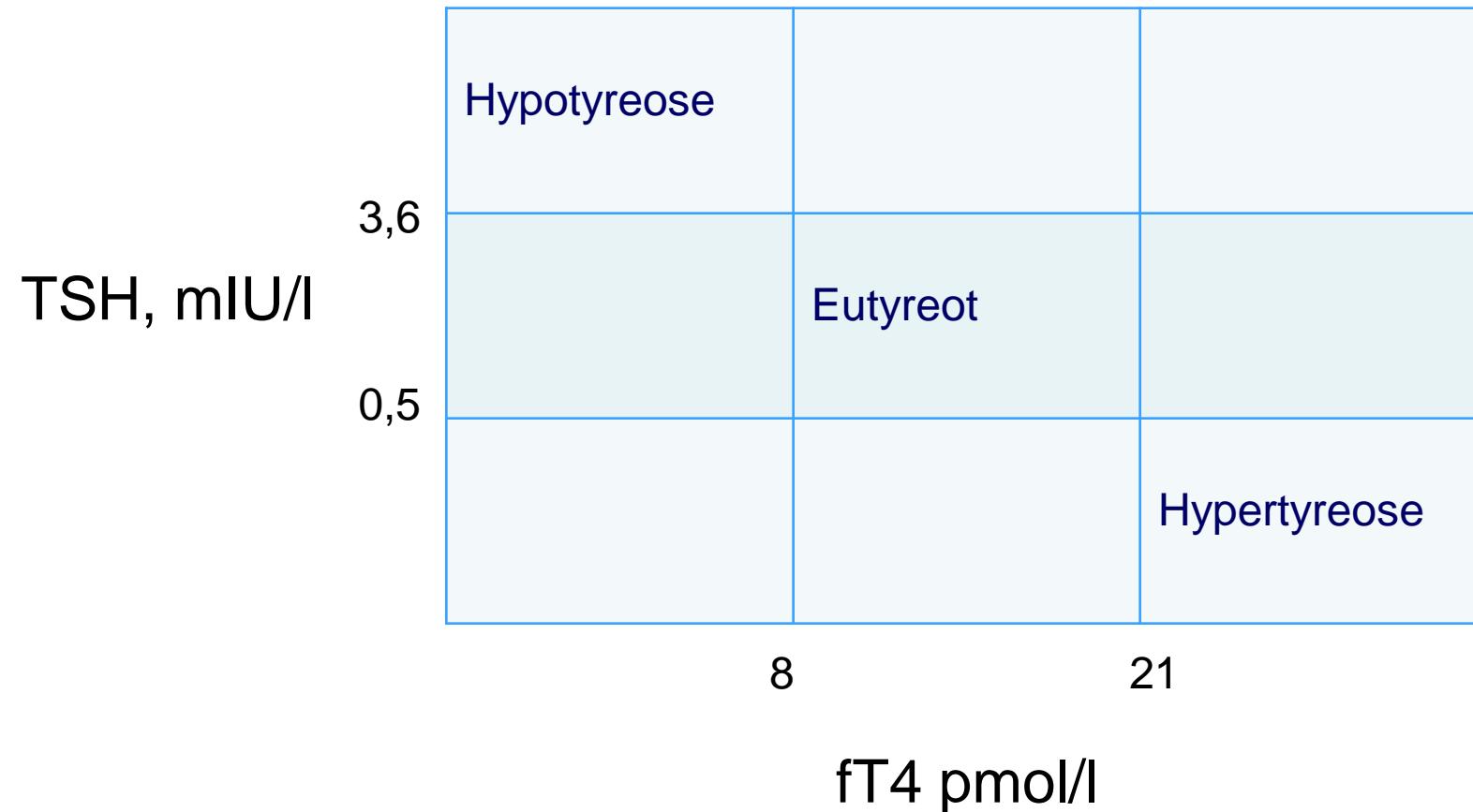




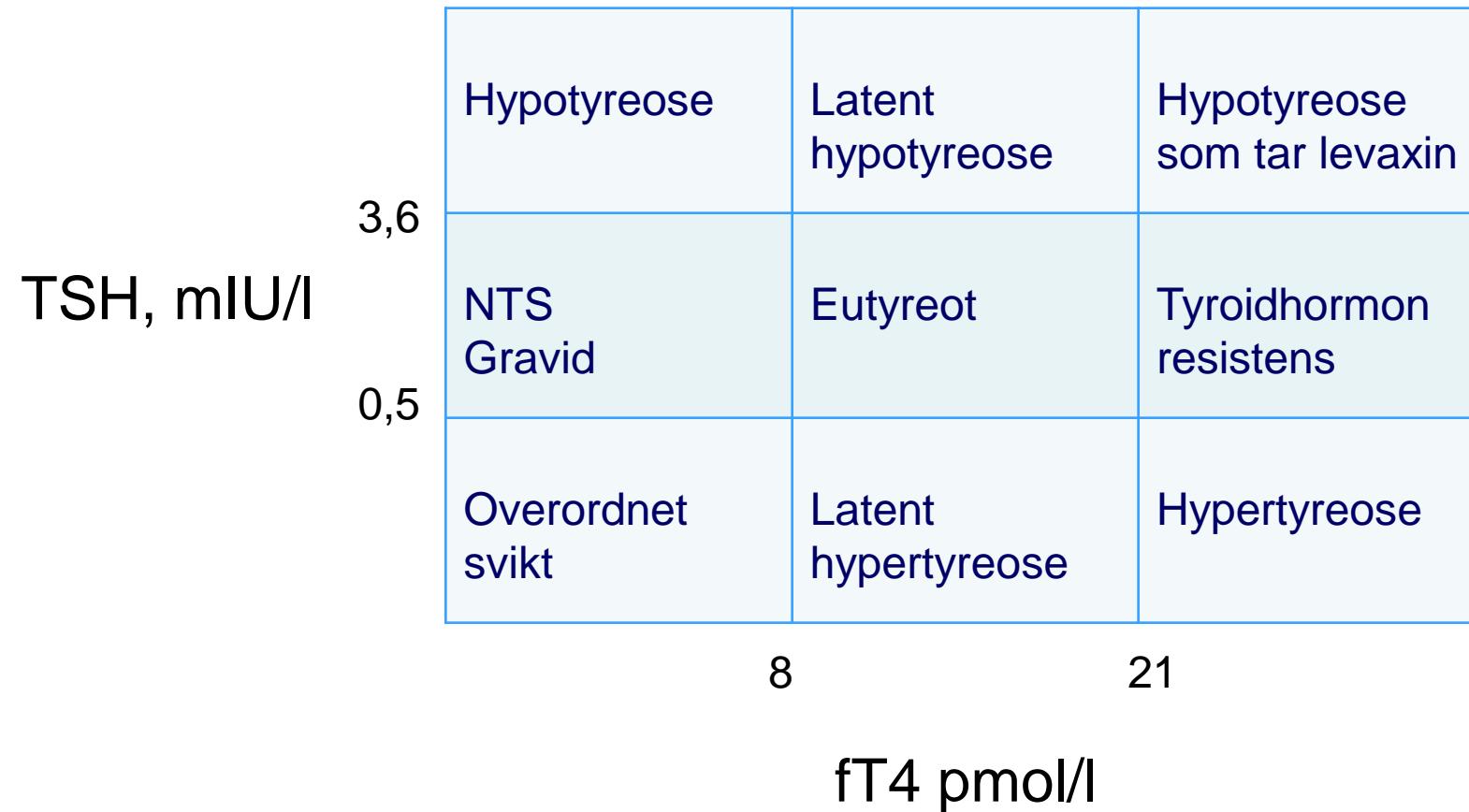
Slapphet/tretthet, generell svakhet



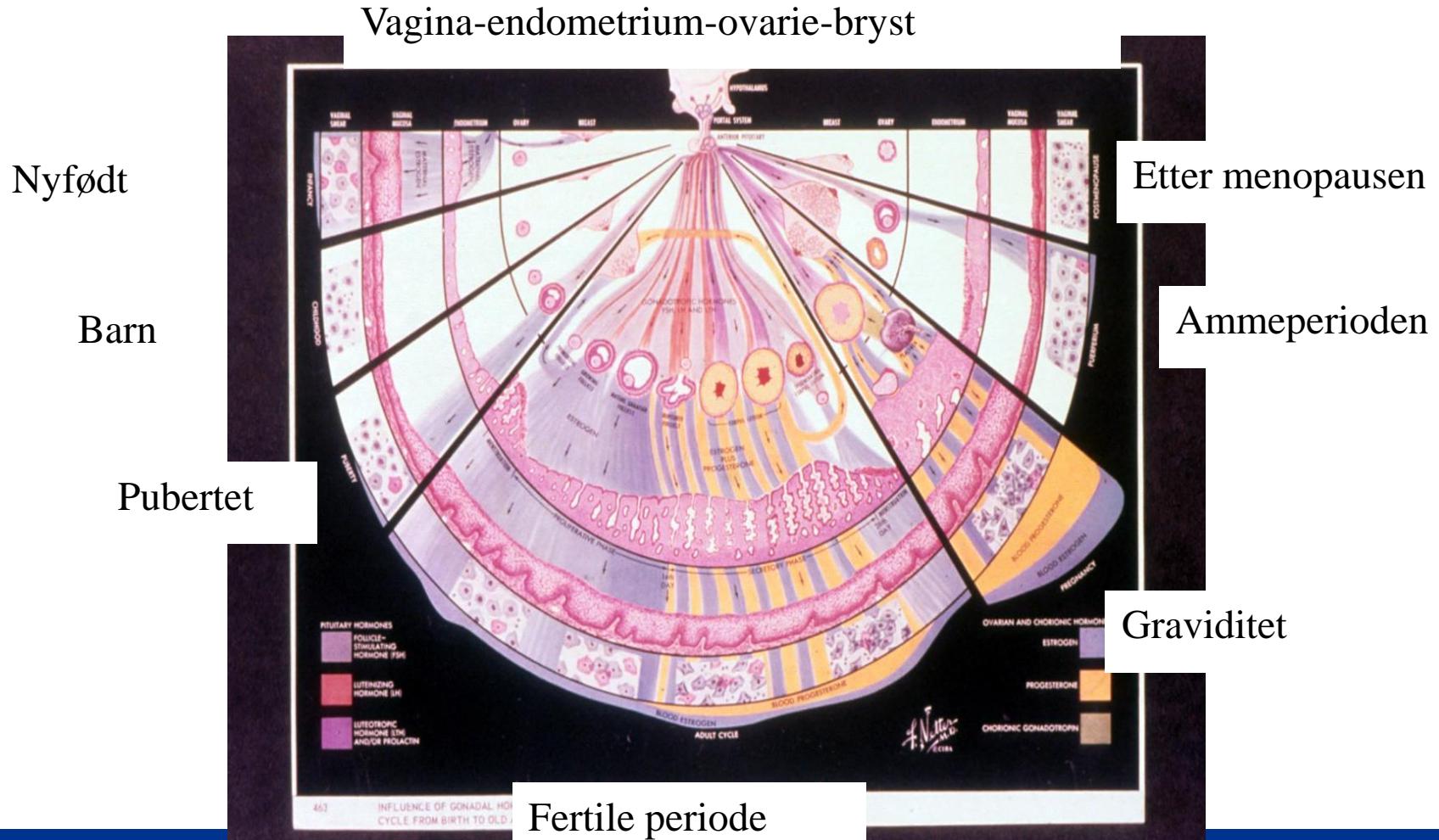
