

# New human organ discovered

Researchers in the Netherlands have made an unexpected anatomical discovery while studying a new type of scan – a fourth pair of salivary glands located where the nasal cavity meets the throat

**PET scans:** Radiotracer is injected into patient to light up specific organs in body. CT scan then uses x-rays to make 3D image of body

**PSMA PET/CT:** Scan used by researchers to highlight salivary glands and avoid damaging them during radiation therapy

**Researchers notice pair of glands, 60mm in length, near back of jaw**



**New organs:** Pairs of glands are visible in scans of 100 patients

**Tubarial glands:** Are wrapped around *torus tubarius*

Nasal cavity

Pharynx (throat)

Jaw

3

2

1

**Salivary glands:** One pair near ears, two more below jaw, another pair under tongue

**1 Parotid glands:** Largest salivary glands. Secrete saliva to lubricate mouth. Saliva contains enzyme **amylase (ptyalin)** which starts digestion of starches

**2 Submandibular glands:** Produce 65-70% of saliva, including antimicrobial enzymes

**3 Sublingual glands:** Around 5% of saliva entering oral cavity comes from these glands. Salivary glands produce between 0.5 and 1.5 litres of saliva every day