Principles and Parameters of Exercise

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PROVRBS-P

- PROGRESSION
- REGULARITY
- OVERLOAD
- VARIETY
- RECOVERY
- BALANCE
- SPECIFICITY
- PRECISION

FITT FACTORS

- FREQUENCY
  - Times per week
- INTENSITY
  - Degree of exertion (i.e. %MHR or #RM)
- TIME
  - Duration (time, distance, sets/reps)
- TYPE (category of ex.)

Progression

- Systematically progress training challenges over time
- Movement skills first
- Endurance
  - Rule-of-thumb is to progress time/distance by no more than 10% per week.
- Strength
  - First master core stability and control of body-weight exercises.

Regularity

- You are what you eat
- You are what you train to become
- If it is important, train it at least once every 7-10 days.
  - Exception: foot marching 2X/month is likely sufficient

Overload

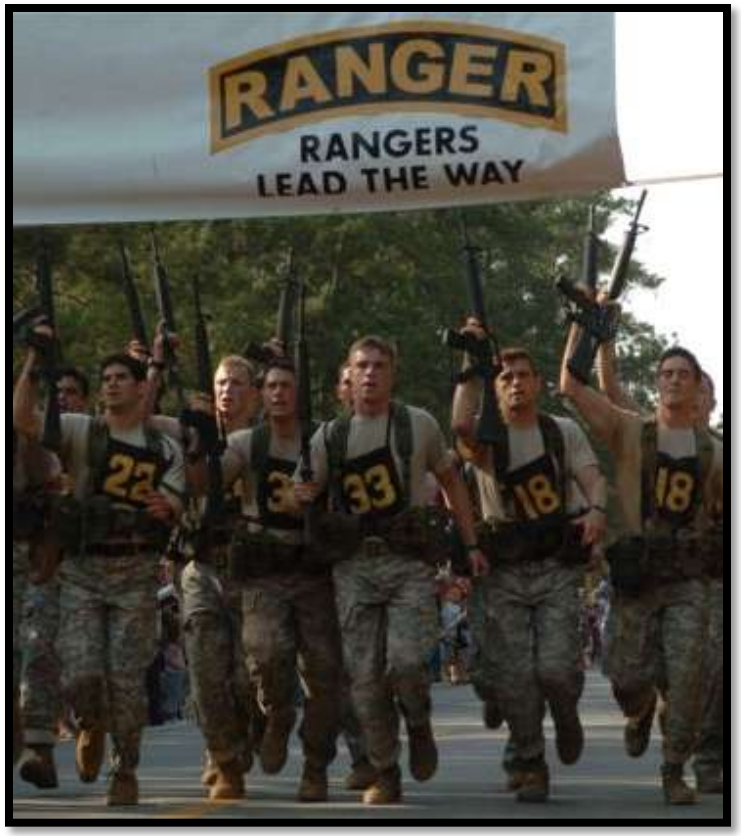
- SAID Principle
  - **S**pecific
  - **A**daptation
  - **I**mposed
  - **D**emands
- Overload imposes the demand
- Very easy to over-overload

Variety

- Ensures multiple adaptations
  - General Physical Preparedness
- Controls overuse injuries
- Absolutely necessary for the broad-ranging physical requirements of Ranger missions.

Recovery

- Overload-Recover-Repeat-Progress
- High-volume speed and/or power training require greater recovery
- Scheduling recovery
  - Weekly, Monthly, Yearly
- Overtraining not only affects muscles/bones/tendons stress injuries, but also disruption of hormonal balance.



Balance

- Strength
  - body-weight resistance
  - moderate-heavy resistance
  - power
- Endurance
  - aerobic
  - anaerobic
- Movement skills

Specificity

- “Fit for what?”
- For Rangers, the answer is “Fit for current and potential Ranger training and combat missions.”
- Tactical PT
  - operationally relevant degree of intensity and volume
  - preceded by general fitness development (strength, endurance, movement skills).
- Variety/Specificity Paradox

Precision

- Biomechanical correctness
- Goal: movement patterns that are efficient and effective
- Biggest flaws
  - Not stabilizing the core
  - Not squatting effectively

FITT Factors

- Frequency
- Intensity
  - %MHR
  - Load
  - Reps or distance/time
- Time
  - Generally inverse to intensity
- Type
  - General to specific

The Root of All Overuse Injuries

a violation of the Principles & Parameters of Exercise…

TOO HARD, TOO FAST, TOO SOON,
TOO MUCH, TOO OFTEN