



**Do genetics play a role in  
how successful children  
will be in sport? ▶**

Studies have shown that a person's performance level and response to training are strongly influenced by genetics. They have shown that children inherit not only physical characteristics, but also psychological qualities such as competitiveness and motivation as well. Heredity is therefore very important in determining how good an athlete a child can be.

Studies of identical twins show that approximately 50 per cent of aerobic power and 70 per cent of endurance performance are fixed by heredity. Research conducted at Université Laval by world-renowned genetics expert Dr. Claude Bouchard indicates that an individual's response to training is also genetically determined. This means that some athletes will show greater potential for improvement than others as a result of training, regardless of their initial level of fitness or how hard they work.

If a child does not have the genetic makeup required to excel in a particular sport, it is unlikely that he or she can perform at the highest level. Although genetics play a key role in determining one's potential for performance, it is clear that proper training is also critical. In fact, it is through training and hard work that genetic potential in sport can be realized.

Genetics play a big part in our ultimate level of achievement in sport, but everyone can and should be encouraged to participate. All children can benefit from the life-long lessons sport can bring them, regardless of their level of performance. Eventually, if performance is important to the child, it may be advisable to consider directing him or her to sports where the probability of success is highest.



*Jeux de Canada Games*