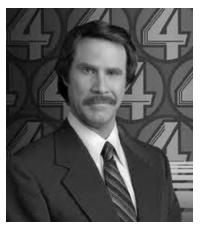
Avoiding Common Programming Bloops and Blunders

Rants, Diatribes, Observations, and other Miscellaneous Miscellanea of a Strength Coach

Shout Outs to People Who Are Kind of a Big Deal



- Charlie Weingroff, Nick Tumminello, Dr. Stuart McGill, Eric Cressey, Mike Boyle, Mike Robertson, Rick Kaselj, Bret Contreras, Gandalf the White, etc.
- Future Dr. Lew is!
- You!



Gentilwho?

- ☼ Brief History
 - BA in Health Ed
 - CSCS, CPT
 - Co-Founder Cressey Performance
 - T-nation, LiveStrong, Men's Health, pretty much the best blog on Earth
- Likes lifting heavy things, eating dead animal flesh, Jason Bourne, old school rap
- Dislikes BOSU balls, trainers that suck, cats





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Outline/Overview/What Have You

- I have ADD
 - Not really
- Common programming faux pas (upper body)
 - ⑤ Speaking of faux pas →
- Inside look at CP
- Observations, thoughts on everything from RC training to technique to core training.
- Becoming a master chef of program design





Program Design is Like Cooking

- Boyle "well, I use some of your stuff, a little of Mark Verstegen's stuff, and....."
- Some people can really cook, others need cookbooks and recipes
- re Everything in a recipe has purpose, much like program design



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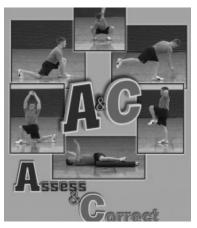
Continued.....

- Beginner you're a cook, follow the recipe and stick to it
 - Don't combine recipes
- Intermediates sous chef
 - Developed ability to alter recipe without spoiling it. Ingredients can be altered, but still follow general plan.
- Advanced 5 + years. Master chef
 - Okay to break the rules, just make sure you understand the rules first



A (sorta) Brief Word on Assessment

- If you're not assessing, you're guessing
- FMS, Assess and Correct, NASM, etc
- More of a "screen."
- CP Assessment?
 - Upper Body





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Assessment Cont.....



- Objective is NOT to make them feel bad
- Don't jump at every chance to tell them how much of a train wreck they are
- Many get carried away
- Don't go out of your way to look for dysfunction
- Remember, they are still there to get a training effect



CP Initial Assessment

- Height/Weight/Before Pics****
- Testing: Broad Jump, Vertical Jump, 3RM Chin-Up
 - Also test 1RM Front Squat
 - High School Leaderboard
 - Front Squat: 350 lbs, 285 to even get on the board
 - ∴ 3RM Chin-Up: 282 lbs, 250 to get on board
 - Broad Jump: 115 inches, 103 to get on board
 - Vertical: 35.6 inches, 30.2 to get on board





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CP Initial Table Assessment

- Thomas Test
- Seated Hip IR/ER
- Supine Hip IR/ER
- Adductor Length
- Hamstring Length
- Prone Quad Test
 Prone Hip IR/ER
- Shoulder IR/ER (total ROM)
- GIRD?
- Shoulder Flexion



Demonstrating Test for Shoulder ROM

Do's/Don'ts

IR: Scapulae fixed!!!!

ER: R1-R2
Goniometer?

Internal vs. External ROM







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Internal/External/Total ROM

- Total ROM should be symmetrical on left and right side
 - Loss of IR normal adaptation
 - Total ROM is the "red flag"
- Again, scapulae fixed
- Real World Example (CP athlete)
 - Right: 19 IR +103 ER = 122 Total ROM
 - Left: 53 IR + 90 ER = 143 Total ROM
- 21 degree Total motion deficit, and 34 degree GIRD
- Asymptomatic does not equal healthy



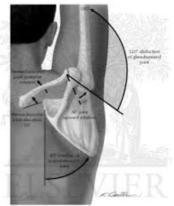
Shoulder Flexion

- Things to look for
 - Shrugging
 - Lumbar extension
 - ੈ T-spine



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Scapulohumeral Rhythm



O ELDEVIEW NO. - NETTERMAGES CO.

