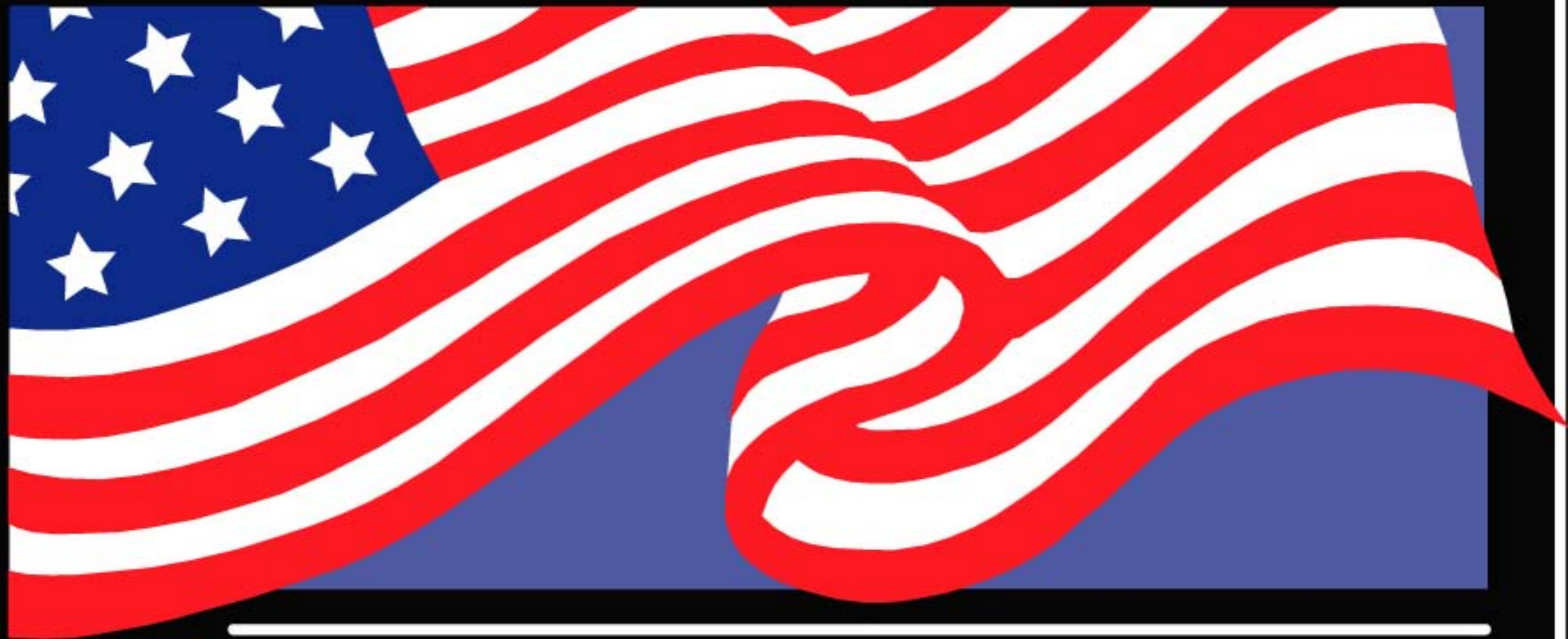


AFPA



AMERICAN FITNESS PROFESSIONALS & ASSOCIATES

Low Impact/Joint Friendly Metabolic Training: Training Smart Not Just Harder!



