

SİNDİRİM SİSTEMİ

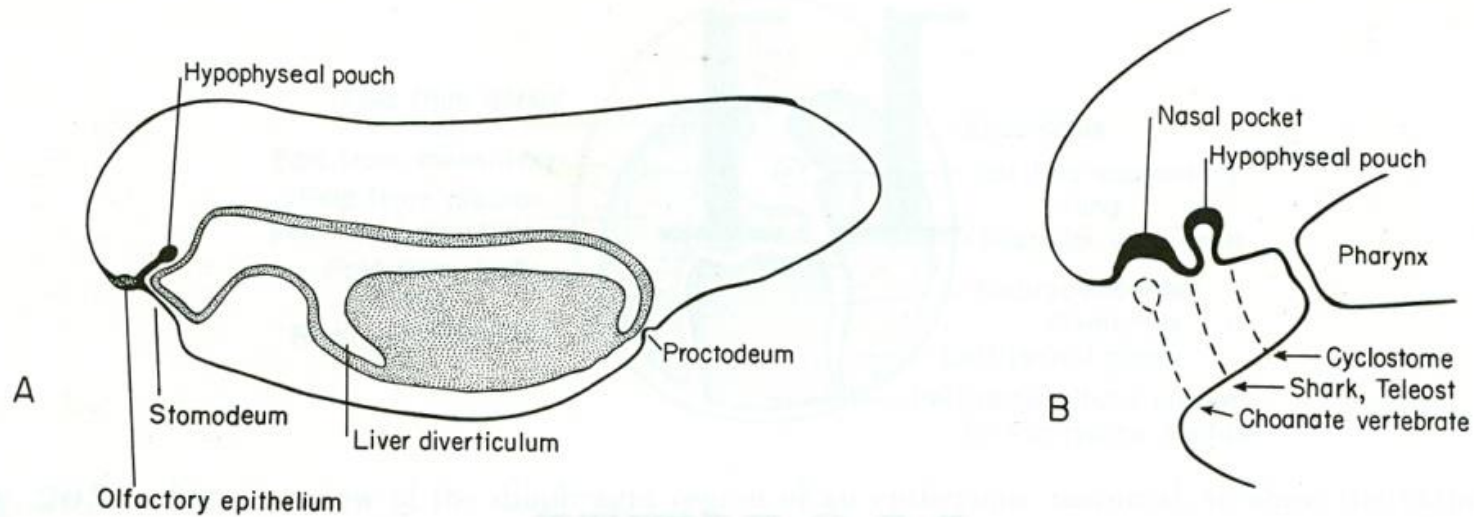


Fig. 206. *A*, Diagram of a larval amphibian (at about the stage of Fig. 70, *E*), in longitudinal section, to show the extent of the endoderm (stippled) and its relation to structures of the mouth region. *B*, Diagram to show the comparative position of the mouth margins in various types of vertebrates (cf. text).

Sindirim kanalının embriyonal gelişimi

Syclostomata – Ağız açık



Köpek balığı

Ağız ventral konumlu



Palamut – Ağız kapalı



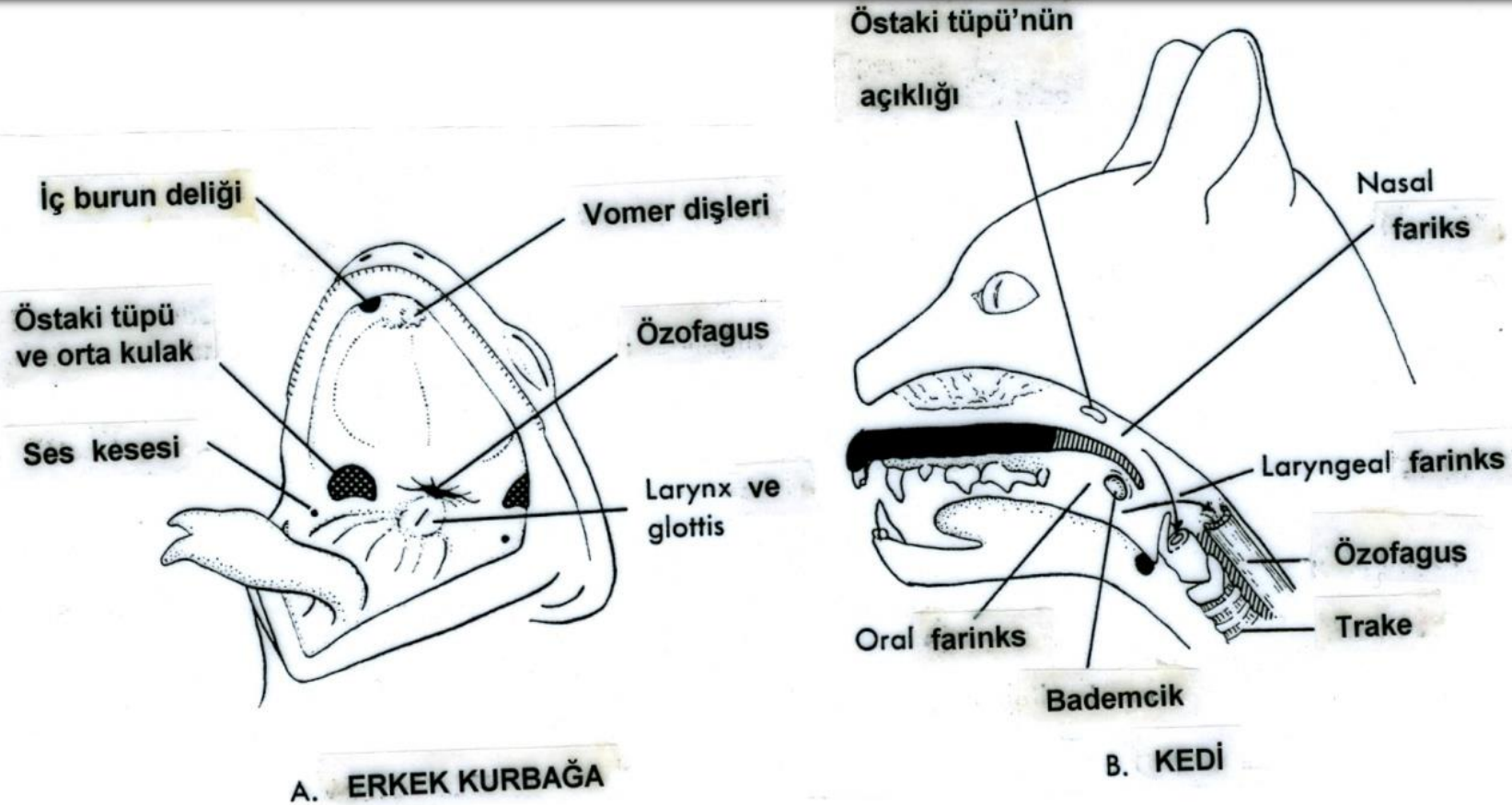
Platypus – dudaklar hareketsiz



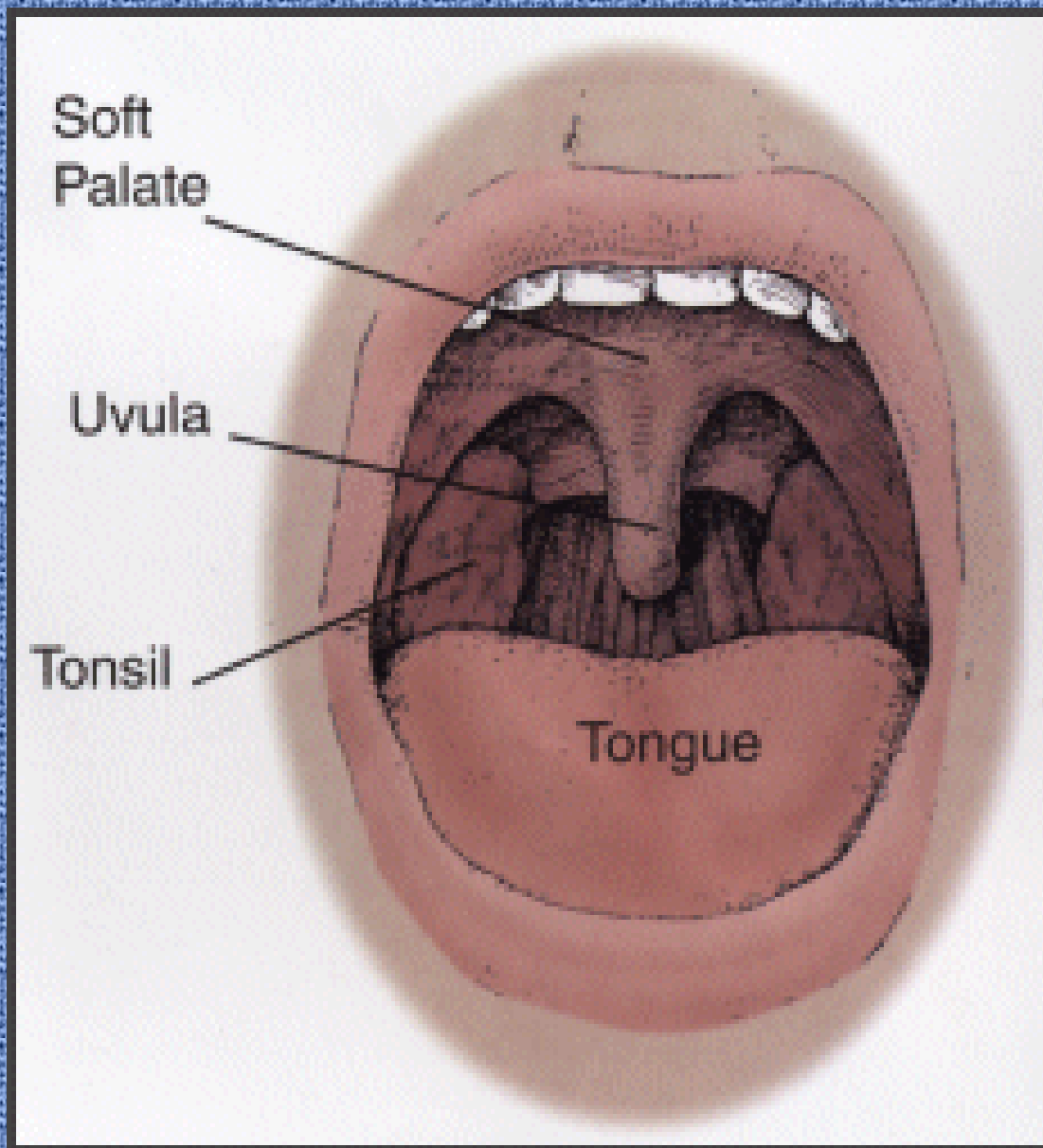
Beyaz balina – dudaklar hareketsiz



Amfibi ve Memelilerde oral boşluk ve yutak



Şekil 7 - 4. Amfibi ve Memelilerde oral boşluk ve yutak. Sekonder damak sadece memelilerde var. Sekonder damağın kemiksi kısmı siyah ve yumuşak damak enine çizgili gösterilmiştir. Çapraz oklar besin ve hava'nın geçiş yollarını göstermektedir.