Tolkning

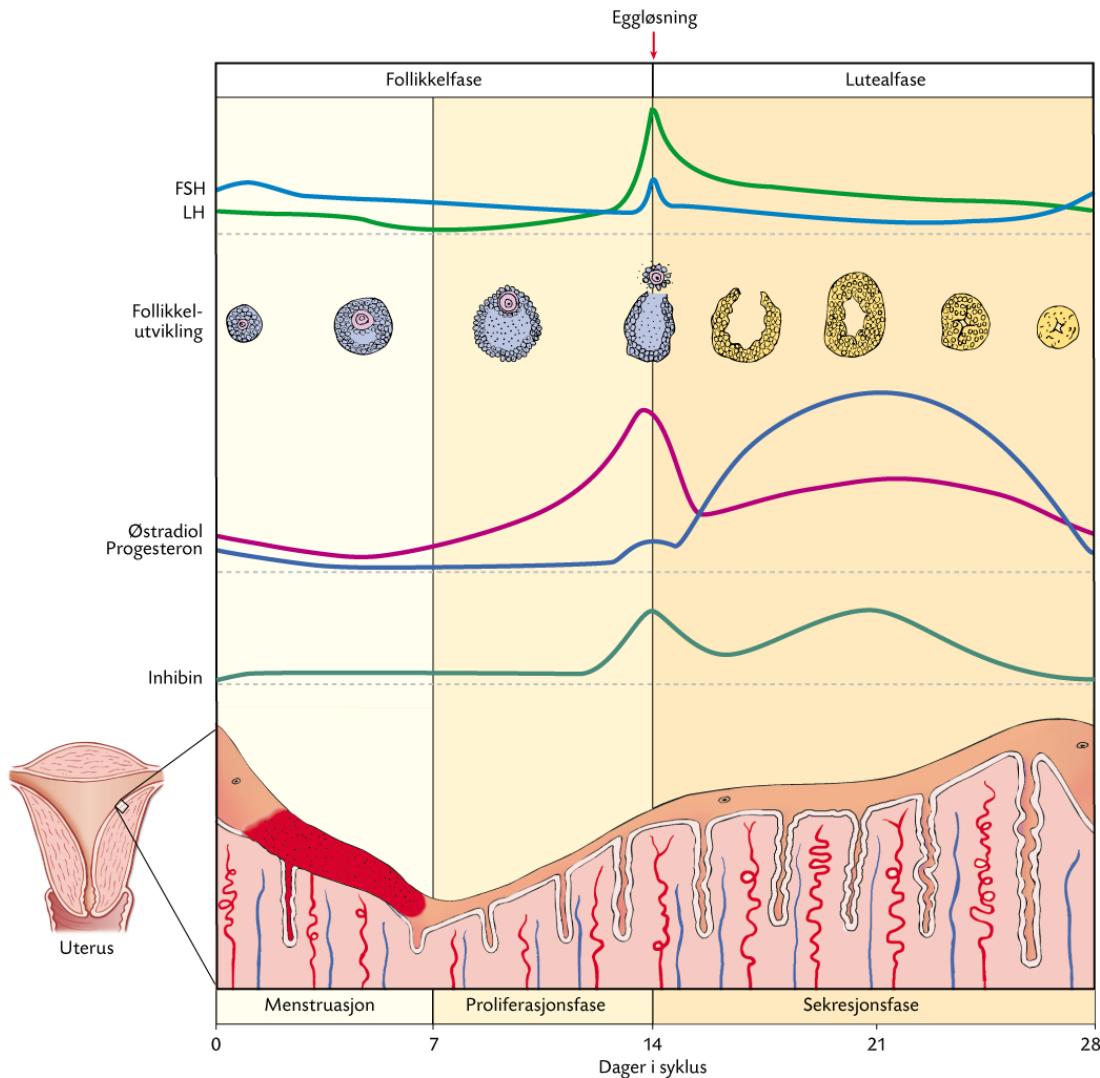


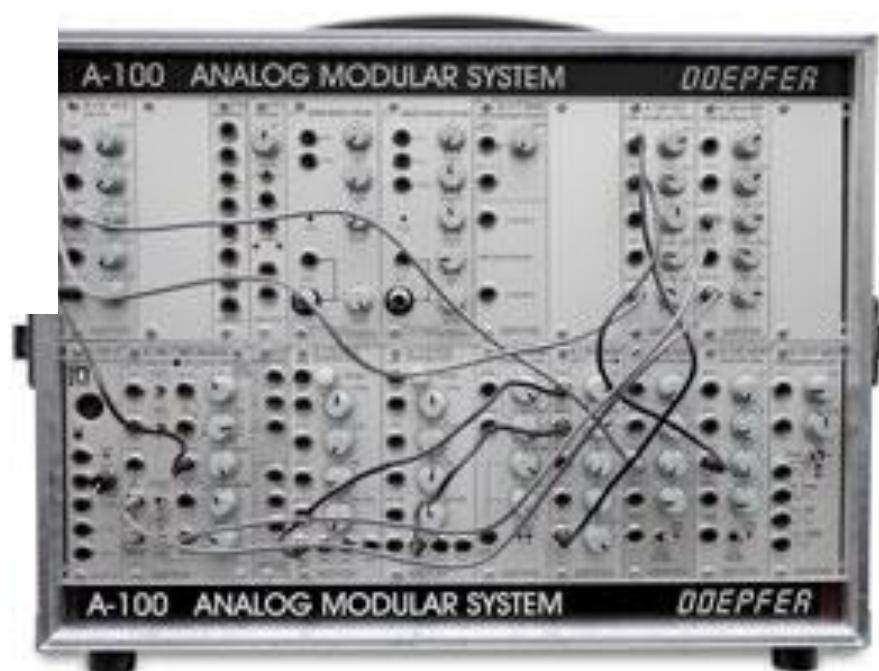
Tolkning



Kvinnens hormonelle livssyklus





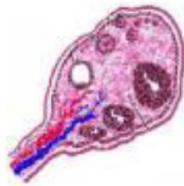


Hvor sitter feilen?

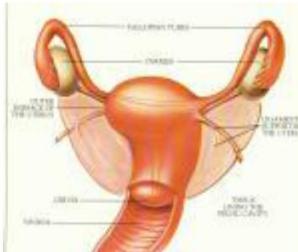


Hypothalamus-hypofyse ?
FSH, LH ↓
Østradiol ↓

FSH / LH: Lav eller «inadekvat normal»