2014 AFPA: Ocean City

Valorie Ness-Sonnemaker, BS, CES, CPT and Bill Sonnemaker, MS, PES, CES, CSCS

2014 Best of Atlanta, Best Personal Trainer, Jezebel Magazine

2013 PFP Trainer of the Year

2009 Kennesaw Business Association Business of the Year

2007 IDEA International Personal Trainer Of The Year

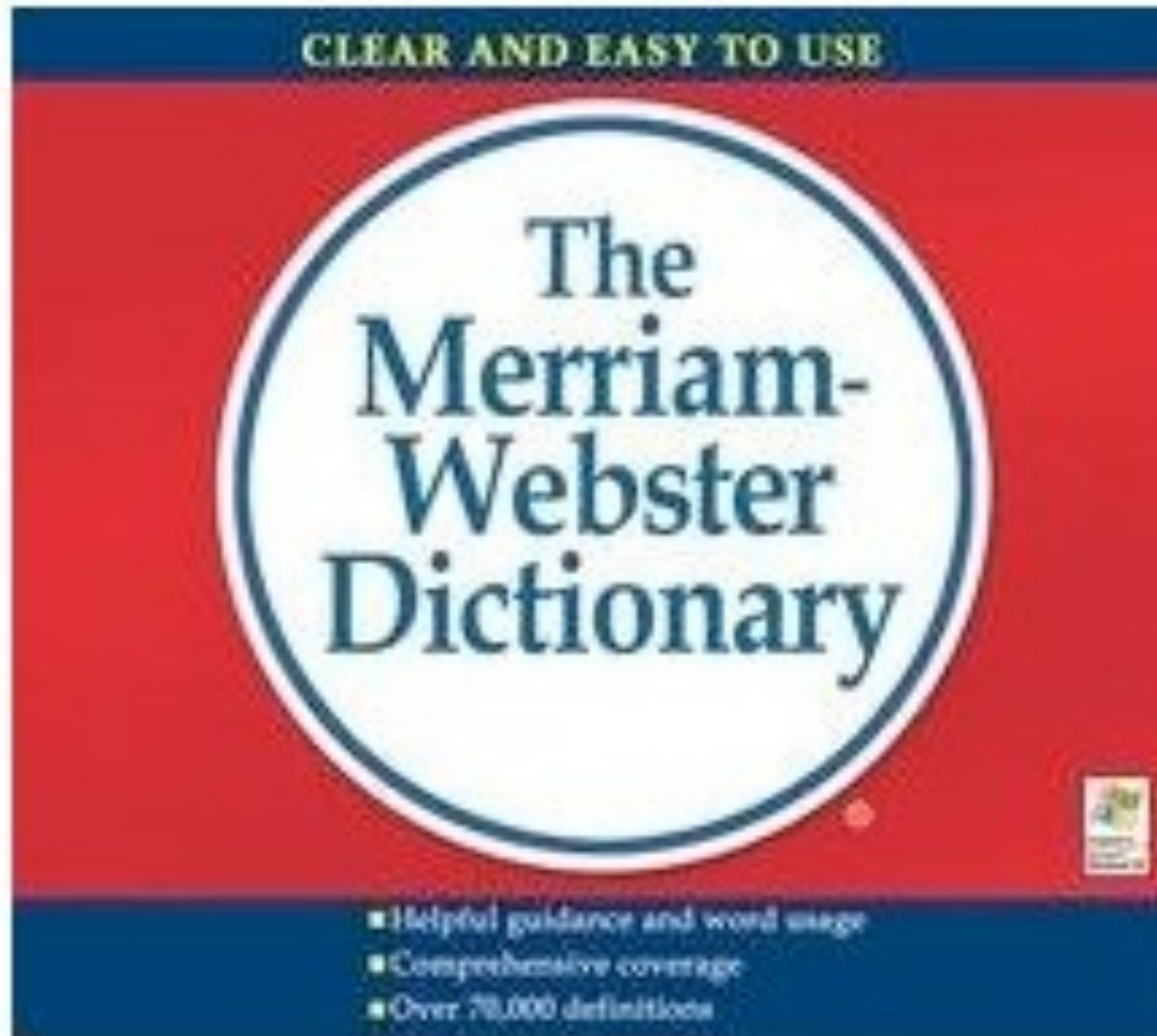
2007 NASM Pursuit of Excellence Award Winner

