

## 112 - PERIODIZATION OF TRAINING OF ATHLETICS FOR CHILDREN OF 08 TO 14 YEARS

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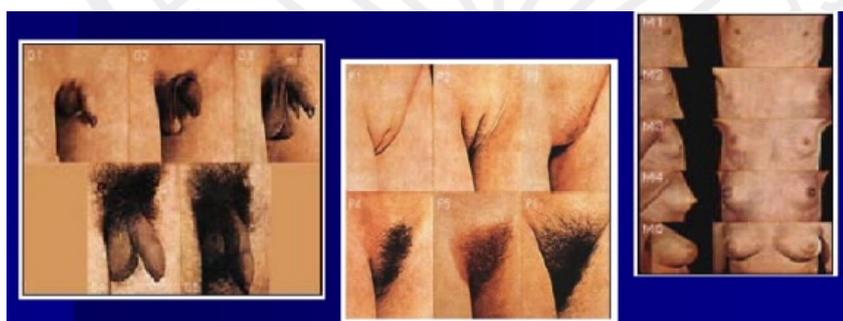
Today more and more children and young people are in evidence in competitive sports by participating in major competitions such as Olympics, Pan American, the age at which these young people are coming to the top of the sport nationally and internationally raises a very important issue. Is the training applied to young athletes is in line with their biological maturation?

Nowadays to be a great champion must follow a long path, where the work should be done in the long term, and respecting the phases of organic and physical development of each individual. What we see today is that the desire of coaches and parents want to be great champions of children at all costs, which often end up overloading them with specific training, leaving aside the development of motor skills and a whole process of initiation, leading thus the child to an early specialization, the preparation of athletes should be divided into four stages, each time the means and methods of preparation are specific to each stage of ripening, using various stages of training for each stage of maturity that athlete is. Of which: pre-pubertal, puberty, post-pubertal and high performance, they apply to the type of training appropriate for each stage, without forcing an early specialization.

The organic growth and maturity of the child does not necessarily happen with the time schedule. Its development is different from the chronological age, different biological systems also reach the state of maturity at different times, for example, sexual maturity usually occurs before the mature bone, so within a group of children of the same sex and similar age chronological, there will be changes in biological age, or level of biological maturity. This usually happens during the initial stages of adolescence or during the stretch growth, but it is also apparent in childhood. Within a group of children in relation to their chronological age, some are biologically more advanced in early development and other lagging behind with the late development. Although two children are in the same range of chronological age, not necessarily be the same level of biological maturity. The difference in the degree of ripeness affects the physical outcome of the child, because the levels of strength, endurance and speed, will be modified with the development of certain physical activities. The maturity level is largely determined by biological inheritance, and in general a positive correlation between level of maturity and physical performance. In practice, it is first important to know the stages pubertal stages, because these are tools for monitoring the sexual development of children, (through the secondary sexual characteristics, you can have a portrait of the development of primary sexual characteristics). Second, due to great variations in the age of onset and speed of progression of sexual maturation within a population, chronological age has little importance as a single parameter for evaluating growth and development of adolescents. Third, there is a direct relationship between the stages of sexual maturation and timing of growth and physical development, it is important to consider the condition of the maturity of the individual when considering the physical performance, the ability to predict the final performance, because children with same age chronological may have the same performance sports in a race. As an example, we have two children, the children who presented the maturation and the advanced stages in the maturational is puberty, while child B in his state maturational is in pre-pubertal. This difference shows that the athlete B has much more chance of being a winner than the A, B because it will develop their physical abilities until you reach puberty.

The self-assessment Tanner is a simple procedure performed by the child. Including identifying the current stage of development of secondary sexual characteristics in accordance with five classifications proposed by TANNER and adapted in the form of pictures. The child will be conducted in a closed environment where the pictures will be posted with the different development phases of hair púbicos / mammary glands / external genitalia of TANNER (1 to 5) and myself will identify with the picture that most closely resembles your maturational stage current.

