

Motor Activity for Children

By, Sam Snow
U.S. Soccer National Staff Instructor

Components of Physical Fitness

1. Balance
2. Agility
3. Eye/Foot & Eye/Hand coordination
4. Endurance
5. Flexibility
6. Strength
7. Speed + acceleration
8. Power

The components are listed above in an order of priority for soccer players' aged twelve and younger. Different components will be emphasized at different ages. Here is a break down of physical fitness priorities for the common soccer age groups.

U6

Balance, running, jumping and introduce the idea of how to warm-up.

U8

All aspects begun at the U6 age group plus agility, eye/foot & eye/hand coordination and introduce the idea of cool-down.

U10

All aspects begun at the U6 and U8 age groups plus endurance and flexibility. Now proper warm-up and cool-down are mandatory.

U12

All aspects begun at the U6, U8 and U10 age groups plus speed, strength and aerobic exercise.

Players from six to ten years of age display these developmental characteristics. "First change of shape": the body's extremities (arms & legs) grow more quickly than the trunk and spinal column. At the same time, the organs of the cardiovascular system increase in size. This stage of development is more or less the same for both boys and girls, although individual children differ greatly in terms of their pattern of growth and physical development.



Our objectives should be to provide all-round athletic experience (basic coordination and fitness). In training do games and exercises for furthering agility (running, hopping, and jumping): - games of tag/relays, -obstacle courses, - reflex exercises/balancing exercises/rhythmic exercises, occasionally using various sports equipment.

Typical characteristics for girls and boys

- ~ pronounced enjoyment of movement
- ~ weight range for boys and girls is approximately 30-50 lbs.
- ~ highly competitive spirit
- ~ height range for boys is approximately 35-45", girls approximately 37-45"
- ~ coordination-related difficulties
- ~ cardiovascular system is less efficient than an adults; a child's heart rate peaks sooner and takes longer to recover to full resting rate
- ~ only poorly developed muscles
- ~ temperature regulation system is less efficient than an adults; children elevate their core body temperature more quickly with activity and take longer to cool down than adults
- ~ low powers of concentration
- ~ movement education approach
- ~ high level of sensitivity
- ~ progress in motor development starts with the head and moves downward to the feet and from the center of the body outward
- ~ strong, uncritical attitude towards adult 'idols'
- ~ emphasis of fundamental movement skills:
 - Locomotor - walking, running, leaping, jumping, hopping
 - Nonlocomotor - bending, stretching, twisting, pulling, reaching
 - Basic Manipulative - throwing, catching, striking

There is a perceivable improvement in pace and coordination from U6 to U8; however the immaturity of a U8's physical ability is obvious. Be aware too for children under the age of twelve the skeletal system is still growing and growth plates are near the joints. Thus injuries to those areas merit special consideration.



Players aged ten to twelve are beginning to or already have moved into puberty. So there can be a one to three year difference in the physical abilities of players who are chronologically the same age. The average age for the beginning of pubescence in girls is ten years old with a range of seven to fourteen and for boys is age twelve with a range of nine to sixteen. The special characteristic of this age is their balance between physical and mental development. This stage of their life is also referred to as the 'golden age of learning' or 'age of harmony'. Their physical characteristics and qualities include a balanced physical appearance through a better-proportioned body and greater coordination. So, for this age coaches should use games to consolidate basic playing fitness. Try boosting motivation by arranging competitions and games involving running to improve the children's agility.

At this age we see overuse injuries, burnout and high attrition rates associated with high-intensity children's programs that fail to stress development and learning enjoyment!

Also at this age boys and girls begin to develop separately. Their gross and small motor skills have become more refined. There is a greater diversity in playing ability and physical maturity with physically mature individuals demonstrating stronger motor skills. They are beginning to develop abilities to sustain complex coordinated skill sequences. Flexibility is now key to preventing injuries.

The majority of soccer coaches in America are quite good about doing a warm-up. However, most of us fail to do a cool-down at all. This is not a good thing at any time, but is most harmful in a tournament or jamboree situation. The purpose of the cool-down is to provide a smooth transition from vigorous exercise to the body's natural resting state. The stretching exercises that make up the cool-down allow players to "unwind" - both physically and mentally. To provide an effective cool-down select two or three stretching exercises to loosen muscles that may have become tight from exertion. This will not only help minimize muscle soreness over the short-term, but will keep your players more agile and responsive throughout their athletic careers. Fitness training for children playing soccer should be done in conjunction with the

development of BALL SKILLS. This is "economical training". That is it combines more than one component of soccer into the training. Following are some samples of activities that will certainly impact the players' "soccer fitness". Simultaneously the players will improve other components of soccer. This will make the best use of the players and coaches' time. Further, for children the training is now entertaining, not boring like a session of calisthenics would be. Fitness improvement for children in soccer should not be *work*, but should be *play*.

Knee Tag

One ball per player. Confined area, random formation. Players collect points by tagging other players on the knee. This activity will work on dribbling, changing direction and speed, shielding, agility, balance, peripheral vision and development of leg strength.

Draw

One ball between two players. Players face each other with the ball between them at a distance of one-step away. Players stand with their feet square. On the signal "draw" from the coach the players try to be the first one to pull the ball back with the sole of their foot. Quick foot movement, immediate ball control and shielding. Reaction time, speed to initiate movement and anticipation of movement decision.

Goal on the Move

Small sided game with two equal teams. Use a nerf noodle for the "crossbar." Play on half of a

field. One player from each team holds the noodle to make the goal. Players holding the goal are neutral and allowed to run anywhere on the field to prevent getting scored on. Play as any other small-sided game. The team in possession tries to score and the other team defends. The only difference is the goal may be there one second and gone the next. Change goal posts every 3 to 5 minutes. Works on dribbling, passing, receiving, heading, shooting, cardiorespiratory endurance, and transition, changing the point of attack and vision.

"In doing we learn."

George Herbert Jacula Prudentum