IDEA Master Trainer, PTA Global, NASM, ACE, NSCA, ACSM

Outline



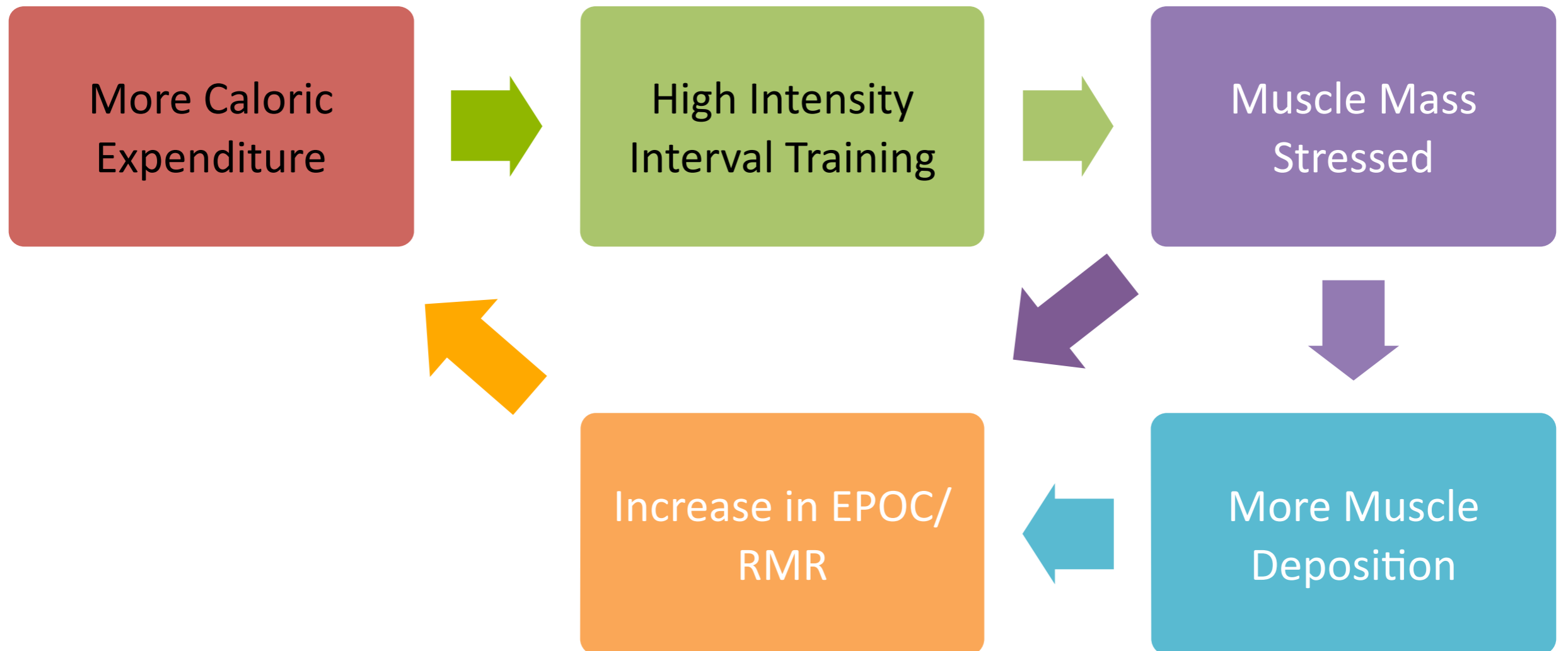
- *What We Do and How We Do It!*
- *Is Metabolic Training New?*
- *Benefits*
- *Utilizing a Principle Based Approach*
- *3-D Nomenclature*
- *Putting the Fun Back in Exercise!*
- *How to Incorporate Suspension Training*



"Metabolic Training involves exercises performed with the intention of increasing the capacity and efficiency of the energy pathways to store and deliver energy for activity. While simultaneously creating an Oxygen debt, known as EPOC."

Benefits





Three Elements of All Sound Programs Design

What Does the Research Say?

EPOC

(2) Best Types

- **High Intensity Anaerobic Interval Training (HIIT-1)**
 - This type of training will burn a lot of calories and sustain the EPOC for the maximum rate amount of time. The most difficult type of exercise to perform.
- **High Intensity Aerobic Interval Training (HIIT-2)**
 - This form of exercise burns a lot of calories, improves aerobic capacity and enhances fatty acid oxidative capacity in skeletal muscle.

