

**Human behavior and changes
in chemistry of the human body**

Prepared by



A.Prof. Dr. Abbas Al-Imami
Physiological Psychology
Northern European Academy
Denmark
abbas-45@hotmail.com

Abstract:

Human beings in all variables (habits, genetics, formative, social environment), which defines its formative geometry and its permanence is an object that transcends its human life on everything, man is certainly his own personality but with a difference and differentiation based on his self-concept and experience the way of life and changes create pressures that require adaptation adapted to that change the more that change increased the risk and increased pressure of this life in various aspects, we are those who keep these pressures with his experience and knowledge forgetting pain and trouble, seeking a state of compatibility and adaptation to provide him with a balanced life together, and those who find it difficult to adapt and compatibility with it generates a state of imbalance and imbalance in behavior through its effects on the biological side, thus affecting the physiology of organs to generate different cases of disease and varying severity, many physical and physiological changes occur as a direct result of the psychological stress experienced by the individual in a world of constant change, and through these stresses and their psychological, physiological and social effects, we can interpret (pressures) biological explanation, As the person falls under the effects of his life and symptoms of response to the physiological and here the person shows a state of defense against the pressures for adjustment, compatibility and containment to relieve himself that psychological suffering, or can have biological effects and symptoms of self-response to the behavior of the individual.

Key words: Human behavior- Personality- Physiological changes.

Study problem and importance:

Biological and behavioral sides of the individual, one affects and is affected by the other, as there is a correlation between the two (biological variables and psychological variables). My study here is to be the behavioral side of man but from the basis of biological basis and this requires us to know full and a thorough study of the nature of the construction and work functions of parts of the human body, especially those associated with the psychological aspects (behavior, performance, ideas, and feelings), or a study of the biological side by the psychological factor and knowledge of what is happening and change in the physiological (functional) side of the cells of the organs affected by this act therefore, there are two contradictory cases

are behavioral variables and physiological variables both have to do the other, and in both cases is a study of the work of two variables, psychological and material to the human, and on this basis the researcher in this study interested in the following:

1. Study of the nervous system and clarify its role in determining what the behavior of the individual.
2. Study the types of electric waves of the brain and which determine the behavior and actions.
3. Hormonal secretions and their role in the occurrence of some diseases that the individual suffers from the imbalance in the body chemistry.

Objectives of the study:

The study aims to find out a range of factors through which they can identify the physiology of the nervous system and the role of external factors in it, and these goals are:

1. Study the physiological indicators produced by an external factor.
2. Study the neural processes resulting from the role of the external stimulus.
3. Study the organic side.
4. Pathological conditions that occur due to hormonal disorders.

The limits of the study:

The current study is determined by the theoretical principles that shed light on the psychological and biological variables of the study and the chemistry of the human body.

Terminology of study :

1.Behavior.

It is a set of responses that an individual takes in the direction of a situation

The researcher knows him

A type of physical, mental and psychological activity by the individual to achieve his goals and satisfy his desires

2.Personality

Is all we can predict what an individual will do when placed in a particular position?

The researcher knows him

Are the qualities and behaviors resulting from the act of external influences which determine the person and the fact that his presence and dealing with what is going on around him a group?

3. Physiological psychology

Is to study the relationship between physiological processes and behavior.

The researcher knows him

To study the mutual effect of psychological variables and biological variables on humans.

The human body faces the stimuli in three mechanizes

A. Alarm phase.

Move the body's abilities to address these stimuli.

B. Resistance stage.

Is the resistance of what the psychological effect of fatigue and exhaustion through the mobilization of all the capabilities of the body?

C. Adaptation phase:

The stage of the emergence of the psychological effect (Causing fatigue and exhaustion) in the form of diseases that affect different parts of the human body.

A range of factors that help the emergence of diseases such as

1. The presence of organic dysfunction in the function of a member of the body.
2. There are some factors (emotional) help.
3. The state and nature of the disease in terms of its rotation of the state of dormancy and activity.
4. Family history has an important role in the emergence of some diseases and the speed of infection.
5. The disparity in the incidence of diseases among males and females.

