

GENERAL POINTS ON THE ROLE OF THE ENDOCRINE GLANDS

Paul Dupont, MD, FRC

The Endocrine Glands and Hormones

To understand what an endocrine gland is, we need first to examine briefly some definitions. The term “endocrine” comes from *endo* meaning within and *kreinin* which means to secrete because the glands secrete substances within the body. These substances are called hormones. This contrasts with exocrine glands with their external secretions.

Glands do not simply secrete hormones in a haphazard manner. In fact, they are known to produce various parameters allowing them to fluctuate secretions, and this varies not only according to external conditions like light, temperature, and magnetic fields but also according to inner conditions like balance or the physical, chemical, and psychic homeostasis of the body.

The word hormone takes its meaning from the Greek *hormōn* meaning to excite, a term used for the first time by English physiologists at the beginning of the twentieth century. The word refers to all substances in the body capable of acting at a distance and by way of the circulatory system independent of the nervous system. Although this encompasses the nervous system’s hormones as well, the great majority of them are directly secreted by the endocrine glands.

The endocrine glands therefore secrete substances that act throughout the body as a whole to maintain its function in well-defined ways and according to a guiding intelligence independent of our will.

The most important endocrine glands and their general effects can be summarized as follows:

- The pineal gland gives a certain rhythm to our life and helps us to regenerate ourselves psychically as well as physically by controlling the aging process.
- The pituitary gland is the “conductor” of all the body’s organic functions and directs cellular growth, the multiplication and division of cells, as well as the genital and reproductive functions.
- The thyroid directs the quality of life and functions like a thermostat of arousal and inner metabolic heat, allowing us to better adapt over the long term in cases of stress.
- The thymus is the protector of the Self, of its immunity and integrity.
- The heart calms and directs the circulation of the blood’s vital force and soothes the nerves.
- The suprarenal glands allow us to adapt when we are under stress by mobilizing reserves of energy and fighting infectious and inflammatory diseases.
- The solar plexus, a meeting point of glands and an exchange zone, commands, coordinates and restores while bringing together our material nature with our psychic being. As a meeting point between the exterior and interior of the body, it is not a true gland although the ganglia of which it is

composed, also secrete hormones. It acts in connection with the suprarenal glands with which it communicates.

- The abdominal and pelvic glands, that is, the liver, digestive tract, spleen, pancreas, kidneys and gonads, through their hormones, support the physical renewal and survival of the human species through the reproductive process.

All these equally important glands act on each other and self-regulate in concert. Therefore nothing is left to chance and the most remarkable thing in all this is the direct interrelationship between hormonal functioning and our consciousness, emotions, and psychological makeup.

Why do these glands function so marvelously, with such synchronicity and unity? This is what we will now explain.

The Endocrine Glands and Cosmic Energy

The endocrine glands have for a long time been considered to be the internal clocks of our biological cycles. As a description, this is an insufficient analogy because their role is not confined to noting the passing of time as does a clock. Besides, it isn't certain that time is a reality in the universal scheme of things. If time did not exist in the cosmic dimension, we would have to say that they coordinate the cycles of organic life in synchronicity with the natural and cosmic cycles around us. These cycles should be viewed as being of a pulsating nature rather than spatio-temporal, and having a vibratory quality with resonating harmonics. Each note corresponds to what we call a human quality within, like for example love, peace, positive strength, and so on.

The endocrine glands are part of these cycles and pulsations and embody them on the physical level provided that

our thinking does not become an obstacle. The glands are also influenced by our psyche, which, like the mind, can block our being uniting with the life-giving cosmic essence and make it less harmonious. We can actually picture our psyche influencing the glands as would an intermediary or mediator. The regenerative, functional, metabolic, and biochemical cycles of the body are dependent on it, although their source is immaterial; without the soul, the physical body would no longer have life.

Now, the whole of life passes through successive phases of destruction and reconstruction. These successive phases are often confused with the cellular multiplication of reproduction where two cells separate or divide from one condition into another. Cells grow, divide, then finally die. The old cells that die allow new cells to live thanks to the energy transferred to them. All the cycles of life are controlled in this way by an intelligence which specifically uses the hormonal secretions of our endocrine glands to accomplish its work harmoniously.

