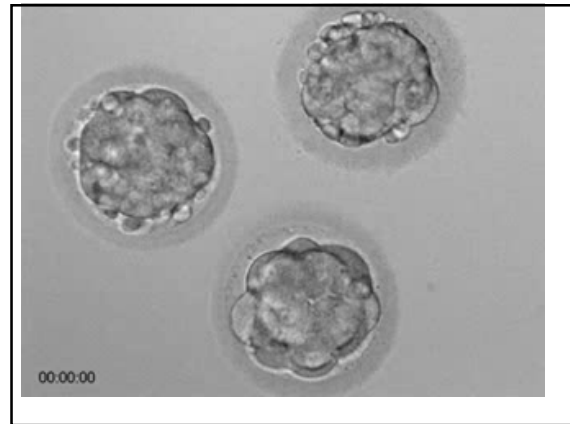
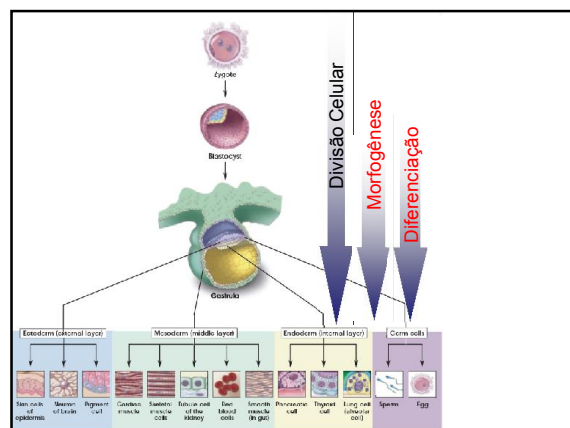




It is not birth, marriage or death, but gastrulation,
which is truly the most important time in your life
Lewis Wolpert (1986)

**O evento mais importante da sua vida
não é o seu nascimento, seu casamento,
sequer a sua morte. É a Gastrulação**



GASTRULAÇÃO

NEURULAÇÃO

DOBRAMENTO DO CORPO

FECHAMENTO DO TUBO ENDODÉRMICO

EXPANSÃO DO ÂMNION

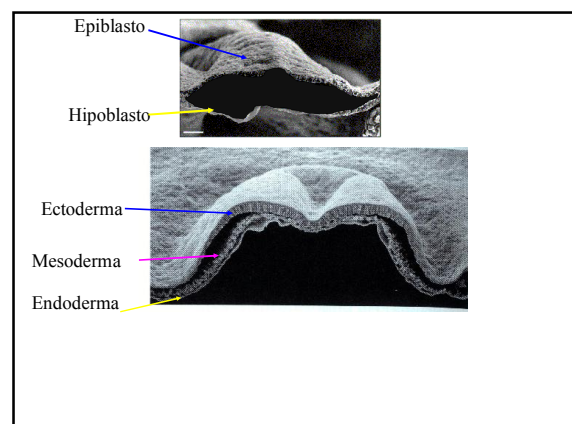
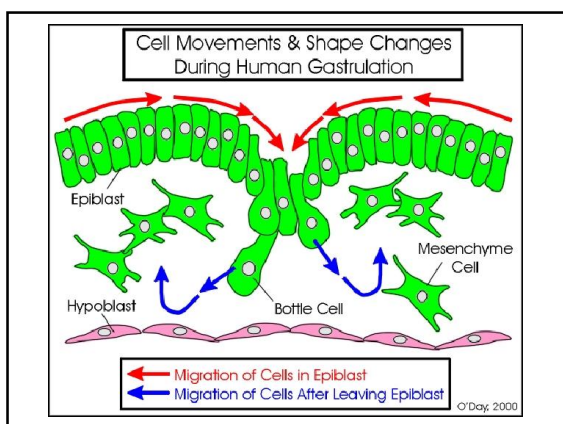
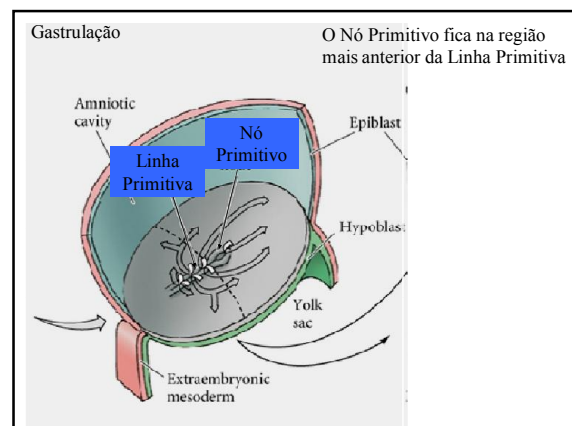
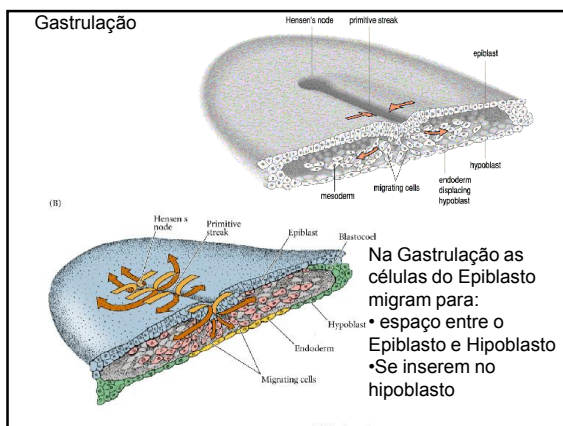
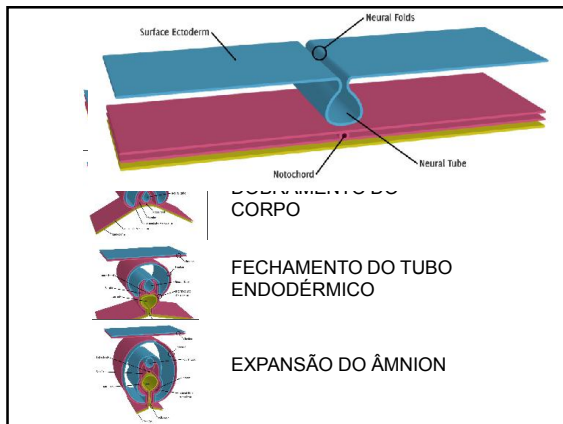
GASTRULAÇÃO

