



VOLT[™]ATHLETICS

Practical High School Strength and Conditioning

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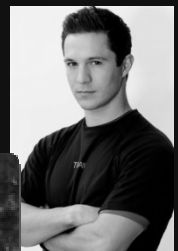
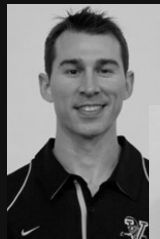
Agenda

- What is Volt?
- The Challenge
- The Volt Approach to Program Design
- Program Implementation
- Questions
- Takeaways

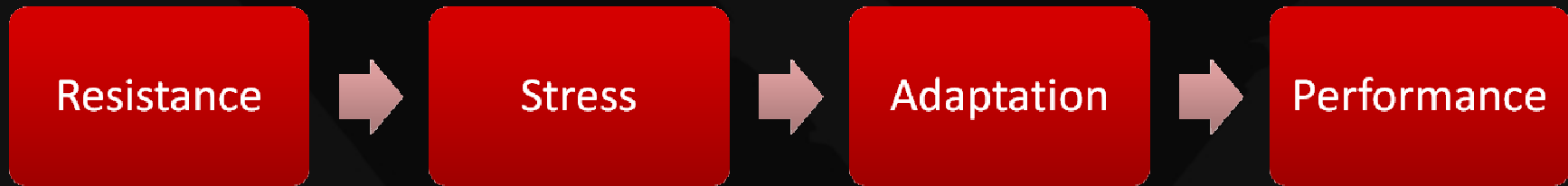
What is Volt?

- The Volt Vision
 - Volt enables coaches to easily and affordably implement elite-level strength and conditioning programs for their athletes
 - Goal is to deliver proven methods of strength and conditioning to athletes around the world
- All Volt programming is rooted in science and research
 - Volt's strength coaches are all CSCS-certified and rely on the latest research and methods

Volt Strength Coaches



Why do we strength train?



The Challenge

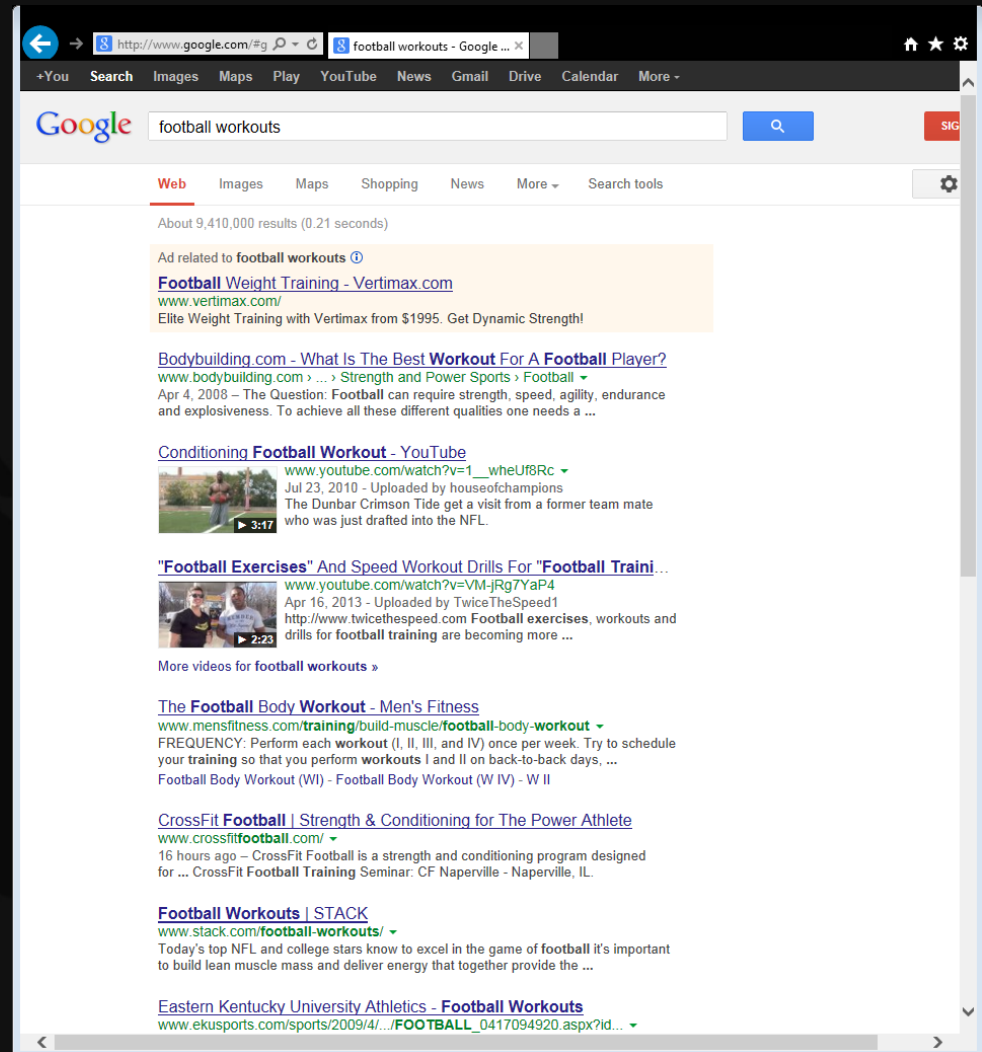
- High school athletes often lack the resources and expertise to train properly
 - Strength coaches are expensive
 - Too many sport coaches *think* they know what they're doing
- College coaches have to start from scratch to build athletes
 - They WANT athletes to come into college with proper training