Figure 01: Planks of Tanner



(DANTAS e ALONSO, 2006)

The first manifestation of puberty in girls is usually the appearance of the breast bud or button, to 9.7 years on average, within the same year there is the appearance of pubic hair. The axillary hair begins later (on average to 14.4 years). The menarche is a late event of female puberty. Occurs after the peak growth rate (PVC). Usually there is an interval of 2.5 years between the onset of first menstruation and breast bud. The average age in our country is 12.2 years and for males, the first manifestation of puberty often is the increase in testicular volume for the Brazilian population to 10.9 years on average. The emergence of the pubic hair occurs much later, around 11.3 years. The development of axillary hair and facial and the rest of the body occurs much later, 12.9 and 14.5 years respectively.

The event's first ejaculation espermarca occurs with an average age of 12.8 years, the teenager at the stage of acceleration or at peak speeds of growth in stature. To learn maturational stage in which the child is able to provide test where we will define sexual maturity, using the classification made by Tanner used for the female and male where it is divided into 5 stages. It is also the most practical application, the classification made by Bonjardim et al (1988) to classify the school, according to the stages (from TANNER, in pre pubertal, pubertal, pubertal Post).

Classification by TANNER for the male external genital development:

**Stage I:** Or children, which persists from birth until the beginning of puberty. The genitalia increases slightly over time overall, but there is no change in the complexion. --

**Stage II:** The scrotum begins to increase and there are changes in texture and color (reddening) of the scrotal skin.

**Stage III:** The penis increases in length and there is a smaller increase in diameter. There is still growth in the scrotum.

**Stage IV:** The penis continues to grow in length and diameter and glans develops.

**Stage V:** The adult genitalia is in size and shape.

Classification by TANNER for the development of female mammary glands:

**Stage I:** The breasts are children, with only lifting the papilla.

**Stage II:** Outbreak breast, as if small projection by the elevation of breast and papilla. Increase in diameter areolar. Mama and papilla. Increase in diameter areolar.

**Stage III:** Increased growth of breast and areola, without separation of its contours.

**Stage IV:** Projection of the areola and the papilla, forming a small projection above the level of the breast. Above the level of the breast.

**Stage V:** Breasts with respect adults, with retraction of the areola to the breast contour.

Classification by TANNER female pubic hair development:

**P1** - lack of pubic hair.

**P2** - sparse growth of fine hair, short, quietly pigmented, smooth encaracolados or slightly over the labia.

**P3** - hair becomes darker, thicker and encaracolados, extending to the pubic region.

**P4** - adult-type hair, though still smaller in area and distribution, not reaching the inner surface of the thigh.

**P5** - hair type of distribution in adults, reaching the inner surface of the thighs, and eventually, to develop above the pubic region constituting the stage P6.

Classification by TANNER male pubic hair development:

**P1** - hair pubiano absent.

**P2** - sparse growth of short hair, thin, slightly pigmented, flat or slightly encaracolados along the base of the penis.

**P3** - Hair more pigmented, the thicker and more encaracolados extending to the pubic region.

**P4** - Hair with adult features, but in smaller area of distribution, not reaching the surface of the thighs.

**P5** - by adults in standard distribution, reaching the inner surface of the thighs. May eventually grow above the pubic region setting the stage P6.

Classification by Bonjardim et al (1988) to classify the school in accordance with the stages of male TANNER:

**Pre-pubertal:** when the sum of the genitals and pubic hair is less than or equal to "2"; pubertal: when the sum of the genitals and pubic hair is bigger than "2" and less than or equal to "9";