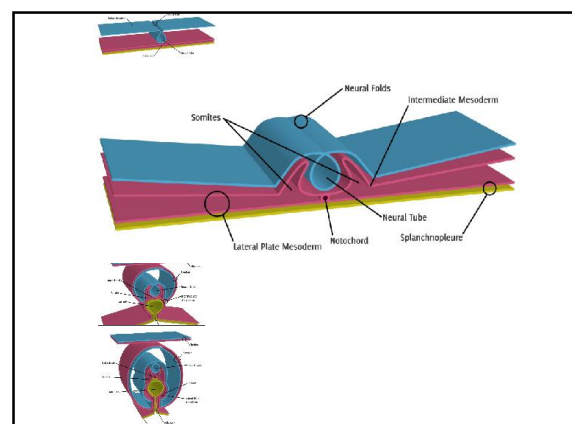
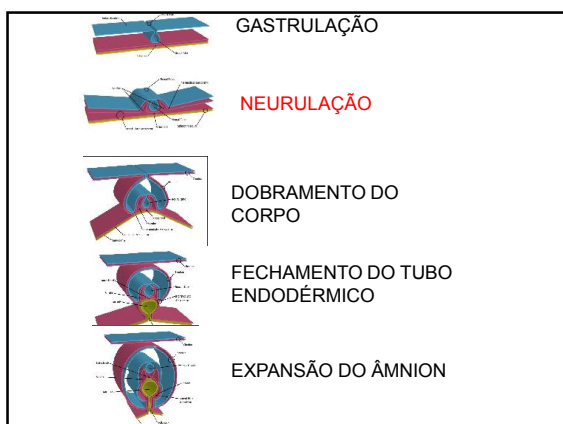
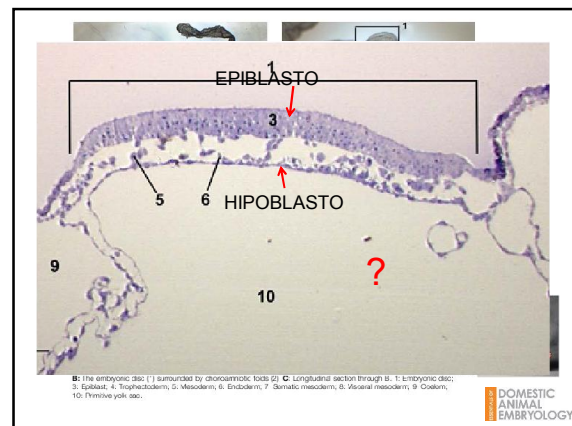
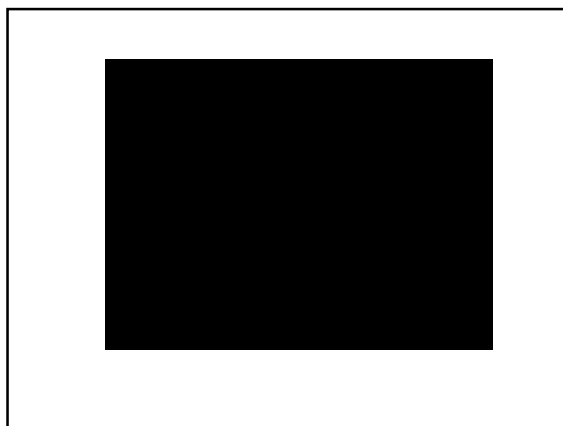
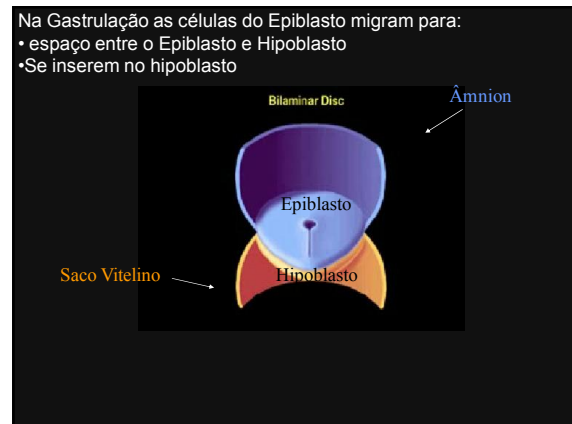
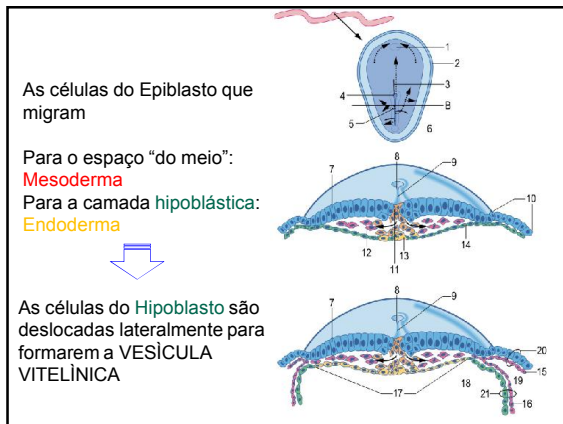
NEURULAÇÃO