Hormones



- **Testosterone** (Muscular Development)
- **HGH** (Muscular Development)
- **IGF-1** (Muscular Development)
- **Cortisol** (Energy Availability)
- **Insulin** (Energy Availability)
- **Epinephrine/Norepinephrine** (Energy Availability)
- **Leptin** (Affects Energy Intake)
- **Gherlin** (Affects Energy Intake)
- **Neuropeptide Y** (Affects Energy Intake)

Exercise Selection

- **Total Body**
- **Compound**
- **Isolated**

Acute Variables

Volume: 2-5 Minutes

Duration: 15-45 Sec.

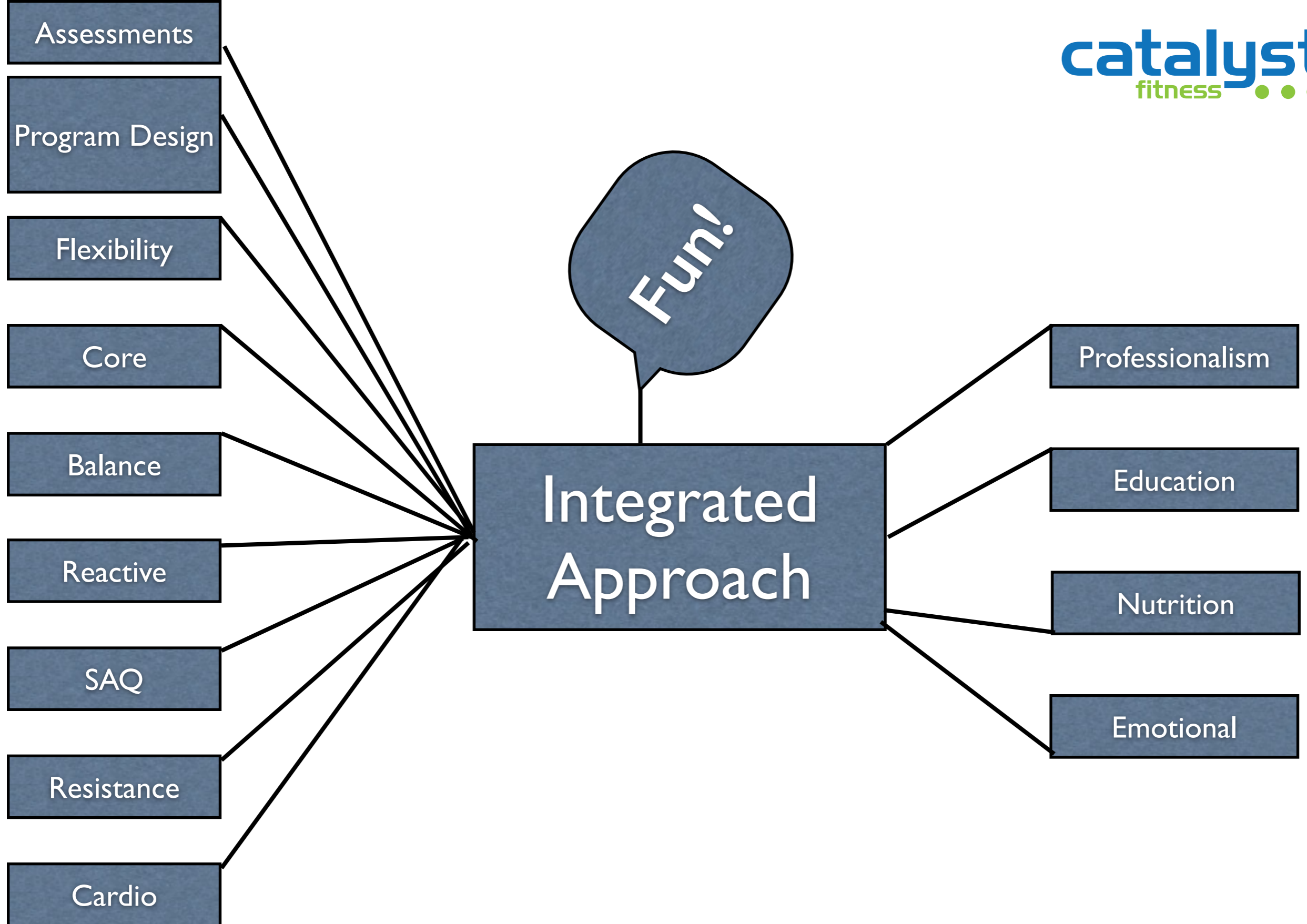
Rest: ~ 1/3 of Duration

Intensity: 70-95% RPE/Max Effort

Traditional Approach

Vs.

