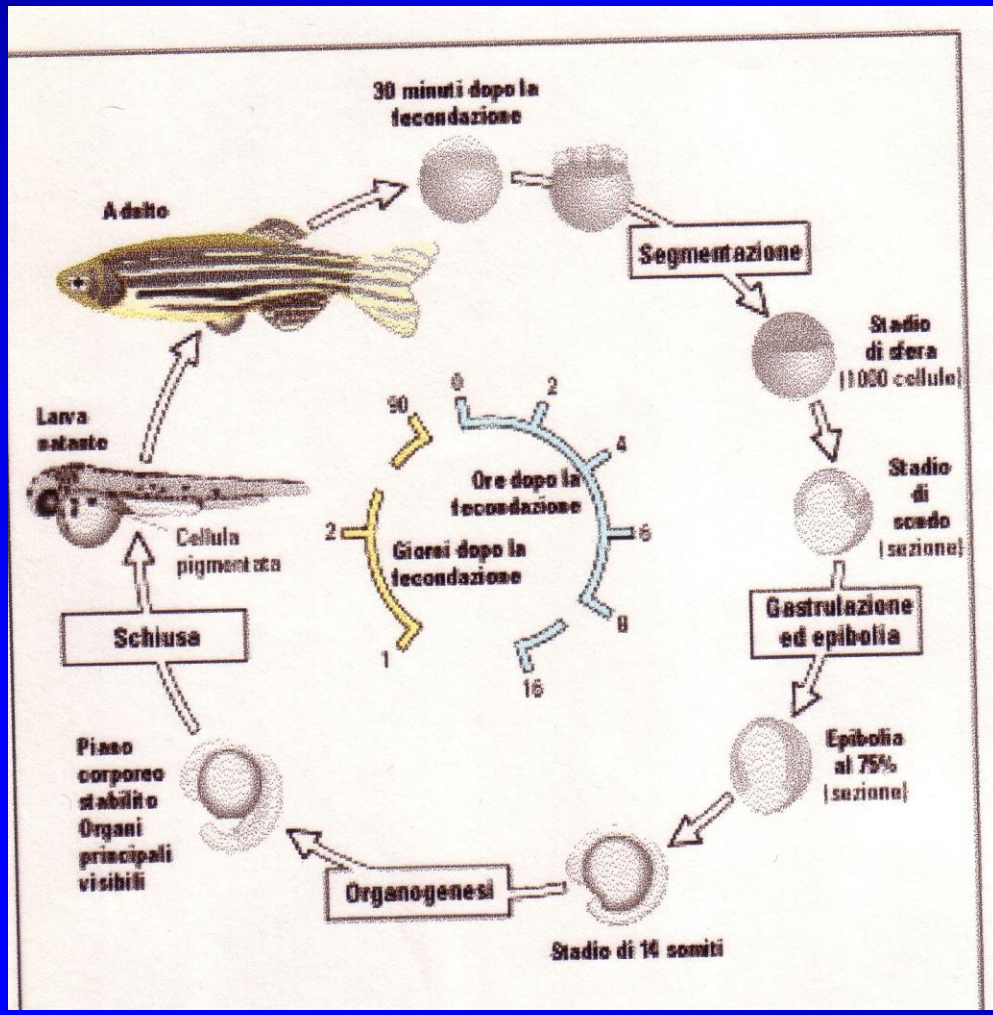
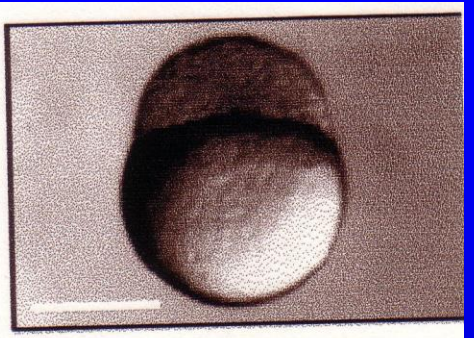
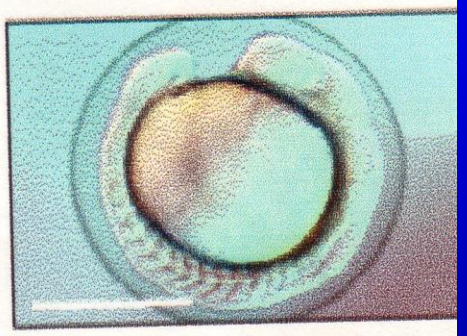
Sviluppo Pesci Teleostei

