

**Physical development of children: assessment and evaluation criteria.  
Simple compliment.**

- 1) What is the mean value of the head circumference of term newborns.
  - a) 32-34 cm
  - b) 34-36 cm
  - c) 30-32 cm
  - d) 36-38 cm
  - e) 38-40 cm
- 2) What is the physiological weight loss of the healthy newborn.
  - a) 5%
  - b) 6-8%
  - c) 20%
  - d) 12%
  - e) 15%
- 3) Select the endocrine glands with priority influence on physical development in the puberty period of children:
  - a) thyroid
  - b) thymus
  - c) adrenals
  - d) sexual glands
  - e) pituitary gland
- 4) Which method listed below is used to assess the proportionality of physical development:
  - a) nutrition index
  - b) weight (ponderal) index
  - c) stature index
  - d) somatoscopic assessment
  - e) complex assessment by percentile levels
- 5) Select which percentile level corresponds to „very high” physical development:
  - a) 90-97 percentiles
  - b) 3-10 percentiles
  - c) 25-75 percentiles
  - d) 97-100 percentiles
  - e) 10-25 percentiles
- 6) Indicate the value of weight (ponderal) index that corresponds to grade I of malnutrition:
  - a) 0,89-0,76
  - b) 0,75-0,60
  - c) 0,90 -1,1
  - d) 0,99-0,90
  - e) <0,60
- 7) Indicate the value of weight (ponderal) index that corresponds to grade II of malnutrition :
  - a) 0,99-90
  - b) 0,89-0,76
  - c) 0,6 and less
  - d) 0,75-0,60
  - e) 0,90-1,1
- 8) Indicate the value of weight (ponderal) index that corresponds to grade III of malnutrition:
  - a) 0,75-0,60
  - b) <0,60
  - c) 0,90-1,1

d) 0,89-0,76

e) 0,99-0,90

9) Indicate the formula to calculate the ideal body weight for a child in the first 6 months of life:

a)  $w_b + (800 \times 6) + 400 (n-6)$ , where  $w_b$  – birth weight,  $n$  – number of the months

b)  $w_b + (800 \times n)$ , where  $w_b$  – birth weight,  $n$  – number of months

c)  $10,5+2 (n -1)$ , where  $n$  – number of years

d)  $19-2 \times (5-n)$ , where  $n$  – number of years

e)  $n \times 5-20$ , where  $n$  – number of years

10) What are the characteristic signs of grade II of muscles development at children:

a) sufficient development of muscles, decreased elasticity, flat ribcage, abdominal wall in tone, medium muscle strength

b) sufficient development of muscles, medium elasticity, cylindrical ribcage, abdominal wall in tone, slow muscle strength

c) sufficient development of muscles, cylindrical ribcage, abdominal wall in tone, medium muscle strength

d) strong (very good) development of muscles

e) sufficient development of muscles, medium elasticity, cylindrical ribcage, abdominal wall in tone, very strong developed muscle strength

11) For determine the bone age in the children what x-ray is performed:

a) of the head

b) of ribcage

c) of the fist

d) of the leg

e) of cervical part of the spine

12) Select the statement that characterized the alternancy law:

a) parts of the body do not growth at the same time, but alternative.

b) for each period of the childhood there is a certain rhythm of growth

c) In the accumulative period of growth the differentiation is reduced and inverse

d) each part has his own rhythm of growth

e) the growth of different parts of the body is proportional

13) Select the statement that characterized the law of proportions:

a) parts of the body do not growth at the same time, but alternative.

b) for each period of the childhood there is a certain rhythm of growth

c) in the accumulative period of growth the differentiation is reduced and inverse

d) each part has his own rhythm of growth

e) the growth of different parts of the body is unproportional

14) Select the statement that characterized the law of morphological and ponderal antagonism:

a) Parts of the body do not growth at the same time, but alternative.

b) for each period of the childhood there is a certain rhythm of growth

c) in the accumulative period of growth the differentiation is reduced and inverse

d) each part has his own rhythm of growth

e) the growth of different parts of the body is unproportional

15) Select the statement that characterized the law of unequal growth:

a) Parts of the body do not growth at the same time, but alternative.

b) for each period of the childhood there is a certain rhythm of growth

c) in the accumulative period of growth the differentiation is reduced and inverse

d) each part has his own rhythm of growth

e) the growth of different parts of the body is unproportional

16) Select the statement that characterized the ponderal index:

a) body weight corresponds to height

Formatiert: Englisch (USA)