Integrated Approach



Is Anything Else Missing?

Balloon Video One: 2 People-Standing



Balloon Video Two: 2 People-Bear Crawl Race



Balloon Video Three: 3 People Standing



(9) Governing Principles

- Overload
- Specificity
- Progression
- Diminishing Returns
- Variation
- Reversibility
- Individuality
- Recovery
- Safety

Acute Variables



- Exercise Selection
- Order of Exercises
- Intensity
- Tempo
- Reps
- Sets
- Rest Period(s)
- Volume
- Training Frequency
- Muscle Action
- Length of Lever Arm
- Range of Motion
- Stable vs. Unstable
- Known vs. Unknown

How Do I Integrate Metabolic Training Into My Overall Program Design? Program Design?

- Client's Abilities, Needs, and Goals
- Use it to Overload the System

The Integrated Model

= 4.5 Minutes Total Work Time

Four Pillar Model

= 3 Minutes Total Work Time

Your Model

= ? Minutes Total Work Time

Favorite Tools



- Body Weight
- SURGE
- ViPR
- Suspension Exercise
- IndoBoard
- Medicine Balls
- Ropes
- Elastic Resistance
- Stability Balls
- Dumb Bells
- Kettle Bells
- Cable Resistance

Least



Favorite Tools

- **STD's**

- Selectorized Training Devices

No Equipment Version

Workout = X # of People

- **Workout begins with everyone performing Movement Prep exercises**
 - 2 Foot/Ankle, 2 Hips, 2 Thoracic Spine
- **45 Second Work Intervals: 15 seconds of Rest**
- **Group A = Crawling**
- **Group B = Core**
- **Group C = Reactive**
- **Group D = Balance**
- **Group E = SAQ**
- **Group F = Games!**

Circuits 1-2



Circuit #1

Group A: Forward Bear Crawl

Group B: Prone Presses

Group C: Burpees

Group D: Left Leg Inverted Hamstrings with 5 Second Holds

Group E: Hop Scotch

Group F: Ballon Bear Crawl Tap Race

Circuit #2

Group A: Reverse Bear Crawl

Group B: Modified Cobra

Group C: Alternating Single Leg Squat Jumps

Group D: Right Leg Inverted Hamstrings with 5 Second Holds

Group E: Carioca

Group F: Eyes Closed Right Leg Single Leg Balance

Circuits 3-4



Circuit #3

Group A: Right Lateral Bear Crawl

Group B: Right Side Plank with Rotation

Group C: Supine Retro Hip Extension with Abducted Arm Driver or Plyo-Push-ups

Group D: Right Side Single Leg Windmills

Group E: Right Lateral Shuffle

Group F: Push-up Contest

Circuit #4

Group A: Left Lateral Bear Crawl

Group B: Left Side Plank with Rotation

Group C: Split Kicks

Group D: Left Side Single Leg Windmills

Group E: Left Lateral Shuffle

Group F: Eyes Closed Left Leg Single Leg Balance

Circuits 5-6



Circuit #5

Group A: Forward Crab Walk

Group B: Leg Triangles Group C: Ice Skaters

Group D: Right Side 90 Degree Hip Internal/External Rotation

Group E: High Skipping

Group F: Sit-up Contest

Circuit #6

Group A: Reverse Crab Walk

Group B: Supine Pelvic Thrust

Group C: Jumping Jacks

Group D: Left Side 90 Degree Hip Internal/External Rotation

Group E: Wall Sprints

Group F: Squat Jump Contest

Workout = 100 People



- *30-45 Second Work Intervals: Rest Long Enough to Switch*
- 4 Point Push-ups
- Supine Rows
- Elevated Hand Walks
- Partner Saws
- Partner Pickups
- Mirror Drill
- Bunk Beds
- Leap Frogs
- Prone Patty Cake
- Fireman Carry Races