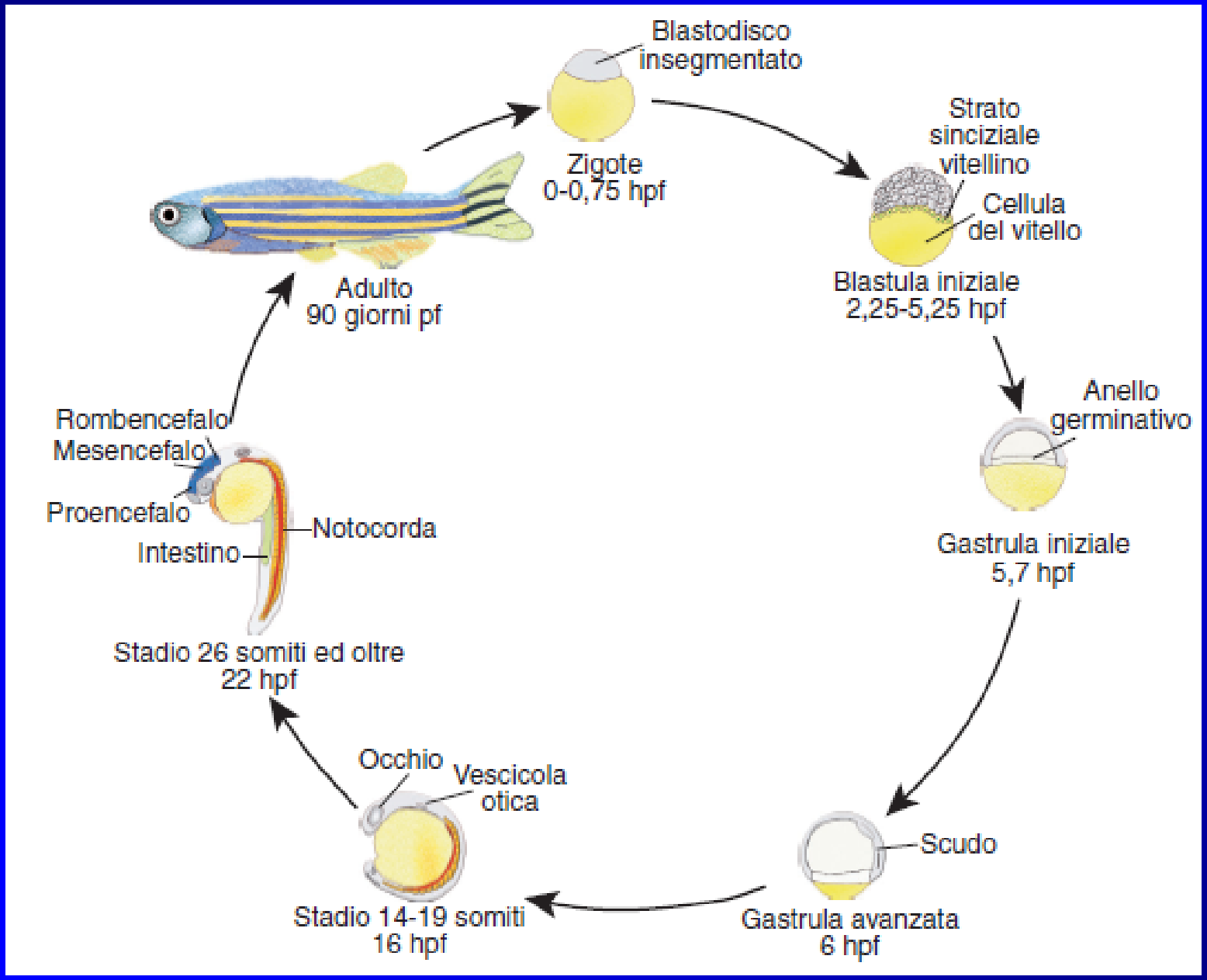
Dario rerio

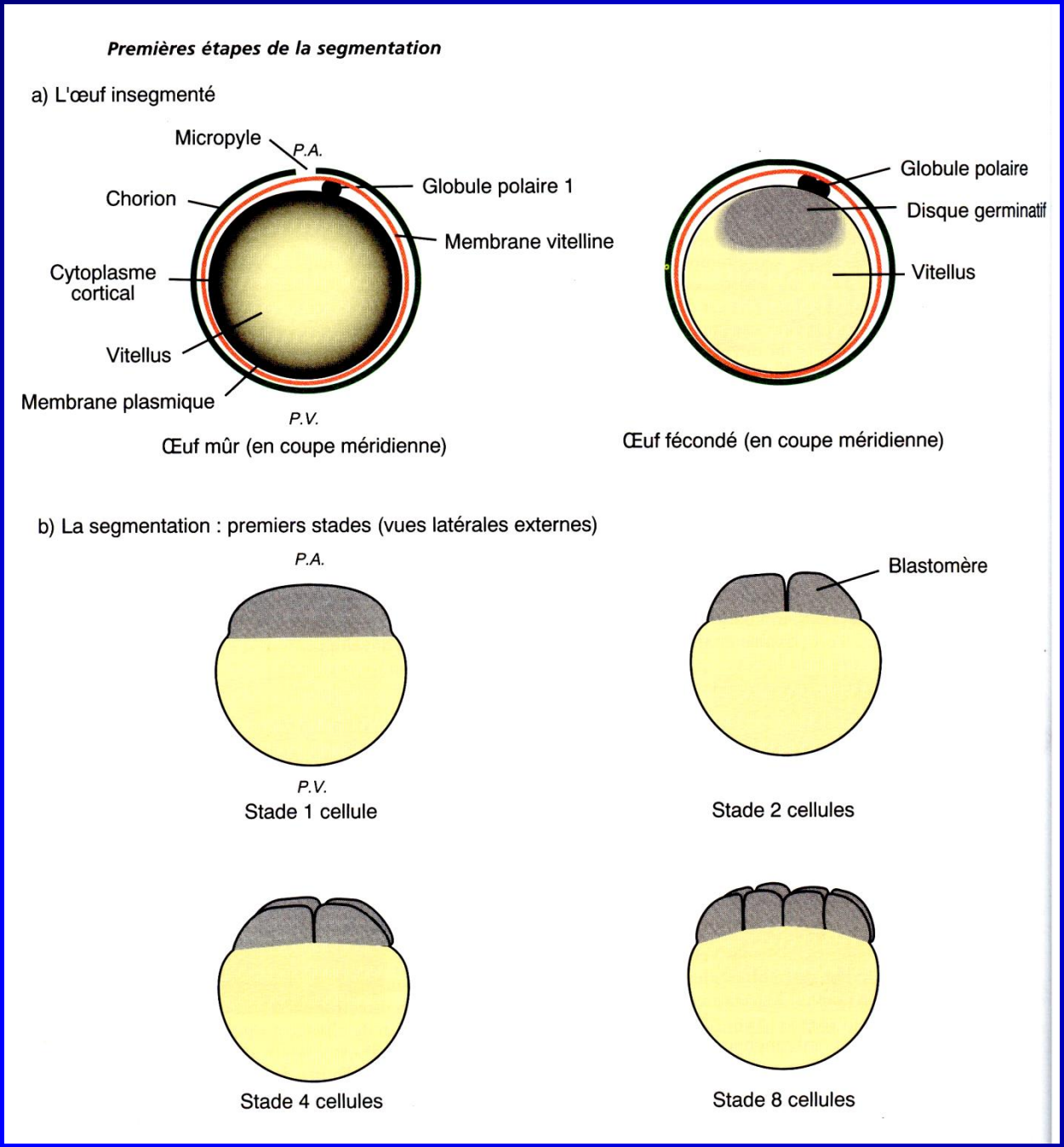









Blastodisco
insegmentato
Zigote
0-0,75 hpf
Strato
sinciziale
vitellino
Cellula
del vitello
Blastula iniziale
2,25-5,25 hpf
Anello
germinativo
Gastrula iniziale
5,7 hpf
Scudo
Gastrula avanzata
6 hpf
Occhio
Vescicola
otica
Stadio 14-19 somiti
16 hpf
Rombencefalo
Mesencefalo
Proencefalo
Intestino
Notocorda
Stadio 26 somiti ed oltre
22 hpf
Adulto
90 giorni pf



