**PATHWAY INVOLVED IN TASTE**

The diagram below shows the neuronal pathways for transmis­sion of taste signals from the tongue and pharyngeal region into the central nervous system. Taste impulses from the anterior two thirds of the tongue pass first into the *lingual nerve*, then through the *chorda tympani* into the *facial nerve*, and finally into the *tractus solitarius* in the brain stem. Taste sensations from the circumvallate papillae on the back of the tongue and from other poste­rior regions of the mouth and throat are transmitted through the *glossopharyngeal nerve* also into the *tractus solitarius*, but at a slightly more posterior level. Finally, a few taste signals are transmitted into the *tractus solitarius* from the base of the tongue and other parts of the pha­ryngeal region by way of the *vagus nerve*.

All taste fibers synapse in the posterior brain stem in the *nuclei of the tractus solitarius*. These nuclei send second-order neurons to a small area of the *ventral pos­terior medial nucleus of the thalamus*, located slightly medial to the thalamic terminations of the facial regions of the dorsal column-medial lemniscal system. From the thalamus, third-order neurons are transmitted to the *lower tip of the postcentral gyrus in the parietal cerebral cortex*, where it curls *deep into the sylvian fissure*, and into the adjacent *opercular insular area*. This area lies slightly lateral, ventral, and rostral to the area for tongue tactile signals in cerebral somatic area I. From this description of the taste pathways, it is evident that they closely parallel the somatosensory pathways from the tongue.