The Challenge

- Misinformation
 - Too many voices, not enough legitimate expertise
 - HUGE difference between teams that train on legitimate programs and those that don't
- So where do we turn??

The Challenge

- GOOGLE!



The Challenge

Without a strength coach, what does a sport coach do?

1. Nothing

- Dangerous, inconsistent

2. Write your own program

- High variability of quality and safety – this is where Volt can help!

3. Hire an outside coach

- Expensive, inconsistent, rarely a long-term solution

Before we dive in... a few definitions

- Stimulus/Mode
- Load/Intensity
- Volume
 - Weight room volume vs. total volume
- Rest/Recovery
 - “You don’t get stronger by lifting weights. You get stronger by recovering from lifting weights.” – Mark Rippetoe
- Periodization
 - Why is periodization so important???
- “Functional” Strength
 - Strength in coordinated movement

Pillars of Volt Training

1) Everything works, but nothing works forever

High school athletes are resilient, but not perpetually resilient... you WILL break them down

2) We train movements, not muscles

Multiple joint, ground-based movements take priority

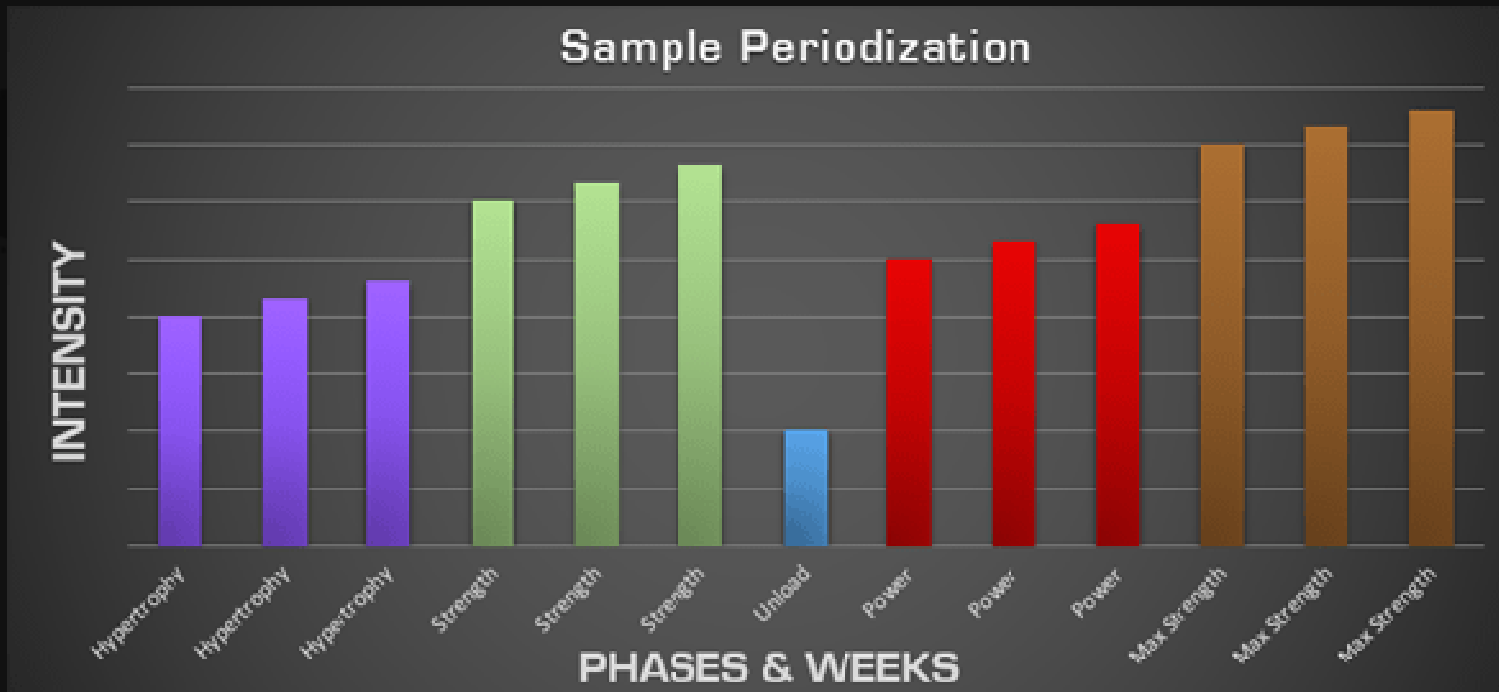
3) Safety is our priority

Proven industry best practices dictate proper progression in movement and load

4) Athletes train to perform

Not training Olympic weightlifters... or powerlifters... or triathletes...
It's all about *sport performance*

Periodization

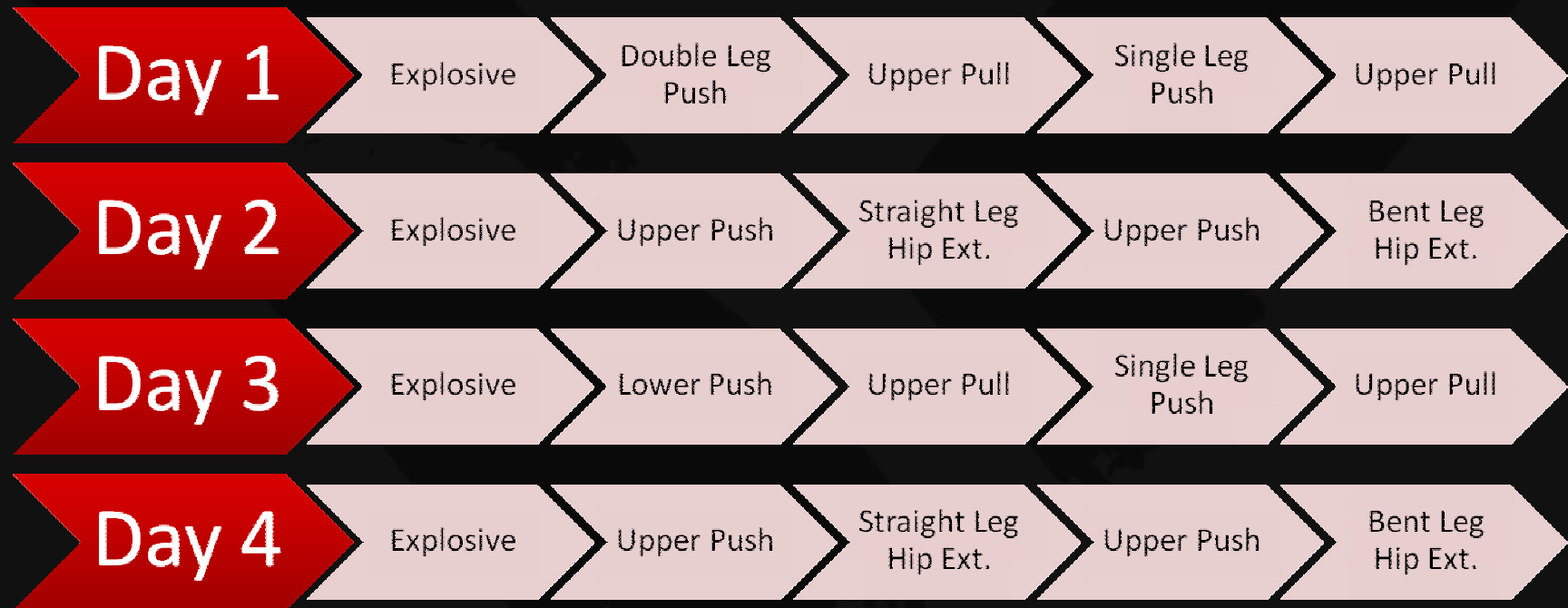


- Each phase generally lasts 2-4 weeks – 3 weeks is optimal
- Progress intensity each week of each phase = SUSTAINABLE SUCCESS
 - We want athletes succeeding in the weight room, NOT FAILING