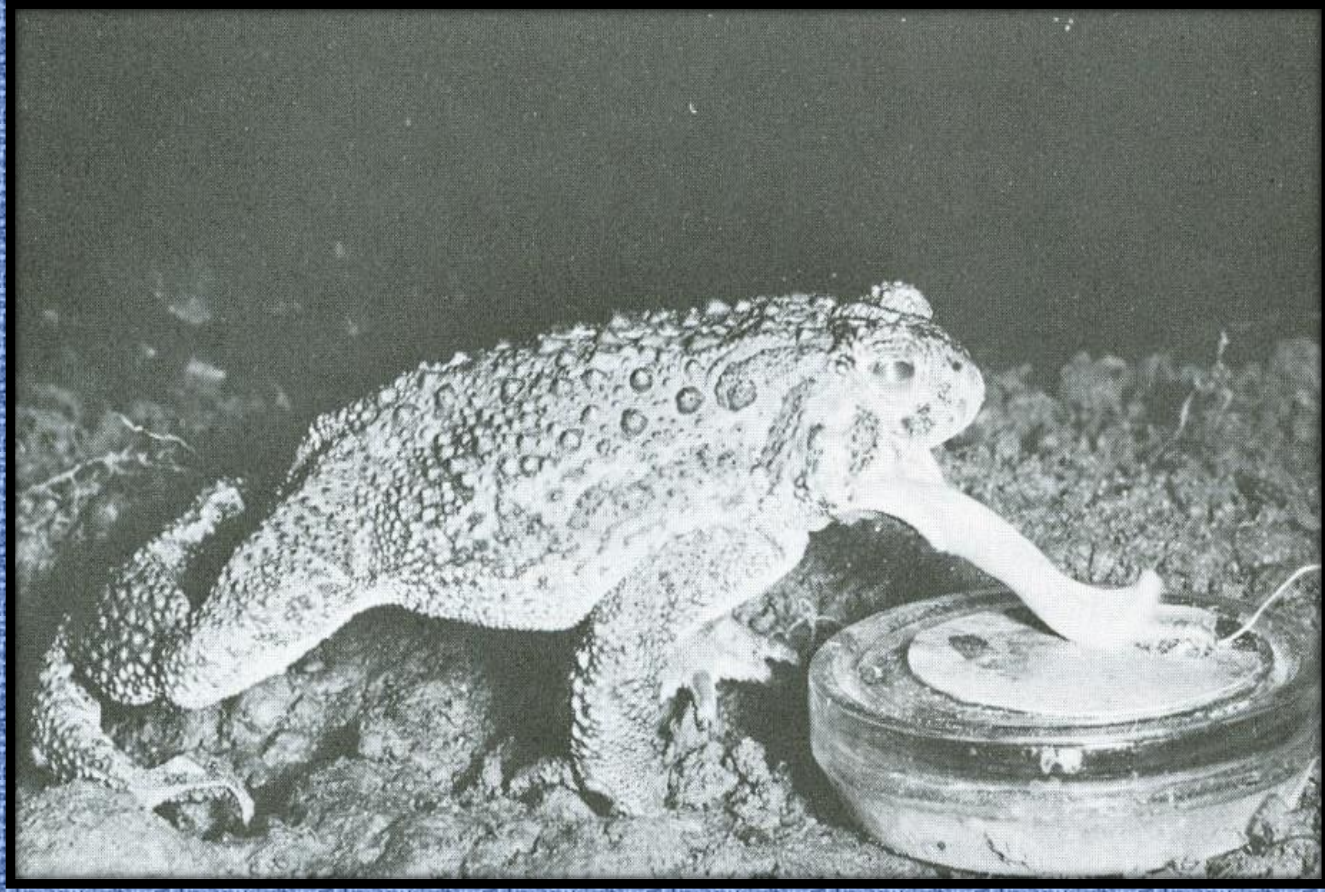
Uvula - insan



Hamster - vestibül



Kurbağada dil



Yılanlarda dil

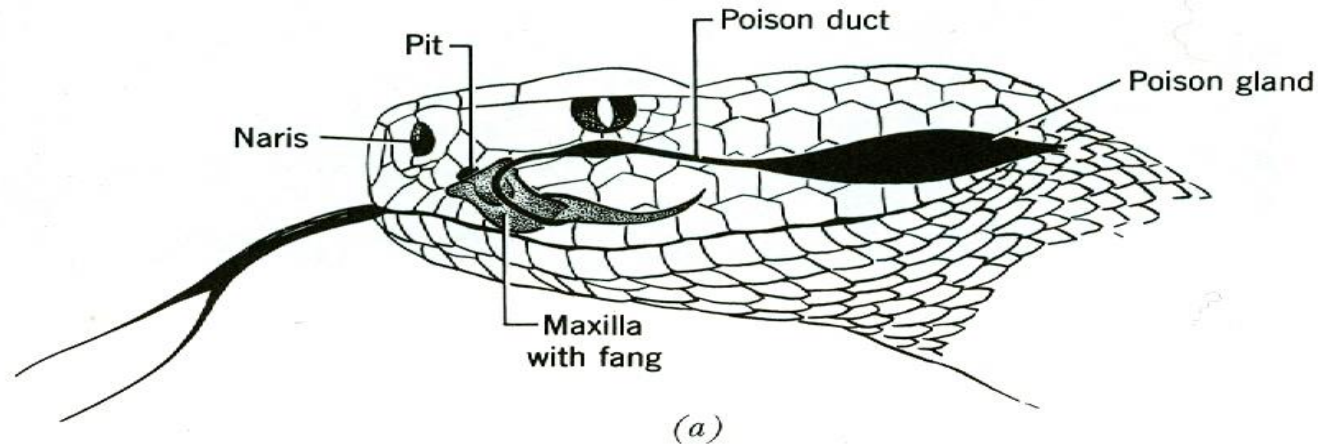


Figure 11. (a) Head of rattlesnake showing the position of the poison gland and duct and the maxilla and fang; (b) Head of a cottonmouth moccasin, with the poison gland and duct dissected. (Drawn by R. Beach. Courtesy of Drs. J. F. Germaro, Jr., P. J. Squicciarni, and N. J. Rohan, University of Florida.)



Ağaçkakan- hareketli dil



Frenulum - insan

inek dili

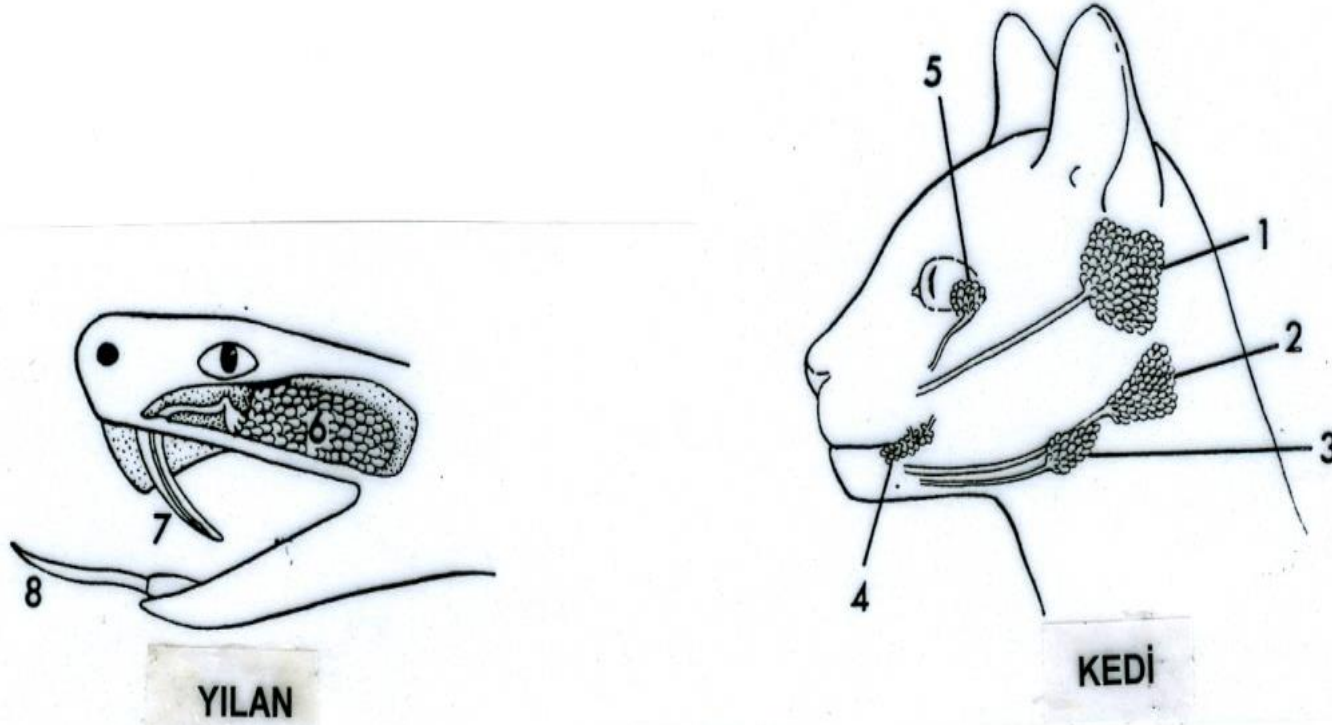


Köpek dili



REPLAY

Reptil ve Memelilerde oral bez tipleri



Şekil 7 - 3. Bir reptil ve bir memelide oral bezler. Kuşların büyük oral bezleri yoktur. 1 - 5, parotid, submandibular, sublingual, molar ve infraorbital tükürük bezleri (sırasıyla); 6, çingiraklı yilanda zehir bezi; 7, zehir dişi; 8, dil.