Uovo telolecitico

Segmentazione meroblastica discoidale

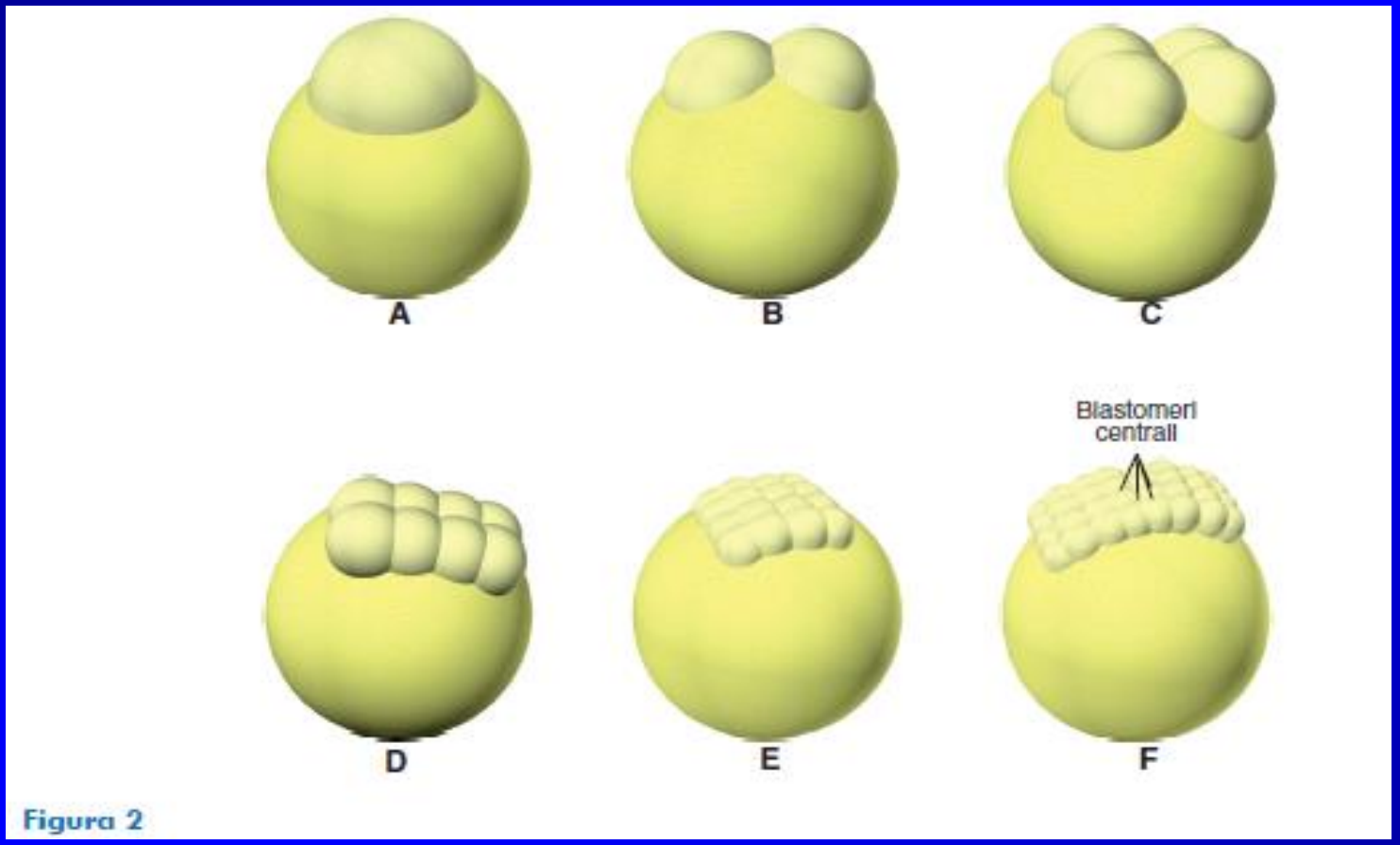
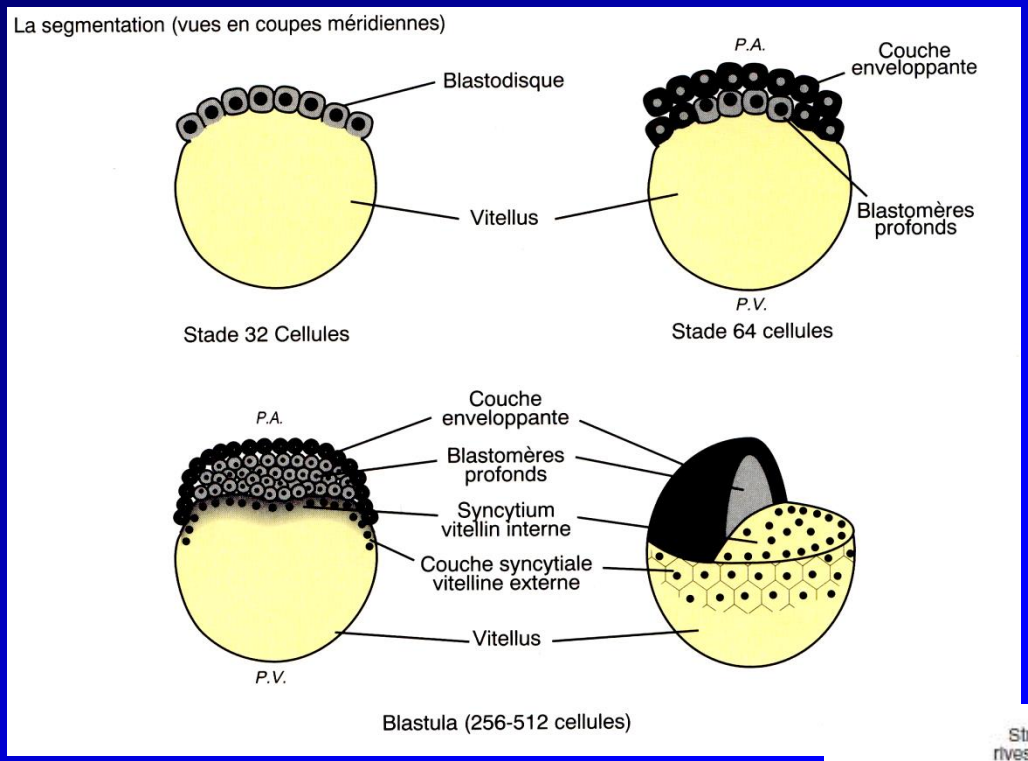


Figura 2



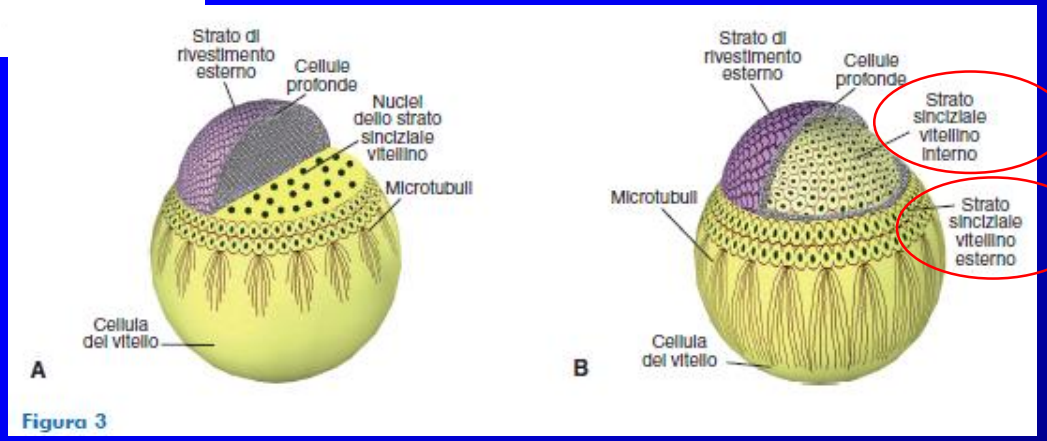
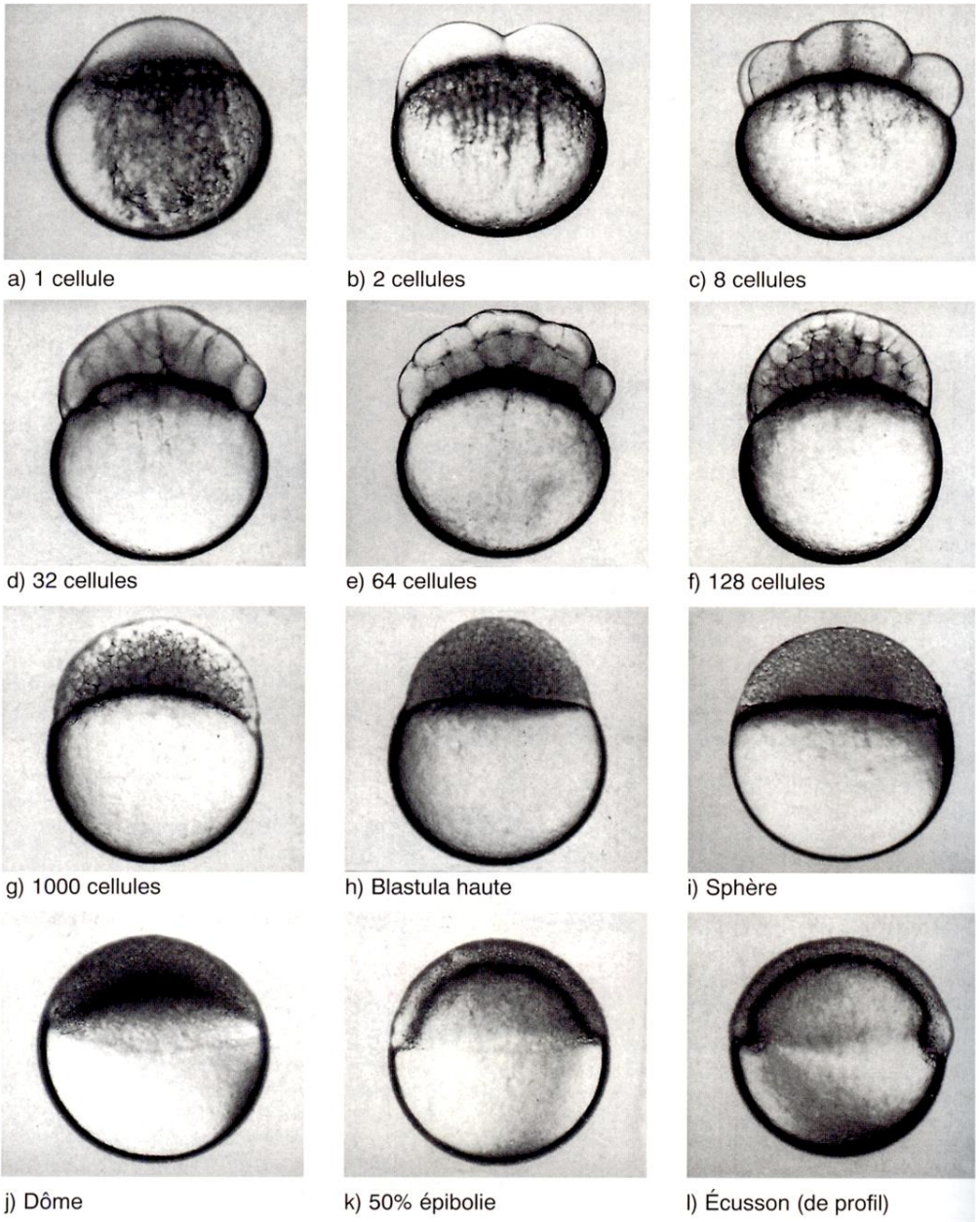


