# Dynamic Resistance



A key factor to look at when building a workout routine is the variable of time. In our busy climate the goal of being the most efficient during a workout can sometimes be the most crucial. In the creation of the IFlow program, the question of efficiency was put to the test. What overlap between resistance training (anaerobic training) and calories burned (primarily aerobic training) over time spent actually existed?

The following excerpt was taken from testing performed by Colin M. Davis of

"[I]t can be reasonably stated that the IFlow Workout is a pre-formatted and guided exercise routine of dynamic nature lasting approximately 20 minutes, which significantly activates both the aerobic and anaerobic metabolic pathways of the participant. The movement patterns of the workout consist of large muscle group movements simultaneously to isometric contractions of smaller, joint-stability oriented musculature. The metabolic intensity of the workout approximates 6 METs and elicits an energy expenditure rate of approximately 8 kcal/min."

With the above testing it was determined that the IFlow program did much more than simply provide resistance training and flexibility to the body; it increased the number of calories burned during the workout to a level only slightly below jogging at five miles per hour!

Much like any sport or activity, there are fundamentals, foundational information, that once understood allow you to enjoy the activity to its full extent. IFlow is no exception. The following Five Fundamentals of IFlow will give you a better understanding of how the program works and, above all, how it can work for you.

# THE FIVE FUNDAMENTALS OF IFLOW **FUNDAMENTAL 1:**

#### Circular Motion Versus Linear

One of the main advantages of working with tubing as opposed to conventional weights is the use of circular motions in all movements. The body and its joints work in circles, not in a straight line. This is especially true for the major joints of the body such as the shoulder, spinal column, and hip joints. These are also where the majority of injuries occur. When pursuing only weight training, you do not condition true proprioception of the nervous system



#### > ARCHER WITH CHEST FLY

(Beginner to Advanced)

- 1. Face the tube with it anchored at approximately waist height.
- 2. Step back on a diagonal with your left leg into a lunging position.
- 3. Keeping your upper body tall, draw back with your left elbow while simultaneously pushing across with your right hand.
- 4. Be sure to keep your left elbow level with the floor and your right hand in front of your chest.

in support of the joint. For example, conventional shoulder exercises such as presses, flys, and lateral movements are linear and do not allow the shoulder to be truly conditioned in a full 360 degrees of movement. To fully innervate the complete nervous system response around a set of muscular contractions, the motion must have a circular as well as linear component.

### **FUNDAMENTAL 2**: Kinesthetic Resistance Versus Static Resistance

Conventional workouts conform to the same rule: the rule of gravity. You can never beat gravity. For a short period of time you may resist it with some success, but it will always leave you feeling drained. Tubing contains potential energy. The tube itself is alive with energy; when you use it, the tube gives you energy, and then it takes it away. It is always a constant exchange. It is that exchange of energy that leaves you

feeling invigorated. This factor is enhanced by the dynamic full range-of-motion positions achieved when using the tubing.

## **FUNDAMENTAL 3**: Level of Engagement

The most dynamic aspect of the tubing is its ability to engage the user in the workout. You are actually working out with the tube, rather than simply using the tube to work out. You must be present at all times during the workout or the tube will not allow you to continue; it will pull or push you off balance and out of alignment the second you stop paying attention. How much do you have to pay attention during a basic bicep curl? With proper concentration and focus you can be one hundred percent engaged in a bicep curl. It is a choice. Many exercisers find it difficult to engage in their workout, whereas with tubing, they have no choice, because the tubing engages with them.

