



# *Principles of Training*

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# *Efficient and Safe Training*

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★ Carefully Planned and Deliberate Training Program



★ Follow 3 Basic Training Principles

- Overload
- Progression
- Specificity





# *Overload Principle*

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★ Body systems become stronger and function better if increased demand is placed on them



★ Should not be too severe (too much)



★ Varies from person to person and system to system



# *Milo of Crotona*

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- ★ Ancient Greek wrestler
- ★ Increased strength by lifting baby calf
- ★ As calf grew, strength increased
- ★ Soon Milo could lift a full grown bull





# *Applying F.I.T. to Overload*

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★ FIT

— F<sup>requency</sup>

— I<sup>ntensity</sup>  
— T<sup>ime</sup>

— T





# *Frequency*

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★ Number of times you exercise

★ Ideally  becomes part of daily routine

★ Minimum  3 times per week



★ Flexibility  3-6 times per week

★ Cardio  3-6 times per week



★ Muscle Strength  work muscle group every other day

★ Muscle Endurance  work muscle group every



# *Intensity*

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★ How hard you work out

★ Too hard ☐ leads to injury



★ Too little ☐ little or no improvement

★ Flexibility ☐ stretch further



★ Cardiovascular ☐ run faster

★ Muscle Strength ☐ increase weight

★ Muscle Endurance ☐ increase weight



# *Time*

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★ How long you exercise

★ Flexibility  Increase Hold of stretch



★ Cardio  Increase Mileage

★ Muscular Strength  Increase Repetitions  
or Sets



★ Muscle Endurance  Increase Repetitions  
or Sets





# *Principle of Progression*

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- ★ Increase your workload progressively for maximum improvement and to prevent injuries
- ★ Body adapts to overload so more overload is needed continue to improve fitness





# *Principle of Specificity*

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- ★ Must do specific exercises to improve specific components of physical fitness in specific body parts





# *Flexibility*

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## Minimum Principles of Training Guidelines



★ **F**requency - at least 3 times per week



★ **I**ntensity - controlled stretch

★ **T**ime - static: hold stretch 15-30 sec.



# *Cardiovascular Endurance*

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## Minimum Principles Training Guidelines

- ★ **F**requency - at least 3 times per week
- ★ **I**ntensity - 60-90% max heart rate or
- ★ **T**ime - minimum 20 min. continuous large muscle groups



# *Muscular Endurance*

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## Minimum Principle Training Guidelines



★ **F**requency - every other day



★ **I**ntensity - low resistance (30-50% 1 RM)

★ **T**ime - high repetitions (10-15 reps, 3 sets)



# *Muscular Strength*

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## Minimum Principles of Training Guidelines



★ **F**requency - every other day



★ **I**ntensity - heavy weights (60-90% 1 RM)

★ **T**ime - low repetitions (4-8 reps, 3 sets)



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***THANK YOU***