- b) The height corresponds to the age
  - c) The ratio between the real weight and the ideal weight
  - d) The ideal body weight according to the age
  - e) The ratio between the ideal weight and the real weight of the body
- 17) Select the statement that characterized the nutrition index:
- a) The ratio between the real weight with the ideal, corresponding to the height
  - b) The height is according to the age
  - c) The weight is ideal for the age
  - d) The ratio between the real weight and the ideal one
  - e) The ratio between the real height and the ideal one
- 18) Select the statement that characterize the stature index:
- a) The weight corresponds to the height
  - b) The ratio between the real height and the ideal one
  - c) The weight according to the age
  - d) The ratio between the real weight and the ideal one
  - e) The ratio between the real weight and the ideal one according to the height
- 19) Evaluation of presence the ossification centers in children is done by performing the X-ray of:
- a) fist
  - b) femur
  - c) tibia
  - d) ribcage
  - e) spine
- 20) Indicate the medium age of first milk (deciduous) teeth eruption at children:
- a) At the age of 6-10 months
  - b) At the age of 2-3 months
  - c) At the age of 8-12 months
  - d) At the age of 7-10 months
  - e) At the age of 16-20 months
- 21) Indicate the medium age of first permanent teeth eruption at children:
- a) At the age of 6-10 years
  - b) At the age of 5-8 years
  - c) At the age of 8-12 years
  - d) At the age of 4-5 years
  - e) At the age of 6-7 years
- 22) Indicate the medium age of changing the teeth from milk (deciduous) to permanent at children:
- a) At the age of 6-10 years
  - b) At the age of 5-8 years
  - c) At the age of 8-12 years
  - d) At the age of 4-5 years
  - e) At the age of 6-7 years
- 23) Indicate the role of parathyroid in the process of growing and development of children:
- a) Stimulates anabolic processes
  - b) Involve in the processes of bone (skeleton) mineralization
  - c) Stimulates catabolic processes
  - d) Stimulates the ribosomal RNA synthesis and protein synthesis
  - e) Accelerates the basal metabolism

**Multiple complement**

- 1) Select the endocrine glands with priority influence on growth and physical development of children in the first year of life:
  - a) thyroid
  - b) thymus
  - c) adrenals
  - d) sexual glands
  - e) pituitary gland
- 2) Select the endocrine glands with influence on growth and physical development of baby in the intrauterine period:
  - a) thyroid
  - b) thymus
  - c) adrenals
  - d) Sexual glands
  - e) Pituitary gland
- 3) Select the indicative formulas for assessment of thoracic circumference in the first year of life:
  - a)  $43-1,5(6-n)$ , where n- number of months
  - b)  $45-2(6-n)$ , where n- number of months
  - c)  $43+0,5(n-6)$ , where n- number of months
  - d)  $45+0,5(n-6)$ , where n- number of months
  - e)  $50+0,5(n-5)$ , where n- number of months
- 4) Indicate criteria of assessment of biological maturation at little pupil:
  - a) height
  - b) the character of annual ponderal growing
  - c) number of permanent teeth
  - d) presence of secondary sexual signs
  - e) "bone age"
- 5) At the base of percentile method of physical development evaluation of a child are:
  - a) anthropometric index
  - b) percentile tables
  - c) sigma deviations
  - d) percentile curves
  - e) indicative formulas of body weight assessment
- 6) "Atypical" physical development is established when body weight and height are in following percentile levels:
  - a) 25 -75 percentile
  - b) 3 – 10 percentile
  - c) 75- 90 percentile
  - d) 90-97 percentile
  - e) 97-100 percentile
- 7) Pathological physical development is established when body weight or height is found:
  - a) lower than 10 percentile level
  - b) higher than 75 percentile level
  - c) lower than 3 percentile level
  - d) at a distance bigger than 2 percentile level
  - e) higher than 90 percentile level
- 8) Indicate what is characteristic for complex assessment of physic development at children:
  - a) Biological maturation level
  - b) Harmony grade of morphofunctional parameters
  - c) Acceleration of physical development

- d) Body height
- e) Body weight
- 9) Indicate pituitary hormone role in the growth and development of children:
  - a) Has anabolic action
  - b) it is growth regulator
  - c) has a catabolic action
  - d) it is immunity regulator
  - e) intervenes in hydroelectrolyte metabolism
- 10) Indicate the role of thymus in the process of children growing and development:
  - a) Has an anabolic action
  - b) It is growth regulator
  - c) Has a catabolic action
  - d) Has an important role in the immune defense
  - e) Intervenes in the nucleic acids and calcium metabolism
- 11) Indicate the role of thyroid in the process of children growing and development:
  - a) has the anabolic action
  - b) Stimulates the growth
  - c) Has the catabolic action
  - d) Stimulates the synthesis of ribosomal RNA and protein synthesis
  - e) Accelerates basal metabolism
- 12) Select secondary sexual signs at girls which appear in the pubertal period:
  - a) breasts development and growth
  - b) appearance of pubic, axillary and facial hairiness
  - c) appearance of pubic hairiness
  - d) progressive increase of testicles and scrotus
  - e) appearance of menstrual cycle
- 13) Percentiles charts allowed the assessment:
  - a) of biological age of the child
  - b) the exact placement on the standard scale of each anthropometric criteria
  - c) percentage quantity of children with different data from those of the examined child
  - d) level of physical development of the child
  - e) functional indices of examined child
- 14) What are the methods of assessment of children and teenagers physical development:
  - a) Somatometry
  - b) Somatoscopy
  - c) Physiometry
  - d) Growing maps
  - e) Biochemical indices of blood
- 15) What are the methods used in physiometry:
  - a) Spirometry
  - b) dynamometry
  - c) Tensile strength
  - d) Skin elasticity
  - e) Biological maturation
- 16) Musculoskeletal examination through somatoscopic method includes the assessment:
  - a) Of the skull
  - b) Rib cage
  - c) Legs
  - d) Hands
  - e) Neck

