



## THE IMPORTANCE OF THE PERIODS OF DEVELOPMENT OF THE CHILD'S ORGANISM

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### Abstract:

The development of a human child is an important process. It is known that during life, a person changes physically and mentally. But during childhood, adolescence and adolescence, development is extremely strong. During these years, the child matures as a person due to physical and mental growth and changes.

**Key words:** preschool age, adolescence, acceleration, childhood, teenager.

### INTRODUCTION

The development of the human organism is a continuous process that continues throughout the life of a person. In each period of a person's life, characteristic features of this period, remnants of the previous period and buds of the next period appear. During these periods, the organism undergoes successive morphological, biochemical and physiological changes. These changes are linked to genetic factors that cause stages of growth and development. A child's organism differs from an adult organism by a number of characteristics[2,5,8]. The most rapid changes in the increase in body weight, the enlargement of individual organs and tissues occur in the first year of a child's life and during childhood. In adulthood, the growth of the organism stops, but the development of internal cortical connections improves functional differentiation and reflex activity. and continues at the expense of complexity. The aging process is unique and involves a series of redevelopments[6,9,10]. The child's development periods are determined based on the weight and size of the body and organs, the degree of hardening of the skeletal bones, the appearance of teeth, the development of connective tissue in the internal secretion glands, and other signs.

### MAIN PART

Until now, a complete list of universal general biological functional and morphological signs, which will be the basis for the systematization of age-related periods, has not been determined. The system of age-related periods was recommended by N.P.Gundobin, and its systematization took into account, on the one hand, the basic laws of the organism's development, and, on the other hand, the issues of organizing education during childhood and adolescence. Therefore, the following





age periods: kindergarten, kindergarten, elementary, middle and high school can be called pedagogical periods[12,11]. The childhood system is recommended as follows:

- The period of development in the mother's womb. During this period, the fetus is completely connected with the mother's organism in matters of nutrition, breathing, temperature and other factors. During this period, the growth and development of the fetus occurs rapidly.

- New born period. This period is 2-3 weeks. This period starts from the moment of birth and lasts up to 2.5-3.5 weeks and is characterized by adaptation of the organism to the conditions of the external environment. Breathing through the lungs occurs for the first time in a newborn child, and the function of blood circulation in the lungs begins. Instead of feeding through the mother's organism, the child's nutrition is carried out through the function of the individual digestive tract, analyzers also take an active part in the activity of the organism[4,7]. During this period, the system that provides nutrition to the fetus breaks down and the umbilical wound heals, and the body weight first decreases, then begins to recover and increase.

- Infancy. This period lasts up to one year. During this period, the length of the body increases by 1.5 times and reaches an average of 75 cm, the weight increases three times and is around 9-10 kg, the basic metabolism increases, the function of the endocrine glands accelerates, the motor speech analyzers are more developed and the child can speak. begins, but the vocabulary is small, i.e. 10 words.

- Young age. This period lasts from 1 to 3 years. During this period, growth and weight gain slows down a bit, but as the child acquires walking and speech skills, their sphere of communication with the environment expands. The child develops the ability to distinguish himself from other people (looks when called by name, gives his hand, etc.). The structure and functions of the organs are improved.

- Preschool period. This period lasts from 3 to 7 years. During this period, cognitive processes (memory, thinking, creative thinking) develop rapidly, the hardening of skeletal bones and the strengthening of the musculoskeletal system occur rapidly, the child's movements are more diverse and coordinated, compared to the newborn period. relatively, muscle strength increases 4-5 times and heart activity improves significantly, brain weight increases and is 1250 grams in a 7-year-old child, conditioned reflex connections are numerous, conditioned braking develops.

-The period of junior school age. This period lasts from 7 to 12 years. During this period, growth and hardening of skeletal bones continue, body proportions change due to the growth of legs, muscles develop rapidly, the integrating role of the cortex of the large hemispheres increases, braking processes increase. The structural and functional differentiation of the liver, kidneys, lungs, heart and other organs and





tissues is completed. The redevelopment of the thymus gland begins. The function of the thyroid gland and pituitary gland increases. Hormonal effects of the gonads begin.

- Middle school age. This period lasts from 12 to 15 years. This period is characterized by rapid growth and weight gain. Body proportions gradually approach those of an adult. Puberty (13-14 years for boys, 11-12 years for girls) and under the influence of hormones of the gonads increase the functions of the thyroid gland, the thymus undergoes redevelopment (involution). The shell of the large hemispheres of the brain functions as "the main controller and distributor of all the functions of the organism." The processes of excitation and inhibition become balanced, the functions of differentiation and generalization become complicated, especially due to the development of the second signal system.

-High school or teenage years. This period lasts from 13 to 18 years for girls, from 15-16 to 19-20 years for boys. This period is characterized by an increase in the function of the gonads, secondary sexual completion. The functions of other endocrine glands, especially the pituitary gland and thyroid gland, also increase[6,8,10]. The function of all organs and systems improves significantly as a result of continuous development. Preschool children do not grow evenly. At first, it grows 4-6 cm per year, 7-10 cm at the age of 6-7, and this is called the period of the first physiological elongation of height.

