PITUITARY GLANDS

The Pituitary gland is located in a well protected position known as the sella turcia. It is about the size of a bean and is made up in two parts, namely; the Anterior lobe and the Posterior lobe; the Anterior lobe being much the larger.

This gland is considered to be the most important of the endocrine glands and is sometimes referred to as the president of the board of directors—all endocrine glands forming the board of directors. Although it is the most important, it is not absolutely essential for the maintenance of life.

The functions of the Pituitary gland are carried on by the production of hormones. The Posterior lobe produces Pitressin which contracts blood vessels and other plain muscles and is influential in the control of blood sugar levels. The Posterior lobe also produces Oxytocin which especially contracts the smooth muscles of the uterus and intestinal tract.

The hormones from the Posterior lobe are also active in affecting control of bodily fats, carbohydrates, water, gall bladder, body pigmentation, and the vegetative nerve centers.

The Anterior lobe produces several hormones, namely: Growth Hormone, Gonadotrope or sex hormone, Thyrotrope Hormone, Fat Metabolism Hormone and Prolactin. These various hormones are influential in bodily control, as their names indicate, the Growth Hormone largely regulating bodily growth; Gonadotrope Hormone regulating growth and function of sex organs; Thyrotrope Hormone acting as a stimulator of the thyroid gland; Fat Metabolism Hormone which controls the breaking up of fat; and Prolactin which is responsible for milk secretion in the breasts of the female.

The Anterior lobe also influences many other bodily functions, including skin texture, hair, central nervous system, vegetative centers, sleep, and psyche.

The Pituitary gland is affected by bodily changes, emotion decreasing the appreciation of pain, Pregnancy and menstruation causes the Pituitary gland to enlarge and secrete its hormones much more freely.

Normal Pituitary activity is shown by bodily signs such as are considered normal. Specific signs include well developed and preserved Pituitary teeth (the two center teeth in upper jaw), fairly large lower lip, and normal secondary sex characteristics.

If the Pituitary gland is too active in early life (Hyper-Pituitary), it results in excessive growth, produces the gigantic type of individual.

If the Pituitary gland (Hypo-Pituitary) is under active in early life, there will be a uniform lack of bodily growth, with the lack of normal bodily signs as just outlined.

Dr. Albert R. Miller McMinnville, Oregon 3/7/36