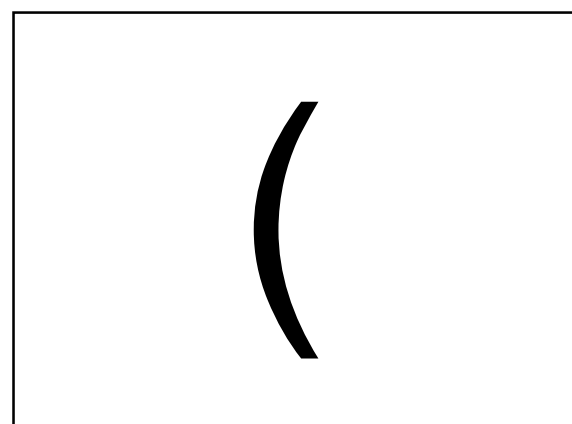
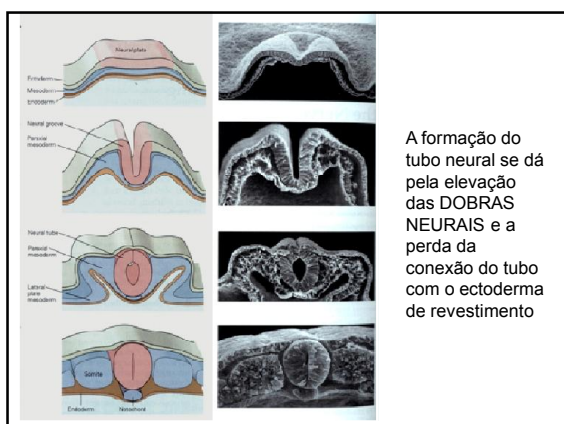
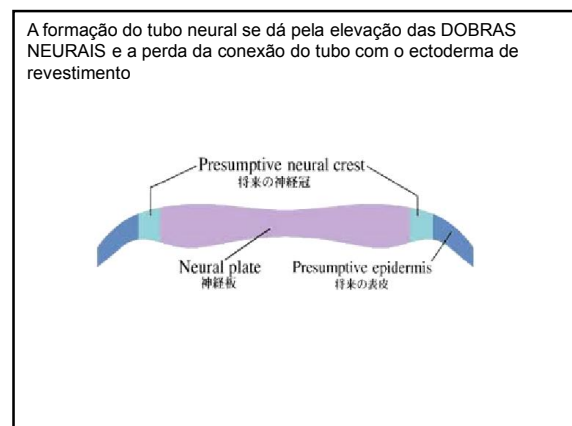
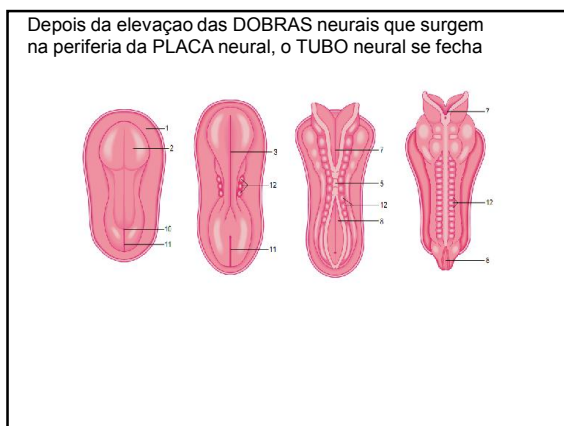
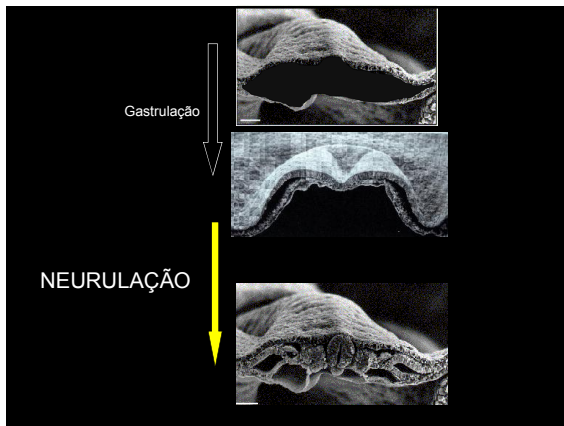
DOBRAMENTO DO CORPO