Children do not gain weight uniformly. The weight of a 4-year-old child increases by about 1.6 kg, at the age of 5 - about 2 kg, by the age of 6 - 2.5 kg, that is, on average, it increases by 2 kg per year. By the age of 6-7, the child's weight should increase by 2 times compared to 1 year old. At this age, the skin thickens, becomes more elastic, the number of blood vessels decreases, it becomes more resistant to mechanical effects. Children under 6-7 years of age have a larger skin surface per kg of weight than adults, so they can get hot or cold.

Depending on the climate and economic conditions, puberty in girls starts at about 12-14 years and ends at 16-18 years, and in boys it starts at 13-15 years and lasts until 18-20 years. First of all, sexual signs appear: hair begins to grow from the forehead and armpits, girls' mammary glands enlarge, boys' voices become hoarse. A sign of maturation of the gonads: menstruation begins in girls, menstruation begins in boys. A teenager gains weight, gains about 3-5 kg in a year. Teenagers are characterized by rapid growth and a violation of body proportions. Their height grows by about 10 cm in a year, girls' growth spurt begins earlier than boys. In adolescents, all parts of the body, tissues and organs grow and develop rapidly, their elongation is clearly noticeable. The trunk, arms, legs, and groin of boys tend to be slightly elongated as they grow. The face changes, the shape of the chest resembles that of an adult. The





uneven growth of some parts of the body leads to a temporary violation of the coordination of movements. A teenager becomes clumsy and rude. After the age of 15-16, these phenomena gradually pass. During this period, it is necessary to pay attention to the correct sitting of the teenagers at the desk, because the wrong posture leads to the curvature of the spine.

Vocal cords grow especially fast in the first year of life and at the age of 14-15. From the age of 12, boys' vocal cords are longer than girls', which explains the hoarseness of boys' voices.

Adolescents' lungs grow rapidly, their total volume expands, and by the age of 12, their lungs are 10 times larger than a baby's. Functional changes are observed in various organs of adolescents. The size of the heart increases, a "youth heart" or "adolescent heart" is formed, a murmur is heard when listening. In most cases, there is an increase in blood pressure (youth hypertonia), a stronger beating of the heart, a rapid heartbeat (sometimes the pressure decreases and the pulse thins), shortness of breath, and pain in the temple area. Some of them suddenly experience short-term dizziness, fainting (mostly in girls), and contractions in various parts of the gastrointestinal tract. When standing still for a long time, dizziness, unpleasant sensations in the heart and abdomen appear. Some teens may experience nausea and vomiting when forced to stand for long periods of time. Their color turns pale, the fingers become icy, sometimes they can turn blue. All these phenomena will pass after going to bed. In such teenagers, there is a lot of sweating, red dermographism (a red line remains when you scratch the skin with a nail), and immediate mood swings. Such events are caused by age-specific vegetative nervous system and endocrine system instability, mental and physical stress. With age, these symptoms usually go away by themselves, but when such phenomena appear, it is necessary to see a doctor to determine the real cause.

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## CONCLUSION

One of the types of activities for each period of child development is the main one, the leader. One childhood period is followed by another childhood period, but each new type of childhood period occurs within the previous one. Therefore, it is necessary to pay special attention to each period, taking into account the development periods of the child's organism.

## References

1. Samandarovna S. X. Mehnat sharoitining inson organizmiga ta'siri sog 'lom turmush tarzi //Amaliy va tibbiyot fanlari ilmiy jurnali. – 2022. – C. 34-37.
2. Самадова Х. С. Соғлом турмуш тарзи инсон саломатлигининг асосидир //Barqarorlik va yetakchi tadqiqotlar onlayn ilmiy jurnali. – 2022. – T. 2. – №. 9. – C. 198-201.
3. Ibotova M.O. Condition of Endemic Goiter. // Vital Annex: International Journal of Novel Research in Advanced Sciences (IJNRAS) – 2022.- P. 63-66
4. Ibodova M.O. Ecological Problems of the Environment Under Modern Conditions. // AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI – 2022. Б. 82-84
5. Artikovna S. Z. The State of Immunity After Parasitic Calving in People of Different Ages //Central Asian Journal of Medical and Natural Science. – 2022. – T. 3. – №. 5. – C. 373-377.
6. Artikovna S. Z. AUTOIMMUNE THYROID DISEASES: THE ROLE OF IMMUNOLOGICAL AND IMMUNOGENETIC FACTORS //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. – 2022. – T. 2. – №. 10. – C. 36-41.
7. Karshiyeva D.R.,Atmospheric dust and its effects on human health//ACADEMICIA: An International Multidisciplinary Research Journal. Voleme: 11 Issue: 03I May 2021 ISSN: 2249-7137. Page 1168-1172
8. .Karshiyeva D.R.,The Importance of Water Quality and Quantity in Strengthening the Health and Living Conditions of the Population//CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. Voleme: 02 Issue: 05I Oct 28 2021 Page 399-402
9. Samandarovna S. K. The Problem of Environmental Pollution //Vital Annex: International Journal of Novel Research in Advanced Sciences. – 2022. – T. 1. – №. 3. – C. 81-85.
10. Samandarovna S. X. Ovqatlanish gigeynasining ahamiyati //Journal of new century innovations. – 2022. – T. 13. – №. 2. – C. 53-55.



11. Samadova X. Radioaktiv nurlarning organizmiga ta'siri //Science and Education. – 2022. – T. 3. – №. 12. – C. 189-194.
12. X.S.Samadova Turli mehnat sharoitidagi omillarning inson organizmiga gigiyenik bahosi // Ta'lim fidoyilari // – 2022. – P. 8-11.