4. Emotions

The external stimuli, both negative (sad) and positive (pleasing) emotional effects on the person to talk him a state of excitement in his behavior and movements, and all these emotions consist of three aspects are.

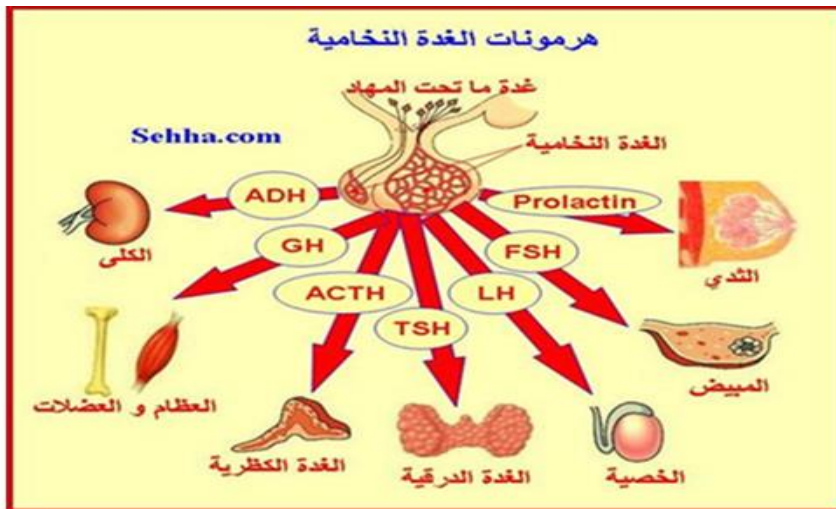
- A. Side emotional
- B. External side
- C. Physiological side

5. Endocrine glands

A group of specialized cells that send their secretions directly into the bloodstream, and the most important of these glands are:

1. Pituitary gland

Is a small gland located at the base of the brain a group of hormones are produced, the most important of which are?



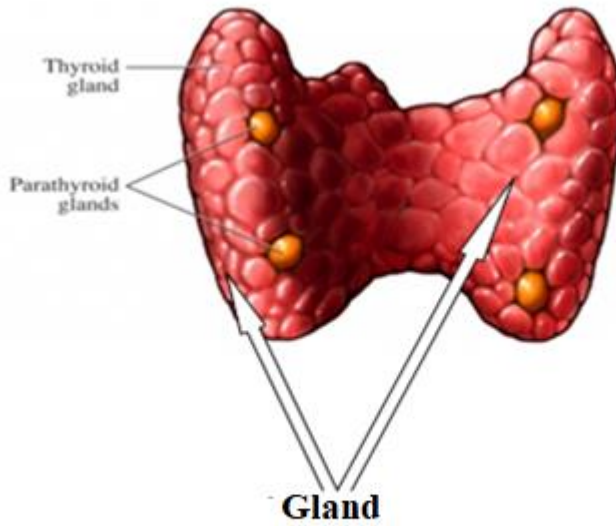
<http://images.google.com/images?q=pituitary+gland&http://images.google.com/images?q=pituitary+gl and&hl=ar>

