

COREFX Strength: Max Out with the Minimum

Douglas Brooks, MS, Exercise Physiologist

I. No Equipment? No Problem!

- A. When presented with minimal equipment options, or limited space, focus on:
 - a. diversity
 - b. variety
 - c. portability
 - d. space
 - e. cost
- B. Small training facility, limited budget
 - a. consider start-up costs
 - b. consider space requirements
- C. Client readiness for a home gym/minimal equipment requirements
 - a. determine whether or not a clear commitment to training is definite
- D. Club, Studio or "Traveling Trainer" Equipment Needs
 - a. findings determine space issues, cost allotments, portability, versatility
- E. Effectiveness
 - a. Does "cost effective" or "versatile" equate to "compromise?"
 - b. space/cost issues and their impact on quality/effectiveness of workout
 - c. simple equipment use vs. all the options in a club w/ unlimited resources
 - d. What is your go to equipment?

II. Effective Program Design Regardless Of Equipment Options

- A. The Architecture of a Workout
 - a. Warm up, lift prep, mobility, integrated core conditioning, speed, agility, quickness, muscle activation, balance, metabolic conditioning, integrated strength and power development, stretching, recovery
- B. Focus On Integrated Strength and Power Development
 - a. frequency, intensity, duration, choice of resistance training tool
 - b. overload (intensity)
 - a. reps, sets, loads and motor unit recruitment
 - c. importance of appropriate load/resistance
 - d. direction of force in opposition to common movement patterns
- C. The Importance of Load and Intensity
 - a. proper load = no compromise to strength, power/performance
 - b. accommodates various fitness levels and goals
- D. Evidence-Based Science Framework

III. Foundational Movement Patterns

- A. Squat, lunge, hinge, bridge, plank, push/pull and a rotational component

IV. Common Movement Faults

- A. Positioning related to: head/neck, shoulders/scapulae, elbows, lumbo-pelvic-hip complex, knee, ankle and global alignment
- B. Annual movement screen vs. daily postural assessment/correction

V. Three-Steps To Successful Movement Performance (regardless of equipment availability)

- A. Mobilize/Stabilize
- B. Skill Practice

VI. Versatile Exercise Equipment And Strength Programming Options—The “Toy Box”

- A. Elastic Resistance (tubing, bands, sheets):
 - a. variable resistance; different thicknesses of tubing
 - b. multiple strands of tubing
 - c. handles (fixed versus quick link attachments)
 - d. door strap attachments, wall mounted units, anchor points
 - e. how to replicate a line of selectorized plate machines
- B. Dumbbells/Kettlebells
 - a. selectorized dumbbells (e.g., PowerBlock)
 - 1) equivalent to 28 pairs of dumbbells: 10-95 pound range
 - b. several pairs of fixed dumbbells, appropriate to strength level
 - c. changeable (non-fixed) dumbbells (consider risk of injury; time)
 - d. micro-load increments (e.g., PlateMate)
- C. Manual Resistance (i.e., trainer resisted)
 - a. trainer assisted spotting
 - b. hands on training
 - 1) enhance mental image of muscle being worked
 - 2) facilitate contraction through reflexive pathways
- D. Stability Ball, Ballast Ball & Non-Burst Ball Options
 - a. major muscle group overload and flexibility
 - b. progressive resistance
 - c. use as an exercise bench prop
- E. BOSU Balance Trainer
 - a. integrating functional balance training/reactivity into metabolic, muscular endurance and mobilization training

VII. SIMPLE SOLUTIONS TO TRAINING WITH MINIMAL EQUIPMENT

- A. In The Home: Question Clients About The Equipment They May Already Have
 - a. e.g., clients who train in the home
- B. Look For Versatility In Equipment Choices
 - a. e.g., elastic resistance, BOSU Balance Trainer, free weights, etc.
- C. Search For Equipment That Can Serve More Than One Function
 - a. e.g., tubing, strength bands
- D. Use Activities That Don't Require Equipment
 - a. body weight, or outdoor training
- E. Study Machine Action So You Can Reproduce Movement
 - a. elastic resistance, cable pulley systems, manual resistance
 - b. differentiate traditional strength gains vs. lighter loading
- F. Use Evidence-Based Training As Your Foundation For Program Design
 - a. framing program in science keeps it safe/results oriented/time efficient

VIII. Break It Down: How to Leverage Equipment Effectiveness & Versatility

- A. Workout Complexes Using Minimal Equipment
- B. Elastic resistance/tubing, strength bands, pro loops (mini-bands) anchor points, partners, harness, line of resistance concept, wall ball, slam ball, dumbbells, kettlebells, selectorized dumbbells, slide board, BOSU Balance Trainer, stability ball/Ballast Ball, cones, ladders, adjustable hurdles, plyo box, steps, weighted vest etc.
- C. Your favorites?