- After first 30 degrees of scapular elevation, both GH and scapula move in a 2:1 ratio
- Watch for shrugging
- Landmarks: base of spine, inferior angle



Thoracic Mobility

- Lumbar Locked Rotation Greg Rose, Titleist Performance Institute
- Advantageous because it doesn't allow for any cheating.
- By "locking" the lumbar spine into position, we can't use it to produce more range of motion.
- For general population clients, we're looking for anywhere from 50-70 degrees of rotation.

 Comparatively, for rotational sport athletes, we'd want to see 70-90 degrees although 90 degrees is freaky.

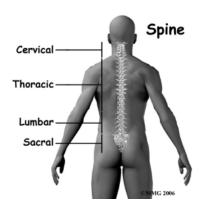
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Lumbar Locked Rotation





T-Spine Shenanigans



- Coincidentally, THIS is where you want your Rotation to come from
- T-Spine = 7-9 degrees per SEGMENT (T1-T-12), roughly 70 degrees
- Lumbar Spine = 0-2 degrees, 13 degrees TOTAL



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Quadruped Extension-Rotation





3-Point Extension-Rotation





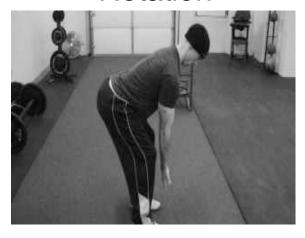
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Side Lying Rib Roll





Bent Over T-Spine Rotation





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2. CP Core Training Philosophy

- Core Strength: Side Bends, Stability Ball Crunch, etc
- ♥ VS.
- Core Stability:
 - Not doing crunches, sit-ups, etc



Why I'd Rather Jump Into a Live Volcano Than Have My Clients Perform Crunches



- Want a six pack? Be less fat
- Functional Anatomy: abs aren't a hamstring!
- Roles:
 - Stabilization and transfer of power
 - Prevention of Rotation
 - Optimal Pelvic Alignment Force Couples
- RA: flexes trunk, depresses rib cage, prevents rotation, anterior stability, posteriorly tilts pelvis.
- Compressive Load with each repexceeds 440 N (McGII)

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Core Training 101 (Cliff Notes Version)

- Anti-Extension: plank variations, fallouts
- Anti-Rotation: chops/lifts, Pallof Press variations
- Anti-Lateral Flexion: farmer carries
- 1-Arm Variations iron work



Planks

Efficacy towards low back pain

Prone: 90-120sSide: 45-60sSymmetrical?

- Rate of diminishing returns
- Conger or more challenging?
 - Regular, 1-legged, pertubation





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Planks







Prone Plate Switches



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Prone DB Slide



Alligator Walk





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Stir the Pot





Side Plank with Row





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Anti-Extension Rollout/Fallouts





Barbell Rollouts

Rollout

Rollout with Push-Up

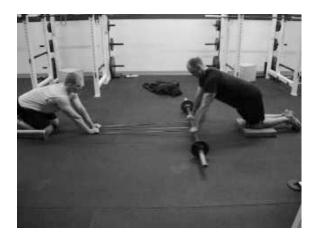






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Rollouts with Bands





TRX Fallouts

TRX Fallout

TRXBusdriver







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Slideboard Bodysaw





Anti-Rotation

PallofPress

PallofPress - alphabet







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Anti-Rotation

Half Kneeling Cable Lift

Half Kneeling Cable Chop







Anti-Rotation Anti-Rotaton Chop





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Anti-Lateral Flexion

HAS (Heavy as Shit) Farmer Carries



Kettlebell Crossbody Carry





Iron Work – lifting weights works your core, too!

1-Arm STRICT DB Overhead Press

1-Arm Bench Press







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Single Leg Variations

Offset Walking DB Lunge

Offset DB Step-Up







Offset Variations

Bulgarian Split Squats

1-Legged RDL







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3. Rotator Cuff Training



- Role of Rotator Cuff:
 - External/Internal Rotation?
 - Elevate am in scapular plane?
- It's TRUE Function
 - Center humeral head within glenoid fossa



Rotator Cuff Training



- No shoulder is the same
- Lax shoulder?
 - Anterior Instability
 - Overhead Athletes
- Band w ork isn't the end all, be all
- Training to Fatigue STOP DOING THIS!!!!

