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>> Good times are rolling

Foam rollers:
Hit or hype?

>> X marks the spot

Essential
guide to
the future
of group X

>> Roaring 40s

Rise of the
retrained
personal
trainer

Win
a Stroops
performance
kit and a place
on a training
course!

ViPR group fitness launches!

Chop chop

Advancing the chopping pattern for rotational power

Properly performed chopping patterns enhance power transfer and reduce low back injuries. **Pete Holman** looks at advanced chopping patterns for suspension training systems.

Figure 1

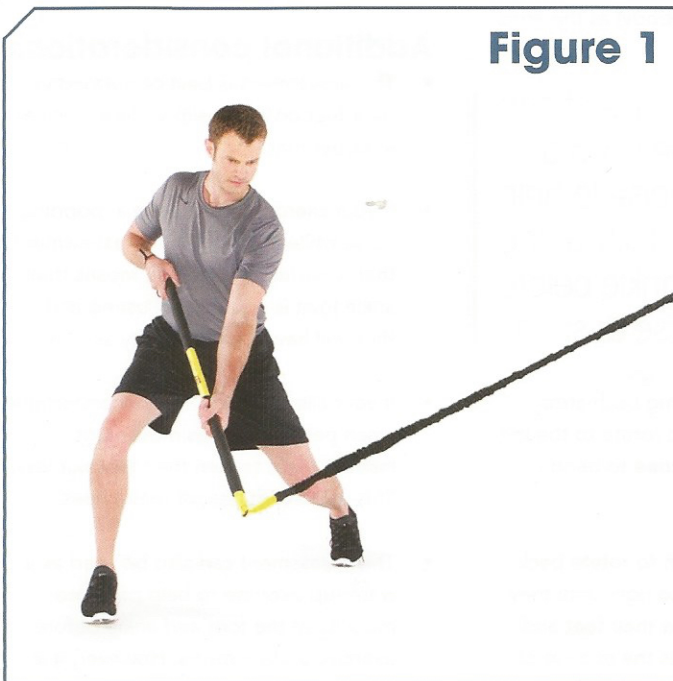


Figure 2

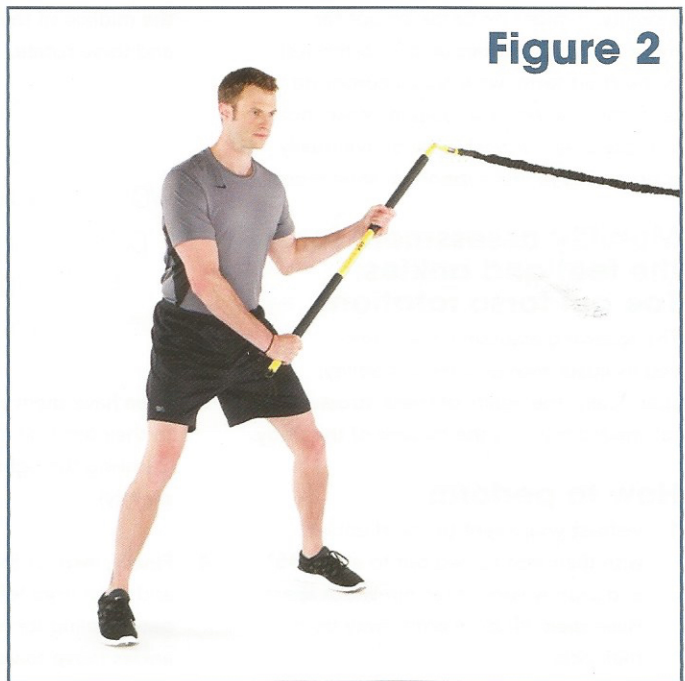
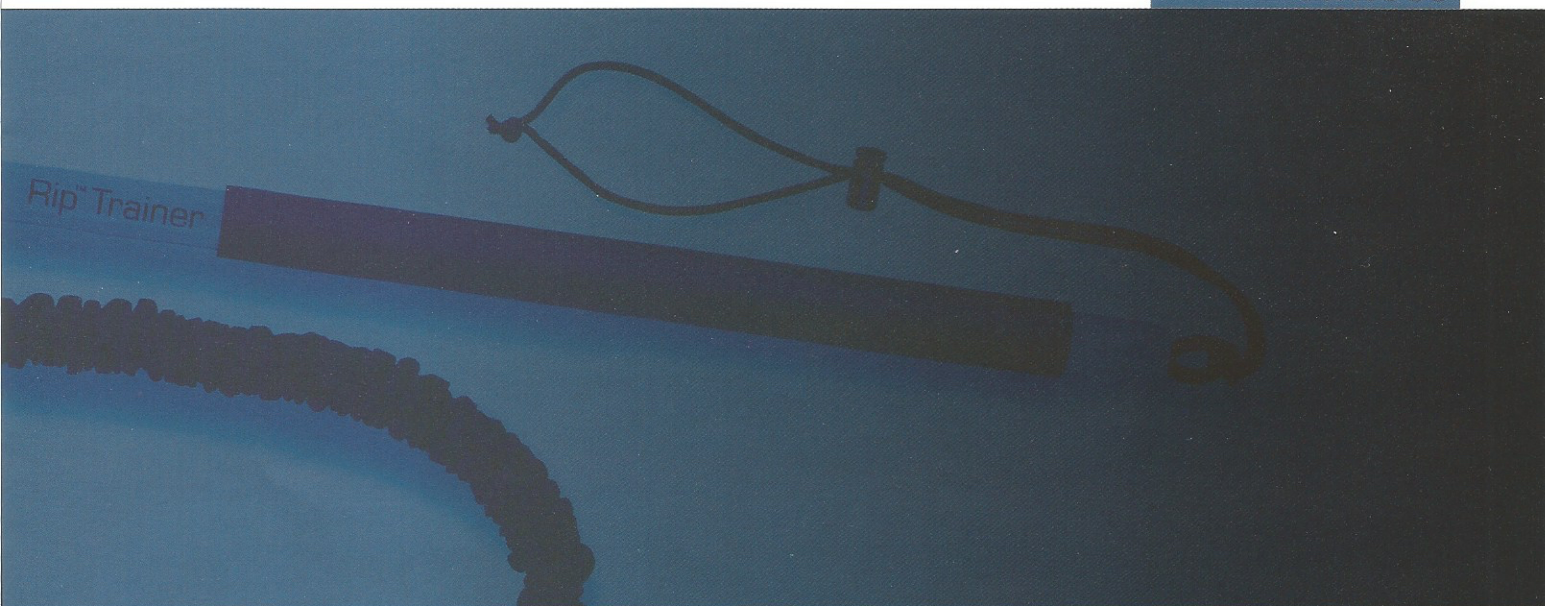