**Post pubertal:** when the sum of the genitals and pubic hair is bigger than "9".

Female

**Pre-pubertal:** I púbicos hair and genitals, breasts and hair púbicos I.

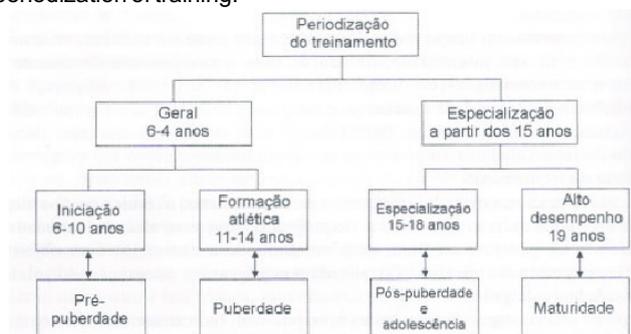
**Pubertal:** genital hair and púbicos II, III, IV, breasts and hair púbicos II, III and IV. I, II and IV.

**Post pubertal:** V púbicos hair and genitals, breasts and hair púbicos V.

Through this classification is that we will achieve all the training, always taking into consideration stage in which the child is. (Dante and Alonso, 2006)

The periodization is a method to organize the training. Here we define those days of training strong, weak, as are the cycles of volume, repetition, series, minutes, distance, duration, which the intensity of training, cargo, strength, weight lifting, speed, for specific periods of time, Which may be a week, a month or years. The planning for steps that contributes to the athlete reaches the sporting success without being exposed to the dangers of early specialization, because the major results are obtained through a continuous and careful preparation for several years. The objectives of a long-term plan based on the parameters and content that are included in a macro-cycle and in micro-cycles and are needed from 8 to 16 years for the training of athletes at high level, thus providing a continuity of training between the present and future. This continuity is also reflected in the level of performance and the standard of drills, which the coach needs to plan and execute a gradual and carefully. This approach is suitable for elite athletes with large loads of training, but also makes them particularly important for children and adolescents as a guarantee of proper direction of the process of training over the years. (BOMPA, 2002).

Table 01: Phases of periodization of training.



(BOMPA, 2002 p.272)

We should know before you start the training that when children learn something new, go through three stages of learning:

**Phase internalization:** Reflection on what is going to do. Before you learn something children need to know clearly what they are learning. Many inexperienced coaches begin by saying or demonstrating how to do something without first explaining what you want to learn. Incorrectly assume that the student knows. During this state of progress may be slow, depending on how much the athlete's own task.

**Stage of learning:** Experiments in several ways to accomplish the task. We saw that the skills are built on what we know and we do. Take longer to learn skills more complex because of the difficulty of coordinating sequences of movements. During this phase it is important to give suggestions on how to use the new ability to use past experience of the child.

**Phase Ability:** Run the ability. The control of movement becomes automated and the athletes seizing priority to choose

what to do, when doing so, not how. This is the stage which combines the notion of the concept of performance skills. Now the athlete can seize more effort on the implementation of the new strategy and skill.

In the pre-Pubertáres, which ranges from 8 to 10, since the child can start with the training of initiation, where the training should be of low intensity, with the main focus of the training program the general athletic development of young athletes. It must be emphasized the multilateral development, using all types of exercises. The bigger the better experience for the young athlete, it is gaining important skills for their future as athlete. We should start the children in exercises that teach basic sports skills, such as race, sprint, jump, throw, hit, balance and roll. Do you learn with various sports, and not a single modality sports. Table 02: Levels of training with duration, frequency and percentages of original content for training.

Higher Education	Duration in years	Frequency weekly training	General content	Specific content
The basic training (beginner level)	2-3 years From 5-8 years of age	2 4	80%	20%

(GROSSER et al., 1989)

As classification of Weineck (1991), from 10 years of age the child enters the stage of pre-pubescence. Eckert (1993) highlights that from that age, children have a better coordination of movement, better command body, accompanied by a progressive increase in capacity of strength and endurance. Furthermore, the child still feels the need to improve their physical skills to acquire more confidence with your social group. Weineck (1991) explains that at that age, education should lead to motor child to learn the movements correctly, as it is a propitious time for learning, as one of the basic periods for future high-performance skills. (August, 2001)

At this stage we can now increase the intensity of training. Many athletes will still be vulnerable to damage and emotional damage, the agency and capacities are growing and are developing rapidly, however, the performance will still depend on the development phase of the teenager. Some athletes may grow rapidly, suffering the stretch of growth which explains the lack of coordination during certain exercises. The emphasis should still be in the development of motor skills and capabilities, not in performance or in victory.