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Journal of Shoulder and Elbow Surgery

Volume 19, Issue 8, Pages 1137-1144, December 201

- RC work to fatigue causes superior migration of humeral head
- Laymen's Terms = pissed off shoulder
 - Impingement?
- Side Lying External Rotations
- Cable ER





Do You Pertubate?

Quadruped Rhythmic Stabilizations Ball-to-Wall Rhythmic Stabilizations







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Supine Rhythmic Stabilizations





RC Variations







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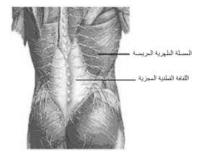
K.I.S.S



- Side Lying External Rotation – with 30 degrees of abduction
- Greatest EMG activity of RC



4. Activate to Dominate



- Thoraco-LumbarFascia
 - Glute-Lat Connection
- Latissimus Dorsi
 - Attaches from humerus to lumbar spine (L1-L5)
 - And all point between
- Serape Effect/Spiral Lines
- Implications toward bench, we quart to the additional to the addit



Squat



- All Starts w ith Set-up
- Find Your "Shelf"
 - Shoulders pinched together
- Pull DOWN on bar
 - Bend the bar!
- More stable = more force



Deadlift

Bad Set-Up

Good Set-Up







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Deadlift Continued



○ SET-UP!!!!!

- Lock shoulder bladesdepressed!
- "Pull" yourself into position activate lats!!!
- Chin Tucked Pack the Neck (more later)



And.....the Bench Press



- We don't spot at CP, we hand off
 - Proper hand-off is crucial
 - Retraction/depression of scapulae
- "Set" the shoulders
- Pull bar down to chest



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5. Bench Press Technique

- Bodybuilding vs.Pow erlifting
- BB: flat back, elbows out, feet in the air (?) = makes my eyes bleed
- PL: Arch in back, chest out, elbows in, glutes activated
- Both stress shoulder





- 6. Stop Benching 3x Per Week: Seriously, It's Not the End of the World.
- Monday: National Bench Press Day
- Conventional Wisdom: balance out movement patterns
- UN-Balance Training to Balance It
 - 2:1, maybe 3:1 ration (pulling:pushing)
 - □ Push-Ups





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Push-Ups Are Wimpy?

Band Resisted Push-Ups

Bodysaw Push-Up







Push-Ups Are Wimpy?

Spiderman Push-Ups

T-Push-Up







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7. Head, Shoulders, Knees, and Toes (What About the Elbows?) Not just a hinge joint

- Medial/Lateral Epicondylitis
- Zones of Convergence
- Athletic vs. General Population considerations
- Programming Considerations
- Lemonade out of Lemons

Elbow

- Big Players: medial & lateral epicondyles
 - 16 muscles cross the joint!
- Zones of Convergence

 - □ Lateral Epicondyle
 - Posteriorly triceps
 - Anteriorly biceps



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And You're Telling Me This Because.....??

TISSUE
QUALITY
IS HUGE





Overhead Athlete Considerations

- Valgus stress (lay back position)
 - 64 N = 40 lb DB pulling down on elbow
- UCL w hat the heck!
 - Takes on 54% of the stress on each throw, yet only takes 35 N to rupture in cadavers
- Again, TISSUE QUALITY!!!!!!!





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General Population (Meathead) Considerations



- Did I mention tissue quality is important?
 Tissue quality is important.
- Tennis Elbow (lateral)
 - Eccentric training, but refer out soon!
- Medial Elbow (weight training crowd)
 - Gripping



Programming Options

- Low er body specialization
- Straps okay
- Sw itch to pronated grips
 - Thumbless might help
- Back squatting probably not a good idea
- Manual Resistance





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Manual Resistance

Manual Resistance 1-Arm Press Manual Resistance 1-Arm Row









8. Pack the Neck

Safety Issue HYPER-lordotic back while deadlifting?

 $\label{eq:Why, then, allow HYPER-lord otic neck?} \\ Stability$



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That's All I Have To Say About That



- Again, thank you!
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- www.cresseyperformance.c

