Body leverage training is a hot trend in fitness. Exercising using body weight has been used for thousands of years, and is emerging as a popular work-out again. Plenty of research exists on the effectiveness of exercises such as push-ups (Cogley, et al., 2005), abdominal/core training (Monfort-Pañego, et al., 2009), and plyometrics (Markovic & Mikulic, 2010). This presentation will present, discuss, and demonstrate what the research indicates are the best exercises to enhance fitness using body weight. Body leverage training takes on many forms including push-ups, abdominal/back/core training, jump training, and partner resistance training. Body leverage training is at the forefront of innovative programming in the fitness industry. The research and efficacy of this form of training will be discussed with demonstrations of most of the exercises that appear in the research.

1) Push-Ups and Upper Body – Push and Pull
   
   a) “V” Push-up.
   b) Push-up with feet on partners back, partner doing front plank (“Push-ups with the feet elevated produced a higher ground reaction forces than all other push-up variations, Ebben, et al., 2011).
   c) Push-ups on partners back, partner in front plank, for clients with shoulder, elbow, or wrist pain.
   d) Plyo-Push-Ups: “fall push-ups required kneeling subjects to drop and then attempt to return to their initial position exercise achieved higher levels of muscular activation in the agonist and synergist muscle groups, and greater impact forces and impact force development rates.” (Garcia-Massó, et al., 2011)
   e) “Over The Hill.”
   f) Partner Resistance Push-up – Resistance between scapula’s
   g) Standing Partner Push-Up – same at upright cable row.
   h) Quad Chain Push-up
   i) Partner Standing Row – Most important for osteoporosis.
   j) Partner Standing Tricep Pressdown and Seated Shoulder Press
   k) Partner Standing Upright row and Seated Lat Pulldown.
   l) Tri or Quad Pull-Ups

2) Abdominal/Back/Core

   a) Modified core training, Standing Front & Side Planks and Standing Bird Dog. For beginning exercisers and workplace training.
   b) Alternative for Straight Leg Raises
   c) Front plank and side plank pushing on partners hands . . . “Plank Arm Wrestle.”
   d) Bird Dog, modified and regular to advanced.
   e) Vertical core training – Partner Arm Chops, Up & Down, Lateral, Rotation.
   f) Pelvic stabilization exercises, Standing Cat Camel, Standing Pelvic Tilt, Pelvic Tilt with Ab Contraction, Pelvic Tilt-Ab Contract, Kelgal exercise (contracting and relaxing the muscles that form part of the pelvic floor, improve the tone and function of the pelvic floor muscles)
   g) Pelvic stabilization: single leg pelvic stabilization.

3) Legs and Compound Exercises

   a) Partner Leg Press – Double and Single Leg
   b) Hamstring partner exercise (Nordic Hamstring Exercise: Lorenz & Reiman, 2011) for increasing eccentric strength and injury prevention.
c) Partner Dead Lift

d) Partner Side Lunge with Hand Hold

e) “Back Up – Slow Down.”

f) “Stand Like a Stone.”

Research Citations & Web Sites for Body Weight Training


Web Sites


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www.drbrackosfitness.com
Fitness Lectures - http://drbrackosfitness.com/fitness-lectures-dvds-calgary.htm
Fitness Work-Shops - http://drbrackosfitness.com/fitness-workshops-calgary.htm