

ORAL CAVITY

With your scissors cut through the *corner of the mouth* on each side in a posterior direction. Continue cutting through the *angle of the jaw*. Expose the entire tongue. The interior of the oral cavity may now be examined.

Vestibule — This refers to the area between the lips and the teeth.

Tongue — This elongated muscular structure is readily visible upon the floor of the mouth. It is attached vertically along much of its length by a membrane, the *lingual frenulum*, and posteriorly to the *hyoid* bone. The surface of the tongue is covered by variously shaped projections known as sensory *papillae*. The greatest number of large fibrous papillae are to be seen at the anterior edge of the tongue. Microscopic *taste buds* are found at the sides and base of the papillae.

Teeth — Upon the upper jaw two *canine* teeth are visible in the photo, one on each side. These, and the third pair of *incisors* are the first to erupt.

The dental formula of the fetal (young) pig is: $I \frac{3}{3}, C \frac{1}{1}, P \frac{4}{4}, M \frac{0}{0}$.

The adult pig: $I \frac{3}{3}, C \frac{1}{1}, P \frac{4}{4}, M \frac{3}{3}$.

Compare this to the dental formula of man.

Deciduous or first teeth of humans: $I \frac{2}{2}, C \frac{1}{1}, P \frac{2}{2}, M \frac{0}{0}$.

The adult human: $I \frac{2}{2}, C \frac{1}{1}, P \frac{2}{2}, M \frac{3}{3}$.

In the young of both pig and man the *molars*, the large, broad grinding teeth have not yet erupted. Three of these will appear in each quarter of the adult pig, and three in the human.

Both the pig and man are *omnivores* whose diet consists of both plant and animal sources. The types of teeth of mammals are indicative of their mode of nutrition.

The pig's dental pattern as well as that of man are characteristic of an *omnivorous* diet. The cat and dog are *carnivorous*. Their teeth are sharp and pointed, fewer molars and modified premolars. Horses, cows and other *herbivorous* animals possess mainly large, broad, flat surfaced molars for grinding; plus a double row of incisors at the front of the mouth for cutting and shearing vegetation.

Palate: This structure forms the roof of the mouth. It is a partition which separates the oral from the nasal cavity.

Hard Palate: This is the bony anterior portion of the palate. A series of transverse ridges, the *palatine rugae*, cross the roof of the mouth.

Soft Palate: This is the posterior continuation of the palate. It is a muscular structure with bony support. It divides the *oropharynx* ventrally from the *nasopharynx* dorsally. In man there is a finger-like process, the *uvula*, which hangs down from its center posteriorly. It is absent in the pig.