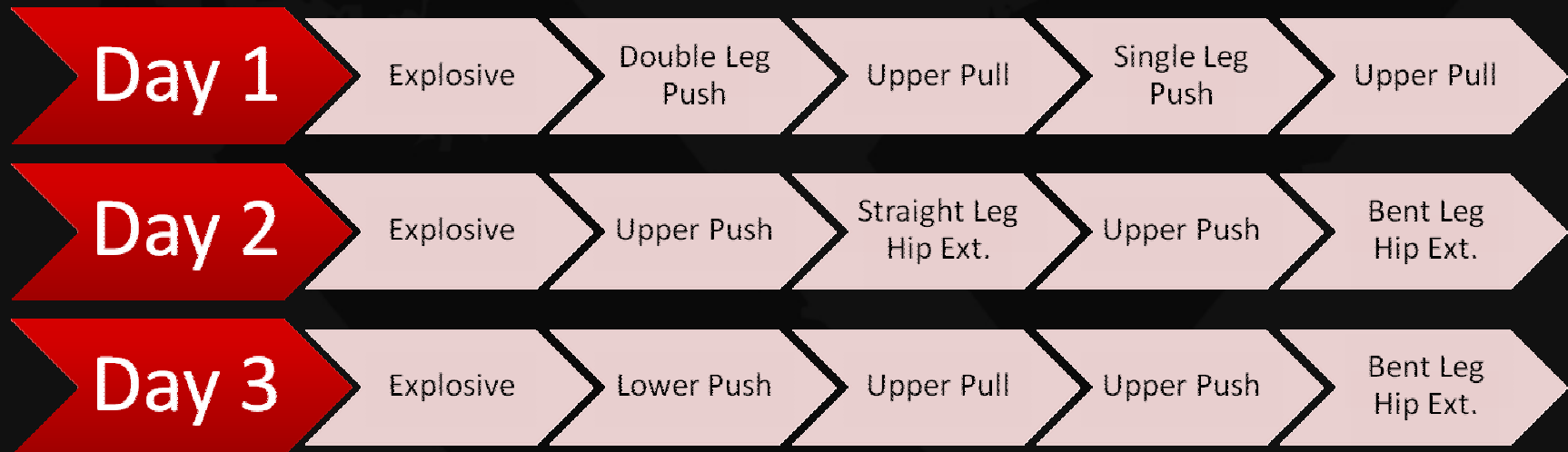
Periodization

Phase	Intensity	Volume	Purpose
GPP	Very low	Very high	Neuromuscular efficiency
Hypertrophy	60%-75%	3-4 sets x 8-12 reps	Muscle size/capacity
Strength	80%-90%	4-5 sets x 3-5 reps	Low end strength
Unload	50%-65%	3 sets x 6-8 reps	Recovery
Power	70%-80%	4-5 sets x 4-6 reps	Strength combined with speed
Speed	50%-65%	4-5 sets x 4-6 reps	Type IIb activation
Max Strength	90%-100%	4-5 sets x 1-3 reps	Maximal strength

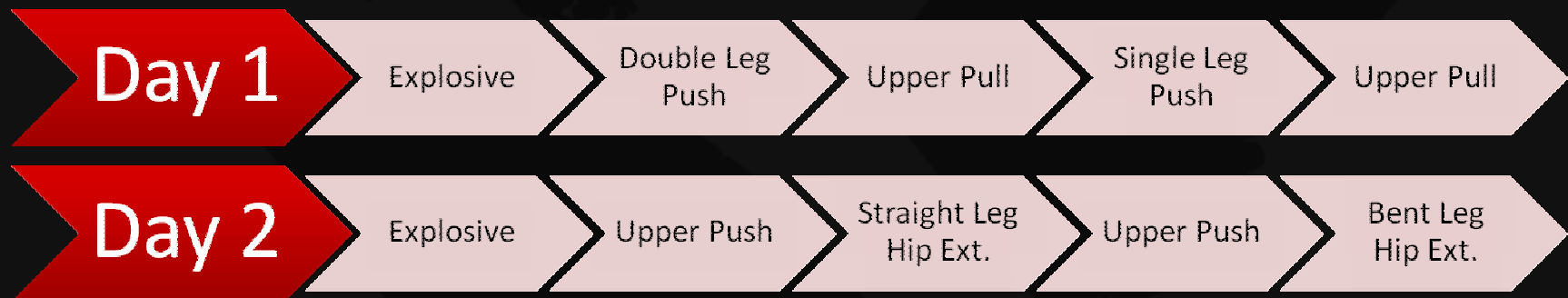
Sample Volt Week – 4 Days



Sample Volt Week – 3 Days



Sample Volt Week – 2 Days



Sample Volt Workout

Dynamic warmup (including torso training)