Figura 3

1. Rivestimento esterno- periderma
2. Blastomeri profondi- formano l'embrione
3. Sincizio vitellino

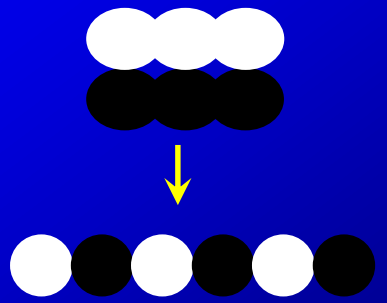
Microphotographies d'embryons de Danio rerio (x 50)



Sterroblastula

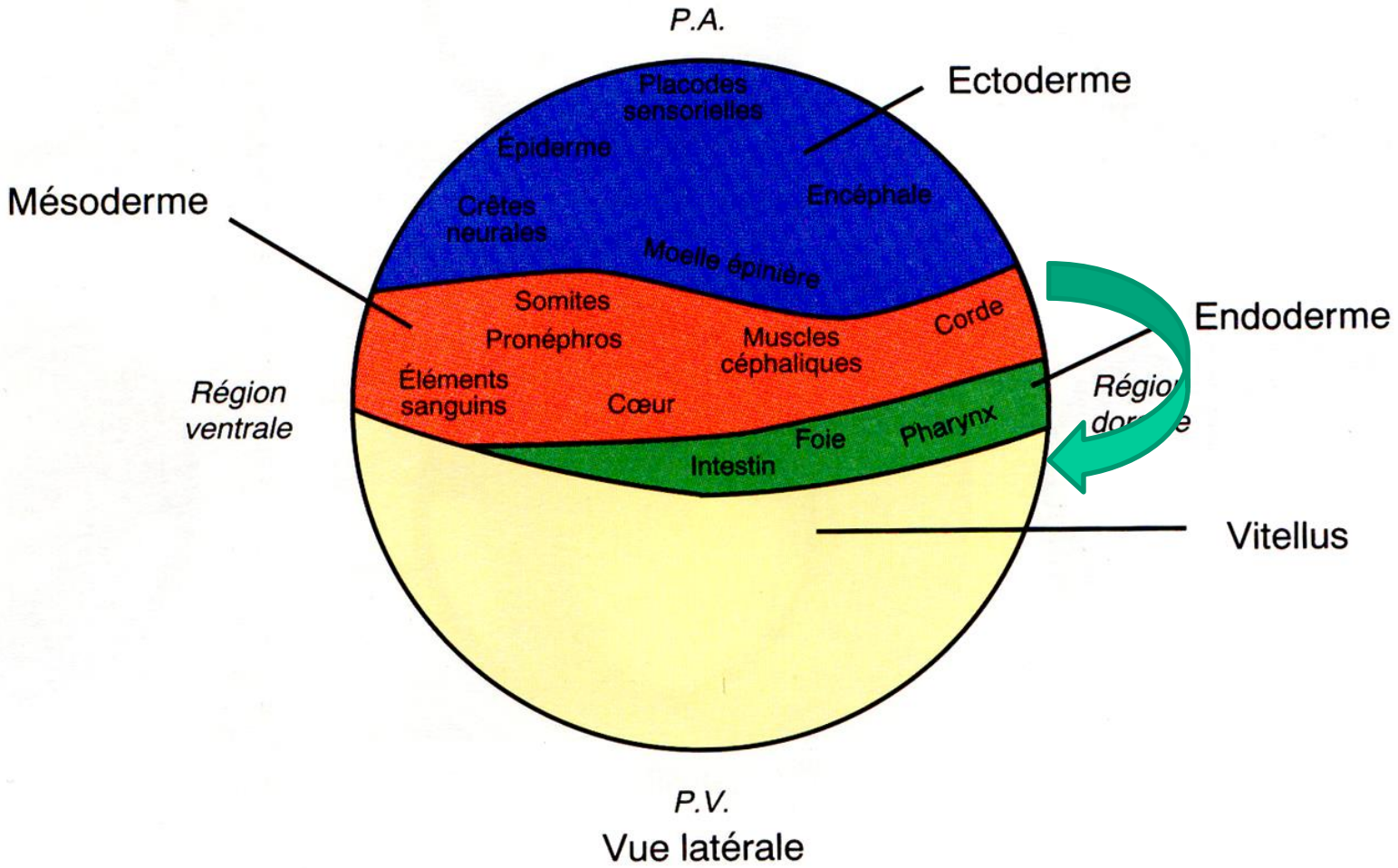
