NAME : Saif Ud Din

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ASSIGNMENT: ANATOMY

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**PHARYNX :**

The **pharynx** (plural: **pharynges**) is the part of the [throat](https://en.m.wikipedia.org/wiki/Throat" \o "Throat) behind the [mouth](https://en.m.wikipedia.org/wiki/Human_mouth" \o "Human mouth) and [nasal cavity](https://en.m.wikipedia.org/wiki/Nasal_cavity" \o "Nasal cavity), and above the [esophagus](https://en.m.wikipedia.org/wiki/Esophagus" \o "Esophagus) and [larynx](https://en.m.wikipedia.org/wiki/Larynx" \o "Larynx) – the tubes going down to the [stomach](https://en.m.wikipedia.org/wiki/Stomach" \o "Stomach) and the [lungs](https://en.m.wikipedia.org/wiki/Lung" \o "Lung). It is found in vertebrates and invertebrates, though its structure varies across species.

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| **Details** | |
| Partof | [Throat](https://en.m.wikipedia.org/wiki/Throat" \o "Throat) |
| **[System](https://en.m.wikipedia.org/wiki/Organ_system" \o "Organ system)** | [Respiratory system](https://en.m.wikipedia.org/wiki/Respiratory_system" \o "Respiratory system), [digestive system](https://en.m.wikipedia.org/wiki/Digestive_system" \o "Digestive system) |
| **[Artery](https://en.m.wikipedia.org/wiki/Artery" \o "Artery)** | [pharyngeal branches of ascending pharyngeal artery](https://en.m.wikipedia.org/wiki/Pharyngeal_branches_of_ascending_pharyngeal_artery" \o "Pharyngeal branches of ascending pharyngeal artery), [ascending palatine](https://en.m.wikipedia.org/wiki/Ascending_palatine_artery" \o "Ascending palatine artery), [descending palatine](https://en.m.wikipedia.org/wiki/Descending_palatine_artery" \o "Descending palatine artery), [pharyngeal branches of inferior thyroid](https://en.m.wikipedia.org/wiki/Pharyngeal_branches_of_inferior_thyroid_artery" \o "Pharyngeal branches of inferior thyroid artery) |
| **[Vein](https://en.m.wikipedia.org/wiki/Vein" \o "Vein)** | [pharyngeal plexus](https://en.m.wikipedia.org/wiki/Pharyngeal_plexus_(venous)" \o "Pharyngeal plexus (venous)) |
| **[Nerve](https://en.m.wikipedia.org/wiki/Nerve" \o "Nerve)** | [pharyngeal plexus](https://en.m.wikipedia.org/wiki/Pharyngeal_plexus_of_vagus_nerve" \o "Pharyngeal plexus of vagus nerve), [maxillary nerve](https://en.m.wikipedia.org/wiki/Maxillary_nerve" \o "Maxillary nerve), [mandibular nerve](https://en.m.wikipedia.org/wiki/Mandibular_nerve" \o "Mandibular nerve) |

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| ***[Anatomical terminology](https://en.m.wikipedia.org/wiki/Anatomical_terminology" \o "Anatomical terminology)*** |

In [humans](https://en.m.wikipedia.org/wiki/Human" \o "Human), the pharynx is part of the [digestive system](https://en.m.wikipedia.org/wiki/Human_digestive_system" \o "Human digestive system) and the [conducting zone](https://en.m.wikipedia.org/wiki/Conducting_zone" \o "Conducting zone) of the [respiratory system](https://en.m.wikipedia.org/wiki/Respiratory_system" \o "Respiratory system). (The conducting zone—which also includes the nostrils of the [nose](https://en.m.wikipedia.org/wiki/Nose" \o "Nose), the [larynx](https://en.m.wikipedia.org/wiki/Larynx" \o "Larynx), [trachea](https://en.m.wikipedia.org/wiki/Trachea" \o "Trachea), [bronchi](https://en.m.wikipedia.org/wiki/Bronchus" \o "Bronchus), and [bronchioles](https://en.m.wikipedia.org/wiki/Bronchiole" \o "Bronchiole)—filters, warms and moistens air and conducts it into the [lungs](https://en.m.wikipedia.org/wiki/Lung" \o "Lung)).[[1]](https://en.m.wikipedia.org/wiki/Pharynx" \l "cite_note-1) The human pharynx is conventionally divided into three sections: the nasopharynx, oropharynx, and laryngopharynx. It is also important in [vocalization](https://en.m.wikipedia.org/wiki/Speech_production" \o "Speech production).

In humans, two sets of [pharyngeal muscles](https://en.m.wikipedia.org/wiki/Pharyngeal_muscles" \o "Pharyngeal muscles) form the pharynx and determine the shape of its [lumen](https://en.m.wikipedia.org/wiki/Lumen_(anatomy)" \o "Lumen (anatomy)). They are arranged as an inner layer of longitudinal [muscles](https://en.m.wikipedia.org/wiki/Muscle" \o "Muscle) and an outer circular layer.

