

*What are the correct physics for improving the golfer's swing?*

*Why is neuromuscular conditioning critical for a good golf swing?*

*Which part of me is in control when I strike the ball—my conscious mind or my unconscious mind?*



*The golfer's swing can be quickly and efficiently improved only by utilizing the correct resistance physics — in motion!*

## The Leading Edge in Golf Training Equipment

Kellion leads the way in researching the physiological basis of the golf swing, and designing equipment that gives golfers the unprecedented benefits of this advanced understanding.



Our flagship product, the  
**POWERGROOVE**

**Exponential Resistance Swing Trainer**, exemplifies the capacity of our "neuromuscular approach" to bring surprising levels of improvement to golfers.

The IMPACTSTIK squeezes a host of the benefits of our knowledge into a package that any and every golfer can easily acquire.

Neuromuscular conditioning—"muscle memory"—it's the secret of a good golf swing. Think of it as **POWER FROM THE INSIDE OUT.**

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# IMPACTSTIK™

*Develop explosive impact*

*Increase club head speed*

*Gain yardage*

*Develop a balanced follow through*

*Increase golf fitness*

*Improve your tempo and rhythm*

*Warm up effectively*

Another ground-breaking golf training aid from



*Power from the inside out...*



## Dynamic Progressive Resistance & Subcortical Reflexes

How does a simple-looking “stick” do so much? The secret is inside—a mechanism that creates *dynamic progressive resistance*. The design is elegantly simple, but the concept is the result of years of specialized research.

### Swing it like a golf club—it works like this:

As you perform the downswing, an internal weight glides from the handle area towards the end of the stick. At the beginning of the downswing, the physiological effect of this sliding weight is to minimize the push reflex of the forearm muscles (which causes casting, over-the-top swing, and outside-in swing path), and to promote the desired pull reflex of the arms.

As the swing progresses into the impact zone, the moving weight ramps up its travel velocity—which rapidly produces a progressively increasing pendulum force. This pendulum force peaks at the ImpactStik’s internal point of impact, which coincides with the golf swing’s point of impact with the ball.

Two things happen at this central moment of impact;

- 1) A satisfying audible “whack” cue helps to identify proper impact timing.
- 2) A mechanical force causes the hands and arms—in the space of a few milliseconds—to “stop” and extend. And a physiological reflex is triggered that firms up the grip, and allows the wrists to snap the stick forward (for a powerful release).

Then the weight retracts back, pulling the golfer’s body through for a proper follow-through and finish position.

This describes the first level of training. But a deeper underlying training occurs because the ImpactStik achieves the correct resistance physics for working synergistically with the unconscious (subcortical) neuromuscular reflexes of the human body. These reflexes fire automatically during the swift downswing of a golf swing—impervious to the golfer’s need, intention, or desire to consciously control them. The ImpactStik’s effect at this level is to *reprogram* those automatic reflexes to fire as the golf swing requires.

## Neuromuscular Conditioning, or “Muscle Memory” Reprogramming

Human body movements are controlled by both our conscious and unconscious minds.

Our conscious (cortical) mind, which operates up to approximately 0.6 second, cannot attend the event of the downswing, which happens in approximately 0.25 second. For this reason, the golf downswing is mostly controlled and performed by our unconscious mind. Most golfers cannot recall what actually happens during impact.

***This fact—that the golf swing is performed mostly by the unconscious mind—is the reason why it is so difficult to learn.***

Operating under different rules than our conscious mind, the unconscious mind functions via pre-programmed muscle firing sequences commonly called “muscle memory”. The crucial fact, however, is that these “muscle memories” can only be reprogrammed through neuromuscular stimulation, or conditioning—exactly what the ImpactStik provides.

**POWERGROOVE™**  
**IMPACTSTIK™**

**The ImpactStik will give you REAL, DEMONSTRABLE IMPROVEMENT. This improvement is IMMEDIATE and ENDURING.**

It is excellent for developing feel of the *pendulum* sensation of the golf swing. It corrects *outside-in swings, reverse pivoting, weak left arm, deceleration at impact, poor follow through and finish*. Swinging it on a regular basis when you are off the course will help develop proper golf musculature and general muscle tone so that you will strike the ball more solidly and more effortlessly. Using it as a warm-up tool before a game will help tune your swing and set your swing tempo and rhythm. The impact feature simulates actual outdoor ball striking, so that you can get the same benefit while using it anywhere.