1. Blastula alta

2. Sfera (intercalazione radiale)

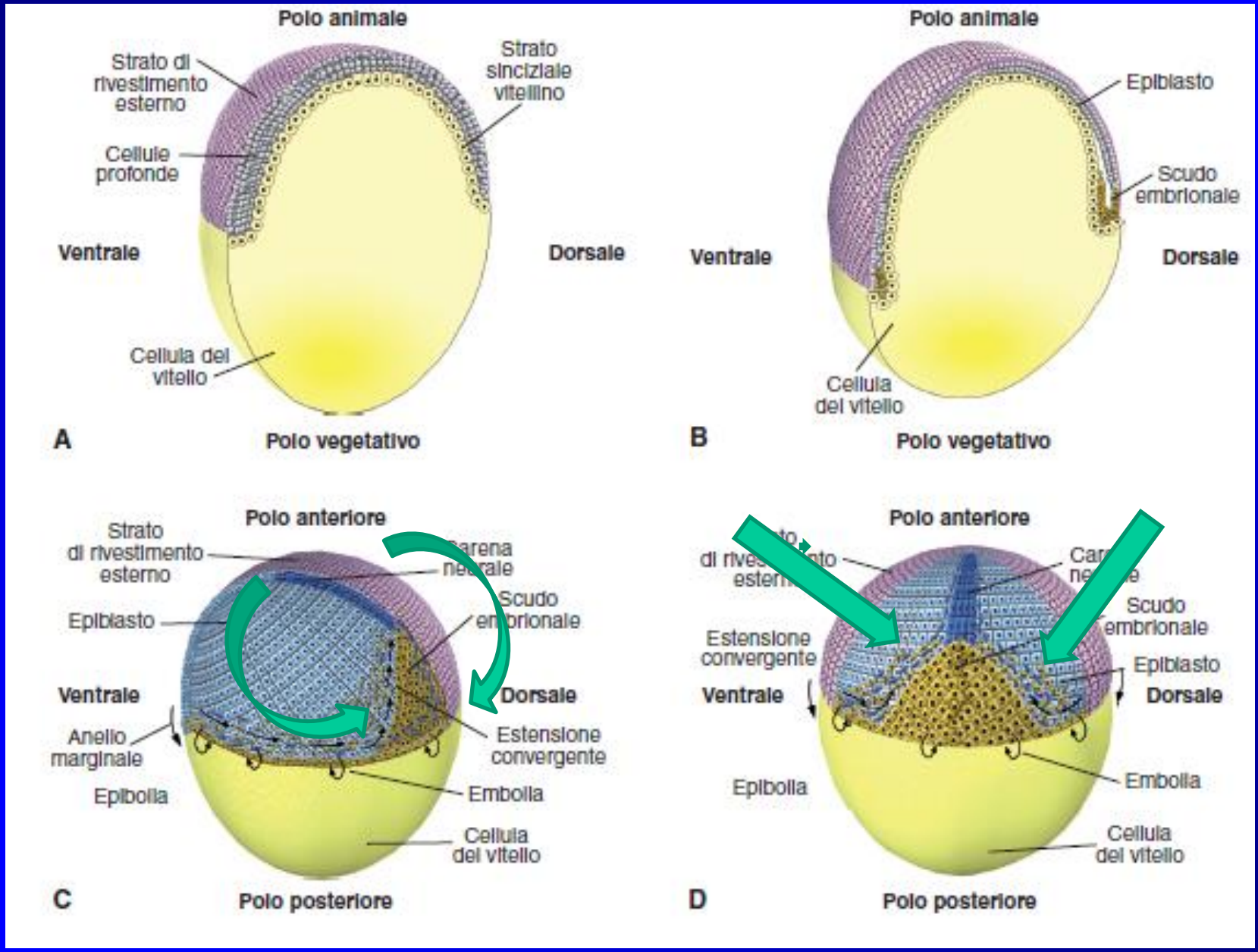


3. Cupola (30% epibolia)
4. 50% epibolia

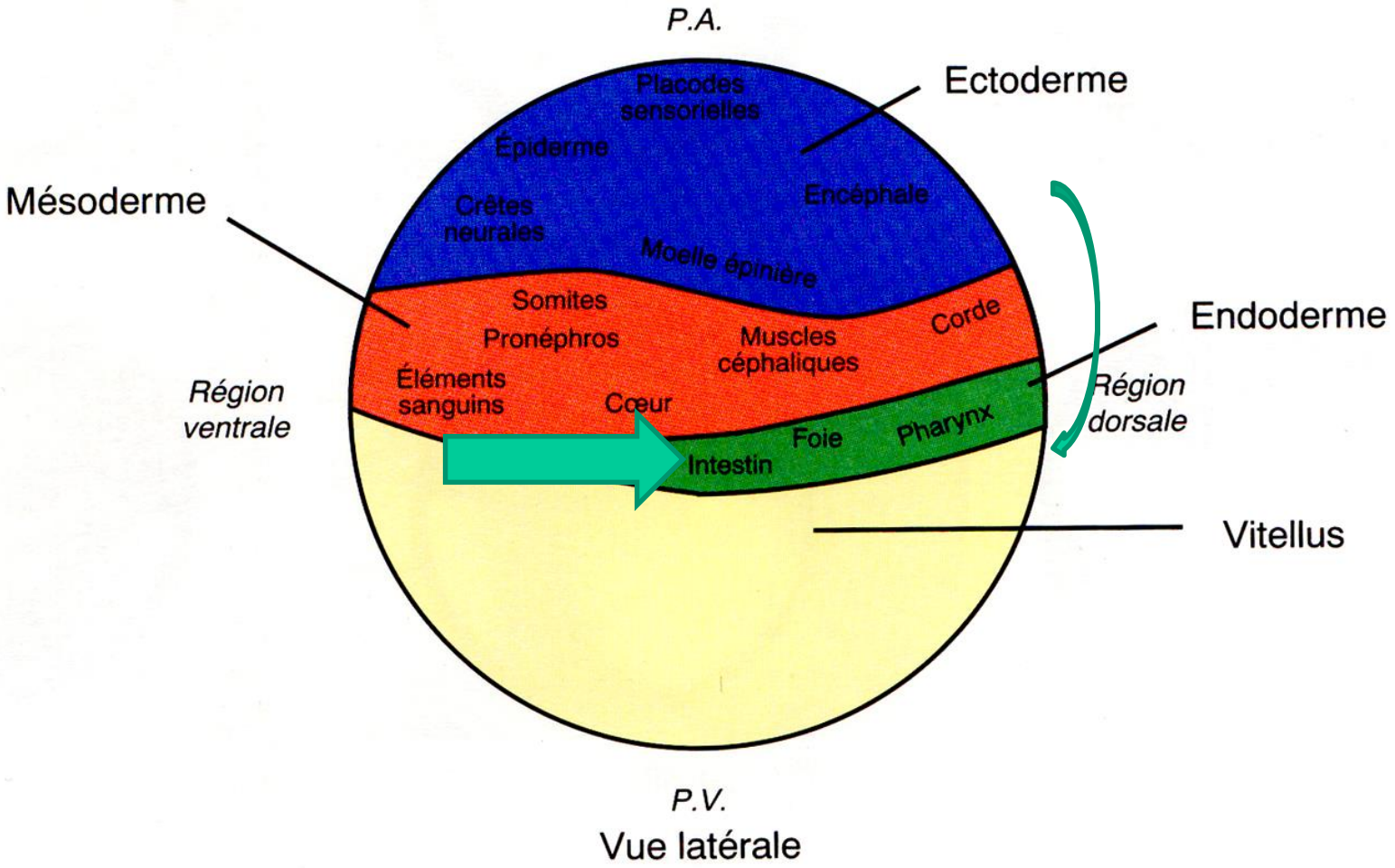
Carte des territoires présomptifs au stade 50% d'épibolie