To talk about the cycles of the endocrine glands then is to affirm the existence of a vital energy which gives life to the body and allows for its constant physical renewal. This energy is put into motion by a higher purpose with a very powerful force called the Vital Force. This Vital Force manifests through the endocrine glands even though these only appear to have a strictly physical task. And so the rhythm, frequency, and periodic oscillations of the secretion cycles are governed by another form of directive energy and not simply by biochemical forces.

The energy oscillates between its two polarities like a swing or a pendulum. It would be more logical to talk about the endocrine glands in terms of pendulums directing not only time but also successive



cycles of these two polarities which give us life.

The question that arises concerns the origin of these energy cycles. This comes back again to wondering what the relationship is that unites our consciousness, the more or less harmonious functioning state of our glands, and our health. Is it possible to know some of these cosmic cycles?

There are two great cycles in complimentary opposition: the planetary cycles of a negative nature, described as maternal, maturing, and feminine, and the stellar cycles described as being positive, paternal, expansive, and masculine. And so a gland can be both positive and negative.

Let's take the case of the hypophysis or pituitary gland. It regulates the female hormonal sex cycle of twenty-eight days in harmony with the lunar cycle. The pituitary cycle is also solar, thus stellar and positive, as we shall see, because under the influence of the sun, there are also secretions of other hormones of a more masculine nature.

It would be possible to find the same phenomena in the case of all the glands: the suprarenals have both a negative and positive aspect, like the sex glands, and it can be surprising to learn that this is so for men as well as women, with both the male and female hormones. However, it would be a mistake to interpret this only from a sexual point of view, because what manifests in the sexual domain is only a reflection of universal laws as a whole. These are dependent only on two complementary forces, a bit like what happens with electricity. Two polarities are needed to create an electric spark. Likewise only two are needed for reproduction, the division of cells, and hormonal secretion in order to maintain the repolarization of

cellular membranes and the conduction of nervous impulses.

And so we can establish planetary correspondences, and even correspondences of cosmic cycles beyond the planets, stemming from the stars. Astronomically speaking, we can now record pulsars. There are two general cyclic phases existing in the universe: a phase of expansion, stellar and wave-like in nature, and a phase of contraction that is planetary and corpuscular in nature. However, the universe cannot be reduced to a machine as some scientists would like to characterize it.

The source of these mechanisms is actually not a law linked to chance and for these cycles to be synchronized really necessitates an order whose origin is of a superior intelligence. We can therefore speak of a "Cosmic Consciousness" existing in the universe. Of necessity, a superior intelligence to humanity exists to be able to maintain this universe with all its cycles in perfect harmony.

If the universe is so complex, what then can be said of the interior of the human body and its vital functions, if not that it too is moved by this superior intelligence which is independent of our rational and limited intellect. We cannot, by the simple act of intellectual will, modify – and fortunately so – the cyclic course of our glandular functioning. However, through an inappropriate emotional or mental attitude, we can seriously damage the glands by disturbing with our discordant thoughts the subtle energy that flows within us with intelligence and compassion.

The Endocrine Glands and Cycles

What then are the cycles of the glands? We will now examine this by reminding ourselves again that cycles are not the

result of chance but of a vital cosmic impulse from beyond the intellectual plane manifesting in our bodies, particularly through the secretion of our glands.

As for all cycles in the universe, there is, as far as the endocrine glands go, a growing phase of a cycle with maximum secretion, then a decreasing cycle with minimum secretion. The glands are not all at their maximum at the same time and their cycles are not of the same duration. Thus the pineal shows both a nycterohemeral cycle (both daily and nightly) which lasts approximately a day, that is twenty-four hours, and also a circannual cycle (yearly) because, like the hypophysis, it is influenced by the sun.

The hypophysis for its part is also subject to the moon's action, which can be observed over the twenty-eight days of the female cycle, and most probably harmonizes with the planets of the solar system. In this sense, the various secretions of the hypophysis which ensures that the other endocrine glands are stimulated, could be linked to the planetary cycles of the solar system.

