

## Branchial Pouches: 4th Pouch

The branchial pouches are found on the endodermal side of the branchial (pharyngeal) apparatus. The 4th branchial (pharyngeal) pouch contains two areas: the dorsal and ventral wings. The dorsal wings develop into the superior parathyroid glands, while the ventral wings develop into the ultimobranchial body and parafollicular C cells.



PLAY PICMONIC

### Separates into Dorsal and Ventral Wings

#### Separating into Dorsal-fin and Vent-troll with Wings

The 4th pouch contains two wings; the dorsal and ventral wings. Each set of wings develops into a different structure.

### Dorsal Wings

#### Dorsal-fin with Wings

The dorsal wings of the 4th branchial pouch form the superior parathyroid glands.

### Superior Parathyroid Glands

#### Super Parachuting-thigh-droid

The superior parathyroid glands are formed from the dorsal wing of the 4th branchial pouch. This gland produces parathyroid hormone, which helps regulate calcium levels in the body.

### Ventral Wings

#### Vent-troll with Wings

The ventral wings of the 4th branchial pouch form the ultimobranchial body, which gets integrated into the thymus. From here, it induces formation of parafollicular cells or (C) cells for the production of calcitonin.

### Parafollicular (C) Cells of Thyroid Gland

#### (C) Cat-cells of Thigh-droid

The parafollicular cells, or C-cells, produce calcitonin and are formed due to the ultimobranchial body. The ultimobranchial body first gets integrated into the thymus after differentiation from the ventral swellings of the 4th pouch. The ultimobranchial body then begins signaling and induces the migration and differentiation of nearby endoderm into parafollicular (C) cells.

### Formed by Endoderm

#### Formed by Indoor-deer

The ultimobranchial body begins signaling, which induces the migration and differentiation of nearby endoderm into parafollicular (C) cells.