Köpekte büyük tükürük bezleri

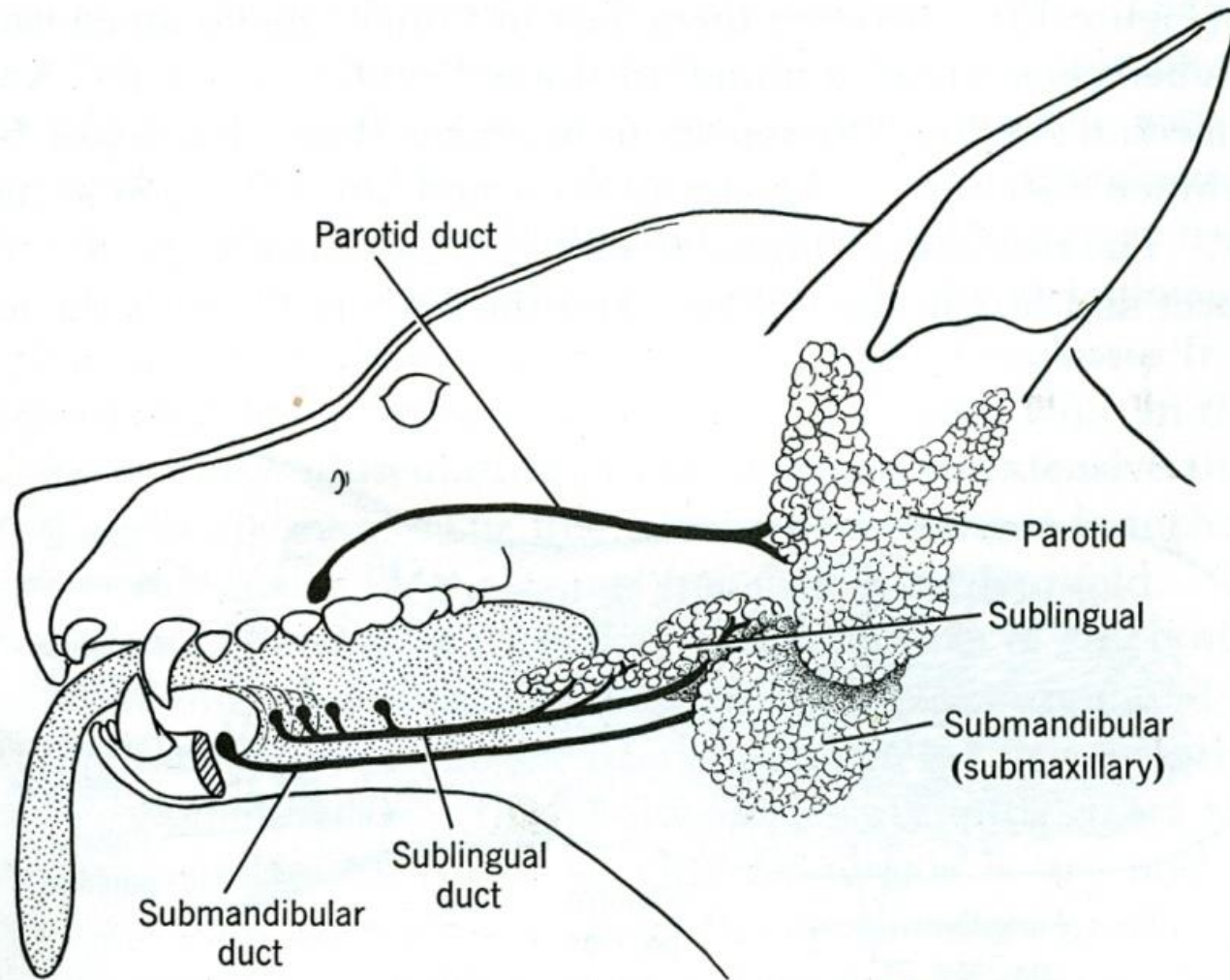
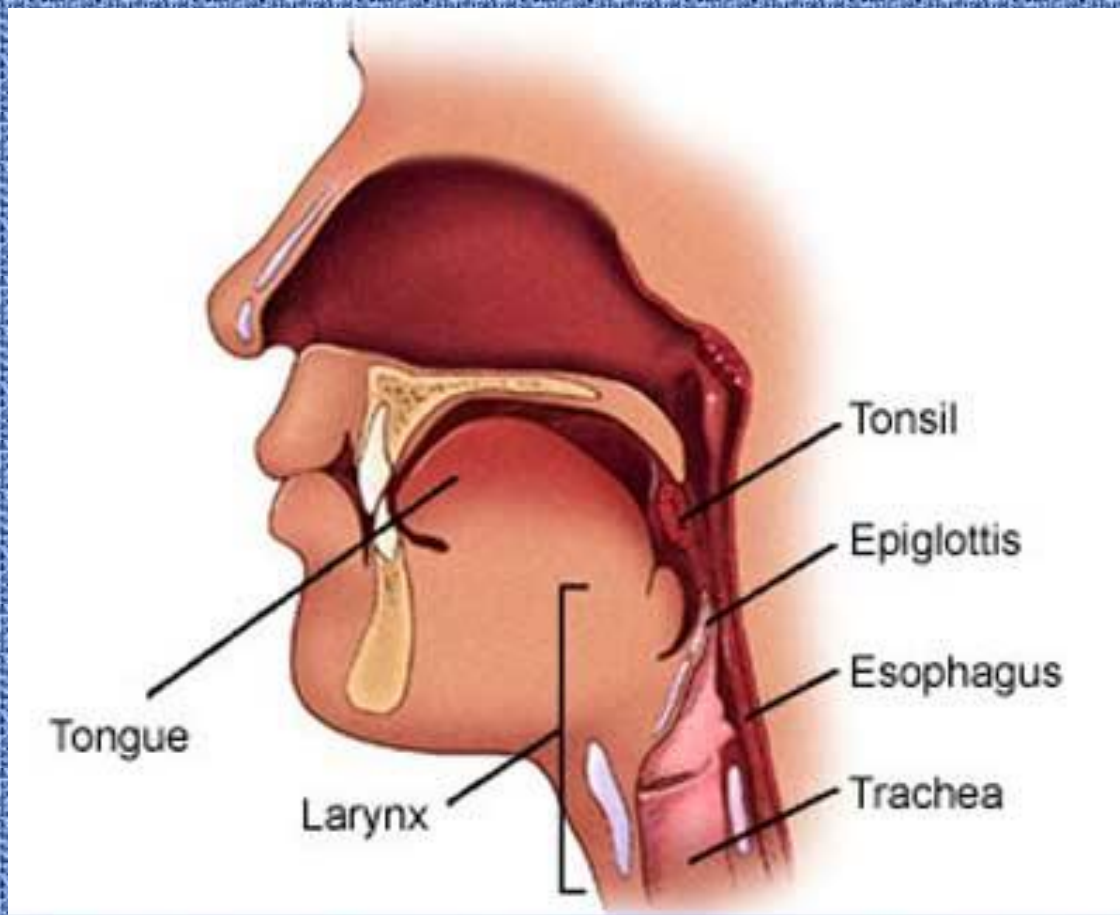
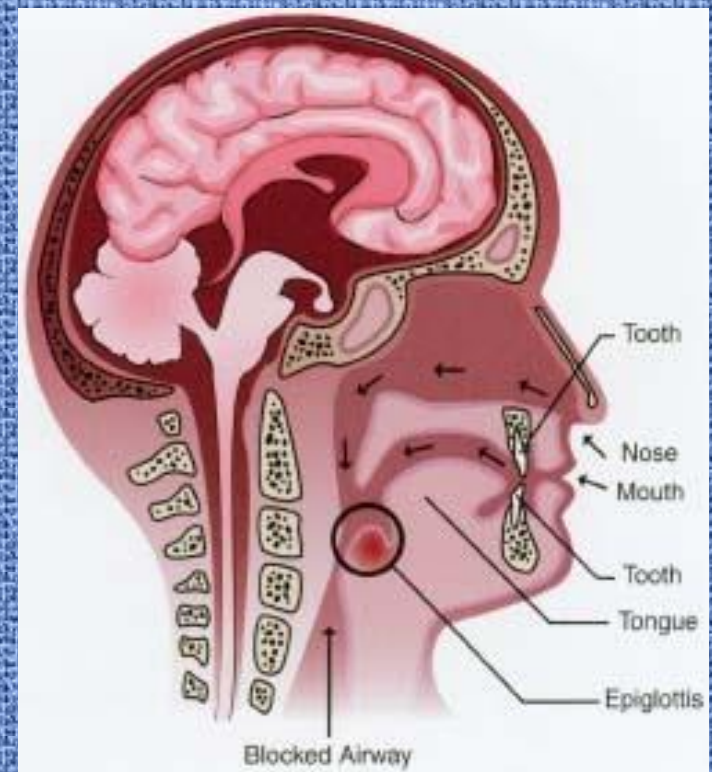


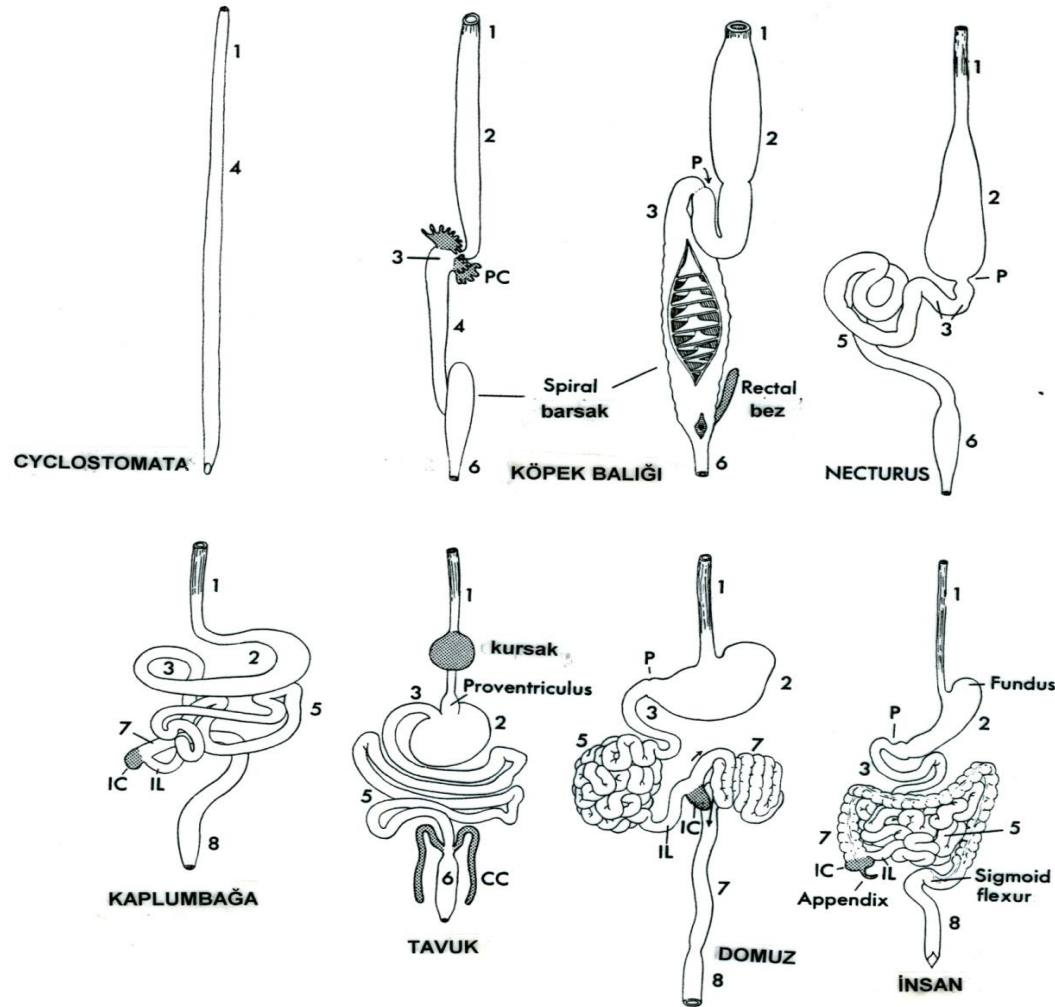
Figure 13. The major salivary glands of a dog.



Epiglottitis



Omurgalılarda sindirim kanal tipleri



Şekil 7 - 1. Birkaç omurgalıda sindirim kanalı. 1, Özofagus; 2, mide; 3, duodenum; 4, barsak; 5, ince barsak; 6, kalın barsak; 7, kolon; 8, rektum; CC, kuşlarda çift çekumlar; IC, ileokolik çekum; IL, ilyum; P, pylorik sfinkter; PC, pylorik çekum. Tüm çekumlar gri olarak gösterilmiştir.

