

As we burn fuel at a high rate, we perspire to cool our bodies down. Also, we breathe faster and our hearts pump faster to get more oxygen to our muscles to keep the fire going and to carry away the smoke and ashes, so to speak, waste products from the combustion in our muscles, in actual fact. Our muscles have enough energy and oxygen stored in them so that we can lift a weight several times without a re-supply but after a few movements, we need more fuel and oxygen. This leads to an unexpected outcome. You can get stronger by lifting weights without increasing your aerobic capacity. Likewise, you can improve your aerobic capacity and not change your strength level. They are relatively independent but as you approach higher levels of fitness in either one, the two become more interrelated. More on that in the future.

Flexibility

The ability to move our joints through their full range without pain or injury is the definition of flexibility. Like aerobic capacity and strength, one can become more flexible without affecting the other two. However, as we age and as we become more fit, flexibility becomes more important. As fitness levels rise, either strength or aerobic, flexibility becomes more important. At the highest levels, all three elements interact and become co-dependent. To perform your best, all three must receive attention.

Balance

Balance has only recently moved into the standard repertoire of physical fitness. It was not previously conceived as something that could be altered through practice but that idea has now been put to rest. Just as we can increase strength, endurance and flexibility through exercise, so we can increase our balancing skills. Dancers probably get a fair amount of this training in their dance lessons and on the floor.

Coordination and Timing

Perhaps the best known example of training to increase coordination and timing occurred in the old Knute Rockne film with Pat O'Brien as the coach and Ronald Reagan as the Gipper. Coach Rockne sent his football players to ballet class so they could maintain better control of their bodies and to help them move their limbs in unison. In short, ballet emphasized balance, coordination and timing, skill as important on the football field as on the dance floor.

The operative word here is skill: something that can be improved with practice.

Nutrition

Certainly food has become the focus of many a diet plan and opinions differ on this over a wide range. None the less, there are certain fundamentals of food that are widely accepted and we'll touch on those. In the same domain is hydration, that is, maintaining adequate levels of fluids and electrolytes in the body. Much has been learned about this seemingly simple concept and hard science shows that proper hydration can significantly improve endurance, strength and overall performance. Dance competitors take note of this subject for future reference.

Rest

All work and no play makes Jack a dull boy but over exercising without sufficient time for muscle recovery leads to injury, loss of optimal fitness and can impair the immune system. Time between bouts of intense exercise is extremely important if optimal results are to be obtained.