Workout = 100 People



- Workout begins with everyone performing Movement Prep exercises
 - 2 Foot/Ankle, 2 Hips, 2 Thoracic Spine
- 45 Second Work Intervals: 15 seconds of Rest
- Group A = Body Bar Exercise
- Group B = Kettle Bell Exercise
- Group C = Dumbbell Exercise
- Group D = SAQ, Reactive, Crawling

Circuits 1-3



Circuit #1

Group A: BB SL (Right) Dead-lift

Group B: KB Squat to to Bilateral Upright Row

Group C: DB Right Arm Forward Reaches

Group D: Reverse Bear Crawl

Circuit #2

Group A: BB SL (Left) Dead-lift

Group B: KB Squat to Right Arm Upright Row

Group C: DB Left Arm Forward Reaches

Group D: Hop Scotch

Circuit #3

Person A: BB Frontal Plane Shuffle with Two Arm Pick Up

Person B: KB Squat to Left Arm Upright Row

Person C: DB Right Arm Lateral Reaches

Group D: Forward Bear Crawl

Circuits 4-6



Circuit #4

Group A: BB Frontal Plane Shuffle with Ipsilateral Arm Pick Up

Group B: KB Swing

Group C: DB Left Arm Lateral Reaches

Group D: Hand-walk

Circuit #5

Group A: BB Frontal Plane Shuffle with Contralateral Arm Pick Up

Group B: KB Right Arm Swing

Group C: DB Right Arm Y Drill

Group D: Elbow to Instep Lunges

Circuit #6

Person A: BB Right Leg Forward Lunge to Overhead Raise

Person B: KB Left Arm Swing

Person C: DB Left Arm Y Drill

Group D: Ice Skaters

Circuits 7-9



Circuit #7

Group A: BB Left Leg Forward Lunge to Overhead Raise

Group B: KB Alternating Arm Swings

Group C: DB Right Arm V Drill

Group D: Forward Sprint

Circuit #8

Group A: BB Frontal Lunge to Right with Squeegee

Group B: KB Walking Arm Swings

Group C: DB Left Arm V Drill

Group D: Lateral Bear Crawl (Right Arm Lead)

Circuit #9

Person A: BB Frontal Lunge to Left with Squeegee

Person B: KB Right Leg Pistol Squat

Person C: DB Right Arm SL Squat Touchdown to Shoulder Press

Group D: Squat Jumps with Reach to Ceiling

Circuits 10-12



Circuit #10

Group A: BB Forward Lunge (Left) with Contralateral Push and Ipsilateral Row

Group B: KB Left Leg Pistol Squat

Group C: DB Left Arm SL Squat Touchdown to Shoulder Press

Group D: Lateral Bear Crawl (Left Arm Lead)

Circuit #11

Group A: BB Forward Lunge (Left) with Contralateral Push and Ipsilateral Row

Group B: KB Right Arm Contralateral Hand to Foot Forward Lunge

Group C: DB Right Arm Contralateral Frontal Plane Lunge to Shoulder Press

Group D: Forward Squat Jumps with 90 Rotation

Circuit #12

Person A: BB Transverse Plane Lunge with Contralateral Reach

Person B: KB Right Arm Contralateral Hand to Foot Forward Lunge

Person C: DB Right Arm Contralateral Frontal Plane Lunge to Shoulder Press

Group D: Split Kicks

IndoBoard



- Prone Plank from Hands Lateral Roll
- Prone Push-up
- Squat on Roller or Disc
- Prone Plank Alternating Oblique Knee Touch
- Standing Freestyle Swim Stroke
- Jump On Disc
- Posterior Leg Elevated on Board w/Disc
- Prone Plank with SL Abduction

Circuits 1-3



Circuit #1

Group A: Step 360 Squat Curl and Press

Group B: SPRI Ladder One In-One-Out

Group C: SPRI Rope Reverse Lunge Marching

Group D: HYPERWEAR Transverse Plane Step-outs with Chest Height Press

Circuit #2

Group A: Step 360 Squat Curl to Lateral Lunge and Chest Press with Torso Rotation