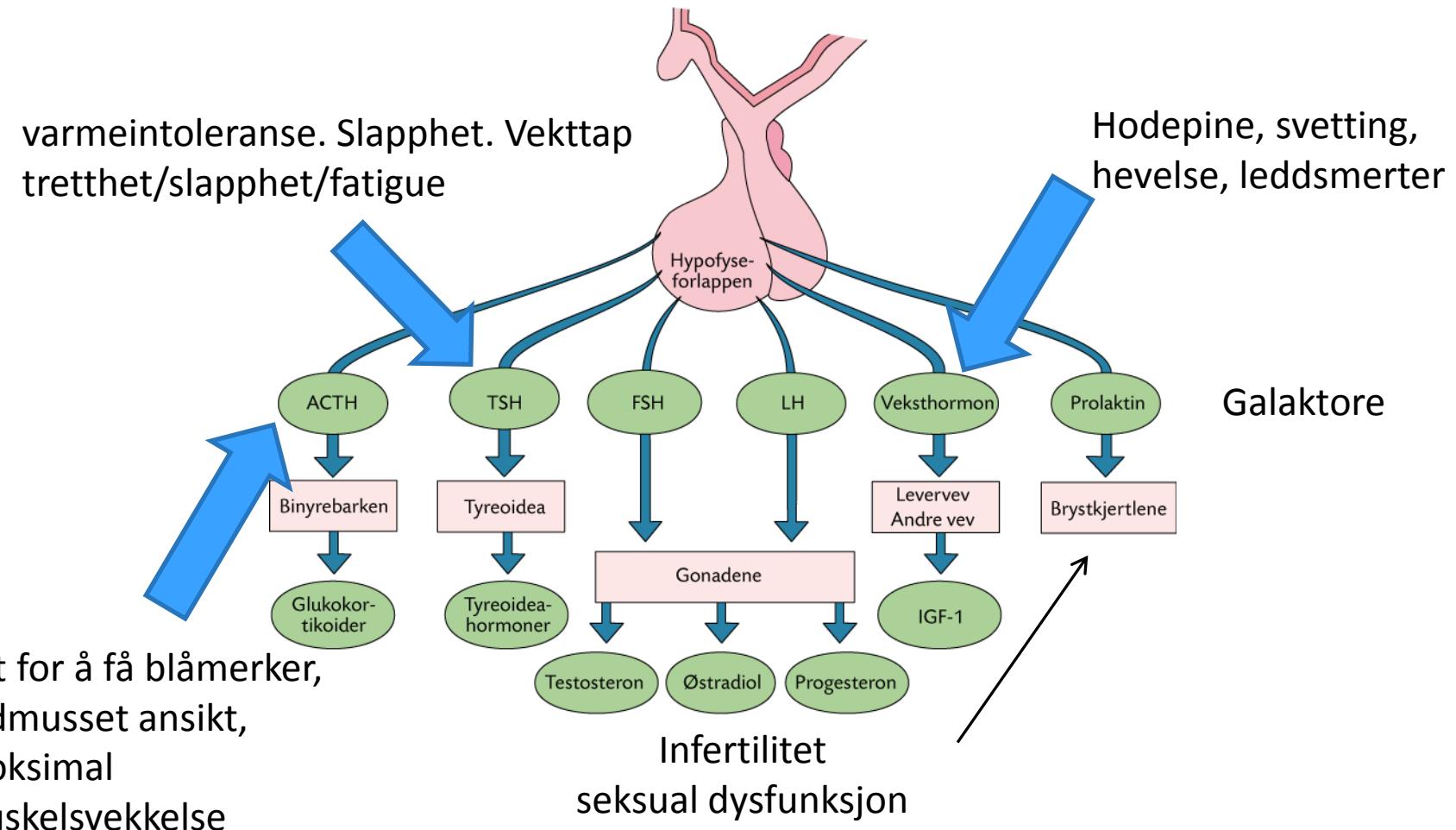
Ovarier ?
FSH, LH ↑
Østradiol ↓

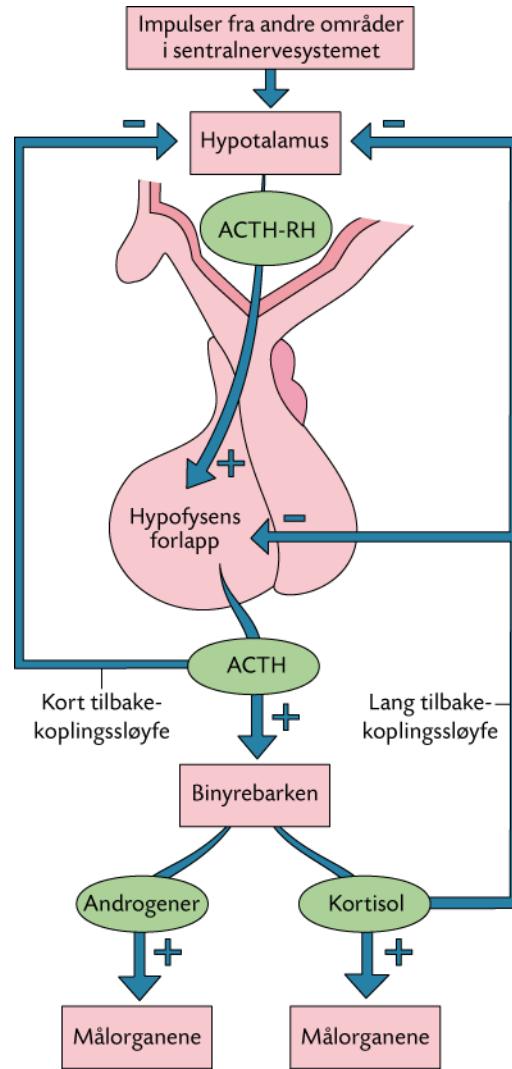


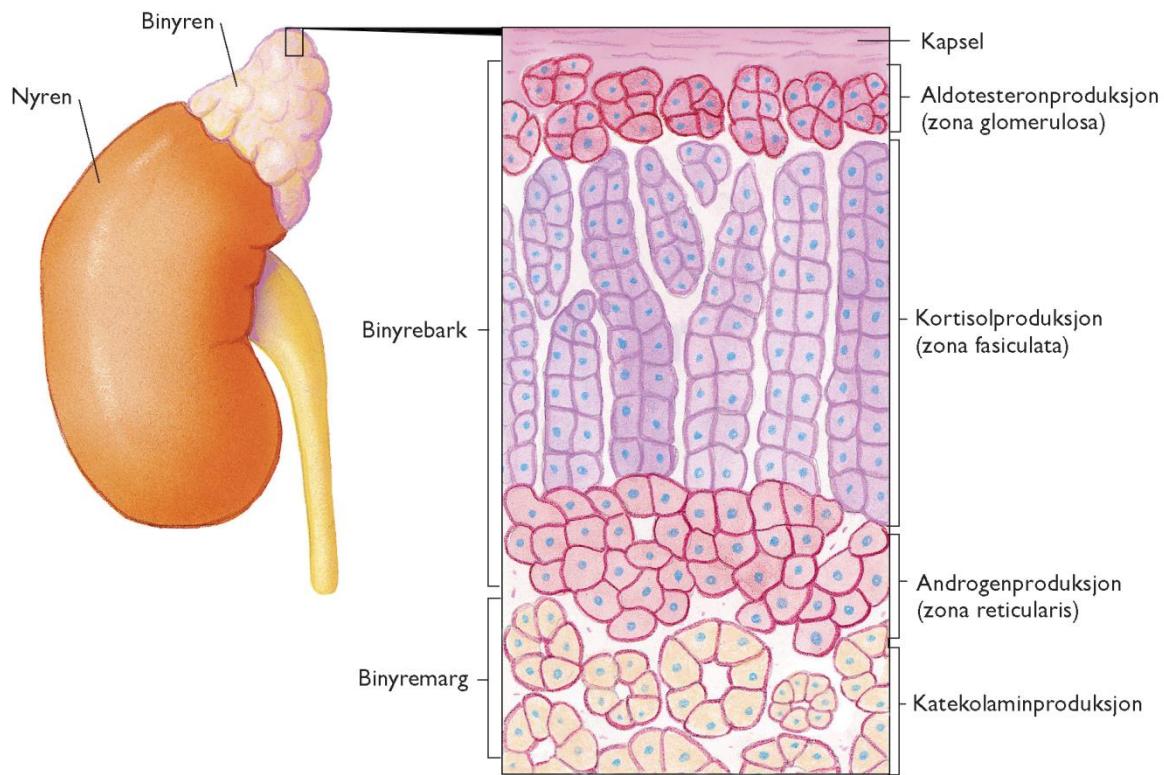
Uterus ?
Normalt

21