Perhaps one day it may be possible to clarify the links between astrology and health with a new understanding. It could be that the various zodiacal signs with their correspondences in the human character can also be found in the endocrine glands starting with the hypophysis.

Here are some of the cycles of secretion:

- The pineal secretes its hormones towards nightfall with a maximum secretion between 2:00 a.m. and 5:00 a.m.
- The pituitary, on the other hand, sees its hormones increase gradually with the arrival of daylight. The maximum secretion occurs at the end of the morning.

Prolactin is one the pituitary's hormones with a maximum secretion towards the end of the night.

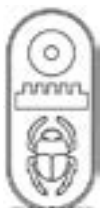
- The secretions of the suprarenals are at their height towards 8:00 a.m.
- The pancreas secretes at its maximum towards midday, with insulin towards 4:00 p.m. in the afternoon.
- The heart functions at its maximum towards 4.00 p.m.

In the same way, the body's temperature and blood pressure follow cycles coordinated by the hypothalamus which is the center of the sympathetic system directly linked to the hypophysis. The temperature is at its maximum at the end of the day and at its lowest at the end of the night.

The Glands and the Psyche: Psychosomatic Aspects

This topic has been the subject of research at the Rose Croix University International (RCUI) since the beginning of the twentieth century. Even though at that time, hormones had only been known about for a few years, Rosicrucians were already teaching that the glands, known today as the endocrines, corresponded to what were called "psychic" centers. These are a source of energy which develop the latent faculties of a metaphysical kind within and which influence our health and personality. This may bring a smile to skeptics were it not for the evidence today as a result of a lot of scientific work. The research has come to support Rosicrucian claims such as the fact that the heart, for example, a source of peace and light for the mystic, is also an endocrine gland which calms the brain and blood circulation.

One of the first books written by a Rosicrucian physician is the work of Dr. M. W. Kapp, who, around 1930 was



already talking about the glands in terms of “our invisible guardians.” He referred to the spiritual link existing between them and our health and soul.

What we are going to relate in this article is not really the knowledge acquired by Rosicrucians over the centuries on this subject, but an interpretation of their understanding. It is interesting to study this psychosomatic link before entering into the more scientific explanations. In fact, the Rosicrucian approach can help in gaining a better understanding of the glands’ functions. We shall now deal succinctly with this topic.

We have seen how the glands follow cosmic cycles. They also react to the subtle forces of a psychic and psychosomatic nature. In other words, our consciousness both on the emotional and psychic planes can produce physical effects on the glands. These maintain a harmony with natural cycles, with the creative Universal Consciousness, its Vital Force, and regenerative Intelligence. Good thoughts and a positive outlook create the favorable conditions for this harmony since we are then directing ourselves towards Universal Love and Peace that are the vital forces of the Universe. Conversely, mental confusion and every negative thought creates an imbalance which seriously disturbs hormonal secretions.

What are these assertions based on? Quite simply on the daily observations of the effects of stress and thoughts on our health. There is not one case of problems with the endocrine glands that does not have its origins in the psyche. If we eliminate nutritional and hereditary causes, the remaining cause is most often of a psychological nature. And even in cases where we subject our glands to a nutritional deficiency, disturbances most often arise when they are accompanied by discordant thinking.

We only have to note how many thyroid problems occur after a bereavement, a separation, or how anxiety can lead to cardiac or suprarenal problems. It is possible to see, gland by gland, the links existing between our glands and our psyche, links by which consciousness can modify glandular functions.

While such a causal phenomenon affecting thought exists, there is certainly a rule of conduct to observe in order to avoid such aggravating problems. This rule states that before becoming organic, a glandular disturbance is a functional one in the first instance. This comes down to saying that what comes before a lesion is disharmony in the endocrine system’s cycle of hormonal secretions.

If our thoughts are discordant, then our secretions will be affected. If we feel ill at ease, it is not because our hormones are excessive or insufficient but rather that our emotions and desires, our thoughts and character are excessive or lacking in some way. It is possible to be careful without being anxious, to be courageous without being foolhardy, or sensitive without being sentimental, to react to annoyances by adapting to the situation rather than worrying with set ideas.

