Nick Tumminello's

The Perfect Workout

Objectives

- Understand Fitness training vs. Performance training programs
- Discover the 5 stages to a "perfect workout" session.

- To provide you with a proven training system, which you can immediately use to incorporate the best aspects from many different exercise approaches to make you workouts more comprehensive, well-rounded and effective!

- Lots of great coaching tips to help you get better results from each and every session!

Who the heck is Nick Tumminello?

- Lives in Fort Lauderdale, FL
- Owner of Performance U
- Hybrid Fitness Expert for Team Jaco Clothing
- Writer / Contributor for Men's Health, Women's Health, Men's Fitness, Muscle Mag, MaxFit, Oxygen, Tmuscle, PTontheNet, YahooSports, MSNHealth, etc:
- Featured in two NY Times Best Sellers
- Featured in ACE PT Manual, 4th Edition
- Produced 10+ DVDs
- International Fitness Presenter
- Trains Pro / Amateur Bodybuilders, Pro / Amateur Figure Athletes, MMA Fighters, NFL Players, etc;

The State of the Fitness Industry
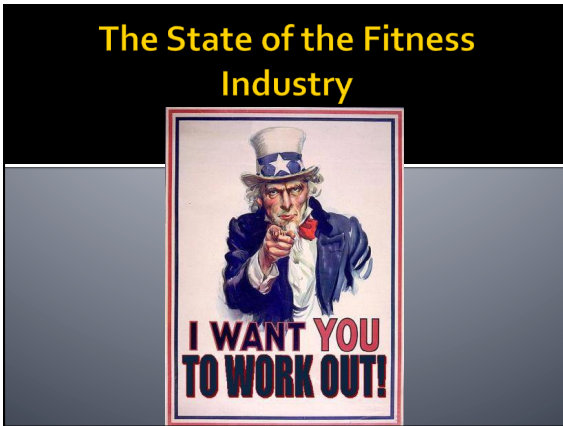

The State of the Fitness Industry

- No one understands program design because it's confusing!
- We substitute new exercises for a lack of ability to use systematic program design to progress our clients.
- We use what's cool vs. what's effective
- You can't progress unless you adapt – if you always vary, you can't adapt
- **Make your clients better, don't just make them tired!**

Who are you training?
The first step to the success of a training program

Two types of clients…
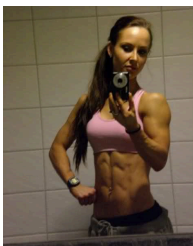
PHYSIQUE   **PERFORMANCE**

Physique Clients

- May or may not have previous exercise experience
- Tend to have limited training time due to family, work, etc:
- Want to look better naked!
- May be prepping for an event – Wedding, Reunion, etc:
- May not be very knowledgeable about training.
- Judge training success by the scale (weight) or the mirror.
- Like to work hard in the gym!
- May have existing personal image issues (So, be positive!) *(be nice on assessments)*

Performance Clients

- Posses previous exercise experience.
- Tend to have more time to devote to training.
- Have a clear cut goal to achieve with training – Get bigger, stronger, upcoming fight, etc:
- Want to outperform opponents, friends, etc:
- May or may not knowledgeable about training.
- Judge training success by weight on the bar, how fast they run, jump height, etc:
- Are comfortable and used to being coached and pushed with intense motivation.

6/20/12

Movements, not Muscles?

Functional (movement) Training
=
Move Better!

Physique (muscle) Training
=
Look Better

KEEP THE GOAL, THE GOAL!

Train Movements & Muscles!

- **For Physique clients – Prioritize Muscle training**
- 2:1 (muscles : movements)

- **For Performance clients – Prioritize Movement training**
- 2:1 (movements : muscles)

Who say's you can't do both!

The Perfect Workout

Organizing each training session for maximal density and results

TRUTH TIME!

- How personalized are your training sessions really?
- Stop training to your bias!

- Use the training modalities, equipment and styles which best fit your clients needs/goals.

- See the strengths and weakness in each type of training from bodybuilding to pilates to yoga.

- It's not what you can do for _____ training. It's what _____ can do for you!

- Why not use it all!
- Don't specialize in a training style – Specialize in a type of client

The Performance U 5-Stage Workout Method

- Stage 1 - Warm-Up
- Stage 2 – Nervous System Development (NSD)
- Stage 3 – Muscular System Development (MSD)
- Stage 4 – Energy System Development (ESD)
- Stage 5 – Cool-Down/Recovery

Some training concepts and techniques go best in specific stages

Warm-Up
(prepare the body for intense activity)

- Mobility drills
- Dynamic stretching
- 3D Matrix (Gary Gray)
- Muscle Activation Drills
- Corrective exercises
- Old-school Calisthenics
- Bodyweight exercises
- Yoga exercises (in fast forward)
- Pilates Moves

Nervous System Development
(Speed, Skill, Power)

- Plyometrics
- Explosive bodyweight exercises
- Speed ladders
- Mini-hurdles
- Medicine Ball throws
- Olympic Lifts
- 10-40yd Sprints
- Boxing / Kickboxing
- Hill sprints
- Change of direction drills
- Kettlebell Drills