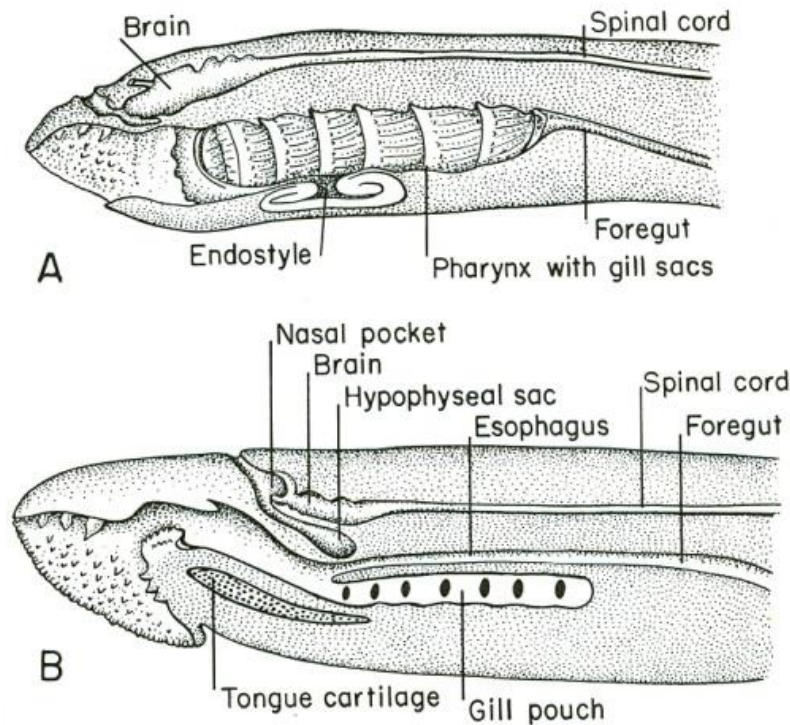
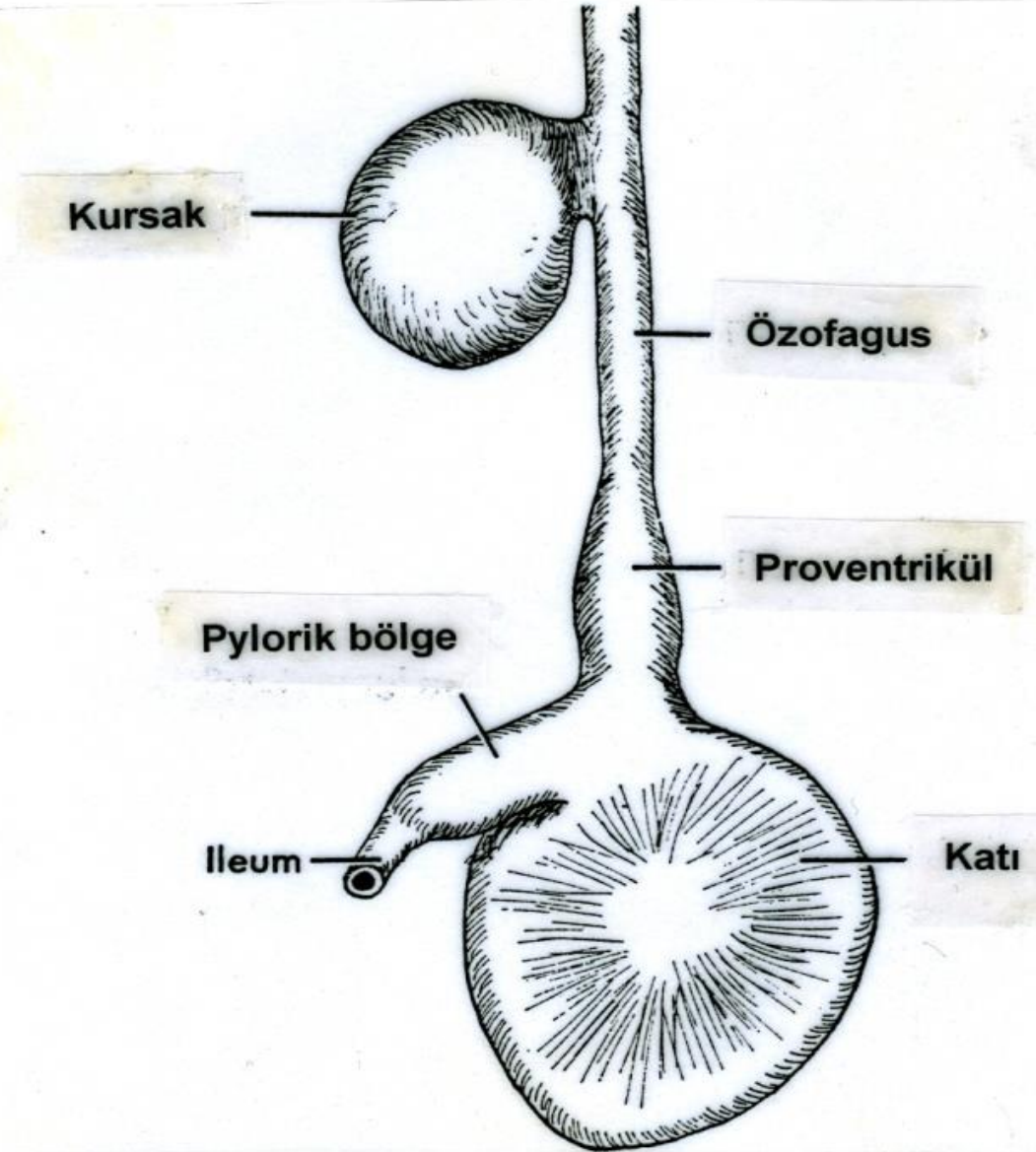


Fig. 231. Sagittal sections of *A*, the ammocoete larva of a lamprey; *B*, adult lamprey; to show especially the division of the adult pharynx into two parts. The endostyle of the larva becomes the thyroid gland of the adult (not shown). (After Goodrich.)

Özofagus – Agnatha (Petromyzon)

Kuřlarda Sindirim Sistemi



Şekil 7 - 5. Tohum tanesi yiyen kuřlarda kursak, özofagus ve mide.

Kuřlarda Sindirim Sistemi

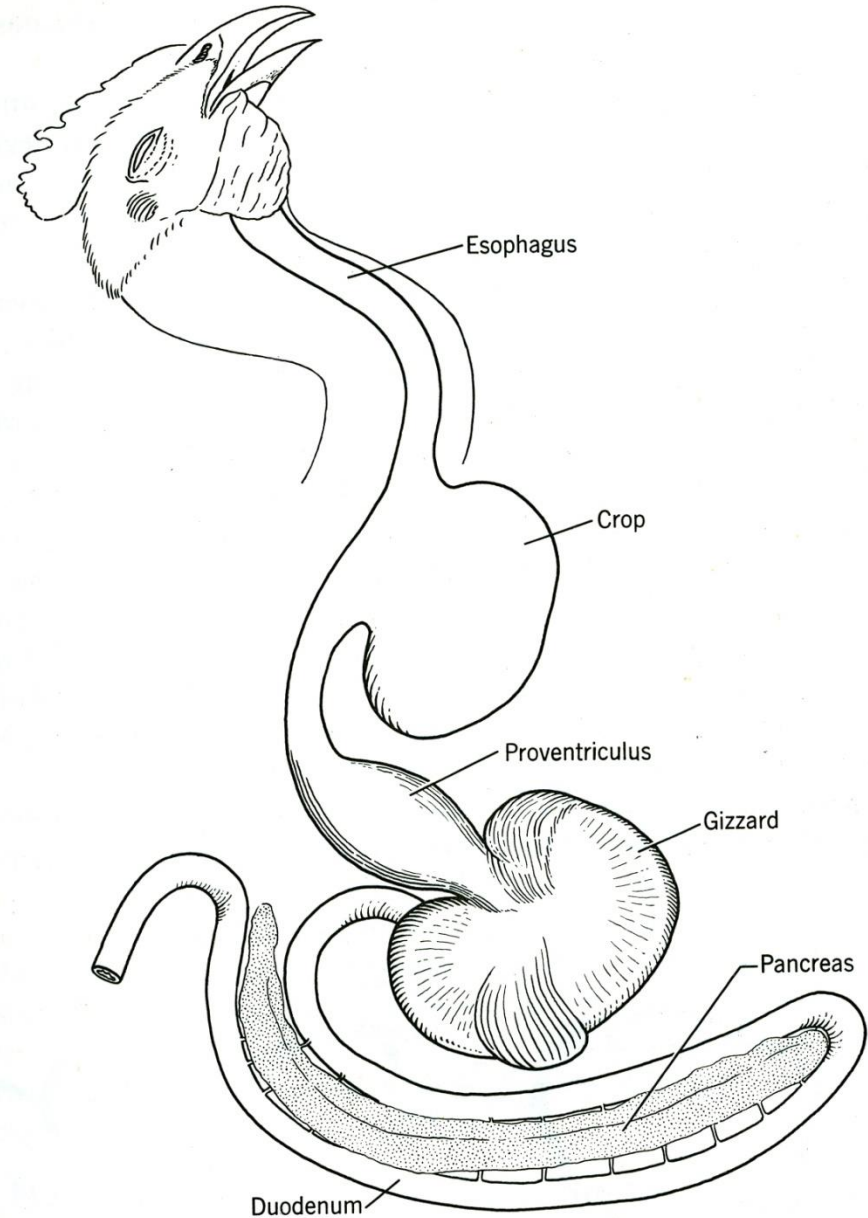
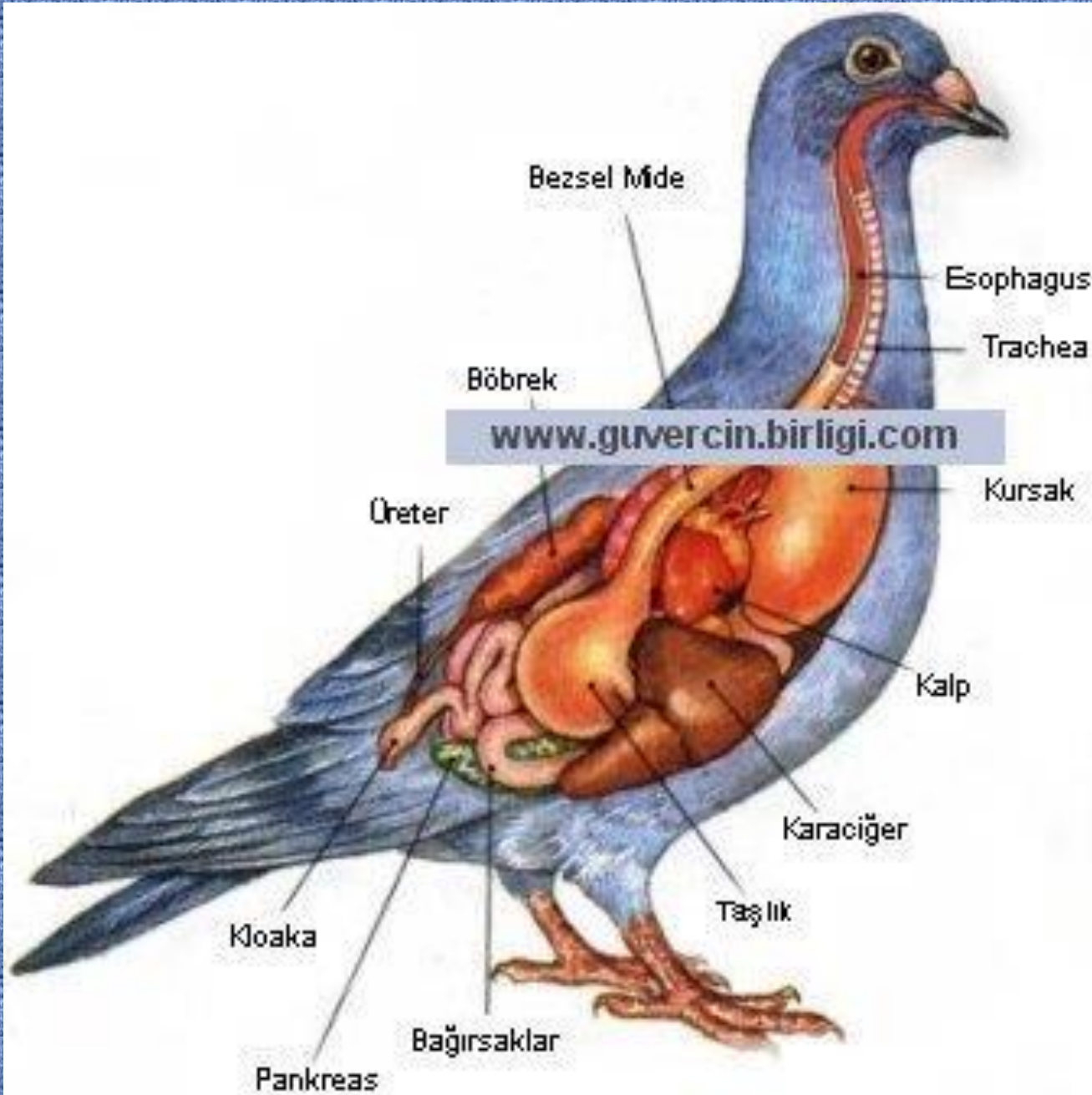
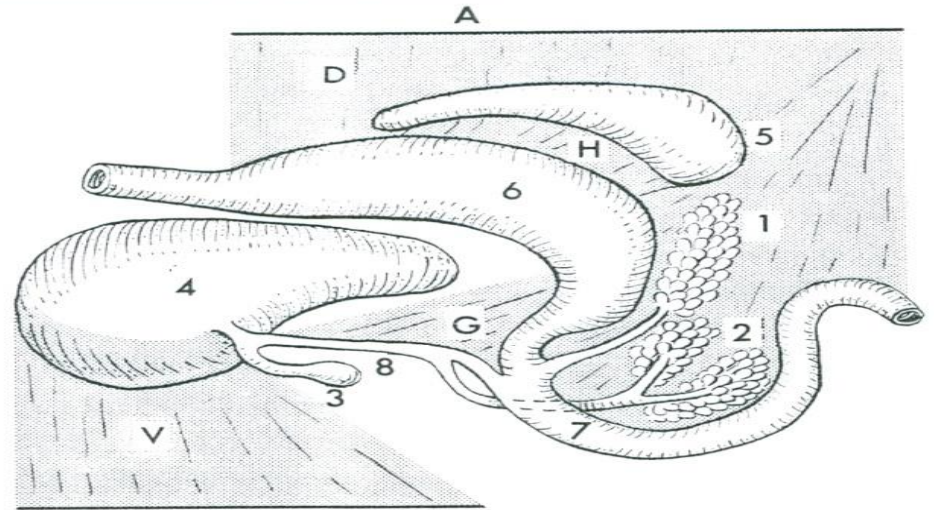
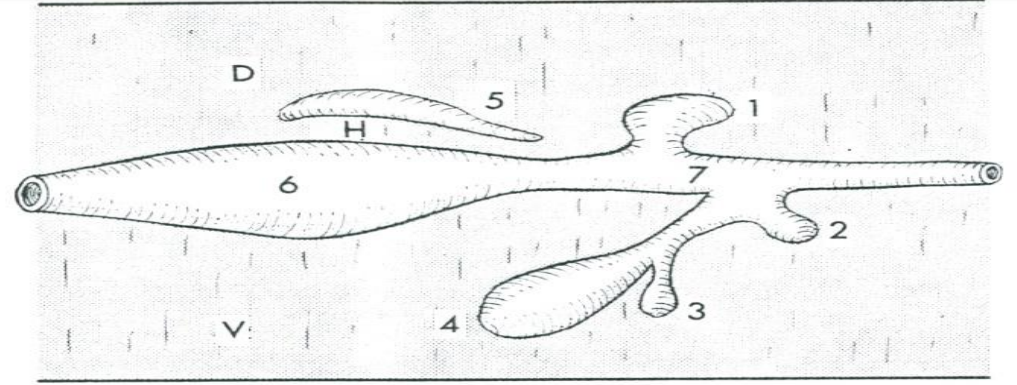