Take the example of the young woman who has a fairly demanding job and who is suddenly annoyed by her employer because she must face an unexpected increase in workload for no reason other than the whim of her tyrannical boss. Such an injustice rightly creates a strong combative response, but it can also generate anger in her, stimulating the suprarenals while she is right in the middle of her hormonal cycle that normally should be experienced calmly through her pituitary hormones. This sudden “battle” then, slows down the female secretions and produces a surplus of male combative hormones. The result becomes evident soon enough; almost at the

moment of hearing the bad news, ovulation can be obstructed which would produce a string of troubles as a consequence. While the cause is psychic, the result is a functional imbalance. But then say this lasts for several months without a solution to the conflict. From starting as a functional disorder, it becomes organic with the risk of a chronic excess of androgenetic secretions of the suprarenals.

This example is only one among thousands, one in which thought can create a phase difference in our endocrine cycles. Many more could be cited. The consequences of thinking that are negative, maladjusted, and antagonistic to life in general manifest soon enough. And it is easier for our organism to throw itself off balance than it is to regain harmony.

This is what the secretions of our glands are like: completely dependent on our mental attitude. A negative attitude in the face of events and people around us stimulates the glands and then exhausts them. Sooner or later, there will either be a hyper- or hypo-functioning of the glands. When illness is initially generated by an endocrine imbalance in this way, there is every difficulty in discovering its cause, and then it comes back to finding out what our errors have been. The trickiest thing for us is to know ourselves and to recognize our imperfections. Psychological analysis can make that discovery possible and be one of the ways of re-establishing balance. However, healing warrants personal inner work which no therapist can do for us. The important thing is to make the connection

between our negative ideas and our health, to discover what in our thinking makes us ill, and resolve to take corrective action so that our inner clocks are no longer allowed to run out of phase with nature and with others.

Often, we are filled with ideas that become poisonous because we attribute them with more value than they really

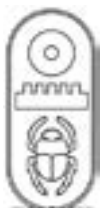
have. We take pleasure in allowing them to live within us and we become obsessed. These ideas are the fruit of false judgements and they have a hold over us as if we are possessed by them. At a certain point, we have to know how to reject such thoughts and not allow them to infiltrate us so insidiously.

To correct glandular problems which have psychic causes, it is not enough

simply to reflect on them, however. Resolutions are also necessary. Reflection not followed by results is of no help whatsoever. To be more precise, if we observe within ourselves traits that work against nature, and we have noticed that this mental attitude or that habit frustrates us to the point of reacting on our glands, then we must definitely and immediately change our behavior. Reading out of curiosity or intellectual reasons on the subject will not be useful at all.

What matters is to look for whatever in our mental attitude or our character makes us unhappy, and that everything that disturbs our endocrine glands and makes us sad or ill at ease is rooted out. We should also observe whether our

The endocrine glands secrete substances that act throughout the body as a whole to maintain its function in well-defined ways and according to a guiding intelligence independent of our will.





professional, social, or family situation is presenting difficulties and perhaps causing an imbalance in our Life. To sum up, the link between the psyche, behavior, character, emotions, ideas, and the glands really does exist.

Taking hormones to replace glandular secretions does not deal with the fundamental problem nor treat the cause. It is not within the scope of this article to discuss the circumstances for taking hormones. What is important is to ask oneself if it would not be better to stimulate and rebalance the glands through a change in behavior and thinking rather than telling ourselves that because the glands are under- or over-secreting, taking some tablets would be enough. Medication will never replace our thoughts or moral and spiritual decisions.

An endocrine imbalance firstly requires us to take charge of ourselves, to stimulate our inner life without expecting anything from others, so that by thought, words, and acts we are able to satisfy our own inner awareness and true spiritual consciousness within, because this is what directs the functioning of the glands.

By what means do our thoughts affect the glands? We will now examine this in a short section on the sympathetic system.

The Glands and the Sympathetic System

Glands react on one another through their hormones but the effect is dependent on the time it takes for the blood to carry these messengers more directly and rapidly through a complex system of nervous plexuses with which they are in direct contact to other parts of the body. These nervous plexuses are like the mesh of a net. They intertwine around the glands and are connected by a complex system of similar interconnections like a huge spider's web woven from inside the brain to the extremities of our limbs.

