

Parameter informations T4 & TSH

Fuji Immuno AU10V

Using Fuji Immuno AU10V you are gaining immediate information about thyroid function of your patient. Interaction of thyroid parameters is complex and thyroid gland is affected by many non-thyroidal illnesses as well as drugs which may have an influence on thyroid parameters itself.

Changes of thyroid parameters – reasons:

T4 low:

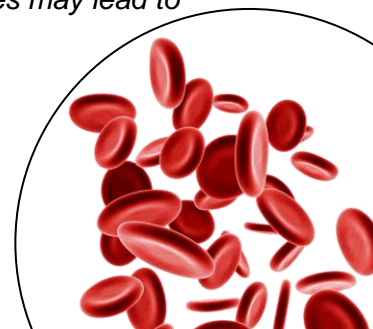
- Hypothyroidism dog
 - *Benign adenoma or lymphocytic inflammation are the most common reasons for hypothyroidism in dogs*
- Non-thyroidal disease
 - *Various diseases can suppress production of T4 in the thyroid gland. Most important ones are: Cushing's disease, Diabetes mellitus, inflammatory disease, renal disease, liver disease, or neoplasia.*
- Drugs
 - *Drugs may influence production of thyroid hormones through different pathological mechanism. Cortisone, phenobarbital, sulfonamides or ketoprofen and carprofen may lead to low T4 concentrations. It is therefore recommended, that prior to analysis of thyroid hormones the respective drugs are discontinued.*
- T4-autoantibodies
 - *Rarely patients with lymphocytic inflammation of their thyroid may develop T4-autoantibodies which may interfere in varying degrees with the test systems*
- Greyhound, Sloughi
 - *Physiologically, these breeds have lower T4 concentrations. Breed specific reference intervals are needed.*

T4 high:

- Hyperthyroidism cat

TSH high:

- Hypothyroidism dog
 - *If thyroid produces lower amounts of T4, pituitary gland automatically releases more TSH*
- 7-18% of dogs with normal T4
 - *Patients with subclinical hypothyroidism may have daily fluctuations of TSH-release or patients with earlier non-thyroidal illness may show increased TSH-concentration.*
- Drugs
 - *Drugs may have an impact on thyroid parameters. Sulfonamides may lead to increased TSH concentrations.*



Typical Changes:

Hypothyroidism (decreased thyroid function) dog

- T4 ↓
- TSH ↑

Hyperthyroidism cat

- T4 ↑