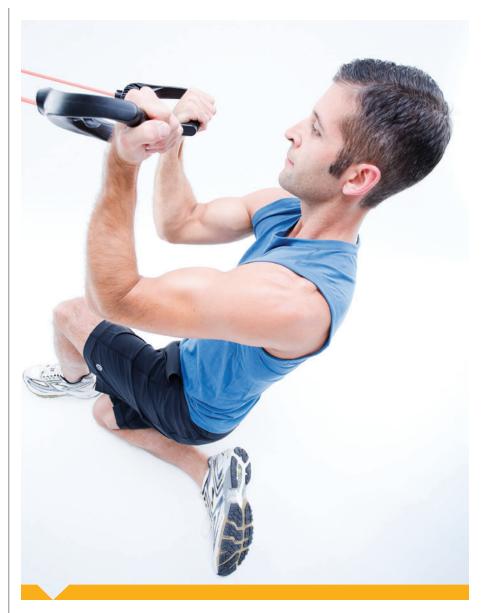
# **WORKOUT**

**FUNDAMENTAL 4**: Functional Flexibility What good is extended range of motion if you have no function in the position? For example, if you could drop into a deep lunge position, without the ability to push yourself back up again, is that true flexibility or just hyper-mobility? Tubing allows you to engage the muscle in a fully lengthened position, thus giving the muscular system as well as the joint the opportunity to increase its ability to generate force at all ranges of motion. This dynamic strength coupled with flexibility is simply impossible with conventional weight training due to the limitation placed on it by gravity. But gravity is not the only factor limiting this action; it is also the proprioceptive response generated by the dynamic energy contained in the tube. The tube actually gives the muscle the trigger it needs to engage at a higher level without solely relying on the user to know how to activate a muscle in an increased (possibly uncommon) range-of-motion position. This is directly due to three anatomical factors: the stretch reflex, the Golgi organ, and the muscle spindles and how they transfer information in conjunction to the central nervous system.

# **FUNDAMENTAL 5**: The Extra Ten Per Cent

Tubing allows for an increased range of motion and intensity of contraction not available with conventional weight training. This is not so much a fault with weight training as it is simply the natural limitations of the movements. With weightlifting, achieving the deepest, most complete contraction possible is the key to success. The same stands true with tubing, except the nature of the tubing allows the user to drive through a motion to reach a peak contraction through movement and not simply through the commonly used maximum contraction principle or an isometric contraction. The extra ten per cent builds its power directly from the information transferred to the central nervous system from the Golgi organ.

Tyler Chisholm is the owner of the BodyPrint Active Weight Loss & Personal Training Centre in Calgary and the creator of the IFlow Fitness System. He has worked in the fitness industry for more than ten years in such unique locations as Mexico, Miami, Montreal, and Los Angeles. See www.bodyprint.ca.



#### > REVERSE DIAGONAL BICEP

**LUNGE** (Beginner to Advanced)

- 1. Face the tube with it anchored at approximately waist height.
- Hold both arms straight in front of you with palms facing up and feet together.
- Step back with your right leg and reach your toe back and across to the left side of your body.
- Bend both knees, keeping the majority of your weight on the front heel.
- 5. Be sure to keep your front knee in line with your toe.
- As you drop down into the diagonal lunge, bring both hands toward your ears into a biceps curl.
- Hold for two to three seconds and repeat for each side for the desired number of reps.

**Note**: to decrease difficulty on this exercise simply step straight back and avoid the diagonal lunge.

Check out more IFlow exercises at the new IMPACT MAGAZINE ONLINE. Tyler and Fionna Chisholm demonstrate advanced exercises at www.impactmagazine.ca. Check out Fionna's cool video too!



#### > SPIDER MAN

(Beginner to Advanced) This is a great exercise for lower body flexibility combined with upper body strength.

- 1. Face the tube with it anchored at approximately waist height.
- 2. Step back on a diagonal with your left leg into a lunging position.
- 3. Push both hands out and away from your shoulders maintaining tension through your upper body.
- 4. Hold for fifteen to thirty seconds and repeat for each side.



### > MATRIX

(Intermediate to Advanced) The Matrix is a fantastic exercise for core stability and complete muscular control.

- 1. Face the tube with it anchored slightly above your head.
- 2. Place your feet beyond shoulder width with your hands held wide and out in front of you.
- 3. Engage your core as you slowly lower your body down and back.
- 4. The goal is to reach a ninetydegree bend at the knee while holding your body parallel to the floor.
- 5. Hold for fifteen to thirty seconds and slowly return to standing. Repeat two or three times.



#### > AWAY FACING WINDMILL WITH KNEE DROP

(Intermediate to Advanced)

- 1. Face away from the tube with it anchored at approximately waist height.
- 2. Place your feet wider than shoulder width apart with both hands wide and above your head.
- 3. Twist back toward the tube while simultaneously reaching one arm up to allow the tube to

- clear your head.
- 4. As you twist, drop down into a lunging position while lowering your chest to parallel with your front leg.
- 5. Be sure to stay centered over your hip with sixty per cent of your weight on your front heel.
- 6. Reaching one hand straight ahead of you with the other hand straight back.
- 7. Hold for two or three seconds and repeat on each side for the desired number of reps.