Figure 18. The anterior part of the digestive tract of a hen.

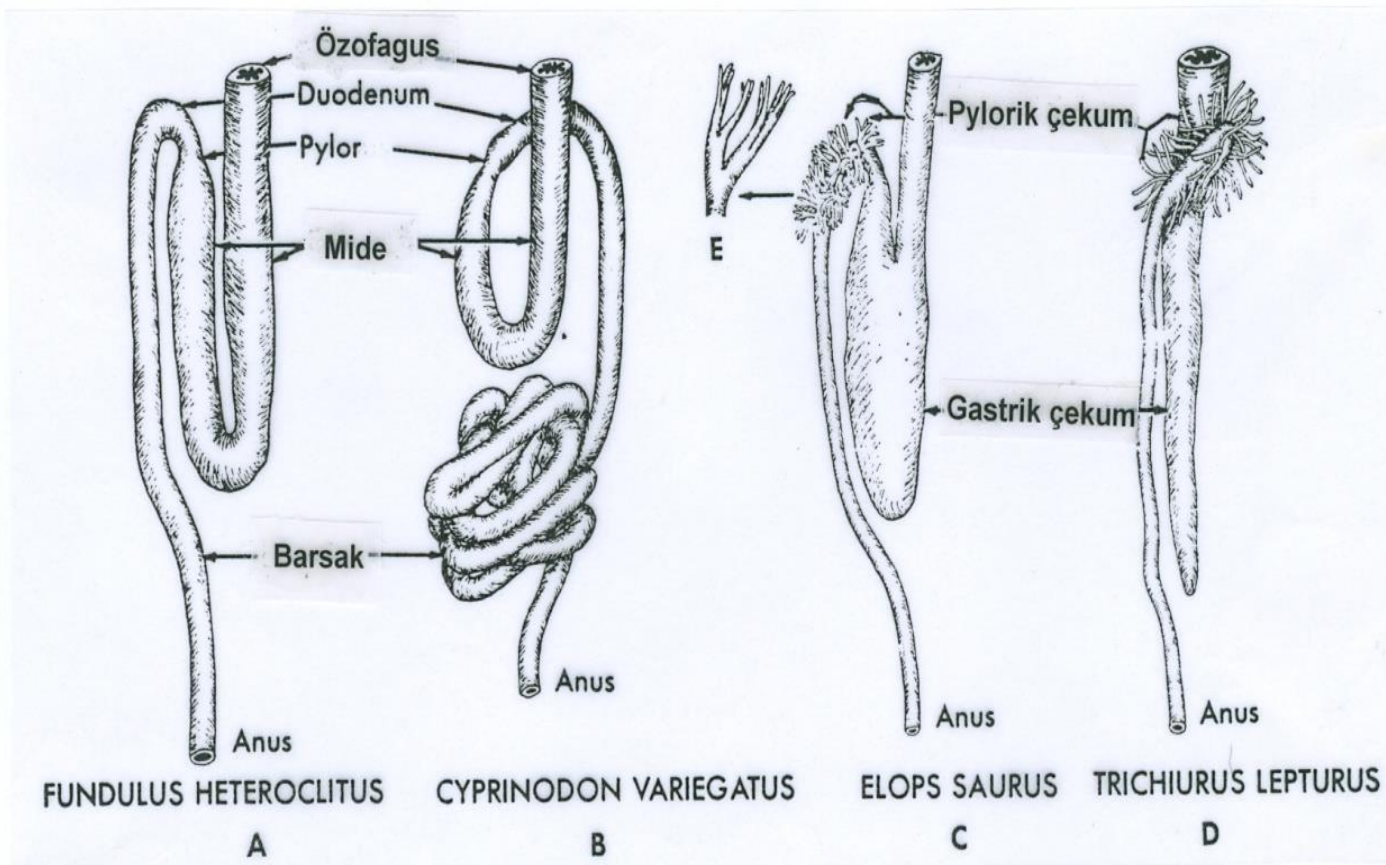


Karaciğer, pankreas, dalak ve midenin gelişimi



Şekil 7 - 10. Karaciğer, pankreas, dalak, mide ve ilgili mezenterlerin gelişimi. A, erken safhalar. 1, Dorsal pankreatik tomurcuk; 2, ventral pankreatik tomurcuk; 3, safra kesesi; 4, A da karaciğer tomurcuğu ve B de karaciğer; 5, dalak; 6, mide; 7, duodenum; 8, müşterek safra kanalı. D, Dorsal mezenter; G, küçük omentum; H; gastrosplenik ligament; V, ventral mezenter (B de falsiform ligament olarak kalır).

