Strength Training For Track and Field Athletes

Lee Taft

www.LeeTaft.com
Most Importantly!

You are responsible for your athletes and their well-being not what other people think or what they are doing!
Know Your Goals When It Comes To Strength Training

1. Improve my athletes safety so they can continue to perform without injury taking them out of their events.
2. Improve performance on the track and in the field.
3. Improve their overall health and well being
4. Improve their confidence by improving strength, physical appearance, posture…
5. Give them the skills to know how to train for lifetime.
Strength Competition Should Be Against Themselves Not Teammates

• Top Lifter Boards on the wall:
  – Genetics win over hard work if you compare everyone against everyone.
  – It tells those who will never make the top 5 or the top 10 and get name on board- you will never be good enough!

**Nothing wrong with competition but give everyone a chance to join the fight! If you set it up wrong you defeat 90% of your team before it starts!**
Does Everyone Need To Be Strong For Their Event?

YES

Nuff Said....
What Does Strength Training Do For Track Athletes

1. If done properly can increase coordination.
2. Improves force production and force reduction.
4. Controls joint actions better if done properly and reduces injury potential.
5. Improves postures and specific positions to perform events better.
6. Improves specific strength to perform events better.
7. Etc…. 
What Type of Strength Training

What You Can Teach Best!!!!!
Research and Train

• Teach what you can teach best but don’t stop learning.

• If full body movements like squats, deadlifts, Olympic Lifts are important then go learn or have someone who knows teach your athletes.
  – I was not a thrower but attended clinics, read books, watched video, and talked to throwing coaches and became a good throws coach.
How Many Days Per Week

How Many Days Do You Need?

• If you are starting from scratch strength train every day you can!
• If you have a highly experienced team of lifters then prioritize your week.
Setting Up Your Program

Junior High and Elementary:

- Learn the basics of movement patterns
- Learn to stabilize spine, shoulders, pelvis, and knees.
- Teach them basic terminology

**They will love it and come ready to train when it is their time!**
Setting Up Program Continued…

**Freshman**- Learn the high school lifting system. Improve functional posture, core strength, skill acquisition of all lifts.

**Sophomores**- Still learning, but now in the system. Learning what intensity and volume means to their workouts, how to adjust.

**Juniors**- Taking it to the next level. Become very proficient lifters, demonstrators, breaking barriers…

**Seniors**- Top lifters, teachers and supervisors of the freshman and sophomores. Extension of coaches.
When First Setting Up Program and Teaching

Choose a Lift of the day and teach!

– Break down the components and drill it
– Build motor programming ability
– Teach how to spot if needed
When First Building Program

- Take the time to do it right rather than have to go back and fix it!

- Athletes will adjust to the environment you create.
Teach Movement Patterns

- Squatting - knee flexion and extension
- Bending - Hip flexion and extension
- Vertical Push - above shoulders
- Vertical Pull - down toward shoulders
- Horizontal Push - away from chest
- Horizontal Pull - toward chest
- Core - Anti-rotation, flexion, extension as well as movement.
Strength Training Organization

Super-Setting:

• Perform two non-competing exercises within a set
  – example; perform back squat, rest 90s then perform Dumbbell row
All Explosive or Olympic Lifts are not in a Super-set.

**Due to the explosive nature and the recovery demands of explosive lifts perform by themselves.**

***When athletes are just learning you can get away with super-setting with explosive lift because they are not being challenged***
Strength Training Organization

Perform 2-3 Super-sets on top of an explosive lift.

Set up: Example
1. Vertical Jump
2a. Squat
2b. Dumbbell row
3a. Shoulder press
3b. Core
Programming

Exercise Selection:

Choose exercises that Involve:

– Total Body Movements
– Triple Extension
– Core Stability
– Joint Range of Motion
Learning Triple extension, Stability, Coordination, Summation of parts
Break Down Movement To Develop Hinging, and Proper Pulling
Learning the middle phase of a lift. Triple Extension and Catching
Add a Strength w/ Squatting.
Learning To Pull From Floor
Learning to Express Quick Power
Then Receive It Over Head
Putting It All Together Over Head
Strengthening Posterior Chain/Core
Programming

Sets and Reps:
Typically the more reps you perform the less sets you will perform due to overall volume.

The less reps you perform you are capable or performing more reps.
Programming

• Example of Sets and Reps and Goal:
  – 3 sets of 12-15 will be more of a hypertrophy/strength endurance program
  – 8 sets of 3 will be more of a strength or power focus.
Programming

Rest

Based on the goal your rest will determine what kind strength you will be mostly focused on

The recover of your energy system (CP, ATP, Oxidative) determines how much energy you can supply for the next bout.
How To Prescribe Rest

0-30 seconds........roughly 50% energy system recovery
30s-2min.............roughly 90% energy system recovery
2-3min...............roughly complete energy system recovery
3-5min...............roughly complete neural recovery

**Full Neural recover is based on intensity of exercises.**
Tempo and time under tension will have a direct correlation to the result of the kinds of strength being gained.

Example:
A slow tempo with many reps will not create explosive power!
How To Prescribe Tempo

• Use a number system that tells athlete how fast to move for eccentric, concentric, and at end ranges.
  – Example; Perform a 211 tempo for push ups
    • 2 = two seconds on the lowering
    • 1 = one second pause at the bottom
    • 1 = one second to rise to the top position
      – If there is an “X” that mean explode.
# Tempo

<table>
<thead>
<tr>
<th>Duration</th>
<th>Intensity</th>
<th>Energy System Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6sec</td>
<td>Very Intense</td>
<td>ATP/CP</td>
</tr>
<tr>
<td>7-30sec</td>
<td>Intense</td>
<td>ATP/CP and Fast Glycolysis</td>
</tr>
<tr>
<td>30-2min</td>
<td>Heavy</td>
<td>Fast Glycolysis</td>
</tr>
<tr>
<td>2-3min</td>
<td>Moderate</td>
<td>Fast Glycolysis and Oxidative</td>
</tr>
<tr>
<td>3m-higher</td>
<td>Light</td>
<td>Oxidative</td>
</tr>
</tbody>
</table>
Loads

Max strength- 90% and higher
Strength Power- 80%-100%
Speed Power- 30%-60%
Strength Endurance- 10%-40%
Power Endurance- 10%-40%

*The difference w/ strength and power endurance is total number of reps and speed of movements.
Loads and Sets/Reps

Basically, the higher the loads the lesser the reps and the more the reps. The lower the loads the higher the reps and the less the sets.

*Explosive training can be done with low loads and low reps.*
Basic 4 Week Block

Week #1 = Base Week- Get them comfortable with the lifts. Intensity is Moderate. Example: 3 sets of 5-8 reps 65%

Week #2 = Volume Week- Build more volume into the program Example: 4 sets of 5-6 reps at 70%

Week #3 = Recover Week- Reduce volume and intensity. Example: 2-3 sets of 6-8 reps 60%

Week #4 = Intensity Week- Challenge strength. 3-4 sets of 5 reps 75%

Repeat by jumping the % up for the new base week.
Final Remarks

1. Build a Strength Program because it is the right thing to do for your athletes.
2. Learn from those who have done it.
3. Involve your athletes in the process.
4. Have a system of teaching the young kids up through high school so they know what’s next.
5. Build pride in the fact you are strong!
Thank You!
IATCCC T&F Clinic

If you are interested in learning about my Speed Camps or Coaches In-services at your school contact me at:
Lee@LeeTaft.com
www.LeeTaft.com