Muscular System Development
(Strength, Size, Stability)

- Power lifting exercises
- Bodyweight exercises
- Unilateral Strength exercises
- Bodybuilding exercises
- Swiss Ball exercises (w/o external load)
- Band/Cable Exercises
- Pilates exercises
- Core/Torso exercises
- TRX exercises

Energy System Development
(Fat Loss, Work Capacity, Endurance)

- Interval training
- Circuit training
- Crossfit-ish training (with GOOD form!)
- Airdyne Bike
- Weight Sled training
- Strongman training
- Kettlebell Complexes
- Battling ropes
- Barbell complexes
- "Functional" fun stuff and games

Cool-Down
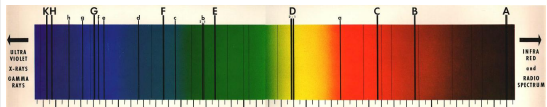### (Recovery, Regeneration, Relax)

- Static Stretching
- Yoga
- Corrective Exercises
- Balance Training
- Meditation drills
- Foam Roller

Functional Spectrum Training (FST) – The key to putting it all together!

What is the Functional Spectrum?

- A method a prioritizing exercises from most functional to least functional.
- *You begin with exercises that are very athletic and move across the spectrum to less athletic exercises*
- You begin with complex movements and and move your way across the spectrum to simpler movements
- *Fast to Slow*
- Integrated to Isolated
- *High CNS Demand to Low CNS demand*

In the FST System…

- We always start with fast exercises!
- Momentum Enhanced Training (MET)
  - The Science of Tri-Phasic EMG

Tri-Phasic EMG

Six adult women produced elbow extension movements at speeds ranging from ballistic (FAST) to very slow.
Surface EMG from triceps brachii (agonist) and biceps brachii (antagonist) muscles were recorded, together with elbow angle, on a microcomputer.
The results showed that triphasic EMG patterns developed systematically.
Slow elbow extension movements were produced by a single continuous activation of the agonist triceps brachii muscle.
However, agonist activation became predominantly burst-like and other components of the triphasic EMG pattern [activation of the antagonist (Ant) and second agonist activation (Ag2)] began to appear.
At the fastest movement speeds, triphasic EMG patterns (Ag1-Ant-Ag2, Ag1 being first activation of agonist muscle) were always present.

W. Gilleard , EUROPEAN JOURNAL OF APPLIED PHYSIOLOGY AND OCCUPATIONAL PHYSIOLOGY, Volume 63, Number 5, 381-386)

- Motor Control. 1999 Oct;3(4):346-71. Natural goal-directed movements and the triphasic EMG. Morrison S, Anson JG.

Movement-related phasic muscle activation. I. Relations with temporal profile of movement. S. H. Brown and J. D. Cooke, *J Neurophysiol* 63: 455-464, 1990;

The Take Away…

- - We need to train with Speed and Momentum - Especially Rotary actions!!!
- - Your CNS will limit power output when a lack of deceleration is apparent *(Car analogy)*
- - Injuries tend to occur mostly during deceleration
- - Coordinating agonist/antagonist cooperation is crucial in all movements to enhance performance and prevent injury!
- - Cables/Bands training will not teach a tri-phasic muscle-firing pattern
- Free weights are more functional than bands/cables!
- - Cables/Bands are good, but don't let them be all you use!
- - Cables/Bands are NOT Free-weights!

Great MET Exercises

-KB Swings & Cleans (I don't use KB Snatches)

-KB Rotary Swings
-Sprints
-Jumps
-Throwing Medicine Balls
-Boxing/ Kickboxing

▪All of our workouts begin with at least one or more of these exercises.

▪*Do something fast everyday!*

Also In the FST System…

- We prioritize Standing Strength and/or Core Limited Strength (CLT)
- Most sports are played on your feet!
- Most movements have the torso (Core) involved!
- *"If we don't see in competition, we don't emphasize it in training."*
- Standing is the most functional body position so it's where we start.
- Force production patterns are different when you're standing vs. lying down – *Therefore strength is different too!*
- We DON'T prioritize the Bench Press *(1 of the 3 "big" lifts)*

The truth about the bench press!

- *This study compared the standing cable press (SCP) and the traditional bench press (BP) to better understand the biomechanical limitations of pushing from a standing position together with the activation amplitudes of trunk and shoulder muscles.*
- ***In addition, the model predicted that pushing forces from a standing position under ideal mechanical conditions are limited to 40.8% of the subject's body weight.***
- *For the 1RM BP, anterior deltoid and pectoralis major were more activated than most of the trunk muscles. In contrast, for the 1RM single-arm SP, the left internal oblique and left latissimus dorsi activities were similar to those of the anterior deltoid and pectoralis major.*
- ***Our EMG findings show that SCP performance is limited by the activation and neuromuscular coordination of torso muscles, not maximal muscle activation of the chest and shoulder muscles.***

J Strength Cond Res. 2007 Nov;21(4):1271-7.
A kinetic and electromyographic comparison of the standing cable press and bench press.
Santana JC, Vera-Garcia FJ, McGill SM.