Teleostlarda sindirim kanalı



Memelilerde mide ventral görünümü

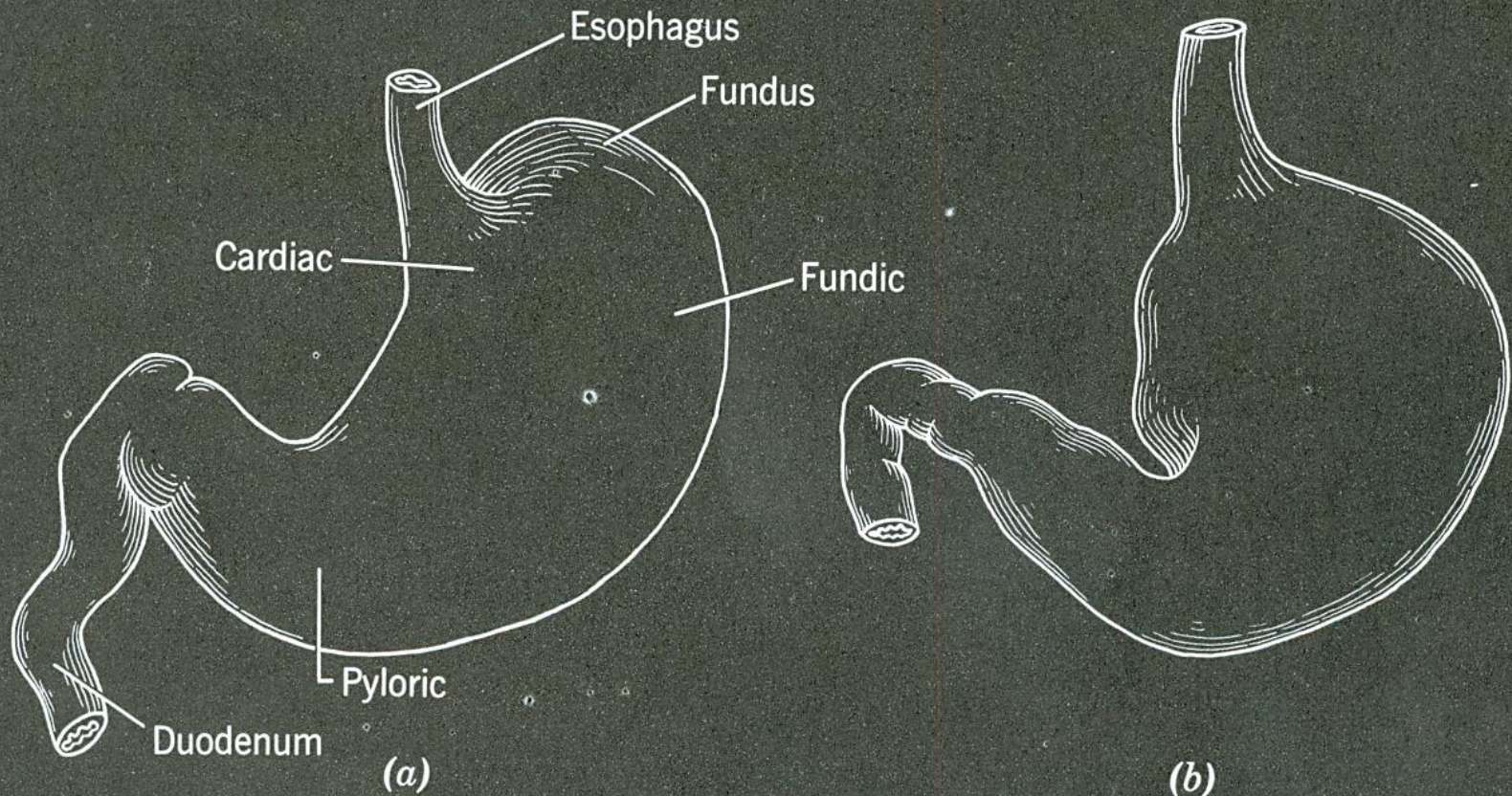
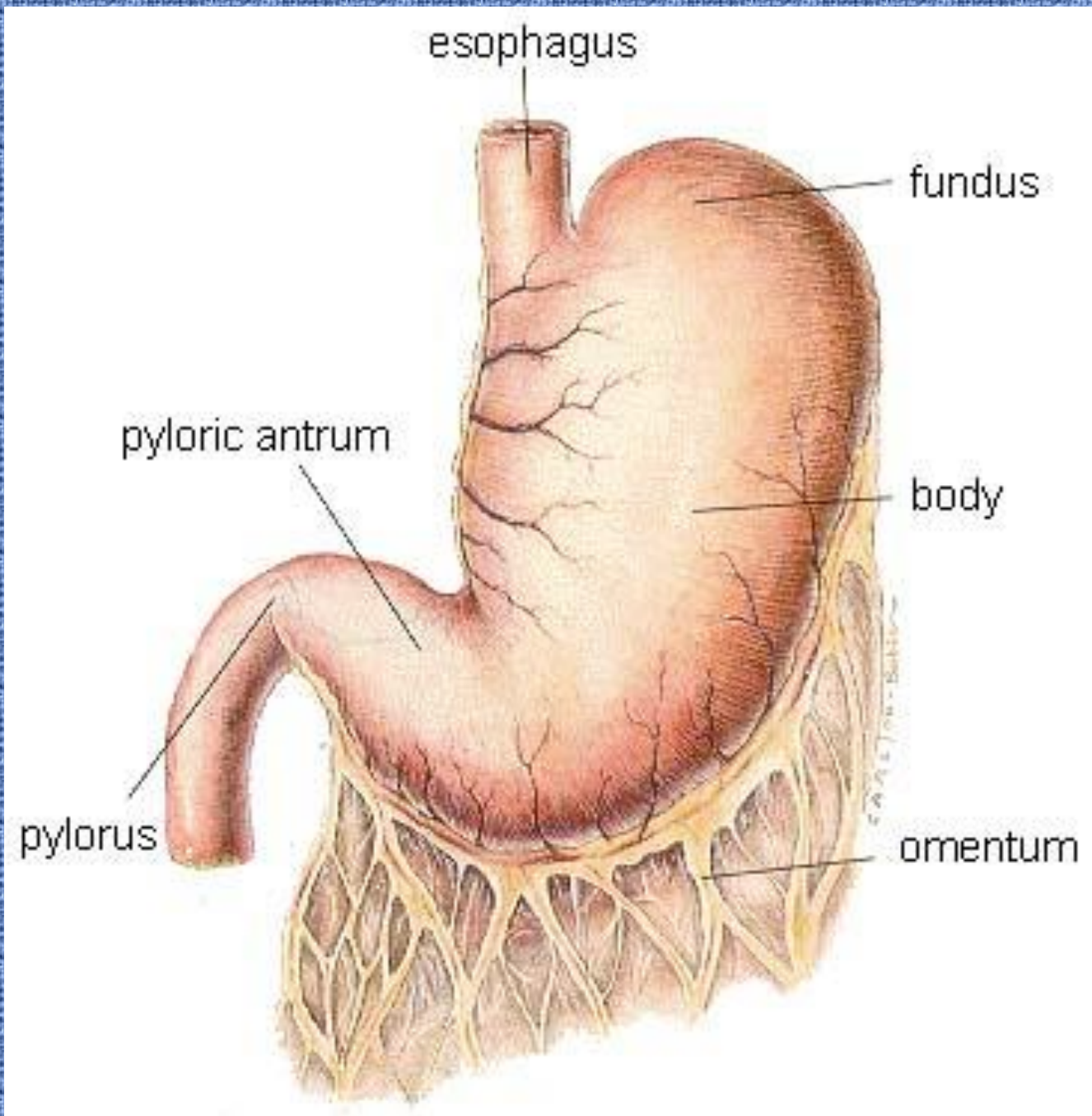
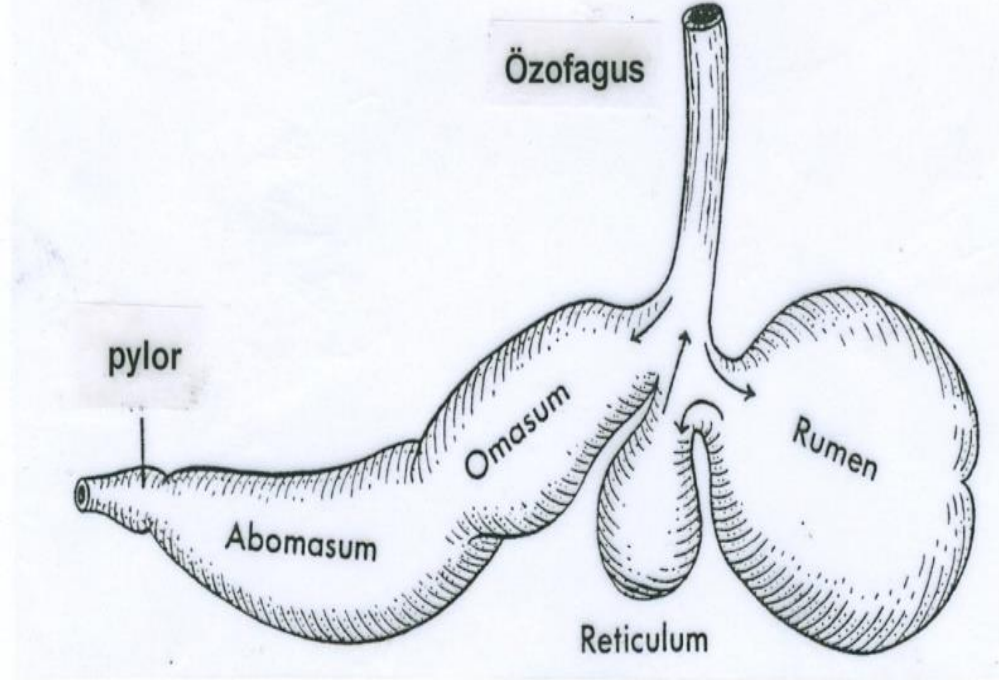


Figure 19. Ventral view of the stomach: (a) man; (b) cat.

Büyük omentum

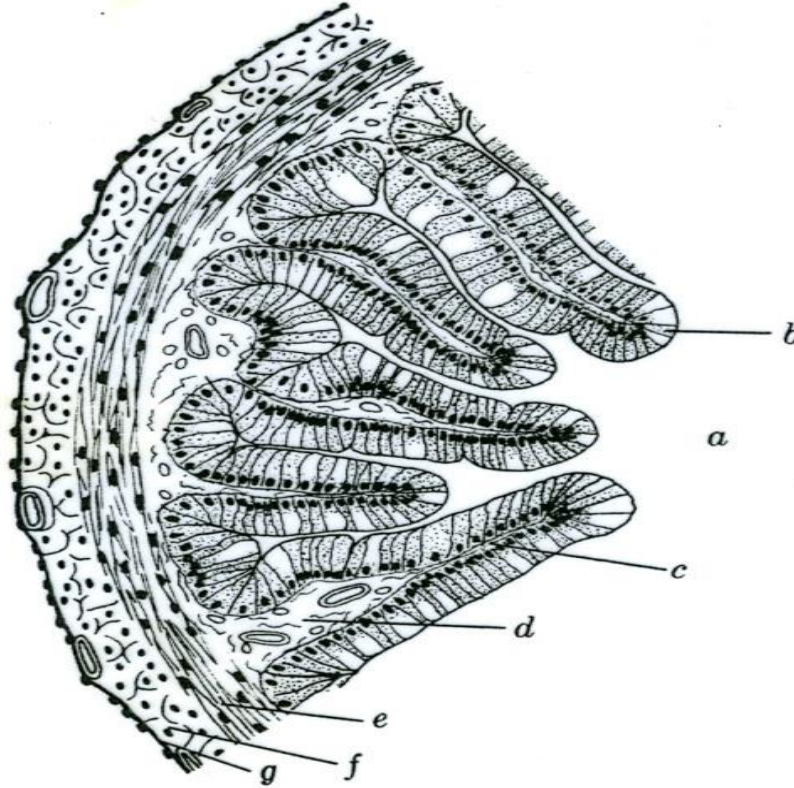


Geviş getiren memelilerde mide



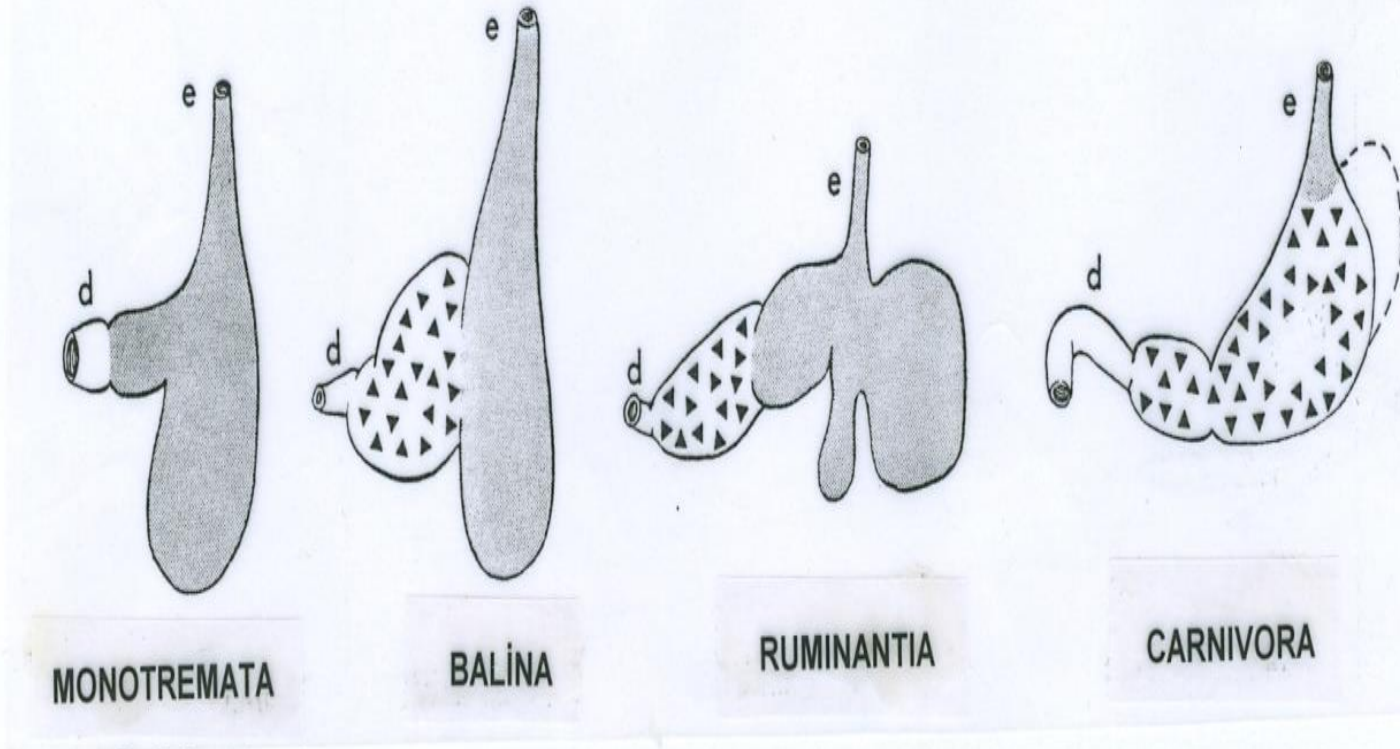
Şekil 7 - 8. Geviş getiren memelilerin midesi. Oklar besinin izlediği yolu göstermektedir.