Explosive multi-joint movements

Multi-joint strength movements

Unilateral strength movements

Isolated single joint movements/transverse movements/grip

Injury prevention

Big points:

- Progress from high CNS involvement to low CNS involvement
- Work multiple joints in different planes
- Balance movement patterns

Volt Dynamic Warm Up







GENERAL WARM-UP

Choose One (3 min)

Jump Rope	Stationary Bike	Jog/Treadmill
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STANDING WARM-UP

6-12 reps each

<p>1 MB Giant Circles</p> 	<p>2 MB Wood Choppers</p> 	<p>3 MB Russian Twists</p> 
<p>4 MB Over Shoulder Rotations from Knee</p> 	<p>5 MB Squat/Presses</p> 	<p>6 MB Good Mornings</p> 

FLOOR WARM-UP

6-12 reps each

<p>7 MB V-Ups</p> 	<p>8 MB Side-to-Side Taps</p> 	<p>9 MB Spread Eagle Sit-ups</p> 
<p>10 Push-ups</p> 	<p>11 Supermen</p> 	<p>12 Lateral Hip Bridges</p> 

Football Training Program

Week of
Jun 23, 2013

DAY 1

Strength Phase

WEEK 1 OF 3



Eric Johnson

Junior, The Volt School

6'3" 205

STRENGTH NUMBERS

205 **310** **240**
clean squat bench

COACH NOTES

AFTER LIFTING: Run twelve 110s building up from 70% to 95% maximal speed. Rest 45 seconds between sprints.

PRE-WORKOUT DYNAMIC WARM UP

6-12 REPS EACH

- | | | |
|-------------------------------|-------------------------|----------------------------|
| 1. MB Giant Circles | 5. MB Squat/Presses | 9. MB Spread Eagle Sit-ups |
| 2. MB Wood Choppers | 6. MB Good Mornings | 10. Push-ups |
| 3. MB Russian Twists | 7. MB V-ups | 11. Supermen |
| 4. MB Over Shoulder Rotations | 8. MB Side-to-side Taps | 12. Lateral Hip Bridges |

✓ Rest 3 min between each set	Set 1	Set 2	Set 3	Set 4	Set 5
1 X. DB One Arm Snatch	35 5e	40 4e	45 3e	45 3e	50 3e

X:



- Arm straight down midline
- Explode off ground, shrug shoulder
- Extension through ankles/knees/hips
- Catch with loud heels, knees bent, arm straight overhead

✓ Pair A & B, rest 90 sec between each	Set 1	Set 2	Set 3	Set 4	Set 5
2 A. BB Back Squat	185 5x	215 4x	235 3x	250 3x	265 3x
B. DB Bent Row	35 6x	40 6x	45 6x		

A:



B:



✓ Pair A & B, rest 90 sec between each	Set 1	Set 2	Set 3	Set 4	Set 5
3 A. DB Bulgarian Split Squat	40 4e	45 4e	50 4e	50 4e	
B. Pullups [Over]	BW 5x	BW+ 4x	BW+ 3x		

A:



B:



✓ Pair A & B, rest 90 sec between each	Set 1	Set 2	Set 3	Set 4	Set 5
4 A. DB Calf Raise	40 12-15x	45 12-15x	50 12-15x		
B. DB Lateral Raise	15 8x	15 8x	15 8x		

A:



B:



POST WORKOUT INJURY PREVENTION

	Set 1
5 A. BW Reverse Crossover Lunges	2 x 10e
B. BB Kneeling Rollouts	10x

A:



B:



KEY

BB = Barbell [] = Grip x = Total Reps
DB = Dumbbell MB = Medicine Ball e = Each Side
BW = Body Weight SB = Stability Ball ___ = Fill In Own



This training program only contains recommendations based on input you, the user (or your coach), provided to Volt. Actual exercises, volumes, and intensities are undertaken in the user's sole discretion and are performed at the user's own risk. Volt makes no express or implied warranties regarding the Volt program or content. Use of Volt's program and content is governed by the terms of use provided on Volt's website.