These plexuses are imbued with a special energy that is different from the sensory and motor nervous influxes. There are in fact two nervous systems in the body. Firstly, there is the cerebrospinal system, which comes from the cerebral cortex and is intended to connect our life with the outside material world. The system allows us to have movement and have objective impressions. It only responds to the commands of our objective and subjective will. Because of this system, we can reflect intellectually, read, walk, eat, and so on.

Along with this “sensory-motor” system, there is another that is autonomous because it is independent of our will. It is also called “neuro-vegetative” because it is considered to be a support to vegetative life, that is, of basic cellular life, the “vegetal” cells within the body. This system is also called the “sympathetic system” because it creates a sort of sympathy between our vital functions.

We can go beyond this in some ways and consider the system as supporting a different energy from the electro-physiological nervous impulse that runs through it. Too often we speak of impulse in defining the cerebral nervous current, forgetting that it has in fact no particular influence outside of a simple motoric or sensorial reaction. On the other hand, the neuro-vegetative system is much more influential because it maintains life, balances our vital functions, and supports a superior form of consciousness within us.

Rosicrucian research has allowed us to prove the existence of two sorts of consciousness: one which is turned towards the external world for awareness of objects or objective consciousness, a mental and intellectual consciousness of a vibratory level approximating a simple electrical current.

Secondly, there is another current to convey a consciousness said to be “subconscious,” that is, a more powerful and refined vibratory form which we can call “psychic consciousness.” The current of the sympathetic system conveys this kind of energy that regenerates our entire being by bringing vitality to where it is needed. It is the energy which repairs and stimulates tissue and scars, as has been proven scientifically. It has been registered, at least in its quantifiable physical aspect, in the form of a galvanic skin current. However, this current is not the whole of

this energy; it is only its material phase. We know that it speeds up the healing of scar tissue.

The same research demonstrated several centuries ago that this energy could concentrate in the plexuses of the sympathetic system; plexuses, in fact, surrounding the endocrine glands. Plexuses are the interconnections, the crossings, or places of information exchange.

What sort of information is this? Surely not exchanges of an intellectual kind which are of the cerebral domain. Surely not of the motoric kind either because what is motor in the physical sense travels along the motor nerves. In effect, the energy that travels in these plexuses is of a more elevated, emotional, and profound nature and, even though it is sensitive, it is difficult to describe in words because it produces imperceptible sensations. The energy concerns a consciousness we call “psychic consciousness.”

Why such a consciousness concentrates at the level of the body’s plexuses is not really the most important question. What is important is not to talk about psychic matters simply because it is fun to speculate about them, but rather to know the creative manifestations that the psychic and Vital Force can produce in our being. From a metaphysical point of view, the connecting points are called “psychic centers.” These centers are not the subject of this piece because their development would require many explanations and a deeper spiritual study. But knowing they exist provides a clue to the existence of a spiritually pure and luminous but undreamt-of energy in every human being.

Actually, taken as a whole, every human being possesses avenues of communication with the spiritual world. These communication paths are the



regions of the physical body which enter into contact with their psychic counterparts called “psychic centers.” The role of these paths is to maintain an awareness of our intimate being, of our soul. And so the sought-after goal of the development of the psychic centers is not to bring about supernatural powers, but rather to assist the incarnated human being reach perfection on a spiritual plane so that more compassion, love, justice, goodness, respect towards others, and Nature, and towards the God of the Heart is developed.

These centers then have a beneficial effect if they are stimulated through a mystical approach because their energy provides us with improved physical health, while at the same time assisting in the attainment of development on the spiritual level of our Inner Being. And so, through the plexuses of the sympathetic nervous system, our glands are regenerated on the inner spiritual plane.

This explanation may appear surprising to you if you are not used to such terminology.

Today, however, a scientist must be prepared to take an interest in philosophy if she wishes to advance towards new discoveries and to penetrate the hidden mystery of the endocrine glands.

