



Principles and Parameters of Exercise



Principles and Parameters of Exercise



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
 - Specific
 - Adaptation
 - Imposed
 - Demands
- Overload imposes the demand
- Very easy to over-overload





Variety



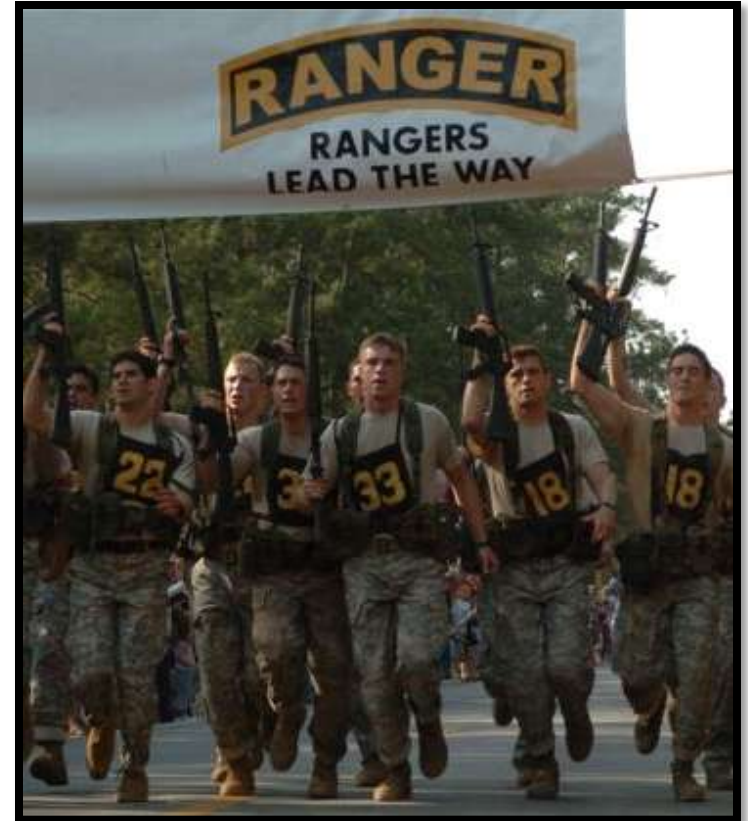
- Ensures multiple adaptations
 - General Physical Preparedness
- Controls overuse injuries
- Absolutely necessary for the broad-ranging physical requirements of Ranger missions.





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**