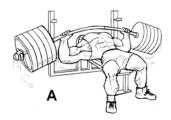
Critical Program Design Strategies

Presented by Tomi Toles, CHEK Faculty Session sponsored by C.H.E.K Institute



Who Is Your Clientele?

→ If 98% of our clients simply want to look better, because their overweight or want to feel better because they are over-stressed and tired...Why are most trainers using methods designed for competitive body builders, competitive athletes and strong men?



Trainers and physical therapists are quite unhealthy, yet usually they are healthier than their clients/patients.

Dose

→ Response consideration is the application of an exercise stressor.

The Health of the Nation

- 46.7% of Americans are on at least 1 Rx drug in 2004!
- In the 65yrs+ category, 87.3% are on at least 1 Rx drug
- In 2002, over 3 BILLION prescriptions were written for drugs in the US

Many drugs:

- Alter pain pathways, masking pain
- Stress internal physiology
- Produce inflammation as a side effect!
- Alter cardiovascular response to exercise stress
- Disrupt enteric NS feedback loops

How Healthy are You?

Stress ~ Recovery Principles

- Anabolic:
 - Tissue building
 - Learning/growth
 - Resistance training facilitates when rest is adequate
- Catabolic
 - Tissue destructive
 - Removing the old to make room for the new!

Aerobic training facilitates this

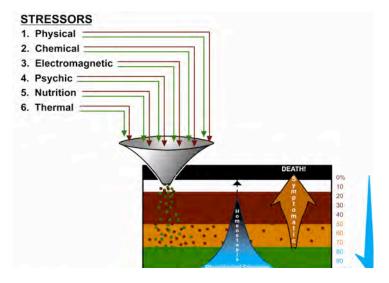
How stressed is your client?

- → Musculoskeletal stress.
 - → Joint pain.
 - → Muscle stiffness.
- → Hormonal stress.
 - → Energy levels.
 - → Headaches.
- → Emotional stress.
 - → Work stress.
 - → Personal relationship stress.

Assessing Physiological Load

Most exercises are catabolic stressors Careful assessment determines:

- Exercise type
- Dose / Volume



- Acute variables
- · Chronic variables

What are some key indicators that your client is catabolic, short of using a weighted questionnaire?

Sympathetic Indicators:

- Constipation
- Anxiety
- Poor sleep quality
- Night sweats
- Orgasm/Genital inhibition

- Waking un-rested
- Nervousness
- Jittery
- muscle tension
- **↑** inflammatory conditions
- ↑ susceptibility to infection

Exercise Selection

Restoring posture, joint stability, tuning biological oscillators and activating biological pumps has far reaching physiological effects!

Muscle balance and stability exercises before strength or power training!

Time Under Tension

Type 1	
Type IIA -	
Type IIB -	

Static postural demands:

- Require repetition/tempo combinations that produce a total TUT of 100 -240 secs
- The intensity should be =/<40% 1RM

Dynamic postural loading demands:

- Type II A < 100 seconds loading at 40 75% 1RM
 - Moderate to slow speeds of movement
- Type II B < 12 seconds loading at 75 100% 1RM or <75% maximum voluntary effort
 - Slow Speed/High Intensity
 - High Speed/Mod. Intensity
 - High Speed/Low Intensity

Pattern Overload

Results from:

- Lack of variation
- Connective tissue fatigue
- Musculo-tendinous fatigue
- Nervous system fatigue

Prevention of pattern overload - using neurologically comparable movements to develop functional strength without overload.

Primal Pattern® Movements

- Squat
- Lunge
- Bend
- Push

- Pull
- Twist
- Gait

Exercise Sequencing

- Ability vs. Skill
- Orthopedic obstruction?
- Neurologic impairment
- Movement skill requirement?
- Movements most needed?

- Most to least complex!
 - Exception: Most important may not always be most complex

The CHEK Success Formula

• Foundation Principles first

FLEXIBILITY - STABILITY - STRENGTH - POWER

Key References:

- 1. Chek, Paul. *Program Design: Choosing Reps, Sets, Loads, Tempo and Rest Periods, 2nd edition (Correspondence Course.* C.H.E.K Institute, 2011.
- 2. Chek, Paul. Advanced Program Design, (Correspondence Course). C.H.E.K Institute, 1997, 1999.
- 3. Chek, Paul. How to Eat, Move and Be Healthy! C.H.E.K Institute, 2004
- 4. Schmidt, Richard A. *Motor Learning and Performance*, *4th Ed.* Human Kinetics, 2007.

For a complete list of references, please e-mail the C.H.E.K Institute.

Presenter Contact Details: C.H.E.K Institute
Ph: 800.552.8789 or 760.477.2620 Fax: 760.477.2630
www.chekinstitute.com info@chekinstitute.com