Slapphet/tretthet, generell svakhet





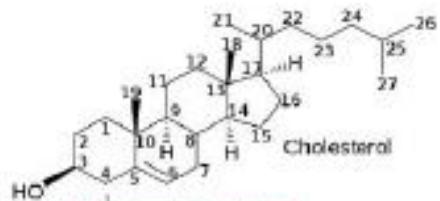


Salt

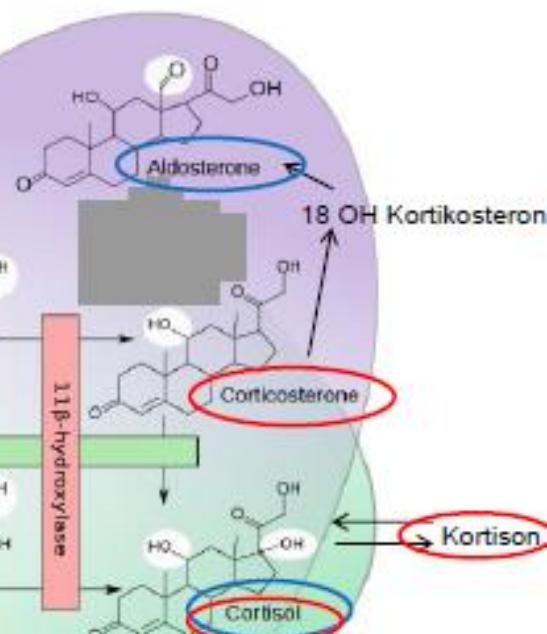
Sukker

Sex

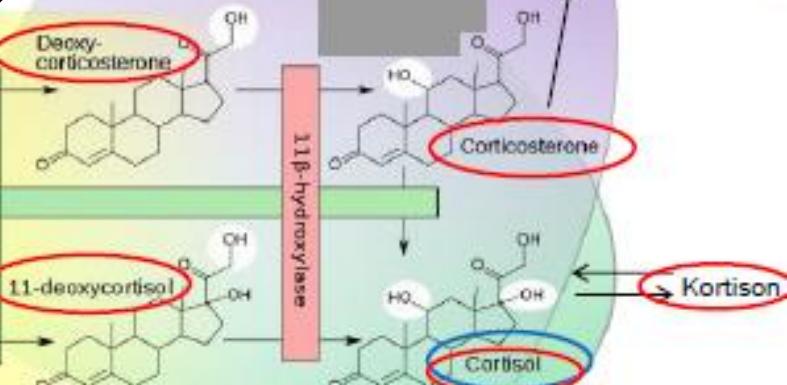