Workout Complex Sampling Using Minimal Equipment

Elastic Resistance/Tubing (anchor point or partner; 6' toner w/ handles)

Exercise	Notes
Rotary Hip Block Straight Arms	arms stay back at hips; progress to straight arms
Rotary Hip Block Push-Press	same as above, add push press
Lateral Rotary 180-Switch Shuffle	builds on skill above
Push-Pull Movements	mimic all basic dumbbell/machine actions
Split Lunge Lateral Pull, Pillar of Strength, Jump/Push/Core Brace	core bracing variations

Overdrive Harness Trainer w/ Tubing or Whiplash (anchor point or partner)

Exercise	Notes
Horizontal Power Leg Press	posterior line of pull
Out & Back Cone Touch	can be done forward and with lateral movement
Traveling/Resisted Linear Run	vary movement to reverse arm-throw & backward jump
Hops/Lunges/Backwards/Bilateral/Unilateral	movement direction and skill options are very diverse

Strength Bands/Pro Loop Mini-Bands

Exercise	Notes
Partner Row (2 red bands)	working in opposition; rhythm/timing key
Banded Tuck Jump	anchor with dumbbells or other solid anchor points
Fwd/Lateral & Diagonal Walk; Prone Plank Leg Lift (Pro Loop)	repeat reps 5x after each step; 10 steps lateral w/ 30-second iso-hold
Banded Glute Bridge	same as Olympic bar hip lift
Banded Mobilization	glutes, hips, global

Dumbbells/Selectorized Dumbbells

Exercise	Notes
Split Stance Clean & Press OH	bent arm to stand
Split Stance Snatch OH	straight arm to stand
Bilateral Snatch OH	stance focus
Basic Movements/Other	show replication parallel to other types of equipment

Landmine, Post, Handle/Attachments

Exercise	Notes
Single Arm (SA) Row	lower body triple extension contributes to pull/arm drive
Single Arm Press OH	lower body extension contributes to press overhead
SA Row to Power Press OH	two skills above combined
Standing Rotary Core	core bracing and torso mobility

Wall Ball

Exercise	Notes
Rotary Hip Block Progression	self toss and release techniques
Supine & Standing RDL	build on floor, progress to standing throw
Wall Ball Slip-Throw	kneeling hip drive; progress to squat/arms overhead
Knee Strike: Single, Single, Double Combo & Throw	after series of strikes, throw to partner or wall

COREFX Strength: Max Out with the Minimum

Slide Board

Exercise	Notes
Basic Slide Progression	focus on push off; staying wide until close phase
Resisted Lateral Slide	w/ strength band, tubing or harness
Resisted Sprinter's Run/Tuck	w/ strength band, tubing or harness
Core Brace Slide Out	kneel on knees off slide board, at one end of board

BOSU Balance Trainer (BT)

Exercise	Notes
Rotary Hip Block Progression	stand holding BOSU, dome side out
Wrap-Around Mobility	single leg hip mobility
Squat Progression	use pressuring to activate ankles, and to mobilize
Single Leg Pistol Squat	use foot position & pressuring to practice/progress skill

Stability Ball/Ballast Ball

Exercise	Notes
Rotary Hip Block Progression	self toss and release techniques; connect to tubing etc.
Prone Core Progression	plank and rotary variations, along with press/push
Hip Flexor Stretch/Mobility	supported mobility/stretch positions
Core Brace Roll Out	begin the progression kneeling; short- to long-lever

Agility Ladders/Cones/Adjustable Hurdles

Exercise	Notes
Cross/Block/Return Drill	regardless of pattern, resisted options
5 Cone Offense/Defense Drill	regardless of pattern, resisted options
5 Cone Triangle React Drill	regardless of pattern, resisted options
Jump, Hop, Bound, Lateral, Run Variations	regardless of pattern, resisted options

IX. Summary Points To Remember When Equipment Choices Are Limited

- A. Focus on effective, science based training.
- B. Your participants will be more excited about the changes they feel and see in their bodies than about any equipment you might introduce them to.
- C. Increase your value as a trainer/coach small group instructor, in the eyes of the participant, by being able to enhance the effectiveness of available exercise equipment in *seemingly* limited situations.
- D. Solutions to your equipment challenge training scenarios
 - a. know the target (training goal; participant capability)
 - b. understand the global aspect of movement patterns
 - c. place load/resistance in opposition to the movement pattern
 - d. identify equipment that is versatile
 1. (e.g., strength bands, pro loop mini bands, tubing)
 2. other examples
- E. Trust science...
 - a. use evidence-based training as your foundation for program design

Thank you for attending this COREFX workshop!!