

Goitre

A goitre is an enlargement of the thyroid gland. This gland is situated at the front of the throat, below the Adam's apple (larynx). The thyroid gland secretes hormones to regulate many metabolic processes, including growth and energy expenditure.

The thyroid gland is controlled by the pituitary gland, which is located in the brain. The pituitary prompts the thyroid to make its hormones - including thyroxine (T4) and tri-iodothyronine (T3) - by releasing thyroid-stimulating hormone (TSH). However, the thyroid can't manufacture its hormones without sufficient dietary iodine. If a person's diet is low in iodine, the pituitary keeps sending chemical messages to the thyroid, but in vain. The thyroid gland enlarges as it attempts to comply with the pituitary's demands. Apart from iodine deficiency, other causes of goitre involve conditions of the thyroid - such as nodules, cancer, hyperthyroidism and hypothyroidism.

Treatment depends on the cause.