Vue latérale

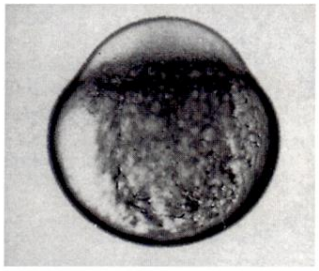

Polo animale
Strato di rivestimento esterno
Strato sinciziale vitellino
Cellule profonde
Ventrale
Dorsale
Cellula del vitello
A
Polo vegetativo
Polo animale
Epiblasto
Scudo embrionale
Ventrale
Dorsale
Cellula del vitello
B
Polo vegetativo
Polo anteriore
Strato di rivestimento esterno
Epiblasto
Ventrale
Dorsale
Anello marginale
Epibolia
Estensione convergente
Embolia
Cellula del vitello
C
Polo posteriore
Polo anteriore
Estensione convergente
Scudo embrionale
Epiblasto
Ventrale
Dorsale
Epibolia
Embolia
Cellula del vitello
D
Polo posteriore

Carte des territoires présomptifs au stade 50% d'épibolie

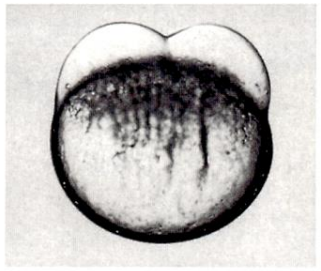


Vue latérale

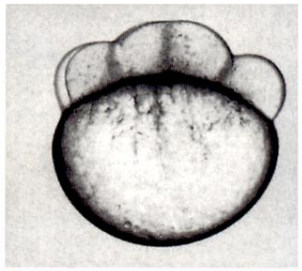
Microphotographies d'embryons de Danio rerio (x 50)