The idea we have just touched on is not illusory. It allows us to understand why we feel ill at ease inwardly when we have a maladjusted attitude in a particular circumstance. The attitude may be due to a lack of spiritual development or quite simply to selfishness or a lack of humane qualities, which comes back to the same thing really. In fact, even though it cannot be registered, there is a subtle and guiding essence from within the human soul acting on the physical body.

It would be easy to demonstrate, with the aid of examples and clinical cases, how a lack of coordination between the impulses of the soul and the body’s desires causes disharmony among the glands. For those who are not convinced, we need point no further than the effects of a negative mental state stemming from a narrow personality on the secretions of the suprarenal glands. In fact, according to how positive or negative one is in a personality area, any one of the glands will be disturbed by being either over-stimulated in activity or too quickly exhausted.

In this article, we give a lot of importance to describing some of these psychic aspects and appropriate spiritual attitudes for each gland to provide the reader with something to think about. It is not a question, of course, of describing every quality or defect affecting our glands. There are just too many bad ones and so few good ones that the piece would become quite imbalanced. Instead, we need to make a constant effort to study ourselves, to observe how we live from the outside, to learn what lies within us, what is lacking, so as to change ourselves and maintain a positive attitude. It is our excesses and deficiencies, our errors and obsessions that generate health problems.

On the other hand, and this must be encouraging for those who make some spiritual effort, if well conducted, the inner spiritual development which flows from that effort generally helps to maintain health, and re-establish it. But it must be remembered that it is always more difficult and the system takes longer to return to an equilibrium when the system is imbalanced. Actually, it requires more time to heal than to create an imbalance.

Illness consists of a series of expanding and contracting cycles. Healing can never occur in the “twinkling of an

eye.” It is a question of time, and the time it has taken to become imbalanced is often the necessary time required to become re-balanced. Illness is therefore also a matter of patience, which is something acquired and developed when a person is on the right path.

The Endocrine Glands and the Passions

The ancients located the passions in the glands. For example, joy was found in the spleen, courage in the heart, and anger in the liver. There is some truth in that actually. Our nervous plexuses and sympathetic system express our feelings and emotions in the harmonious or disharmonious functioning of the endocrine glands. Overall, we could say that the virtues have a favorable effect, while discordant passions a negative one because they affect our health by blocking the nervous and psychic energy.

Where energy should blossom and radiate, the passions make it dense and constricted. For example, over-indulgence and gluttony disturb the digestive tract; anger affects the suprarenals, liver, and kidneys; lust or spite on the other hand disturb the heart; envy presents problems for the pancreas, liver or the spleen; ambition perturbs the hypophysis; jealousy the thymus; and fear the thyroid. Through these actions on the hormones, all passions have an effect on the body as a whole and create numerous psychosomatic illnesses.

Here, for example, is how the seven discordant passions disturb the seven major psychic centers and their corresponding glands:

- Envy disturbs the pineal. It causes a loss of sleep and appetite, creates fevers and many illnesses related to depression, and these conditions give rise to the seeds of cancer as the ancients like Galen, Hippocrates, and Celsius believed.

- Pride exacerbates the hypophysis and discord leading to madness, megalomania, hypocrisy, and wild emotions.
- Laziness slows down the functions of the thyroid. All the functions that depend on it become exhausted. The idler becomes lethargic, apathetic, lymphatic, constipated, and ages prematurely.
- Miserliness disharmonizes the thymus because the miser only thinks about wealth, his material affairs and lives in sordid conditions that destroy health; he is susceptible to infectious diseases.
- Over-indulgence and excesses of all kinds affect the heart, leads to nervousness, faintness, and to congestion of the arteries and veins. In the case of gluttony, the intestine, pancreas and liver are also affected.
- Jealousy contorts the solar plexus and produces problems in all the minor glands like the liver which is a source of bilious behavior; the intestine a source of anxiety, the pancreas a source of behavior based on wrong judgements, the spleen a source of sadness, and the kidneys a source of worry.
- Anger throws the suprarenals into imbalance and brings complications to cardio-vascular diseases, hypertension, and premature cerebral aging.

This article is an excerpt from the AMORC book, *The Endocrine Glands and Your Health*, written by Frater Paul Dupont, MD.