FECHAMENTO DO TUBO ENDODÉRMICO

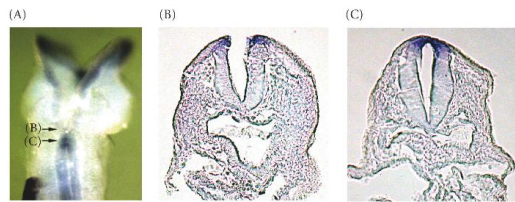
EXPANSÃO DO ÂMNION



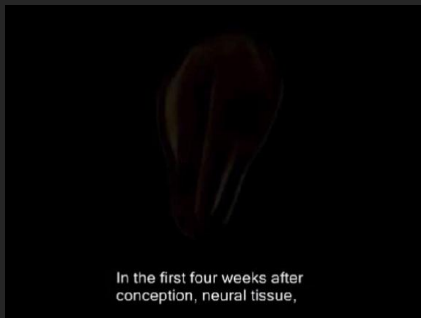




As extremidades livres do tubo neural expressam proteínas que se ligam ao ácido fólico.



DEVELOPMENTAL BIOLOGY, 6th Edition, Figure 15.7 © 2005 Garland Science, Inc.

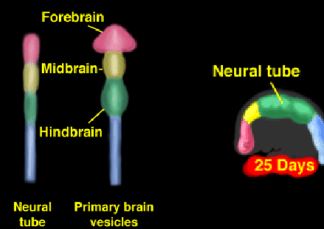


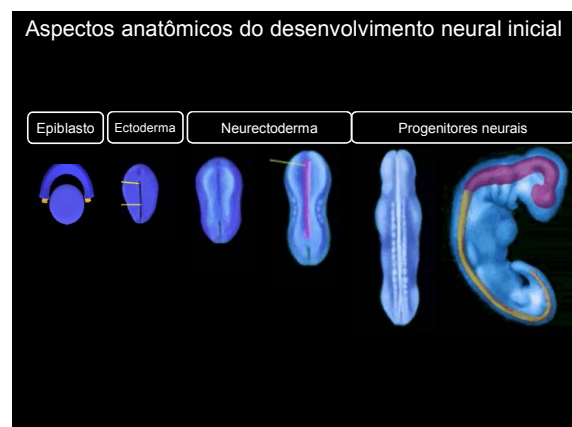
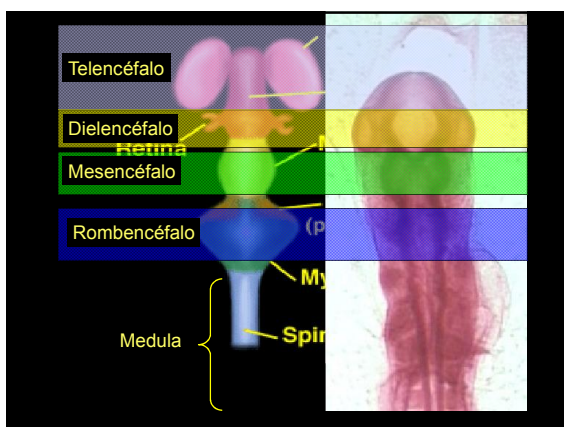
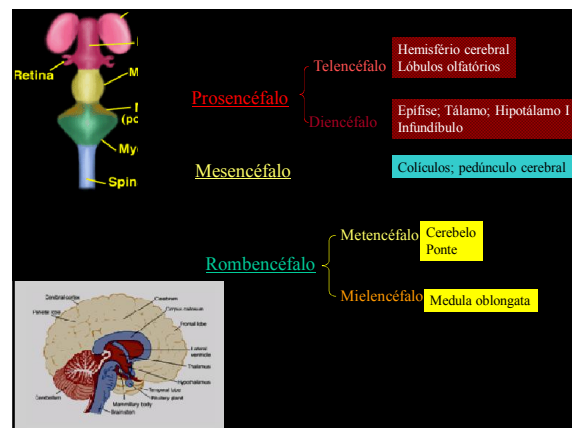
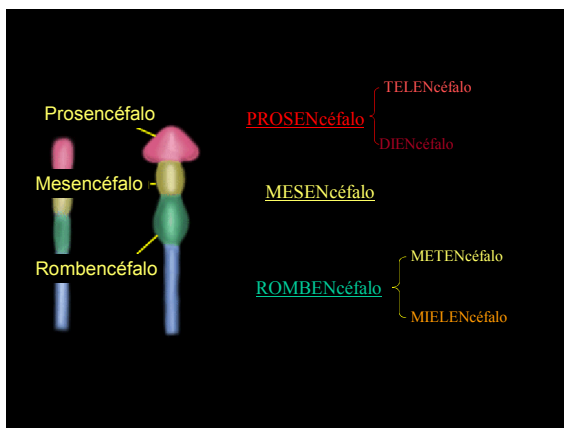
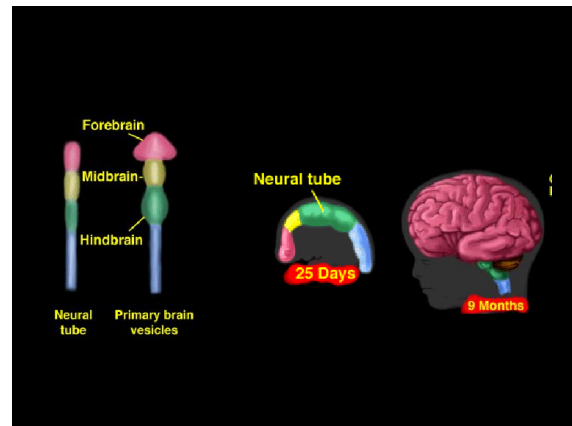
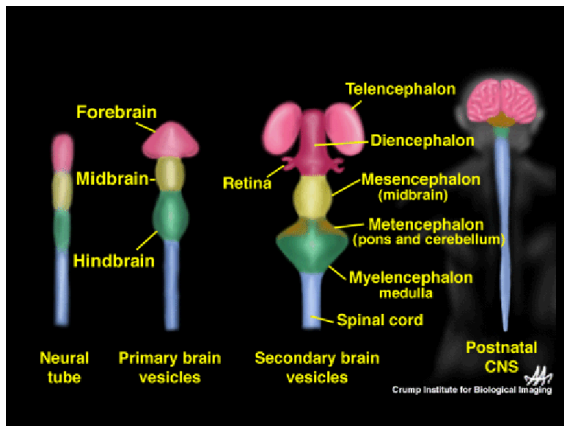
In the first four weeks after conception, neural tissue,