الشكل - 1

ACTH – TSH – FSH – LH – GH – Prolactin - ADH

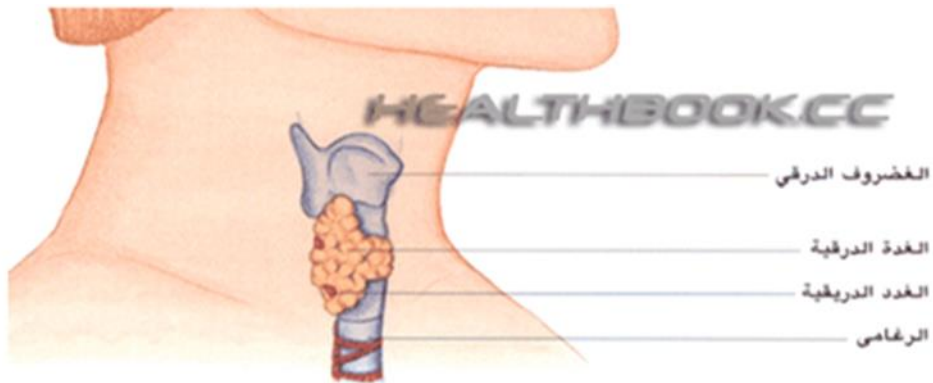
2. Gland Thyroid

The area is located the front of the neck, In front of the trachea and it consists of two lobes. Its function is the secretion of thyroxin.



<http://images.google.com/images?hl=ar&lr=&q=thyroid+gland>

(2)

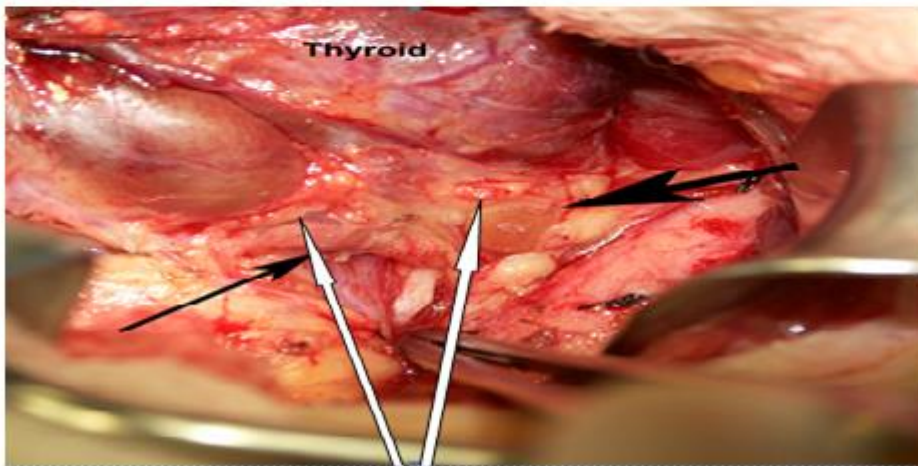
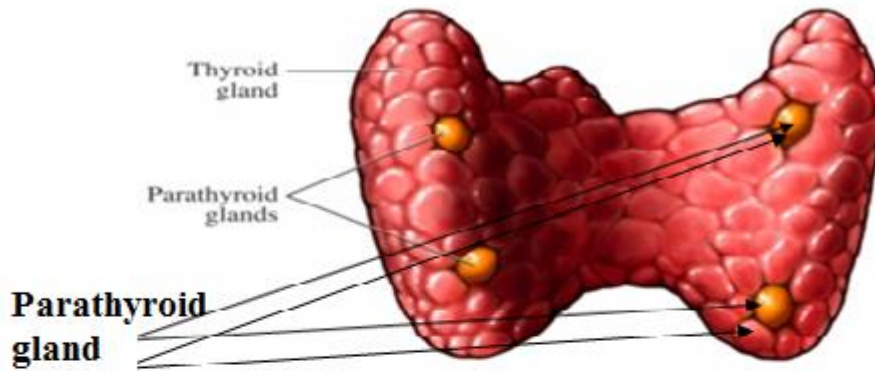


<http://images.google.com/images?hl=ar&lr=&q=thyroid+gland>

شكل - 3

3. Parathyroid gland

Consists of four small lobes not exceeding 5 mm in diameter and are adjacent to the thyroid gland.