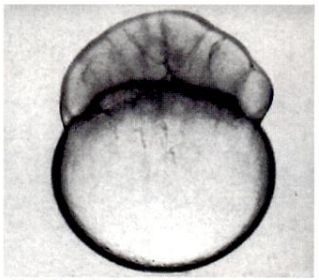
a) 1 cellule



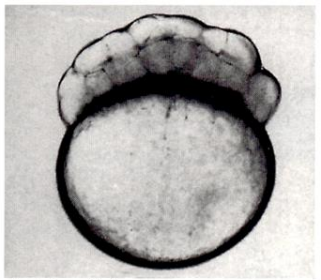
b) 2 cellules



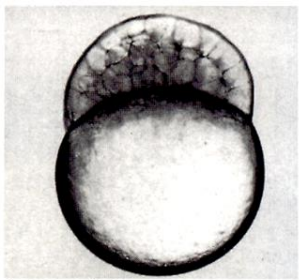
c) 8 cellules



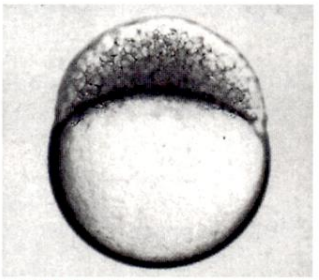
d) 32 cellules



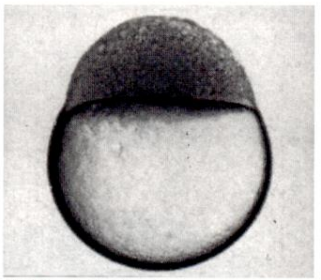
e) 64 cellules



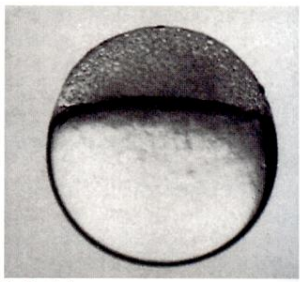
f) 128 cellules



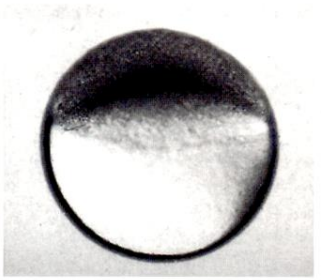
g) 1000 cellules



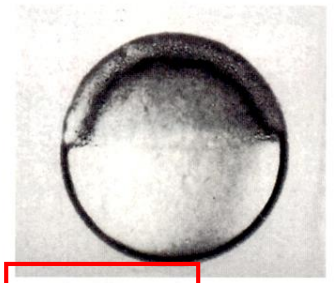
h) Blastula haute



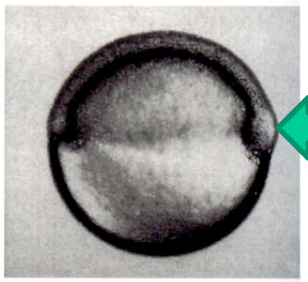
i) Sphère



j) Dôme



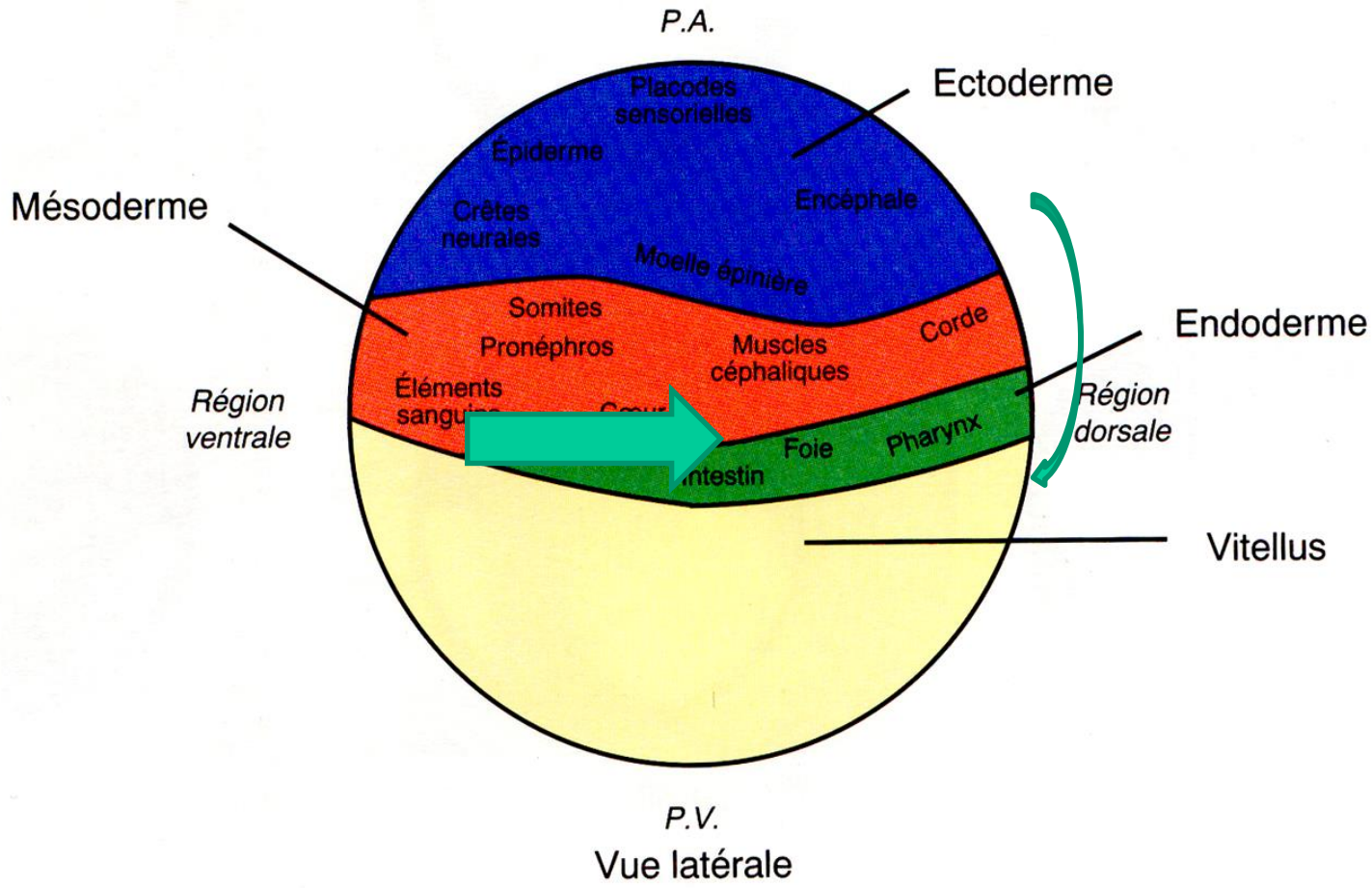
k) 50% épibolie



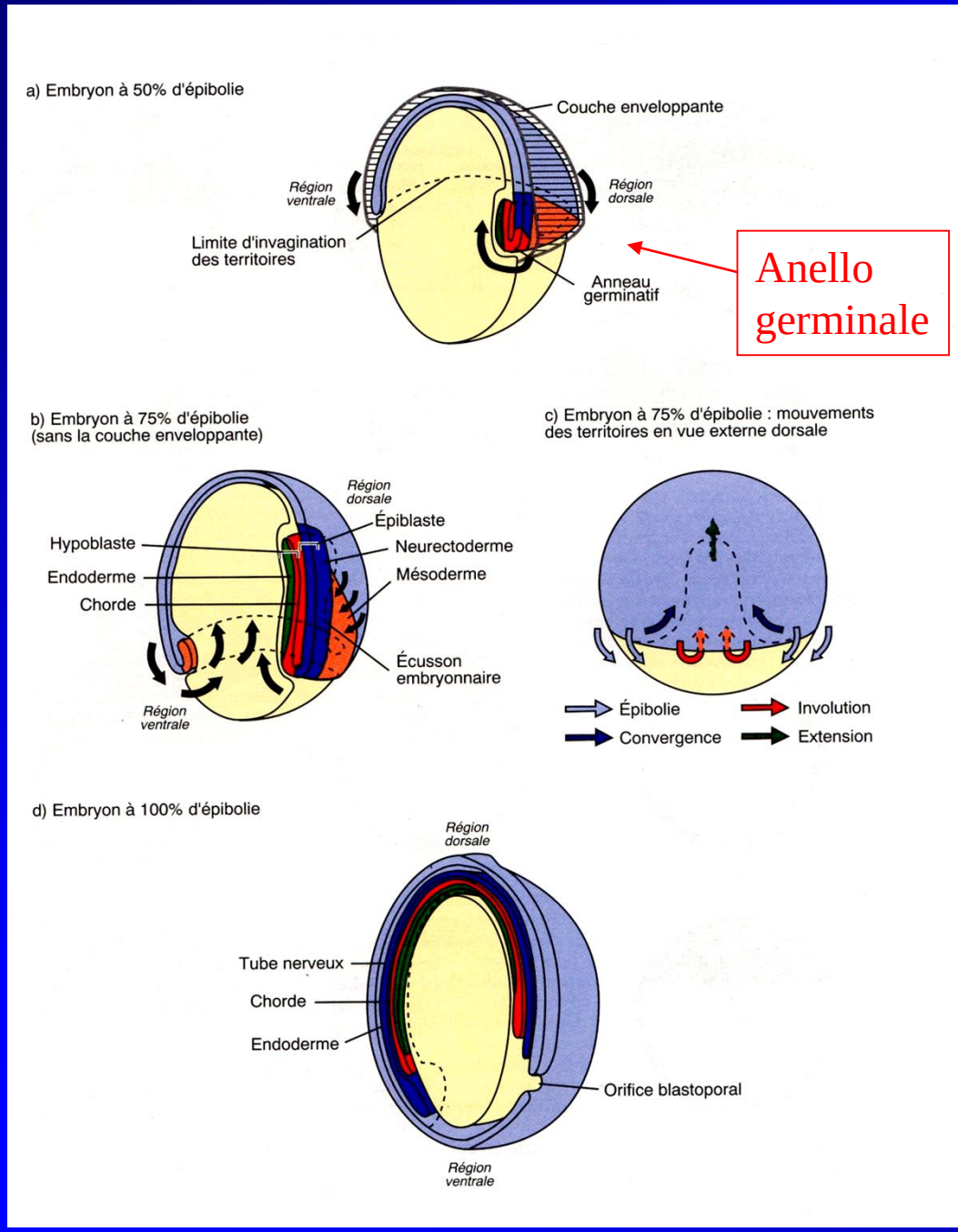
l) Écusson (de profil)