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| ***Pharynx*** |
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**ESOPHAGUS :**

The esophagus is a [fibromuscular](https://en.wiktionary.org/wiki/fibromuscular" \o "wiktionary:fibromuscular) tube, about 25 cm (10 in) long in adults, which travels behind the [trachea](https://en.m.wikipedia.org/wiki/Trachea" \o "Trachea) and [heart](https://en.m.wikipedia.org/wiki/Human_heart" \o "Human heart), passes through the [diaphragm](https://en.m.wikipedia.org/wiki/Thoracic_diaphragm" \o "Thoracic diaphragm) and empties into the uppermost region of the [stomach](https://en.m.wikipedia.org/wiki/Stomach" \o "Stomach). During swallowing, the [epiglottis](https://en.m.wikipedia.org/wiki/Epiglottis" \o "Epiglottis) tilts backwards to prevent food from going down the [larynx](https://en.m.wikipedia.org/wiki/Larynx" \o "Larynx) and lungs. The word *oesophagus* is the [Greek word](https://en.m.wikipedia.org/wiki/List_of_Greek_and_Latin_roots_in_English" \l "O" \o "List of Greek and Latin roots in English)  , meaning "gullet".

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| **Details** | |
| **[Precursor](https://en.m.wikipedia.org/wiki/Embryology" \o "Embryology)** | [Foregut](https://en.m.wikipedia.org/wiki/Foregut" \o "Foregut) |
| **[System](https://en.m.wikipedia.org/wiki/Organ_system" \o "Organ system)** | Part of the [digestive system](https://en.m.wikipedia.org/wiki/Digestive_system" \o "Digestive system) |
| **[Artery](https://en.m.wikipedia.org/wiki/Artery" \o "Artery)** | [Oesophageal arteries](https://en.m.wikipedia.org/wiki/Oesophageal_arteries" \o "Oesophageal arteries) |
| **[Vein](https://en.m.wikipedia.org/wiki/Vein" \o "Vein)** | [Oesophageal veins](https://en.m.wikipedia.org/wiki/Oesophageal_veins" \o "Oesophageal veins) |
| **[Nerve](https://en.m.wikipedia.org/wiki/Nerve" \o "Nerve)** | [Sympathetic trunk](https://en.m.wikipedia.org/wiki/Sympathetic_trunk" \o "Sympathetic trunk), [vagus](https://en.m.wikipedia.org/wiki/Vagus" \o "Vagus) |

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| ***[Anatomical terminology](https://en.m.wikipedia.org/wiki/Anatomical_terminology" \o "Anatomical terminology)*** |

The wall of the esophagus from the [lumen](https://en.m.wikipedia.org/wiki/Lumen_(anatomy)" \o "Lumen (anatomy)) outwards consists of [mucosa](https://en.m.wikipedia.org/wiki/Mucosa" \o "Mucosa), [submucosa](https://en.m.wikipedia.org/wiki/Submucosa" \o "Submucosa) (connective tissue), [layers of muscle fibers](https://en.m.wikipedia.org/wiki/Muscular_layer" \o "Muscular layer) between layers of [fibrous tissue](https://en.m.wikipedia.org/wiki/Fibrous_tissue" \o "Fibrous tissue), and an outer layer of connective tissue. The mucosa is a [stratified squamous epithelium](https://en.m.wikipedia.org/wiki/Stratified_squamous_epithelium" \o "Stratified squamous epithelium) of around three layers of squamous cells, which contrasts to the [single layer of columnar cells](https://en.m.wikipedia.org/wiki/Simple_columnar_epithelia" \o "Simple columnar epithelia) of the stomach. The transition between these two types of epithelium is visible as a zig-zag line. Most of the muscle is [smooth muscle](https://en.m.wikipedia.org/wiki/Smooth_muscle" \o "Smooth muscle) although [striated muscle](https://en.m.wikipedia.org/wiki/Striated_muscle" \o "Striated muscle) predominates in its upper third. It has two muscular rings or [sphincters](https://en.m.wikipedia.org/wiki/Sphincter" \o "Sphincter) in its wall, one at the top and one at the bottom. The lower sphincter helps to prevent reflux of acidic stomach content. The esophagus has a rich blood supply and venous drainage. Its smooth muscle is innervated by involuntary nerves ([sympathetic nerves](https://en.m.wikipedia.org/wiki/Sympathetic_nerve" \o "Sympathetic nerve) via the [sympathetic trunk](https://en.m.wikipedia.org/wiki/Sympathetic_trunk" \o "Sympathetic trunk) and [parasympathetic nerves](https://en.m.wikipedia.org/wiki/Parasympathetic_nerve" \o "Parasympathetic nerve) via the [vagus nerve](https://en.m.wikipedia.org/wiki/Vagus_nerve" \o "Vagus nerve)) and in addition voluntary nerves ([lower motor neurons](https://en.m.wikipedia.org/wiki/Lower_motor_neurons" \o "Lower motor neurons)) which are carried in the vagus nerve to innervate its striated muscle.

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| ***Esophagus*** |
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Thank You .....