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ELUCIDATE THE PATHWAY IN TASTE

Taste pathways is taught in medical schools for students to learn about the taste sensation and its perception. It is important for students to know about the taste modalities, the receptors involved, the pathway, applied aspects and differential diagnosis. Though taste disorders do not directly affect one's life, it has an impact specifically on the quality of life. Taste disturbances can be present in those with: Bell's palsy, lesions of tegmentum in midbrain and/or pons. Thalamic lesion, radiation treatment of head and neck, trauma or lesion to the taste pathway and some uncommon cause such as Sjogren's syndrome.

The taste buds present on the anterior 2/3rd of the tongue are innervated by the facial nerve, posterior 1/3rd by the glossopharyngeal and epiglottis by vagus. These afferent fibres relay in the nucleus of tractus solitarius [NTS]. Fibres from the NTS synapse in the thalamus, which pass to the somatosensory cortex. The various viewpoints put forth by fMRI studies, clinical examinations of the cranial nerves and lesions of the taste pathway shows that, the variation lies between the NTS synapse at thalamus and the fibres project to the ipsilateral cerebral cortex; The second order neurons arising from NTS, cross to opposite side and synapse at the thalamus, which projects to the contralateral cerebral cortex; 'Few' fibres from NTS decussate and terminate at the contralateral somatosensory cortex, whereas majority of the fibres continuing on ipsilateral side, project to the ipsilateral cerebral cortex.