



Plyo Play for Kids

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A growing body of evidence indicates that plyometric training can offer observable health and fitness value provided that age-appropriate training guidelines are followed. First known simply as “jump training,” plyometric training conditions the body through dynamic movements which involve a rapid eccentric muscle action that is immediately followed by a rapid concentric muscle action.

Program Design Considerations

Plyometric training is a specialized method of conditioning that requires appropriate overload, gradual progression, and adequate recovery between exercise sessions. Moreover, plyometric programs should include proper coaching, a safe training environment, and a slow but steady advancement from education to progression to function. Since the performance of a plyometric exercise is a learned skill, proper instruction is needed to ensure continuation of correct exercise technique. Instructors should be careful to match the plyometric training program to the needs, interests and abilities of each child.

An advanced plyometric training program for a young athlete would be inappropriate for an inactive child who should be given an opportunity to experience the mere enjoyment of different

types of hopping, jumping and throwing exercises. One of the most serious mistakes in designing a youth plyometric training program is to prescribe a training intensity that exceeds a child's capacity. In short, it is always better to underestimate the physical abilities of a child rather than overestimate them and risk negative consequences (e.g., dropout or injury).

There are literally hundreds of plyometric exercises that children can perform depending on training experience and ability. Children should begin with low intensity drills (e.g., double leg jump or medicine ball chest pass) and gradually progress to higher intensity drills (e.g., lateral cone hop or single leg hop) over time. In addition to body weight exercises, upper body throws using medicine balls can also be effective. In terms of sets and repetitions, beginning with one to two sets of six to 10 repetitions on a variety of upper and lower body exercises twice per week on non-consecutive days seems reasonable. If multiple sets are performed, children should be allowed to recover between sets in order to replenish the energy necessary to perform the next series of repetitions at the same intensity. Unlike traditional strength exercises, plyometric exercises need to be performed quickly and explosively. General youth plyometric training guidelines are outlined below. More detailed information is available in *Progressive Plyometric Training for Kids* (Monterey: Healthy Learning, 2006)

- Provide qualified instruction and supervision
- Wear sneakers with tied laces and train on a nonskid surface
- Begin each session with a dynamic warm-up
- Start with one set of 6 to 10 repetitions on low intensity exercises
- Develop proper technique on each exercise before progressing to more advanced drills

- Include exercises for the upper and lower body
- Progress to 2 or 3 sets of 6 to 10 repetitions depending on needs, goals and abilities
- Allow for adequate recovery between sets and exercises
- Perform plyometric exercises twice per week on nonconsecutive days
- Keep the program fresh and challenging by systematically varying the training program.

Since plyometrics are not designed to be a stand-alone program, youth conditioning programs should include a variety of skills and drills that are specifically designed to enhance different fitness components. In fact, plyometrics actually work best when integrated into a multi-faceted program that includes other types of training. Furthermore, it is important for children to be exposed to different types of conditioning and actually understand the concept of a fitness workout. Combining fitness components is not only more effective and time efficient, but this type of training is more fun for young participants who tend to dislike prolonged periods of monotonous training. While there are no short cuts or gimmicks to enhancing strength, speed, and power, with guidance and encouragement children will gain confidence in their abilities to perform relatively easy drills and therefore they will be more willing and able to perform at a higher level.

Selected References

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