The Take Away!

- Unless you're a powerlifter, the bench press is just another way to strengthen your chest and shoulders... not a key to improving functional performance!

- Squat & deadlifts are awesome because they're standing and CLT!

- The best core training is infused with other movements like pushing, pulling, squatting, etc:

Great CLT Exercises

Pushing

- -Push Ups
- -1A Push Ups
- -1A Cable Presses
- -OH Presses (DB or BB)
- -DB Uppercuts
- -Angled Barbell Presses

Pulling

- -BO rows
- -1A Free Standing Rows
- -1A Cable Rows
- -1A Compound Rows
- -1A Motorcycle Rows

- *(Split Stances)*

Great CLT Exercises (cont.)

Rotation

- -Cable Chops
- -Plate Corkscrew
- -DB Plank Row
- -DB Uppercuts
- -1A Cable Press

Legs/Hips

- -BB Squats
- -1A Lunges
- -1A Farmers Walks
- -Deadlifts (DB,BB)
- -Front Squats
- -Zercher Squats & Lunges

Isolation Exercises are used in the FST System...

- Towards the end of the workout
- To bring up weak areas
- Increase muscles size (bigger muscles dissipate force better)
- Increase connective tissue strength
- Getting "bigger" can help you produce more force...*So bodybuilding can have a functional carryover to sports indirectly due to hypertrophy gains.*
- Machines and bodybuilding methods have been shown to help performance *(Leg extension research)*
- Muscles create movements!

The FST System Uses...

▪2 Kinds of Functional Training: General & Specific

▪GENERAL: *get stronger, leaner, better conditioning, etc:*

▪SPECIFIC: *Match the force production patterns of specific sporting movements you wish to improve.*

- *Do BB Squats to improve squat jumps*
- *Train using various elements of the bench press to get better at doing the bench press!*

- *The focus of these sample workouts in GENERAL!*

FST Rarely uses...

▪Unstable Surface Training

- UST doesn't match force production patterns
- Unless your playing sports in an earthquake, UBT is less functional than stable base training
- UBT has been shown in research to help regain normal levels of proprioception after an ankle, knee, hip or low back injury.
- UBT has been shown to REDUCE force output due to the instability.
- Stabile base training is better for building strength & stability

- *The more stability you have, the less balance you need*

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Sample FST workouts
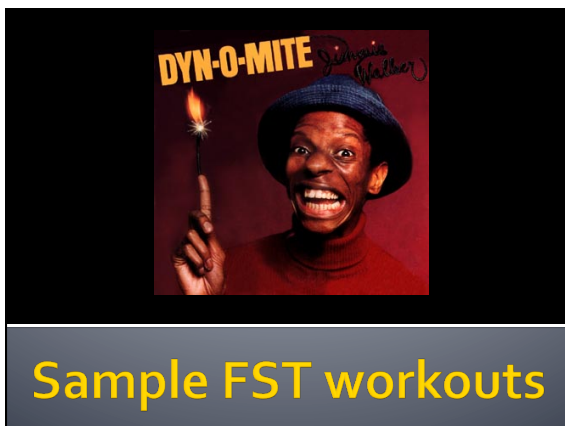
3-day FST Split

- Mon – Locomotion, Rotation, Pulling

- Wed – Locomotion, Rotation, Pushing

- Fri – Locomotion, Rotation, Legs/Hips

Sample workout:
Locomotion, Rotation, Pulling

1. Sprints (NSD)

2a. 1A KB Swing
2b. MB Side Scoop Throw

3a. 1A Cable Row
3b. SB Pikes

4a. Rope Climb or Chin Ups
4b. Band Rotations

5a. DB Rear Delt Flys
5b. DB Biceps Curls

6. Ropes Gone Wild (ESD)

Sample workout:
Locomotion, Rotation, Pushing

1. Kickboxing (NSD)

2a. MB Power Push Throw
2b. KB Rotary Swing

3a. 1A Press Row
3b. SB Hypers

4a. 1A Push ups or Push up (variations)
4b. Band Rotations

5a. DB or BB Shoulder Press
5b. Rope Triceps Extensions

6. Prowler Pushes (ESD)

Sample workout:
Locomotion, Rotation, Legs/hips

1. Sprints (40yds)

2a. Long Jumps
2b. MB Punch Throw

3a. 1L Squats
3b. SB Front Neck Bridge

4a. BB Deadlifts
4b. SB Lateral Neck Bridge

5a. BB GM + Calf Raises
5b. Leg Extensions

6. Farmers Walks (ESD)

It ALL works so use it ALL!

- Dynamic WARM-UP

- Begin with: Sports Performance Training, Sports Specific Exercises, KB Training, MB Throws, etc:

- Middle with: Compound lifts (powerlifting), Strongman drills, Total-Body exercises, Heavier Lifts - Isolation moves (Bodybuilding), Matt Pilates, TRX moves, Balance exercises, etc:

- Finish with: Cardio/ Conditioning

- Cool Down: Yoga, Roll, Stretch

Not Rules, just guidelines!

THANK YOU!!!

I've got a
HIGH
FIVE
with your
name on it