

## **What is Graves' Disease?**

Graves' disease is an autoimmune disease characterized by overactive thyroid gland. In about ¼ of individuals it may affect the eyes (Thyroid Eye Disease) and less commonly the skin (Graves' Dermopathy). Graves' disease is the most common cause of an overactive thyroid gland (hyperthyroidism); is more common in women than men.

### *Endocrine Connection*

Autoimmune diseases occur when the body's immune system starts producing antibodies that target areas of the body that it shouldn't target within itself. Generally, the immune system is expected to protect our body and help it fight disease. Antibodies (thyroid stimulating hormone receptor antibodies) in Graves' disease target the thyroid gland; In response to these antibodies, the thyroid gland becomes overactive and begins to produce too much thyroid hormone (hyperthyroidism).

Although Graves' disease most commonly targets the thyroid gland, the same antibodies can also affect other areas of the body, such as the eyes (Thyroid Eye Disease) and skin (Graves' Dermopathy). In Thyroid Eye Disease, these same antibodies can cause enlargement of tissues in the back of the eye, eye swelling, pain, and double vision, among other symptoms. Graves' Dermopathy is a rare complication of Graves' disease and is likely caused by inflammation in the tissues under the skin. Pregnant women with uncontrolled Graves' disease are at greater risk of miscarriage, preterm delivery, and having a low-birth-weight baby; Therefore, active treatment is required even during pregnancy.