## Why lodine and Selenium work together...





Selenium is a chief component of the molecules, called seleno-proteins, which are necessary for the body to be able to create and use thyroid hormones.

## **Seleno-proteins:**

- Regulate thyroid hormone production
- Support the conversion of thyroxine (T4) to triiodothyronine (T3).
- Protect the thyroid tissues
- Help balance thyroid hormone production

Enzymes arranged around selenium, called seleno-de-iodinases help to keep T3 at an appropriate level in liver, kidney, thyroid and brain cells. Glutathione peroxidase is another enzyme, which helps to limit T4 when its levels go on the high side.

The problems which selenium deficiency can cause are made more serious when Iodine is also deficient. Selenium is crucial in aiding the body to recycle Iodine. Selenium deficiency coupled with an Iodine deficiency is likely to lead to thyroid imbalance.

Many people who are diagnosed with a thyroid dysfunction have a deficiency of Iodine, but research has shown that some may have a significant selenium deficiency as well. It's vital to treat both deficits in order to re-establish thyroid stability.