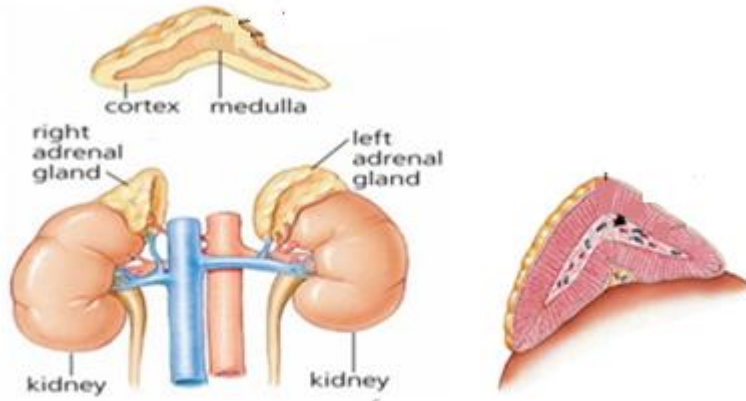


4

Parathyroid gland

4. Adrenal gland

These glands are located above the kidneys,



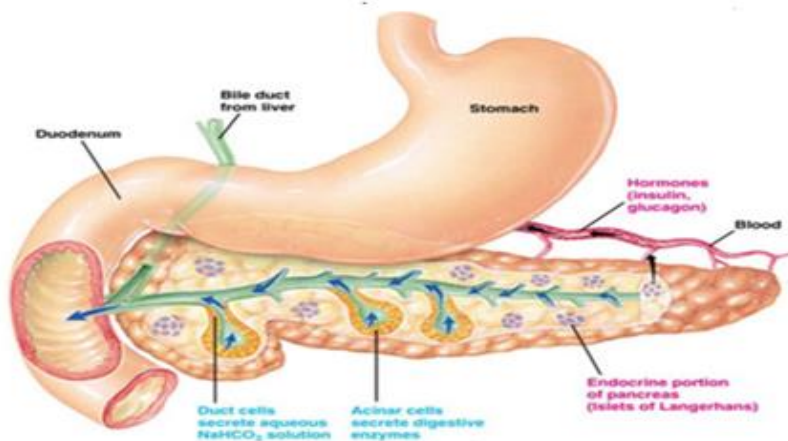
<http://images.google.com/images?hl=ar&lr=&q=suprarenal+gland>

5-

5. Pancreatic gland

Digestive gland located between the stomach and small intestine

- A. Alpha cells secrete the hormone glucagon
- B. Beta cells secrete the insulin hormone that regulates blood sugar

