

THE ENDOCRINE GLANDS

(Collated by Michelle Wilkinson www.movingnaturally.co.uk)

Endocrine glands secrete hormones in small amounts directly into blood capillaries.

These glands are found in two forms of organs. There are organs which only make hormones and others like the pancreas and kidneys that in addition to hormone secretion carry out other bodily functions.

Hormones are chemical agents which affect the cells of bodily glands, organs and tissues through stimulation or inhibition of their functions.

Activity changes in the body are registered in the brain which in turn sends messages to increase or decrease hormonal secretions.

The endocrine system is chemical while the nervous system is electrical. Together they regulate and integrate the bodily functions at a cellular level.

The adrenal glands are triangular and cup each kidney.

They are around 5cm (2 inches) long and level with the 11th and 12th floating ribs.

They secrete hormones for the metabolism of carbohydrates, fats and proteins and regulate the salt balance in bodily fluids.

The adrenals also secrete the hormone adrenalin which gives rise to the primitive flight, fight, freeze or friendship response in life threatening situations.

The ovaries in women and the testes in men are the gonads or reproductive organs that produce hormones responsible for the development of secondary sexual characteristics such as voice depth, body hair, sexual maturity and the production of female eggs and male sperm.

The ovaries, the size and shape of an almond, secrete hormones for the menstrual cycle, pregnancy, birthing and lactation.

The pancreas lies behind the stomach. As an organ it secretes a variety of essential substances for effective food digestion. In its endocrine gland capacity, it releases insulin to support blood sugar levels.

Shaped like a fish it is around 15cm (6 inches) long with the head towards the centre of the torso and its tail extending back to touch the spleen.

The thymus gland shaped like a butterfly, is 5x5cm (2x2 inches) square.

It is located above the heart and produces hormones for general growth particularly in early life.

This gland has a purifying role as it stimulates the production of lymphocytes which form part of the blood's white blood cell defence system.

The thyroid is a two-lobed gland 5cm (2 inches) in length situated either side of the larynx and trachea in the throat.

It manufactures thyroxine which controls the body's metabolic rate, its conversion of food into energy.

Embedded in this gland are 4-disc shaped glands called the parathyroids which are responsible for controlling the calcium levels in the bloodstream. They are also concerned with physical and mental development.

The pituitary gland is a small pea-sized gland in the brain close to the eyebrows.

It has two lobes and is responsible for the general body chemistry which includes growth and metabolism. It releases oxytocin which activates natural instincts and labour contractions.

The pineal gland is a small cone-shaped gland lying further back in the brain than the pituitary. At night it produces the hormone melatonin which regulates the human body rhythm in relation to daytime and night thus supporting the balance of activity and rest.

These 7 endocrine glands are regarded as energy centers or chakras.

The glands are located along or nearby the spine and in the head.

Because of their subtle invisible energy, a light finger-tip touch is enough to contact them.

Rather than overstimulating one gland in isolation of the others, follow a sequential flow of energy along the spine and out through entrance and exit points.

The tailbone, crown of the head, hands and feet are energetic entrance and exit points.

In Body Mind Centring, somatic movement work founded by Bonnie Bainbridge-Cohen the glands relate to curiosity, intuition and feelings. The glands can provide a quality of alertness and clarity and reflect the inner balance or chaotic nature of a person.

They support personal communication through the creative mediums of dance, drawing, music, ritual, theatre and writing.

Each one will have its own vibration, tone and rhythm which will express itself in human movement, and posture.