Figure 3





I imagine hitting a tennis ball, driving a golf ball or shovelling snow – you are essentially performing a chopping pattern.

A chopping pattern is a diagonal or spiral movement of the upper extremities from a high to low angle (see Figure 4) which mimics functional movement patterns that occur in both sport and daily life. The chop can be used to cause reflexive activation of the core before upper-body movement. In individuals without dysfunction, movement of the upper extremity is preceded by contraction of the erector spinae, multifidi, transversus abdominis and both the internal and external oblique muscles¹. Properly performed chopping patterns enhance power transfer and reduce low back injuries. After your client or athlete perfects the chop, what's next? A strength coach or trainer can advance the chop pattern to improve balance, power and overall athleticism.

The chop and suspension training

The TRX Rip Trainer is a strength and conditioning tool that, when used properly, may help to improve spiral and diagonal movements. The Rip Hockey Slap Shot (see Figure 1 and 2) is an excellent way to progress after the basic kneeling chop has been mastered. Similar to the chopping pattern, the Rip Hockey Slap Shot uses the synergistic pushing and pulling of the upper body to reflexively activate the core muscles. The challenge during this exercise is to use a pivot mechanic on the ball of the rear foot to help activate the rear glute and drive power towards the target.

Because the legs are more involved during the Rip Hockey Slap Shot relative to kneeling chops, speed of movement can be progressed, which helps to develop power. Additionally, the off-set stance challenges balance, which will improve proprioception and overall athleticism.

The chop can be used to cause reflexive activation of the core before upper-body movement

Let's look at some of the coaching points used to execute the Rip Hockey Slap Shot properly (see Figures 1 and 2).

1. Stand sideways to the anchor point in an off-set stance with the rear hand (power hand) palm up and the front hand (base hand) palm down.
2. Aggressively pull the base hand towards the waist while extending the power hand towards the target (approximately 25cm off the ground) while simultaneously pivoting on the ball of the rear foot.
3. Pause for 1-3secs at the end range of motion to ensure you are balanced, stable and maintaining a neutral spine posture.

Chopping patterns are a great way to reflexively activate the core and closely mimic movements seen in daily life and sports. Once the kneeling chop pattern has been properly rehearsed, the Rip Hockey Slap Shot is an excellent way to further challenge the chop in a more athletic stance and with faster speeds. Additionally, the Rip Trainer is easily portable, can be anchored anywhere and allows the user to adjust tension in real time by simply moving closer to or further away from the anchor point. **fp**

For information on TRX Rip Training visit www.TRXtraining.com



Figure 4

For references mentioned in this article visit www.fitpro.com/references