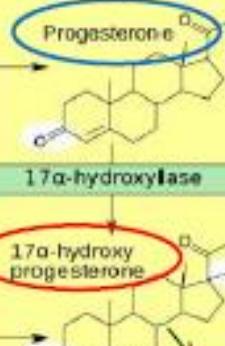
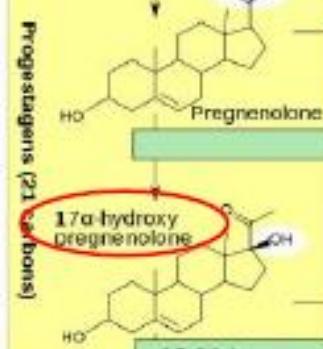
Stress



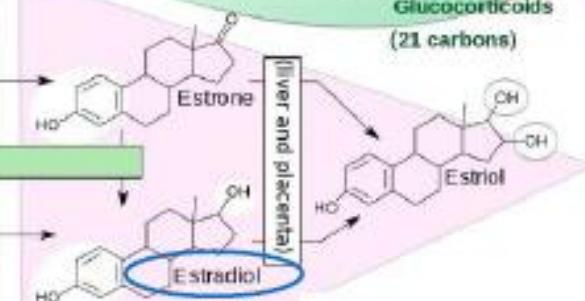
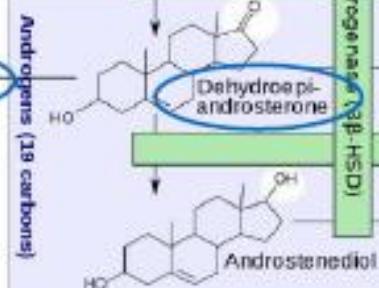
Mineralocorticoids
21 carbons)