Table 03: Levels of training with duration, frequency and percentages of content for advanced training.

Higher Education	Duration in years	Frequency weekly training	General content	Specific content
Improvement (advanced level)	2-4 years Children from 9 to 12-13 years of age	3 6	60 50%	40 50%

(GROSSER et al., 1989)

### CONSIDERAÇÕES FINAL

The early specialization, while it takes the athlete to achieve good results in lower categories (children and adolescents), on the other hand, limits the athletic career of it, since the specific charges applied before the appropriate time generate physical and emotional sharply, Expelling the young athletes in training and competitions (Filinia and Volkov, 1998).

The early training can cause serious problems in the child's life, both physical and social order. She may make irreversible injuries, losing interest in the sport, the practice of physical activity in general. For a proper development of children is necessary to respect their biological conditions. A conscious professional should include in its planning activities compatible with the age of the children, including recreational activities, sports games pre-contributing to the development of sport and knowledge of the rules. The benefits of sport and conducted in childhood and youth are numerous and can lead to a proper social behavior and psychological, cooperation, socialization, discipline and training of character.

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### PERIODIZATION OF TRAINING OF ATHLETICS FOR CHILDREN OF 08 TO 14 YEARS

#### ABSTRACT

Today more and more children and young people are in evidence in competitive sports by participating in major competitions such as Olympics and Pan American Games, and organic growth and maturity of the child does not necessarily happen with the time schedule and their developments may be different from chronological age, different biological systems also reach the state of maturity at different times. The first manifestation of puberty in girls is usually the appearance of the breast bud or button, to 9.7 years on average, within the same year there is the appearance of pubic hair and men in the event of the first ejaculation occurs with espermarca average age of 12.8 years, the teenager at the stage of acceleration or at peak speeds of growth in stature, the periodization is a method to organize the training and there we will define those days of training strong, weak, as are the cycles of volume, repetition, series, minutes, distance, duration, which the intensity of training, cargo, strength, weight lifting, speed, for specific periods of time, which may be a week, a month or years. The early specialization, while it takes

the athlete to achieve good results in lower categories (children and adolescents), on the other hand, limits the athletic career of it, since the specific charges applied before the appropriate time generate physical and emotional sharply, Expelling the young athletes in training and competitions.

KEYWORDS: Education - Maturity - Periodização - Children.

### **PÉRIODISATION DE LA FORMATION DE L'ATHLÉTISME POUR LES ENFANTS DE 08 À 14 ANS**

#### **ABSTRACT**

Aujourd'hui, de plus en plus d'enfants et de jeunes sont en évidence dans le sport de compétition en participant à des grandes compétitions telles que les Jeux olympiques et aux Jeux panaméricains, et la croissance organique et de la maturité de l'enfant n'a pas nécessairement le cas avec le calendrier et de leurs évolutions mai être différent de l'âge chronologique, les différents les systèmes biologiques aussi atteindre l'état de maturité à des moments différents. La première manifestation de la puberté chez les filles est généralement l'apparition de la poitrine bouton ou un bouton, à 9,7 ans en moyenne, à l'intérieur de la même année, il est l'apparition de poils pubiens et les hommes en cas de la première éjaculation se produit avec espermarca moyenne d'âge de 12,8 ans, l'adolescent au stade de l'accélération ou la vitesse de pointe de la croissance dans la stature, la périodisation est une méthode pour l'organisation de la formation et nous allons définir ces jours de formation forte, faible, comme le sont les cycles de volume, de répétition, des séries, les procès-verbaux, de la distance, la durée, dont l'intensité de la formation, du fret, la force, l'haltérophilie, la vitesse, pour des périodes de temps, de mai qui sera une semaine, un mois ou des années. La spécialisation précoce, alors qu'elle prend à l'athlète d'obtenir de bons résultats dans les catégories inférieures (enfants et adolescents), d'autre part, les limites de la carrière sportive de celle-ci, car les redevances appliquées avant le temps, physique et émotionnelle forte, À expulser les jeunes athlètes en formation et des concours.