<http://www.youtube.com/watch?v=mMDPP-Wy3sI>

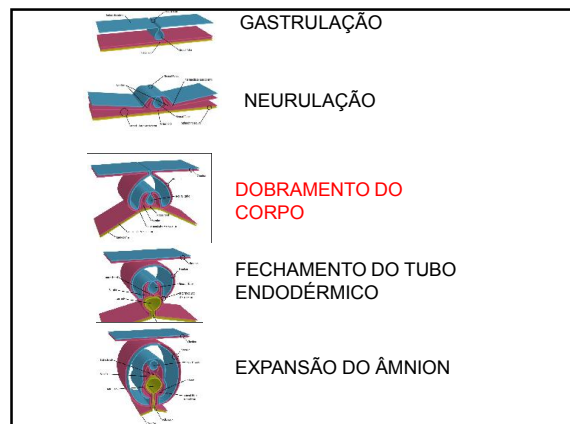
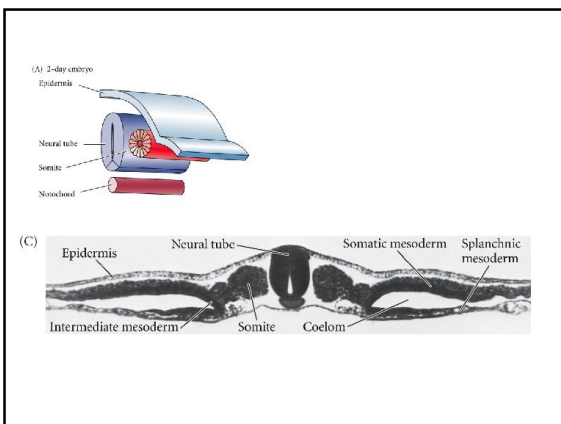
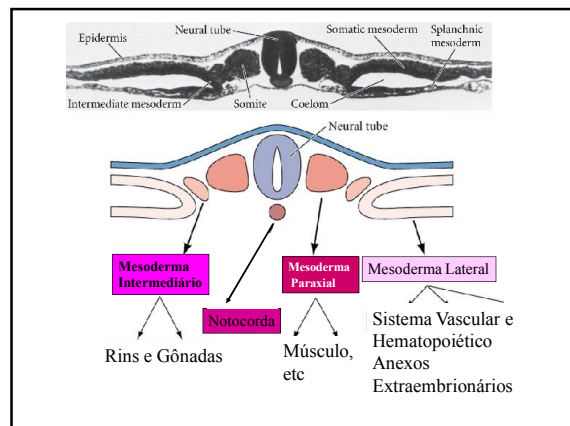
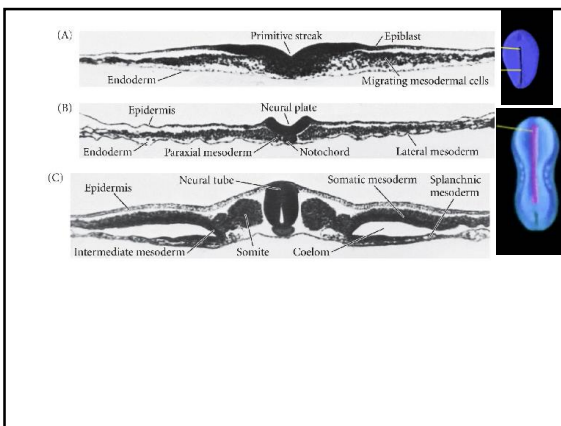
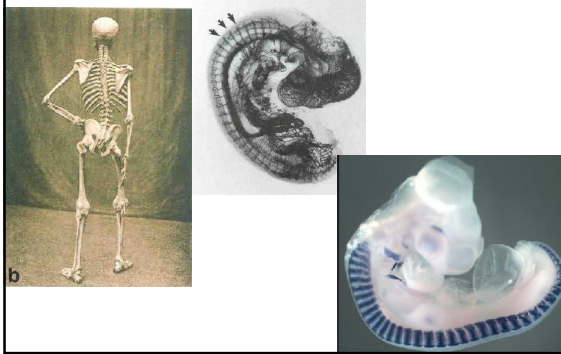
O CORPO DO EMBRIÃO ESTÁ