17) Indicate biological maturation criteria of children:

- a) Appearance and observing skeletal ossification points
- b) Appearance of permanent and temporary dentitions
- c) Assessment of secondary signs of sexual development
- d) Height growing
- e) Body weight growing

18) What are the anthropometrical indices used in physic development assessment of children:

- a) Nutrition index
- b) Stature index
- c) Ponderal index
- d) Ciulițkii index
- e) Erisman index

19) Indicate the role of adrenals in the growing and development process of children:

- a) Has an inhibitory action on the growing process.
- b) Intervine in the mineralization process of skeleton
- c) Intervine in the electrolyte metabolism
- d) Stimulates DNA and ARN secretion
- e) Accelerates basal metabolism

20) What are the secondary sexual characters at boys, that occurs during pubertal period:

- a) external genitalia emphasizing
- b) pubic, axillary, facial hairiness appearance
- c) progressive increasing of testicles and scrotum
- d) behavior changes
- e) changing of voice timbre

21) Assessment of nutrition state in children is performing according the criteria:

- a) body weight
- b) body surface
- c) ponderal index
- d) the ideal weight for height
- e) nutrition index

22) Basic anthropometric parameters used in the assessment of physical development in children in the first year of life are:

- a) dentition
- b) Ponderal growth
- c) Stature growth
- d) Thoracic perimeter
- e) Head circumference

23) Select growing factors on development and growing of children:

- a) genetic factors
- b) endocrine factors
- c) internal factors of the pathology
- d) feeding
- e) behavioral factors.

24) General principles of physic development assessment of a child are:

- a) percentilic method
- b) method of complexed assessment of physic development
- c) the method Denver II
- d) sigmale deviation method
- e) method of anthropometric indices

25) Growing mechanism is explained by?

- a) alternating law
- b) the law of proportions
- c) the law of morphological and ponderal antagonism
- d) the law of unequal growth
- e) acceleration

**26)** Exogenous factors that determine and influence the growth and development of children are:

- a) Feeding (nutrition)
- b) the geographical environment
- c) socio-economic factors
- d) affective-educative factors
- e) genetic factors

**27)** The endogenous factors that influence the growth and development of children are:

- a) genetic factors
- b) hormonal factors
- c) hereditary factors
- d) the internal factors of pathology
- e) the geographical environment

**28)** What physical development parameters are appreciated by somatometry:

- a) body weight and height
- b) the length of limbs
- c) shoulder width
- d) skull, arm, thigh, leg, rib parameter
- e) signs of biological maturation

**29)** What physical development parameters are appreciated by somatoscopy:

- a) the development grade of muscle and fat tissue
- b) skin elasticity
- c) signs of biological maturation
- d) the shape of the ribcage, the back, the sole (foot), the posture
- e) tensile strength

**30)** Indicate the role of sexual glands in the process of development and growth of children:

- a) Have an anabolic action
- b) decrease the statural growth during puberty period
- c) stimulate the proliferation of stimulated cartilage cell
- d) stimulate the differentiation and sexual maturation
- e) accelerates basal metabolism

**Physical development of children: assessment and evaluation criteria.**

**Simple compliment.**

- |      |       |       |
|------|-------|-------|
| 1. B | 9. B  | 17. A |
| 2. B | 10. C | 18. B |
| 3. D | 11. C | 19. A |
| 4. E | 12. A | 20. A |
| 5. D | 13. B | 21. E |
| 6. A | 14. C | 22. E |
| 7. D | 15. D | 23. B |
| 8. B | 16. C |       |

**Complement multiple**

1. A, B
2. A, C
3. B, D
4. C, E
5. B, D
6. B, E
7. C, D
8. A, B
9. A, B
10. D, E
11. B, D, E
12. A, C, E
13. B, C, D
14. A, B, C
15. A, B, C
16. A, B, C
17. A, B, C
18. A, B, C
19. A, C, D
20. A, B, C, E
21. A, C, D, E
22. B, C, D, E
23. A, B, C, D
24. A, B, D, E
25. A, B, C, D
26. A, B, C, D
27. A, B, C, D
28. A, B, C, D
29. A, B, C, D
30. A, B, C, D