MOTS CLÉS: Formation - Maturation - périodisation - Enfants.

### **PERIODIZACIÓN DE LA FORMACIÓN DE ATLETISMO PARA NIÑOS DE 08 A 14 AÑOS**

#### **RESUMEN**

Hoy en día más y más niños y jóvenes se encuentran en pruebas en deportes competitivos mediante la participación en grandes competiciones como Juegos Olímpicos y Juegos Panamericanos, y el crecimiento orgánico y la madurez del niño no necesariamente ocurrirá con el calendario y su evolución pueden ser diferentes de edad cronológica, diferentes los sistemas biológicos también alcanzar el estado de madurez en momentos diferentes. La primera manifestación de la pubertad en las niñas suele ser la aparición de la yema de mama o el botón, a 9,7 años por término medio, en el mismo año es la aparición de vello púbico y los hombres en el caso de la primera eyaculación se produce con espermarca media de edad de 12,8 años, el adolescente en la fase de aceleración o en el pico de velocidad de crecimiento en estatura, la periodización es un método para organizar la formación y vamos a definir los días de entrenamiento fuerte, débil, como lo son las ciclos de volumen, la repetición, serie, minutos, distancia, duración, que la intensidad de la formación, la carga, fuerza, levantamiento de pesas, la velocidad, para determinados períodos de tiempo, que puede ser una semana, un mes o años. La pronta especialización, mientras que el deportista toma para lograr buenos resultados en categorías inferiores (niños, niñas y adolescentes), por otro lado, limita la carrera deportiva de la misma, ya que las tarifas aplicadas antes de que el momento oportuno generar físico y emocional bruscamente, Expulsando a los jóvenes atletas en formación y competencias.

PALABRAS CLAVE: Formación - Maduración - periodización - Niños

### **PERIODIZAÇÃO DE TREINAMENTOS DE ATLETISMO PARA CRIANÇAS DE 08 A 14 ANOS**

#### **RESUMO**

Hoje cada vez mais crianças e jovens estão em evidência nos esportes competitivos participando de grandes competições como Olimpíadas e Jogos Pan Americanos, e o crescimento biológico e maturidade da criança não necessariamente acontecem junto com calendário do tempo e seus desenvolvimentos poderão ser diferente da idade cronológica, diferentes sistemas biológicos alcançam também o estado de maturidade em diferentes momentos. A primeira manifestação de puberdade no sexo feminino é geralmente o surgimento do broto ou botão mamário, em média aos 9,7 anos; dentro do mesmo ano observa-se o aparecimento dos pêlos pubianos e no sexo masculino o evento da primeira ejaculação espermarca ocorre com idade média de 12,8 anos, estando o adolescente na fase de aceleração ou no pico de velocidades de crescimento em estatura, a periodização é um método para organizar o treinamento e nele vamos definir quais os dias de treino forte, fraco, como serão os ciclos de volume, repetições, séries, minutos, distância, duração, qual a intensidade do treinamento, a carga, força, peso levantado, velocidade, por períodos de tempo específicos, que podem ser uma semana, um mês ou anos. A especialização precoce, se por um lado leva o atleta a alcançar bons resultados nas categorias menores (infantil e juvenil), por outro, limita a carreira esportiva do mesmo, já que as cargas específicas aplicadas antes do momento oportuno geram estresse físico e emocional acentuado, afastando os jovens atletas dos treinamentos e competições.

PALAVRAS CHAVE: Treinamento - Maturação - Periodização - Crianças.