DIVIDIDO EM DOMÍNIOS

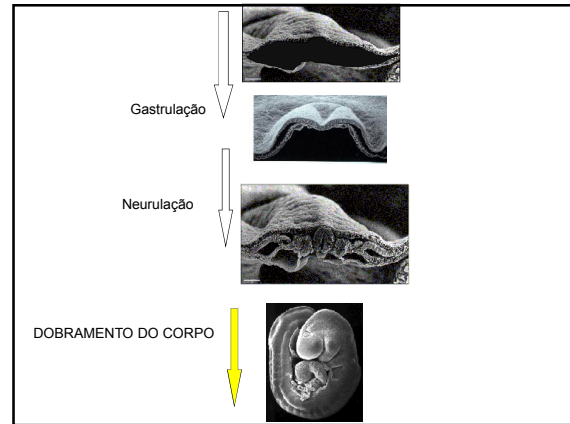
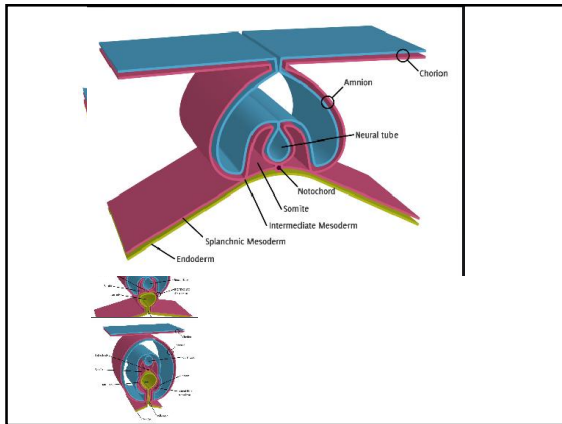
E ESTES, POR SUA VEZ,
ESTÃO SUBDIVIDIDOS EM
SUBDOMÍNIOS





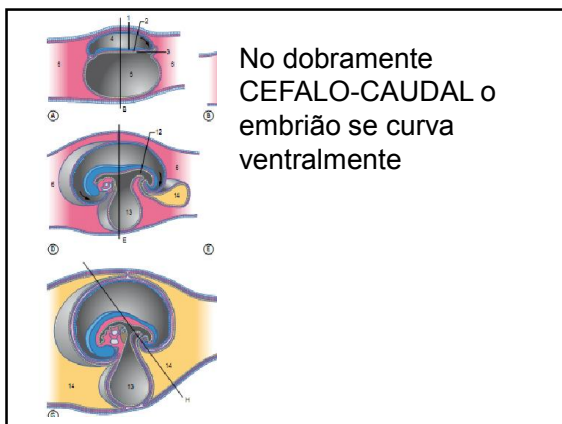
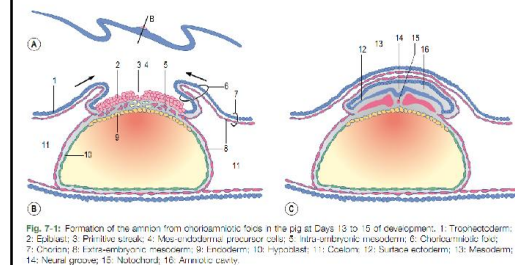
SOMITOS