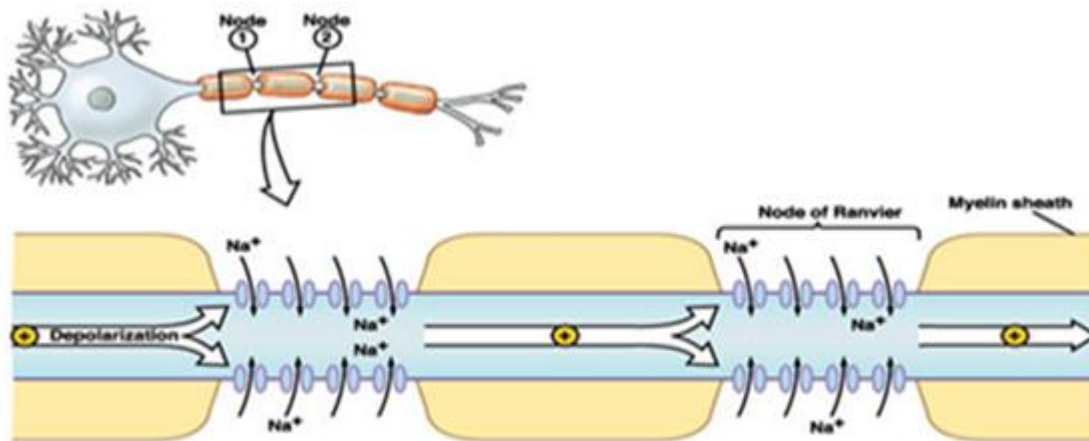


<http://images.google.com/images?hl=ar&lr=&q=+langerhans>

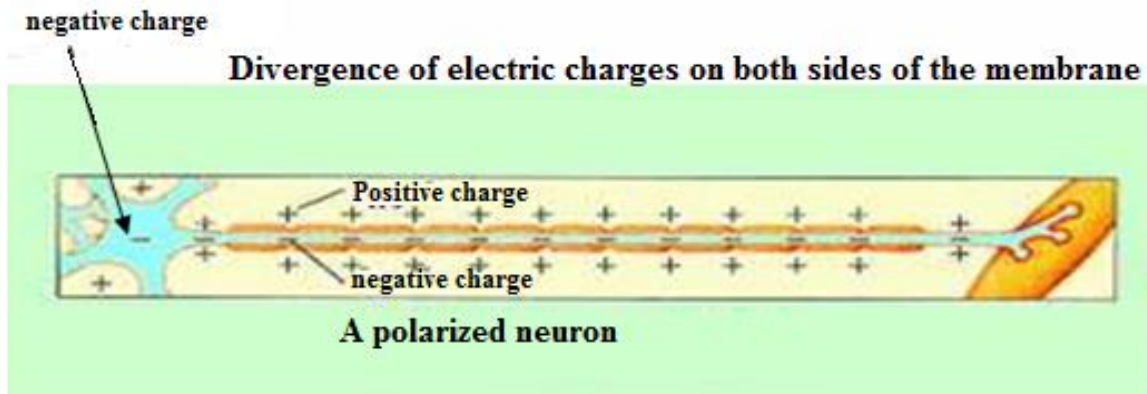
6 -

How is the transfer of nerve impulses from one cell to another?

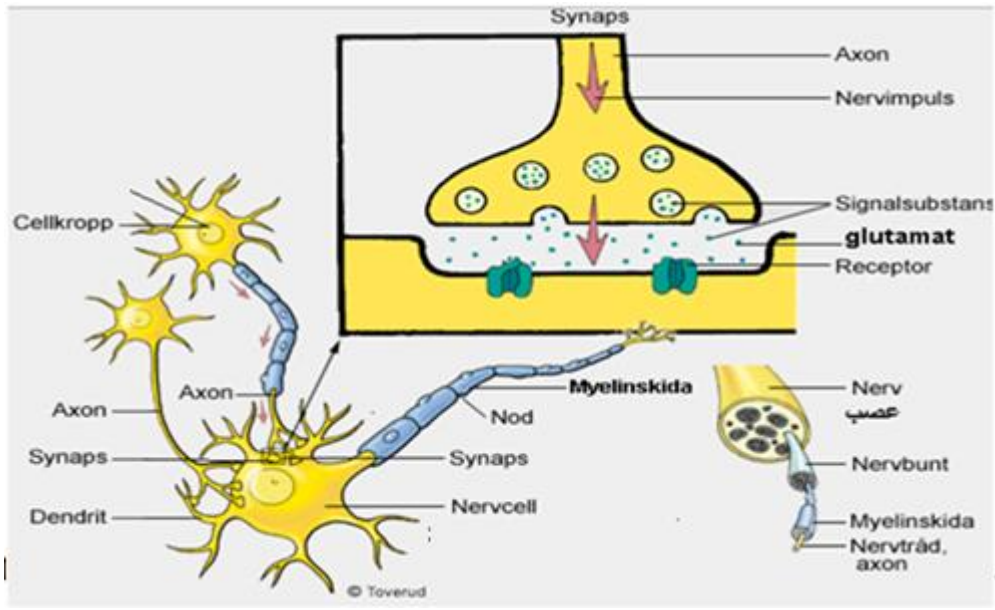
The cell in its natural state is the status of an electric chemical stable



Positive ions transition of sodium through the holes



The state of polarization of the cell is nervous in case of stability



Psychological stress and its role in biological disorders:

