The Bottom Up Kettlebell Carry Stuart McGill

Every time I work with top international athletes I learn more about athleticism. We have all heard that having a strong core increases strength elsewhere in the body. Experience tells us this is true but I was incomplete in my explanation of the mechanism. I enhanced my education a couple of years ago following my analysis of "strongman event" competitors.

First we measured the athlete's strength capabilities – hip abduction being one of them. Then we quantified the tasks, strength demands and joint mechanics in various events. Curiously they needed more hip abduction strength to succeed in events such as Super Yoke and the Suitcase carry than they could create in their hips. How could they perform a feat of strength that was beyond what a joint could produce?

Consider the Super Yoke where several hundred pounds are carried across the shoulders. The axial load down the spine traverses across the pelvis to the support leg allowing the other leg to step and swing. Hip abduction is needed to lift the pelvis laterally but clearly the strength required far exceeded what the hip could create. The missing strength came from the core muscles (quadratus lumborum and the abdominal obliques on the swing leg side) which helped lift the pelvis. Now consider the footballer who plants the foot on a quick cut. A strong and stiff core assists the hip power to be transmitted up the body linkage with no energy losses resulting in a faster cut. This is the same performance enhancing mechanism as in the Super Yoke but it is not traditionally trained in the weight room.

This experience resulted in the search for the best training approach. We quantified asymmetric carries such as the suitcase carry and found that quadratus and the abdominal wall were challenged to create this unique but essential athleticism. However, working with Pavel we tried kettlebell carries (just in one hand). Racked traditionally with the bell carried on the back of the forearm (with the hand position tucked in close to the chest as if the athlete were to begin an overhead press) helps to reduce shoulder impingement should this be an orthopaedic issue. However, even better was the bottom up carry. Here the bell is held upside down in the bottom up position with the elbow tucked close to the body and the bell beside the head. The core is stiffened to control the bell and prevent it from rotating in the hand. Now walk briskly. Core stiffness is essential to prevent the loss of the bell position.

I consider that every general program to enhance athleticism needs a carry task. The bottom up kettlebell carry is a staple. This and other techniques for performance enhancement are found in "Ultimate back fitness and performance" (www.backfitpro.com).