Cholesterol side-chain cleavage enzyme

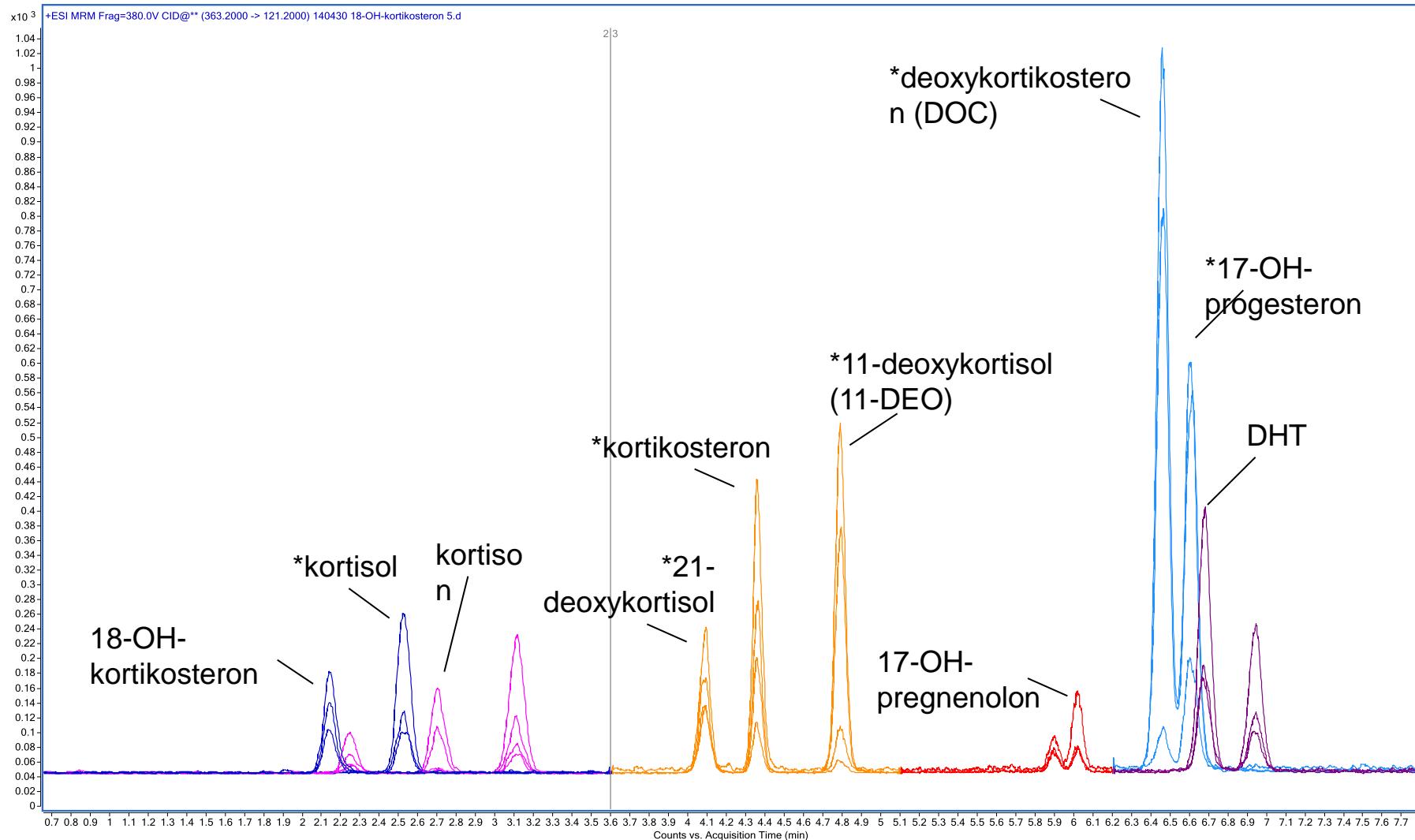


17,20 lyase



**LC MS/MS
Immunoassay**

LC-MS



LC-MS

Fordeler:

- Multikomponent analyse
- Mer spesifikk enn direkte immunoassay

Utfordringer:

- «Riktig» svar eller raskt svar?

Oppsummering

- Hormoner
 - To-nivå diagnostikk
 - Vurdere kompleksitet
 - Eksempler
 - Stoffskifte, gynækologi, binyre
- Laboratorielegen må se helheten for å gi råd