Psychological stress has many effects, including

1. Increased secretion of adrenalin generates an increase in blood pressure and an increase in the proportion of sugar in the blood.
2. Secretion of the hormone cortisol A.C.T.H, Which activates the adrenal cortex, has a stronger effect than the adrenaline hormone effect.
3. Secretion of the hormone cortisol, Reduces immunity and thus the body is susceptible to disease.
4. The center of hunger in the hypothalamus has stopped, Leads to reduced appetite for food, disabling most digestion processes, Hormone secretion reduces urination.
5. Secretion of the hormone cortisol and prolactin, working not to activate the sex center in Alhaaboethelamos, Thus, we notice the cessation of menstrual cycle in females, and lack of libido in males.

Conclusions:

Through this study shows us the following:

1. The occurrence of imbalances in the hormonal balance of the individual exposed to mental disorders.
2. Less body immunity by psychological pressure on the individual cases.

3. Cases emotionality a significant role in determining the nature of slow and rapid electrical activity frequencies, and brain chemistry.
4. Most organic diseases are caused by psychological stress.

Recommendations:

1. Facing life problems in a correct way of thinking and increasing self-confidence in turn reduces stress and anxiety.
2. Determine the period of time from the day of the individual to rest and relaxation and the practice of hobbies and sports work, even in its simple form.
3. Positive thinking, optimism and looking at the positive side of life continuously.

References

- 1 Al-Imami, Abbas Naji (2010). The relationship of optimism and pessimism to the future anxiety of the youth of the Arab community in Denmark. Unpublished MA Thesis - The Arab Academy in Denmark.
2. Al-Dahri, Saleh Hassan and Al-Obaidi, Nazem Hashem (1999). Personality and Mental Health, Al-Kindi House for Publishing and Distribution, Irbid, Amman.
3. Al-Dahri, Saleh Hassan (2005). Principles of Mental Health, Wael Publishing House, Amman.
4. Alder, Ibrahim Farid (1983). Biological Foundations of Human Behavior, Publications of the New Horizons House, Beirut.
5. Al-Zayat, Fathy (1998). Biological and psychological foundations of cognitive mental activity - Cognitive Psychology Series Dar Al-Wafaa - Mansoura - Egypt.
6. Al-Hariri, Rafidah Omar. Front, Abbas Naji (2018). Dealing with people with repulsive behaviors, House of Approaches for Publishing and Distribution, Amman.
7. Al-Haffar, Saeed Muhammad (1984). Biology and the destiny of mankind - the world of knowledge.
8. Al-Tawil, Izzat Abdel-Azim (1999). Milestones of Contemporary Psychology, 3rd Edition, University Knowledge House
9. Kamil, Abd al-Wahhab Muhammad (1994). Physiological Psychology, 2nd Edition, Dar Al Nahda.

10. Abdel-Qawi, Sami (1997). Biopsychology, Arab Renaissance Library.
- 11 Abd al-Khaleq, Ahmad Muhammad (1986). Physiological Psychology, House of Knowledge.
12. Abd al-Khaliq, Ahmad Muhammad (1983). The basic dimensions of personality, University House for Printing and Publishing, Beirut, Lebanon
10. Adas, Abd al-Rahman (1998). Educational Psychology, Dar Al Fikr for Printing and Publishing, Amman.
11. Al-Obaidi, Muhammad Jasim (2009). Clinical Psychology, House of Culture for Publication and Distribution, Amman.
- 12 Awad, Abbas Mahmoud (1999). Physiological Psychology, University Knowledge House.
13. Othman, Farouk (2001). Anxiety and stress management, Arab Thought House, Cairo, Egypt.
14. Safaa, Abbas Naji (2018). A study of the reciprocal roles of some stressful psychological variables and hormonal secretions in the general health of individuals, Issue 1, Northern Europe Academic Journal, Denmark.
15. Al-Rifai, Naim (1987), Mental Health, 6th Edition, Damascus University, Syria.