Mide ışık mikroskobu görünümü



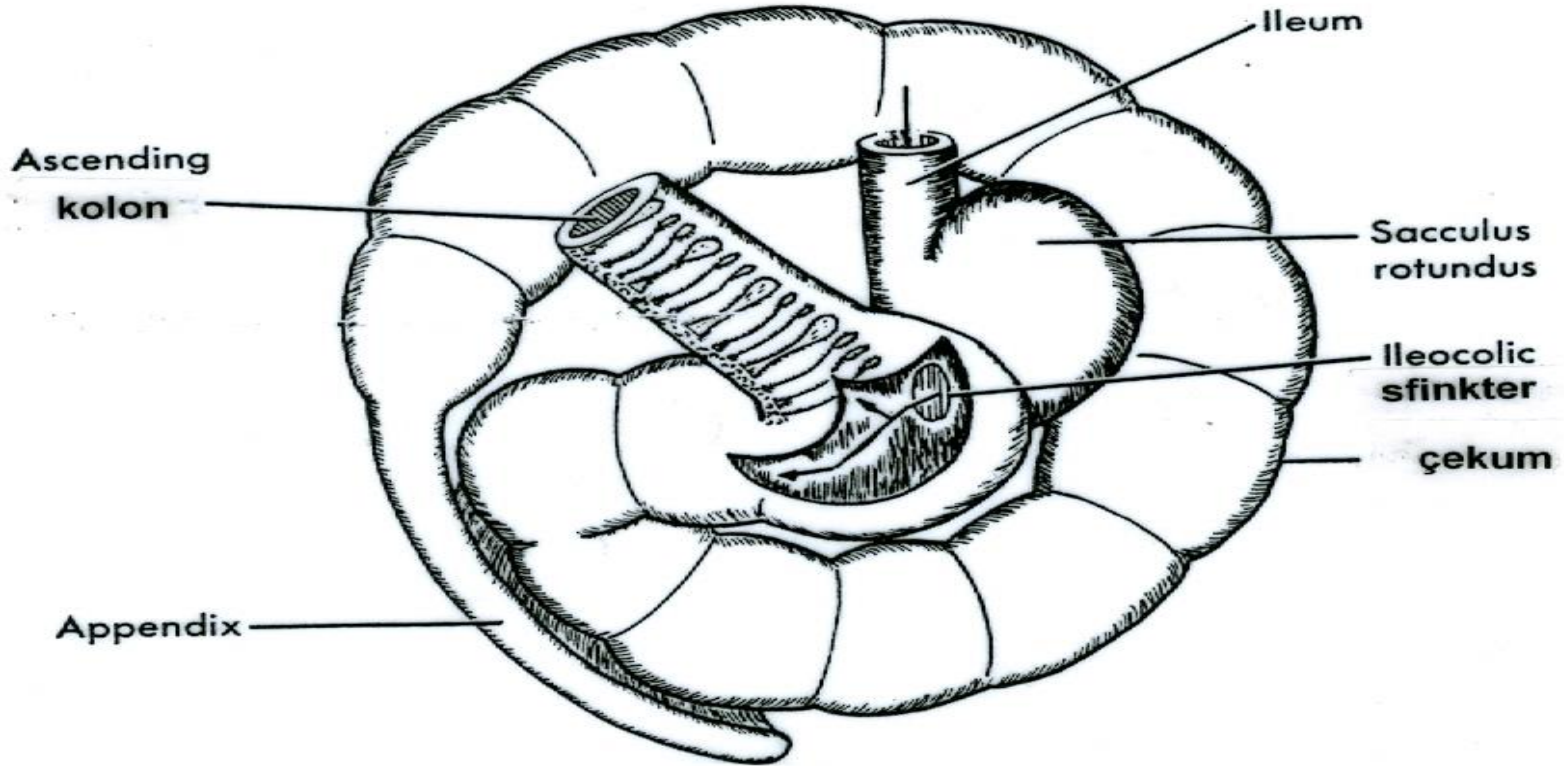
Şekil 7 - 2. Mide duvarından enine kesit. a, Lümen; b, yüzey epiteli; c, lamina propria ve muskularis mukoza; d, submukoza; e, düz kas lifli halka tabaka; f, düz kas lifi boyuna tabaka; g, visseral periton.

Memelilerde Mide Tipleri



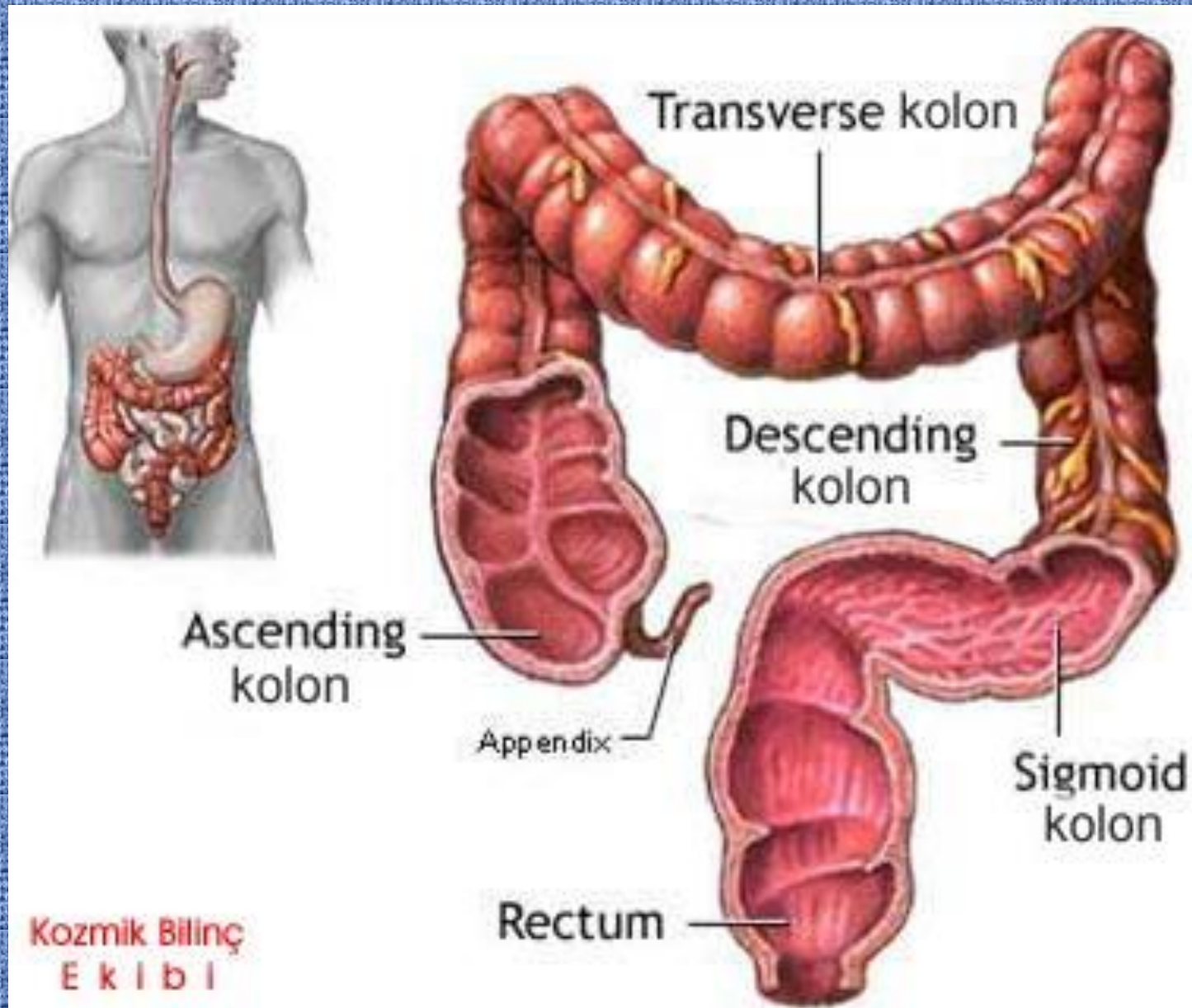
Şekil 7 - 6. Bazı memelilerin midelerinde tipik gastrik bezlerin (üçgen şeklinde) ve özofagustakine benzer epitelin (gri renkli) dağılımı .

Tavşanda iliokolik bölge



Şekil 7 - 9. Tavşanda ileokolik bölge, çekum ve kör barsak.

İnsanda kalın barsak



Balıklarda Pilorik Çekum

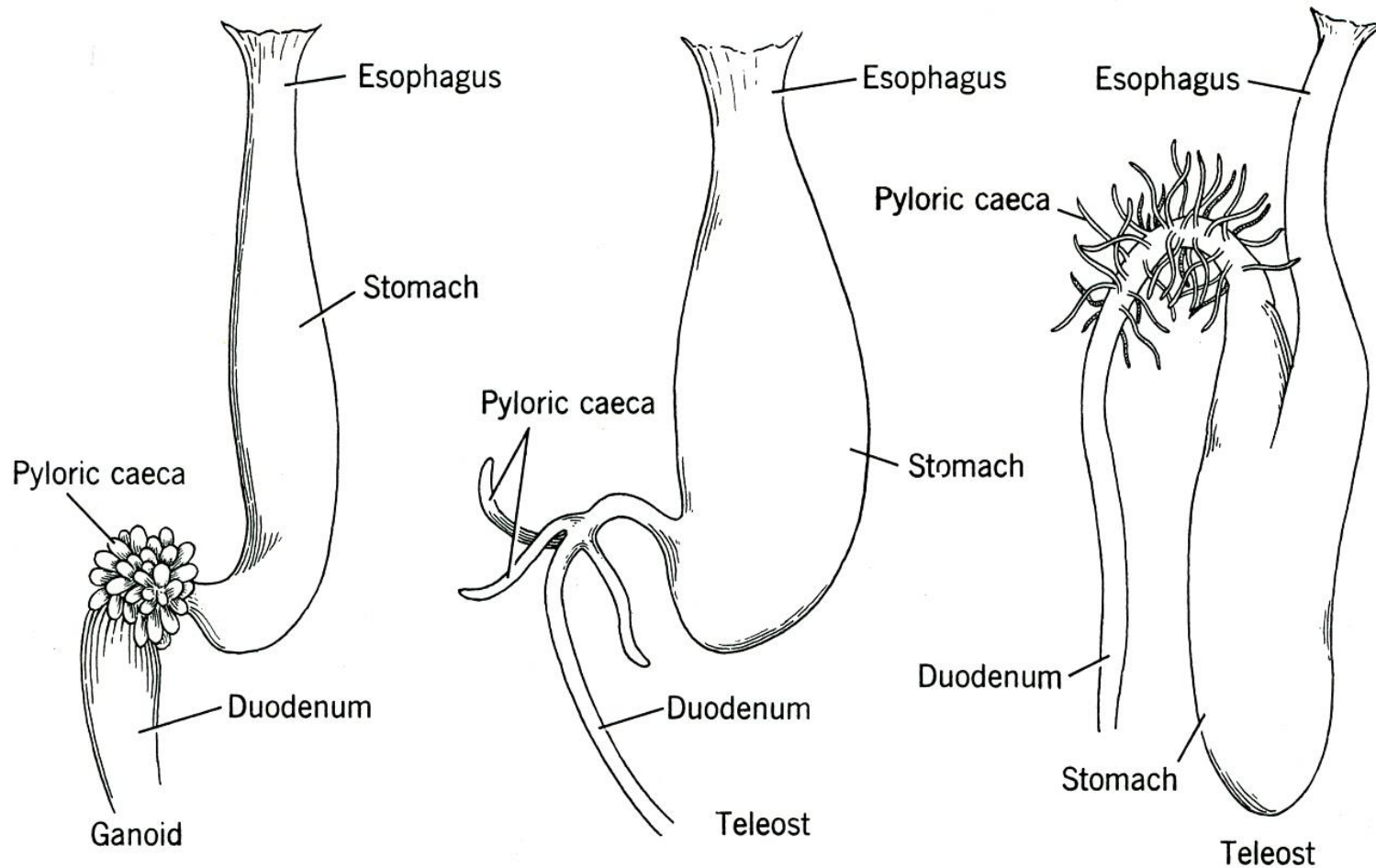


Figure 24. Pyloric caeca in fishes.