- Når rekvisitent bruker vår rekvisjon
- Send alle prøvene til oss

FOR LABORATORIET		Ref. nr. (for elektroniske svar)
Pasient		
Fødselsdato	Personnr. (med oppgiv.)	Kvinne <input type="checkbox"/> Mann <input type="checkbox"/>
Navn:		
Adresse:		
Poster.	Betaltes av (med oppgiv.)	
Kommunen:	<input type="checkbox"/> Inst. <input type="checkbox"/> NAV	
Rekvisitent (Fattende informasjon om pasienten)		
Adresse	Læge/helse	
Relevante opplysninger		
Kommentar ønskes ved patologisk prøvervar <input type="checkbox"/>		
Relevante medikamenter		
Siste menstruasjons første dag		
Gravid: <input type="checkbox"/>		
Supplær analyser ønskes: Ja <input type="checkbox"/> Nei <input type="checkbox"/>		
Informasjon til prøvetaker* - se baksiden		
Utredningsforslag - se baksiden		
Tyreidea <ul style="list-style-type: none"> <input type="checkbox"/> TSH <input type="checkbox"/> FT₄, Tyroxin frist <input type="checkbox"/> T₄, Tyroksin <input type="checkbox"/> FT₃, Triiodtyronin frist <input type="checkbox"/> T₃, Triiodtyronin <input type="checkbox"/> TBG, Tyreksimbundende globulin <input type="checkbox"/> Anti-TPO <input type="checkbox"/> Anti-Tg <input type="checkbox"/> TRAS, TSH-reseptor antistoff <input type="checkbox"/> hTGA Gonader <ul style="list-style-type: none"> <input type="checkbox"/> FSH <input type="checkbox"/> LH <input type="checkbox"/> Prolaktin <input type="checkbox"/> Østroidol <input type="checkbox"/> Progesteron <input type="checkbox"/> Testosteron <input type="checkbox"/> DHT, Dihydrotestosteron 2 nmol <input type="checkbox"/> Androstanolon 1 nmol <input type="checkbox"/> SHBG, Seksualhormonbindende globulin <input type="checkbox"/> FT₄, Free testosteron-indeks 1 nmol (FT₄ = testosteron x 10 · SHBG) <input type="checkbox"/> AMHL, Androstanolborrom* <input type="checkbox"/> Anti-ovarians-tosterffer Kalsium og bænker <ul style="list-style-type: none"> <input type="checkbox"/> PTH* <input type="checkbox"/> PTH* og Kalsium, frist* (2 glass) <input type="checkbox"/> 25-OH-Vit. D <input type="checkbox"/> 1,25-(OH)₂-Vit. D <input type="checkbox"/> DBP, Vit. D-bænketende protein <input type="checkbox"/> Osteocalcin <input type="checkbox"/> Alk-fosfatase (heimpesifik) <input type="checkbox"/> CTS-1* frist* <input type="checkbox"/> PINP 1 ml 		
Binære <ul style="list-style-type: none"> <input type="checkbox"/> Kortisol kl 07-09 <input type="checkbox"/> Kortisol kl 16-21 <input type="checkbox"/> Kortisol kl..... <input type="checkbox"/> ACTH* kl 07-09 <input type="checkbox"/> ACTH* kl 08-21 <input type="checkbox"/> ACTH* kl..... <input type="checkbox"/> Kortisol, frist i spitt* kl 07-09 <input type="checkbox"/> Kortisol, frist i spitt* kl 21-23 <input type="checkbox"/> Kortisol, frist i spitt* kl..... <input type="checkbox"/> CBG, Kortikosomobildeende globulin <input type="checkbox"/> 17-OH-Progesteron <input type="checkbox"/> 17-OH-Pregnenolon <input type="checkbox"/> DHEA-Sulfat <input type="checkbox"/> DHEA, Dihydroepiandrosteron <input type="checkbox"/> 11-Dokosakontisol <input type="checkbox"/> 11-DOC, Dekosakortikosteron 4,25 nmol <input type="checkbox"/> Aldosteron 1 nmol <input type="checkbox"/> Reninaktivitet* 1 nmol <input type="checkbox"/> Metanefrin og Normetanefrin* 3 nmol <input type="checkbox"/> Am-21-hydroksyse Vekst og metabolsme <ul style="list-style-type: none"> <input type="checkbox"/> Veksthormon <input type="checkbox"/> IGF-1* <input type="checkbox"/> IGF-bindingprotein 3 Diabetes <ul style="list-style-type: none"> <input type="checkbox"/> Insulin fastende <input type="checkbox"/> C-peptid fastende <input type="checkbox"/> Prinsulin fastende <input type="checkbox"/> Insulin stimulert <input type="checkbox"/> C-peptid stimulert <input type="checkbox"/> Prinsulin stimulert <input type="checkbox"/> Anti-GAD <input type="checkbox"/> Auto-IA2 <input type="checkbox"/> Anti-insulin <input type="checkbox"/> Auto ZnT8 		
Amnet <ul style="list-style-type: none"> <input type="checkbox"/> % CDT, Karbonyldiacyd fatsoedat transf. <input type="checkbox"/> EPO, Erytropoetin <input type="checkbox"/> Leptin <input type="checkbox"/> LTFR, Loselig transferinseptor <input type="checkbox"/> rT₃, revers trijodtyronin <input type="checkbox"/> ADH, Antidiuretisk hormon* 1,28 nmol <input type="checkbox"/> Glukagon* <input type="checkbox"/> PTHrP, PTH-tilsetert peptid* 1 nmol <input type="checkbox"/> Hensmakomatose genotyp* 1 nmol <input type="checkbox"/> Laksosomelukose genotyp* 1 nmol <input type="checkbox"/> Androstanedi-glukuronid Andre analyser - kun etter avtale <ul style="list-style-type: none"> <input type="checkbox"/> Andre genetiske analyser* kan spesifiser <input type="checkbox"/> ... <input type="checkbox"/> ... 		
URIN Totalvolum <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ml Samleidetrenn: <ul style="list-style-type: none"> <input type="checkbox"/> Kortisol, frist* <input type="checkbox"/> Aldosteron* <input type="checkbox"/> Jæd* <input type="checkbox"/> Ambol-androgene steroider, 50 nmol <input type="checkbox"/> Medikamentanalyse smørk rik understrekkes*, beta-blockere, diuretika, glukokortikider, stimuler, 50 ml Katekolaminer <ul style="list-style-type: none"> <input type="checkbox"/> Adrenalin* <input type="checkbox"/> Noradrenalin* <input type="checkbox"/> VMA, Vanilinmandelyne* 		
<small>Oslo universitetssykehus HF Akut sykehuse Hormonlaboratoriet</small> <small>Tlf: 22 89 47 08 Tlf: 22 13 87 96 Adresse: Postboks 4059 Nydalen Adresse: 0424 Oslo Nett: www.hormonlaboratoriet.no</small>		
<small>SE BAKSIDEN FOR PRAKTIKSKE OPPLYSNINGER</small>		
<small>HELSE SØR-ØST</small>		





Hormonlaboratoriet.no