

POWER RESISTANCE TRAINING FOR ALL AGES

OnSite Fitness recently spoke with Bob Piane, the inventor of the Vortex Xcellerator and Power Belt system about the benefits of power resistance training for various ages and goals.

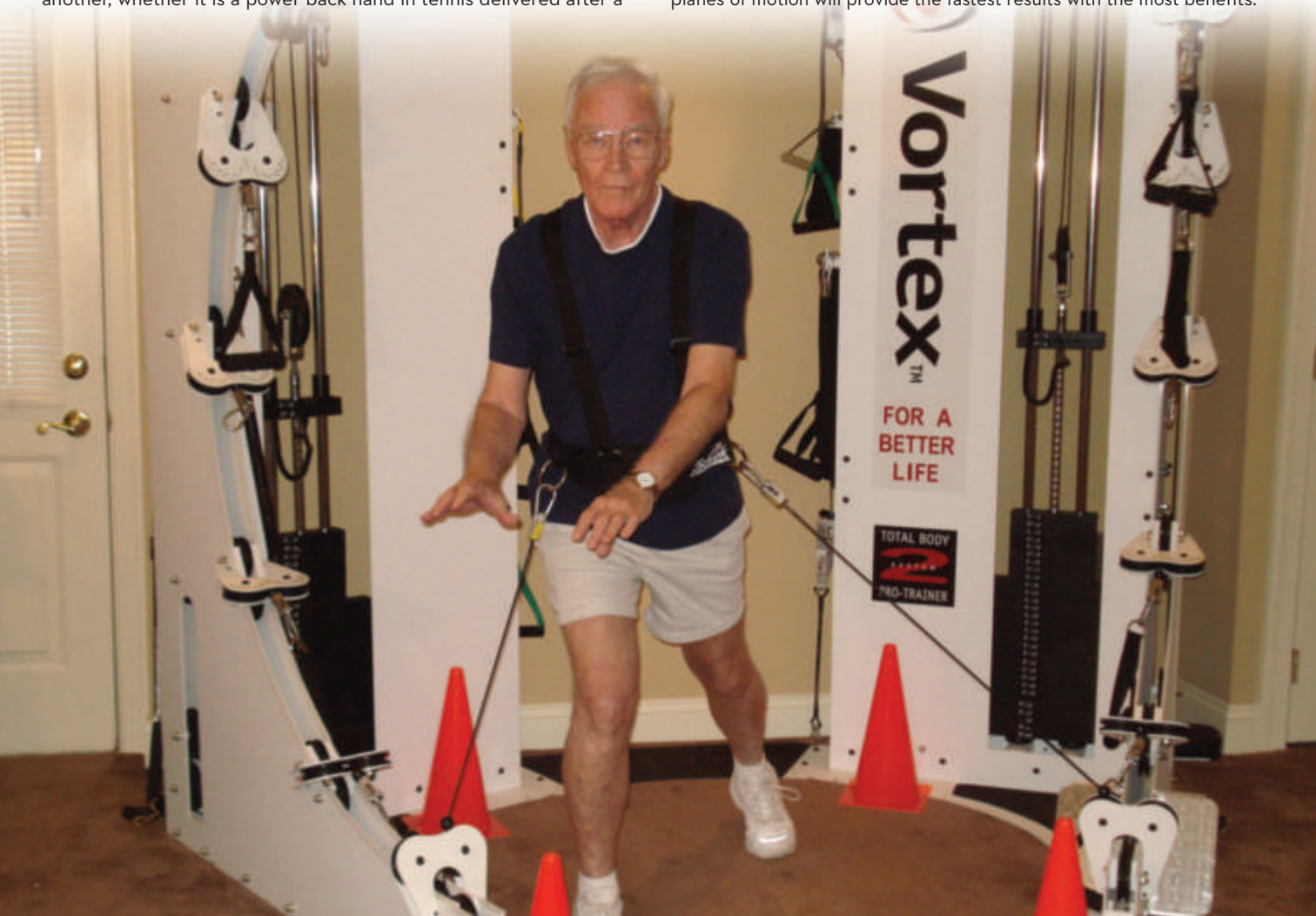
OSF: Bob, why do you think power resistance moves are beneficial to isolated strength exercises?

PIANE: Resistance training that also incorporates multiplaner movement patterns with power training is showing tremendous results on the playing field. The reasons are two-fold. First, all sports movements require multiple muscle groups to work together to perform, nothing happens in isolation. If you train athletes for power and movement, the "transfer effect" onto the actual playing field is far greater. The strongest guys in the weight room holding the squat and bench press records are rarely your top performers on the field. Second, most sports require power movements in one form or another, whether it is a power back hand in tennis delivered after a

hard deceleration to change directions to make the shot, or off the line on a football field, it is power that is required. If the muscles for power are trained in isolation there is a dramatic increase in injury realized once the smaller muscles are called upon for power in multiple planes of movement, they become the weakest link and often break down due the imbalance of the training.