Kuşlarda Kolik Çekum

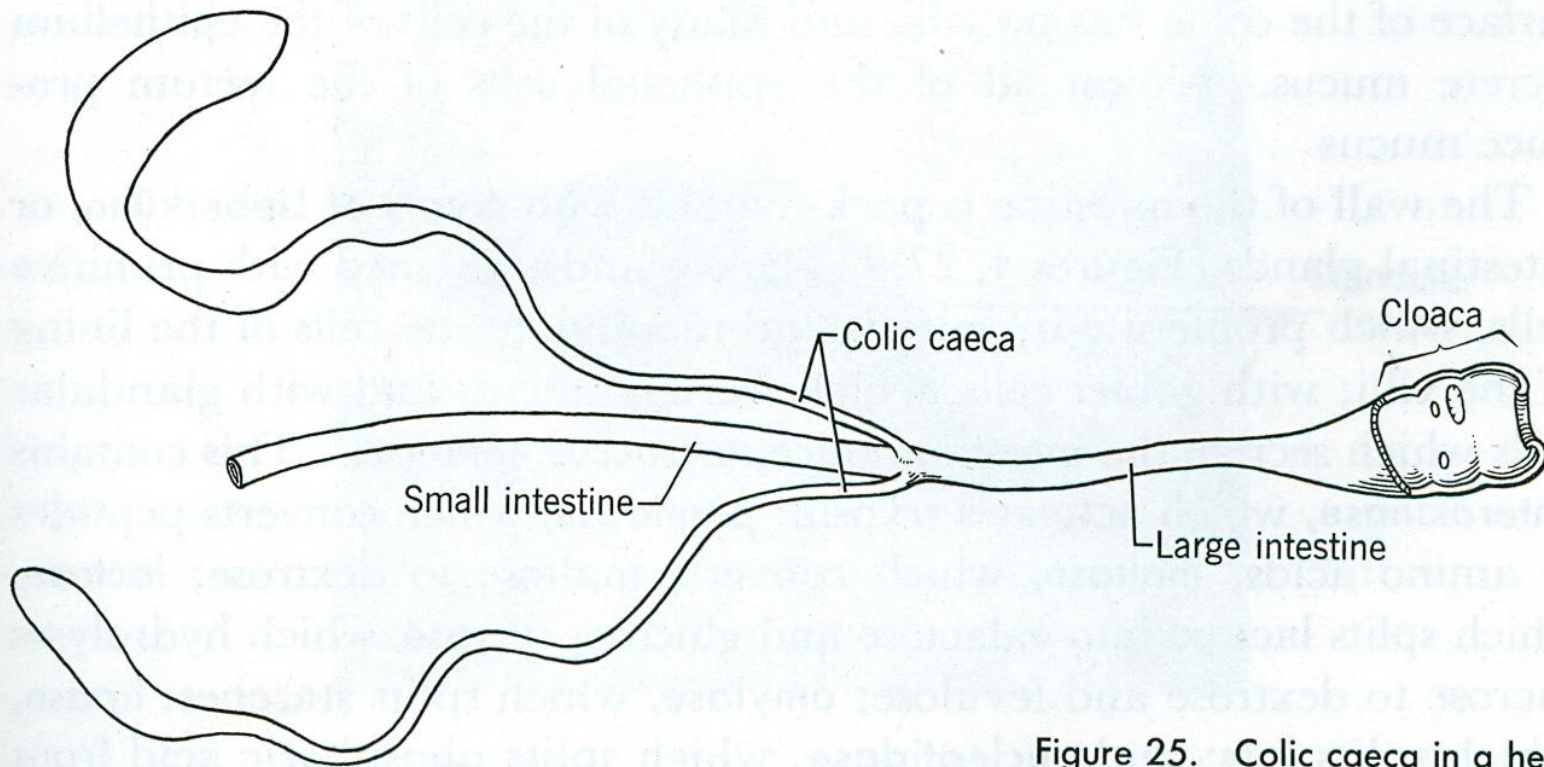


Figure 25. Colic caeca in a hen.

İnsanda Karaciğer ve Safra Kesesi

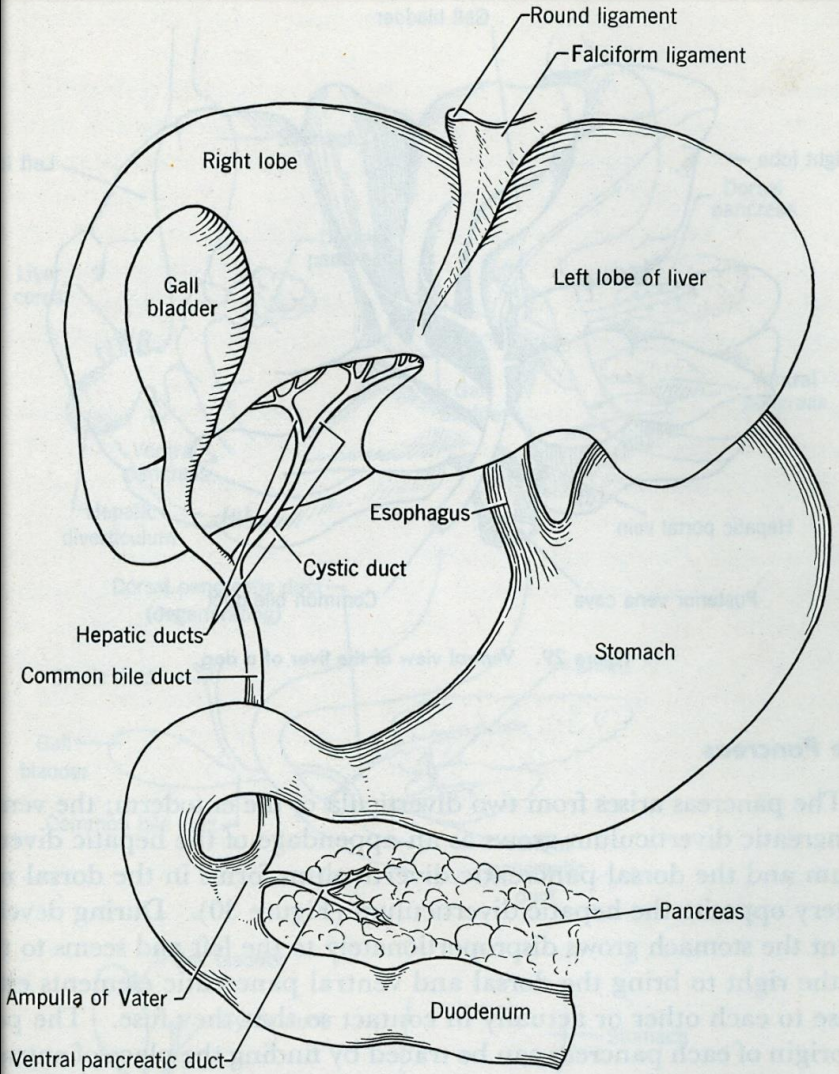
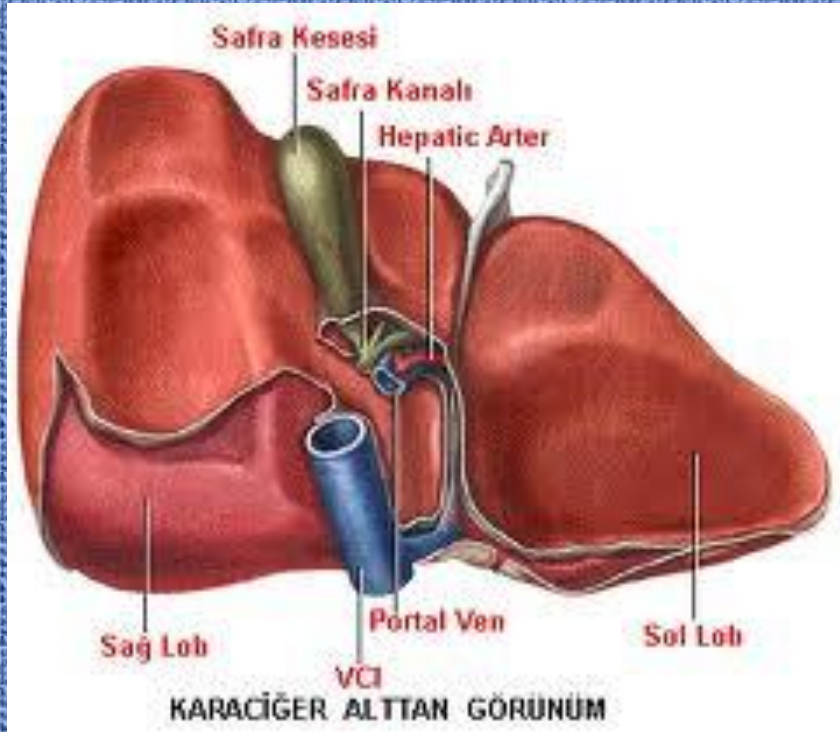


Figure 28. Liver and gall bladder of man.

Memelilerde Pankreas

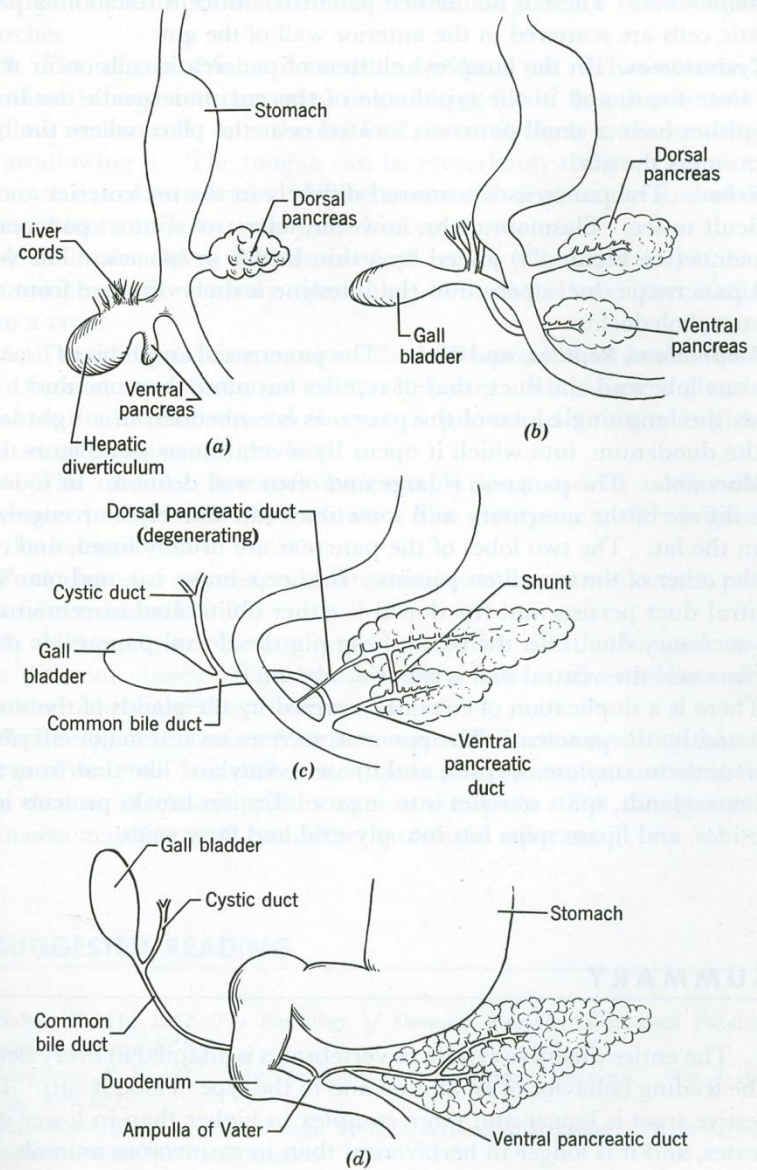


Figure 30. Progressive stages in the development of the pancreas in a mammalian embryo: (a) (b) and (c) show the gradual rotation of the stomach to the right and the coming together and fusion of the pancreatic elements; (d) the adult pattern.