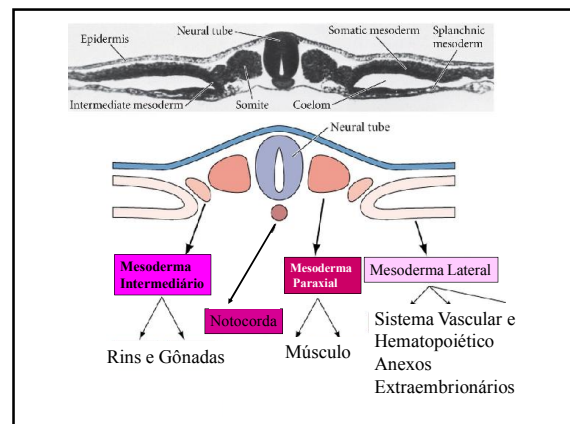
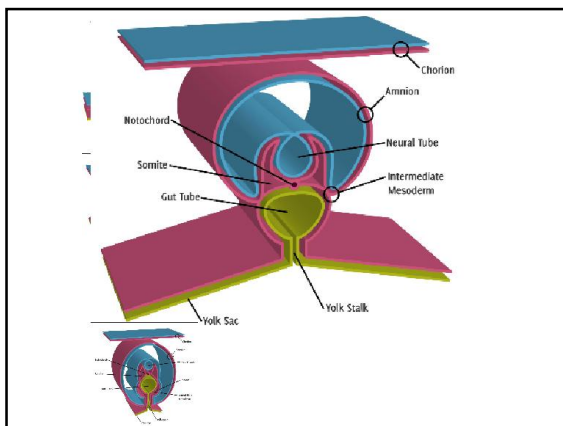
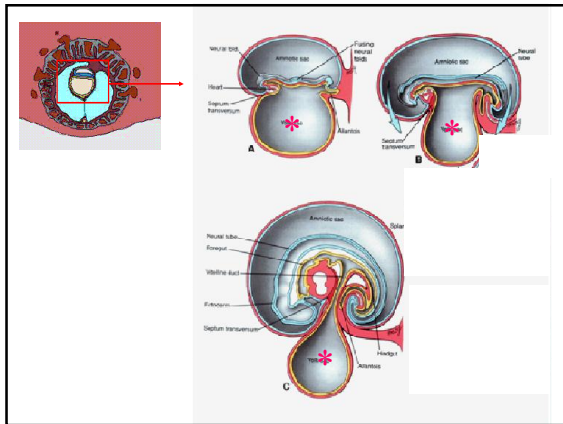




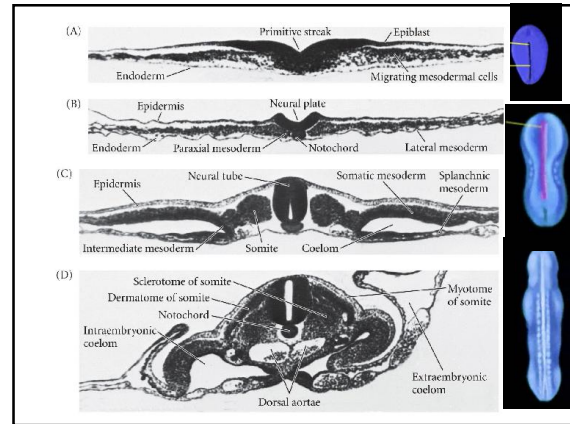
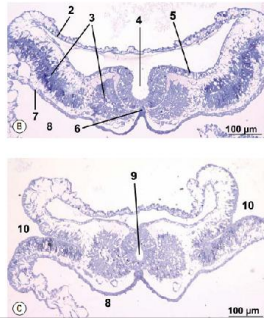
Concomitante à formação do TUBO NEURAL, existe um outro movimento que resulta no **Dobramento** **Cefalo-caudal** e **lateral** do Embrião.