OSF: Can you give some examples of how this type of training helps both the young athlete all the way to a senior in functional health?

PIANE: All physical things in life require muscle strength and some level of power to accomplish them. It is all relative, but an athlete who is stopping on a dime to change direction has to train for that power move, as well, the senior trying to catch themselves after tripping needs some level of power and strength to prevent the fall and injury. Training muscles in combination that simulate the sport or active daily living situations (ADL) for strength and power in multiple planes of motion will provide the fastest results with the most benefits.



OSF: Do you feel that isolated exercises are still valid with functional training?

PIANE: Yes, the major muscle groups should always be trained and isolation training does this best by providing a strong base to work off of. But the other is just as, if not more, important to overall strength and the reduction and prevention of injury. You would not expect a tall building, although it may be made of solid concrete, to hold up very well if they did not put the reinforcing rods in the mix as it was built. The body is the same way, and functional training is what keeps the connectors strong and held together.

OSF: The Xcellerator is relatively new on the market yet it is seeing some amazing results. Can you share what it is about the product in particular that you like, and how it is helping clients in your areas?

PIANE: In sports we have top-level athletes increasing their explosive power. For example, the Carroll College Football team trained under the direction of Coach Jim Hogan (Samson's National Strength Coach of the Year for the 2005-06 season) this past summer for ground-based power movements using the Xcellerator, the Vortex Power Belts and the Vortex PRO-TRAINER. They won the national title, defeated all comers in their 16-0 season, and had strength and speed gains as well as reduced injuries in almost every category. In fact there were no injuries recorded the entire year for those players that trained with the Vortex systems.

Pro-Boxer Travis Simms won his title back after a long layoff and trained on the Vortex system using the Xcellerator. Because the combo of the bands, the weight stack and the unlimited movement and multiplaner training environment of the Vortex design he was able to increase not only his strength, but the power in his punches and his overall conditioning since he was able to simulate the sport by "fighting the machine"...and at ballistic speeds without the weight stack flying around. The combination of bands with the selectorized weight stack provides the best of both worlds together as one new resistance system. The same goes for Hockey, Lacrosse, Golf, Baseball, Wrestling, Tennis, Basket Ball, Skiing, etc. Practically every sport gains results faster and at higher levels with reduced injury from this new power system.

OSF: How applicable is it to a variety of ages and physical needs/limitations?

PIANE: Those with other physical limitations can also benefit from the use of the Xcellerator Band system. It is a ballistic power training system but when used in a slower, more controlled way the user gets the benefit from the bands. The resistance increases as the movement is carried out (one benefit of band training); plus it connects to a selectorized weight plate and enables the trainer to increase the starting load by a measurable and constant base weight.

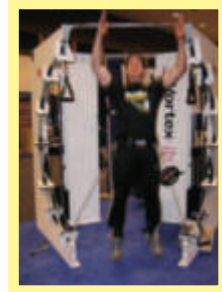


Thus, the benefits of having a selectorized resistance are also incorporated. We have been seeing results of 50-75% faster improvement from seniors, those in therapy and in wheelchairs using this system.

OSF: How about the Power Belts designed to use with the Vortex equipment - what kinds of needs do they address?

PIANE: The custom Vortex Power Belt was designed by us with Sheik to create a belt that allows our cables to be attached at a variety of points around a users' waist. It sounds simple but it adds so much to the creativity of training, especially what is called "ground-based" training. This type of training is done with a load of resistance attached at one or two points around the waist and exercises and movements are done in a standing position. With the Xcellerator, Power Bands connected to the weight stack and the Power Belt, any number of training possibilities open up. Athletes use it for explosive acceleration and deceleration at all angles. Particularly

desirable is the lateral training and plyometric work that can be done in all directions under a measurable workload. For seniors it allows for anti-fall and stability training to prevent falls and the serious complications resulting from a fall. Active Daily Living exercises like walking up stairs, twisting while bending to pick something up, or simply carrying groceries into the houses can all be simulated. In addition, the user's body's weight can be off-loaded to the machine as counter-weighted squats and lunges are performed using the Power Belt, thus allowing those recovering from hip and knee replacements the ability to move in real to life movement patterns without the load of their body weight.



OSF: How easy are they to use?

PIANE: Everything is easy to use. The bands simply hook onto the weight stack by hand, the belt is just that, and the cables all have easy snap on attachments. Plus the unit itself uses a patented "Grab-n-Train" design.

Once a person sees the unit and accessories in use they understand the simplicity of mastering the initial set-up and then specific training routines can be formulated to satisfy the various users' needs. **OSF**

For more information contact Vortex Fitness at 877-676-4677, www.vortexfitness.com.