Group B: SPRI Ladder Hop Scotch

Group C: SPRI Rope Jumping Jacks

Group D: HYPERWEAR Kneeling Stand-ups to Shoulder Press

Circuit #3

Person A: Step 360 "Burpee" with 180 Degree Turns

Person B: SPRI Ladder Bear Crawl One-In-One-Out

Person C: SPRI Rope Lateral Shuffle with Alt. Waves

Group D: DYNAMAX Thai Clinch to Alternating Knee Driver

Circuits 4-6



Circuit #4

Group A: SPRI Jump Rope

Group B: SPRI Ladder Right Foot in Center Square Hop Scotch

Group C: SPRI Rope Kung Fu Slams

Group D: DYNAMAX Forward Shuffle to Lunge with Alt. Contralateral Jab

Circuit #5

Group A: Step 360 Dragon Pushups

Group B: SPRI Ladder Left Foot in Center Square Hop Scotch

Group C: SPRI Rope Forward/Reverse Advance with Alt. Waves

Group D: DYNAMAX Deep Squat Tribal Drums

Circuit #6

Person A: Step 360 Kettlebell Swings

Person B: SPRI Ladder Bear Crawl One-In-One-Out

Person C: SPRI Rope Lateral Shuffle with Contralateral Outward Arm Rotations

Group D: DYNAMAX Alt. Lateral Scoop Toss without Release

Anything Left?



Example from the Top 10 of 2010 Featuring Jonathan Ross and Bill Sonnemaker

AN INTEGRATED APPROACH TO SELF MYOFASCIAL RELEASE (SMR)

In this DVD award winning Exercise Physiologist and Personal Trainer, Bill Sonnemaker, MS demonstrates over 30 of his favorite Self Myofascial Release Techniques that he uses with clients and athletes on a regular basis to consistently achieve world class results.

POINTS OF INTEREST

- This DVD contains over 30 different techniques to reduce Myofascial Adhesions and enhance the performance of your Clients and Athletes.
- DVD contains a printable PDF with photos of exercises and instructions to use with your Clients and Athletes.
- Learn how to reduce the risk of injury and maximize performance with only a few minutes worth of work.



Bill Sonnemaker, MS is an internationally sought after Exercise Physiologist, Personal Trainer, and Fitness Educator who holds a Master of Science in Performance Enhancement and Injury Prevention. He earned a BS in Health and Exercise Science from his academic background in Molecular Biology, Molecular Genetics and Biochemistry along with a BA in Sport Management and a CDC Analytical Research Certificate. Advanced special interest certifications such as Performance and Exercise Specialties, Corrective Exercise Specialist, and Certified Strength and Conditioning Specialist and additional certifications through PFA include the National Academy of Sports Medicine (NASM), the National Strength and Conditioning Association (NSCA), the American College of Sports Medicine (ACSM) and the American Council on Exercise (ACE) are indicative of his commitment to continuing education and being a reputable board certified and fitness expert. Bill is not only an IDEA Master Trainer and spokesperson, but was the recipient of the 2012 IDEA International Personal Trainer of the Year Award and the 2012 NASM Personal Trainer of the Year Award. He is a Strength and Conditioning Coach for the Georgia State University Football, Georgia Tech, an Exercise for the Medical Fitness Association (EMFA), and a media representative and "Fly Guy" columnist for the National Strength and Conditioning Association (NSCA). Bill is the founder and CEO of Catalyst Fitness, Georgia's only fully accredited and medically supervised personal training and performance center located in Atlanta.



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AN INTEGRATED APPROACH TO SELF MYOFASCIAL RELEASE (SMR)

VOL 1

AN INTEGRATED APPROACH TO SELF MYOFASCIAL RELEASE (SMR)



AN INTEGRATED APPROACH TO MOVEMENT PREPARATION

In this DVD, award winning Exercise Physiologist and Personal Trainer, Bill Sonnemaker, MS demonstrates over 30 different exercises that are systematically designed to improve a client's ability to reduce, stabilize, and produce force in all three planes of motion.

POINTS OF INTEREST

- This DVD contains over 30 different Dynamic Flexibility exercises that will prepare your Clients and Athletes for a more successful training session.
- DVD contains a printable PDF with photos of exercises and instructions to use with your Clients and Athletes.
- Learn how to reduce the risk of injury and maximize performance with only a few minutes worth of work.



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AN INTEGRATED APPROACH TO MOVEMENT PREPARATION

VOL 1

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Special Thanks!

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