Scudo embrionale

Carte des territoires présomptifs au stade 50% d'épibolie



Vue latérale

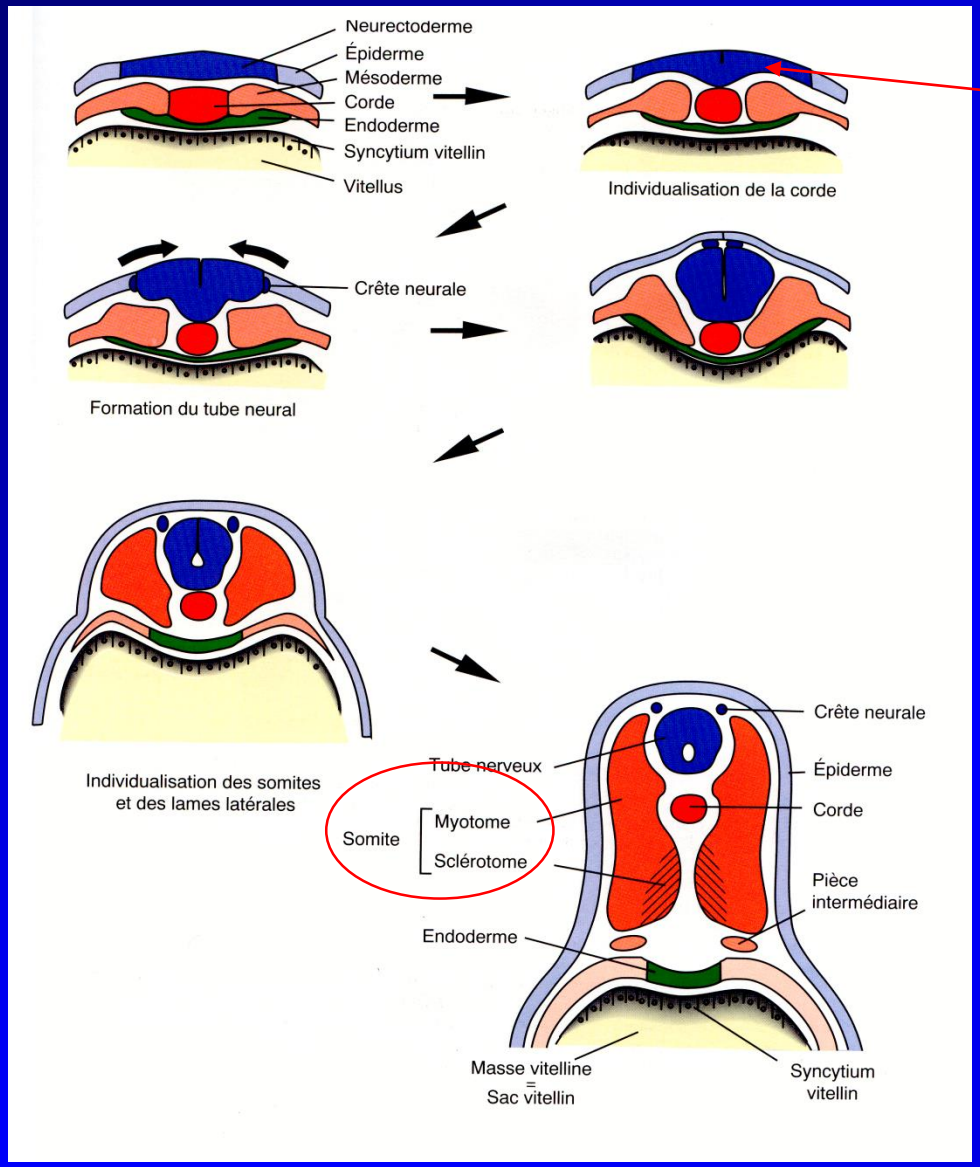


Anello germinale

Gastrulazione

Strato esterno= periderma
Epiblasto= ectoderma
Ipoblasto= mesoderma
endoderma

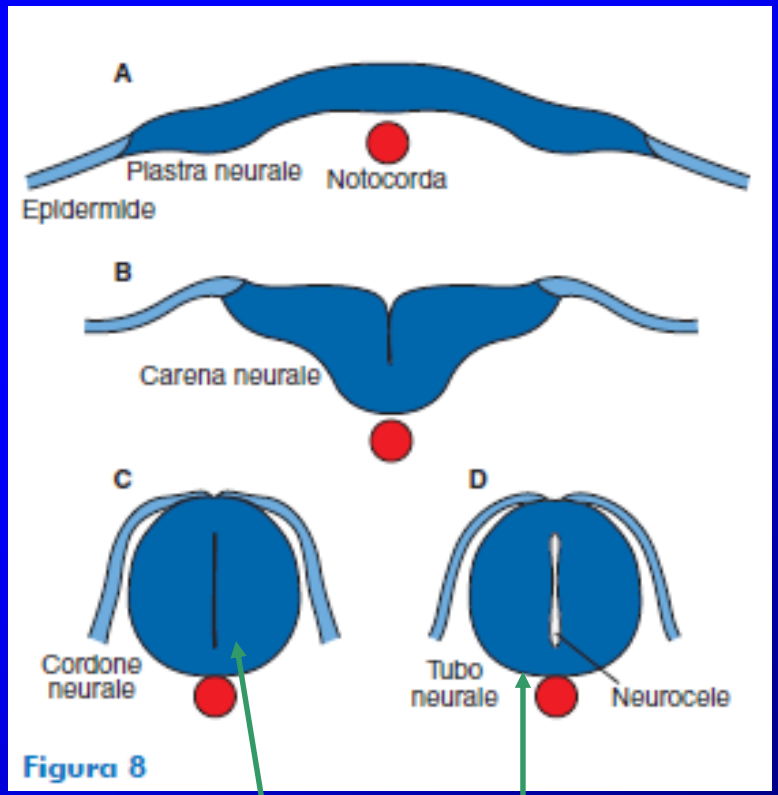
1. Convergenza
2. Involuzione
3. Epibolia
4. Estensione



Organogenesi

Carenatura neurale

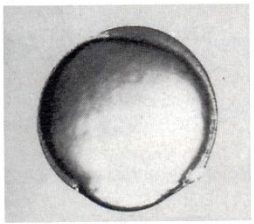
Neurulazione



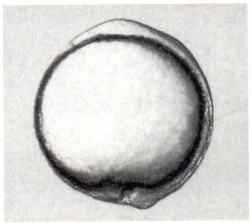
Tubo chiuso

Tubo cavo

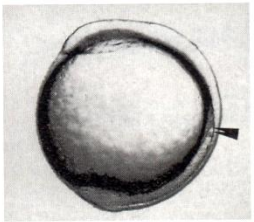
a) Formation du jeune bourgeon caudal et somitogenèse



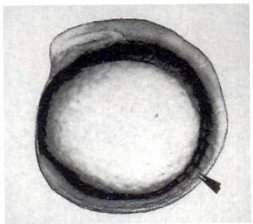
80% épibolie



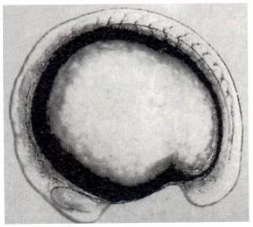
Bourgeon caudal



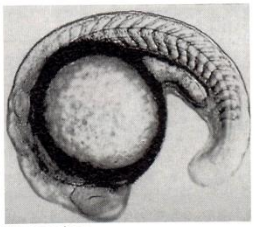
1 somite



5 somites

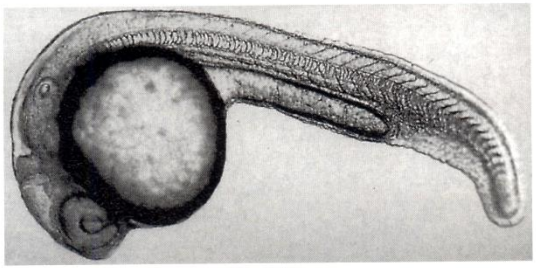


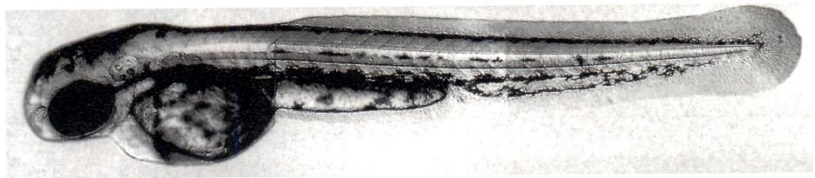
15 somites



20 somites

b) Redressement du bourgeon caudal





Bourgeon caudal âgé

c) Formation de la larve nageuse



(*d'après* Boulekbache, 1998)

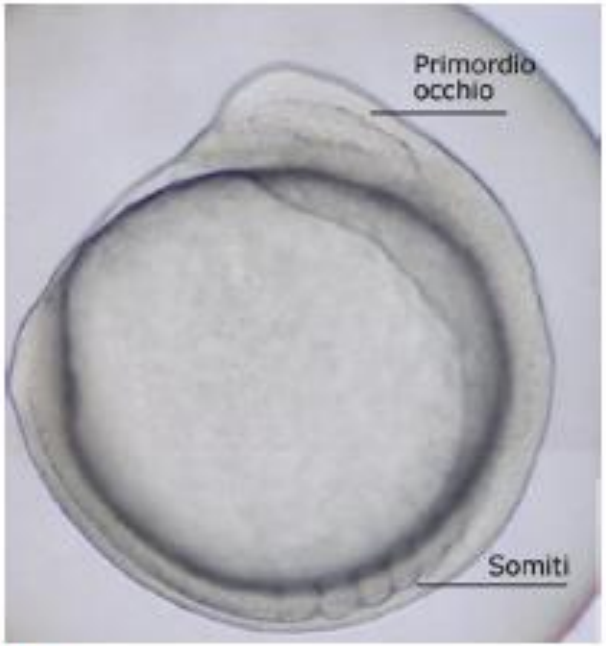


Figura 6

Avannotto

Teleosteo – sacco del tuorlo