VOLTATHLETICS

Programming Nuts and Bolts

- Rely on proven methods of enhancing sport performance and preventing sport injury
- Minimal equipment demands = universal implementation
- Every training session incorporates **explosive hip extension** for athletics power development
- Balance movement patterns FIRST, then adjust for sport-specificity as necessary
- Integrate programs across sports
 - Sport-specificity at the high school level is secondary to ATHLETIC DEVELOPMENT

Programming Nuts and Bolts

- Progressions

- Load
- Volume
- **Movement complexity**

- Variations

- Grips
- Angles
- Types of contractions
 - Concentric, Eccentric, Isometric
- Time under tension



DB Split Squat



DB Bulgarian Split Squat



DB Single Leg Squat

Strength Training and Concussions

- HOTTEST TOPIC EVER.
- The Question: Can lifting weights prevent concussions?

MAYBE

- Most of the focus is on strengthening the neck
 - Anecdotal evidence exists but very little empirical evidence
 - University of Washington has instituted mandatory neck strengthening protocols for high-risk sports
- Volt's stance:
 - Due diligence calls for a proactive approach

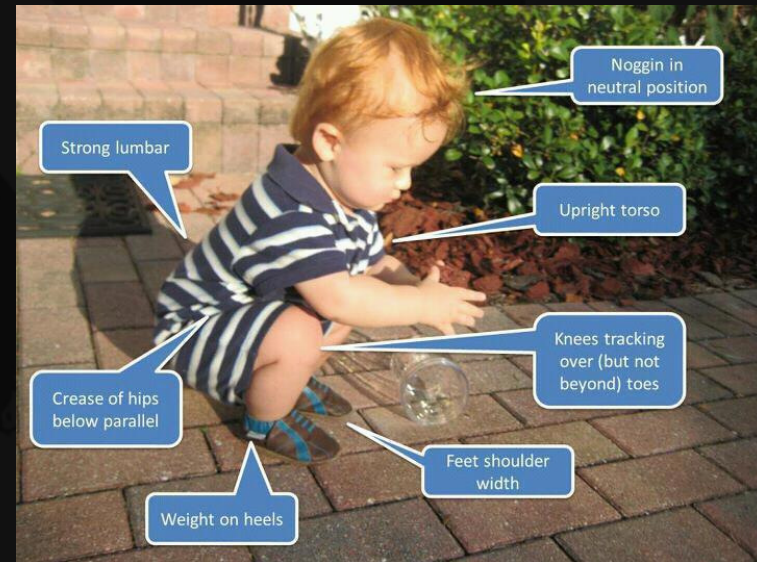
In-Season Training

- Why lift in season?
 - Detraining can begin as soon as two weeks after ceasing strength training
- Adjustments
 - Decrease volume to avoid DOMS
 - Decrease duration – time is a premium in-season
 - Extra awareness of practice/competition volume
 - Proactive recovery and injury prevention is HUGE

Youth Athletes

- Priority = MOBILITY
- Look to engage minds AND bodies
- Build efficiency of movement patterns
- Focus on quality and volume

We ALL start out with proper mobility!



FAQs

- What about multi-sport athletes?
 - Programs have to be integrated across sports
 - Developing the ATHLETE takes precedence
- What if my team has restricted access to the weight room?
 - FIO (Figure it out)
- I have a part-time strength coach – what's the best way to utilize him/her?
 - Part-time coaches are expensive per minute, so the goal should be to make their time as efficient as possible
- I have stretches of time without contact with my athletes. What do I do then?
 - Make sure they are set up on the right program
- How do I ensure my athletes' safety?
 - You are always ultimately responsible for your athletes
 - Be a proactive coach at all times

The Ultimate Goal

So what is the ultimate goal of implementing a strength training program??

LONG-TERM ATHLETIC DEVELOPMENT

- It's not about a single workout or an 8 week training program
- Implementing a true PROGRAM involves planning for 52 weeks year after year after year...

Practical Implementation

- Optimize time and space
 - Be sensitive about your time AND your athletes' time
- Commit to a system
 - Remember: everything works, but...
- Be a proactive coach in the weight room
 - Be a student and a teacher
- Educate your athletes

Takeaways

So what can YOU do?

- Figure out how realistic it is to design and implement your own program
- Weigh the options
- Equip your weight room
- Get educated
 - Get CSCS certified
 - Take an NSCA Coaches education clinic



VOLT™ ATHLETICS

MAKING ELITE POSSIBLE