Durante a gastrulação, forma-se a **CAVIDADE AMNIÔNICA** que se forma dorsalmente ao embrião (ou seja, acima do ectoderma)





Com o dobramento lateral, uma folha doo MESODERMA LATERAL irá se curvar dorsalmente, e outra folha irá se curvar ventralmente



Durante a gastrulação, parte do **mesoderma lateral** irá participar da formação da CAVIDADE AMNIÔNICA que se forma dorsalmente ao embrião (ou seja, acima do ectoderma)

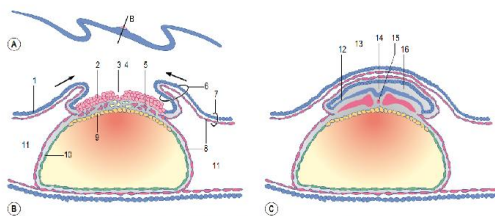
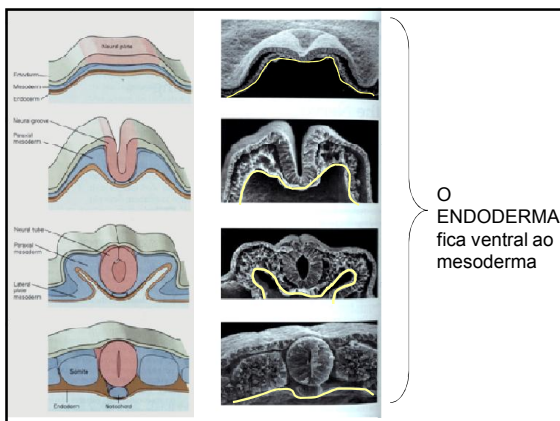
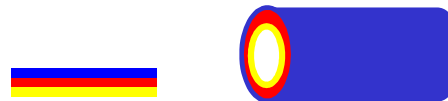


Fig. 7-11: Formation of the amnion from oropharyngeal folds in the pig at days 13 to 15 of development. 1: Trophoblast; 2: Epiblast; 3: Primitive streak; 4: Mesodermal precursor cells; 5: Intra-embryonic mesoderm; 6: Oropharyngeal folds; 7: Chord; 8: Extra-embryonic mesoderm; 9: Endoderm; 10: Hypoblast; 11: Coelom; 12: Surface ectoderm; 13: Mesoderm; 14: Neural groove; 15: Notochord; 16: Amniotic cavity.

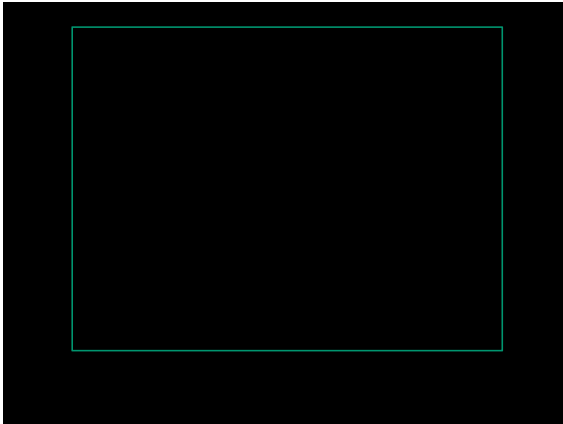
Folhetos embrionários

Ectoderma (ecto=externa)	Pele Sistema Nervoso Crista Neural
Mesoderma (Meso=meio)	Notocorda Músculo Rins Sangue
Endoderma (endo=interna)	Tubo Digestivo Faringe Tubo respiratório

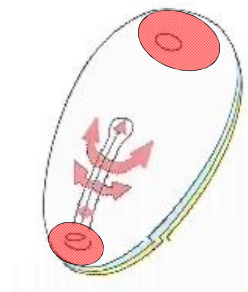
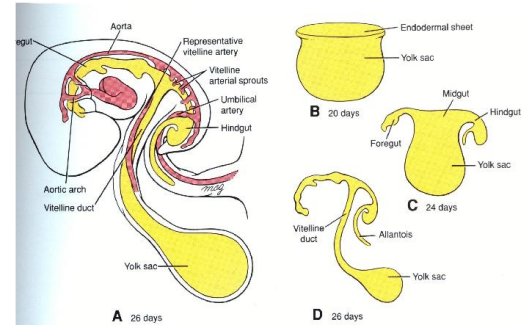


Durante o dobramento embrionário, o endoderma forma um tubo, que originará o tubo digestório.





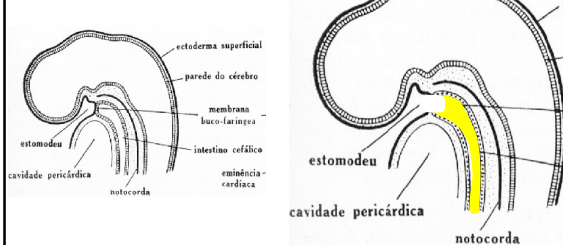
O começo do tubo endodérmico embrionário é a BOCA e o fim o ÂNUS



ATENÇÃO!
Não há formação de mesoderma na região cloacal (posterior) e na placa precordial (anterior).

A placa precordial irá formar a MEMBRANA BUCOFARÍNGEA.

A extremidade mais anterior do tubo endodérmico entra em contato direto com o ectoderma (membrana BUCOFARÍNGEA) e formará a boca primitiva ou ESTOMODEU



GASTRULAÇÃO

NEURULAÇÃO

DOBRAMENTO DO CORPO

FECHAMENTO DO TUBO ENDODÉRMICO

EXPANSÃO DO ÂMNION

