



PAF30-PAF40

PERSONAL FITNESS

TRAINING PRINCIPLES

- FITT PRINCIPLE
- PRINCIPLE OF OVERLOAD
- PRINCIPLE OF PROGRESSION
- PRINCIPLE OF SPECIFICITY
- PRINCIPLE OF INDIVIDUAL DIFFERENCE
- PRINCIPLE OF REVERSIBILITY
- PRINCIPLE OF DIMINISHING RETURNS
- PRINCIPLE OF RECOVERY
- PRINCIPLE OF TEDIOUSNESS
- PRINCIPLE OF CEILING EFFECT

FITT PRINCIPLE

THE FITT FORMULA: PHYSICAL FITNESS

	Aerobic	Flexibility	Muscular Endurance	Muscular Strength	Body Composition
F	<ul style="list-style-type: none"> • 3-5 times / week 	<ul style="list-style-type: none"> • Daily • Warm-up • Cool down 	<ul style="list-style-type: none"> • Daily for some muscle groups • 3-4 times / week 	<ul style="list-style-type: none"> • 3 times / week • Different muscle groups 	<ul style="list-style-type: none"> • Daily exercising • Follow Canada's Food Guide
I	<ul style="list-style-type: none"> • 60-90% of max. heart rate 	<ul style="list-style-type: none"> • Hold 15-30 seconds • Total body • 1-3 reps 	<ul style="list-style-type: none"> • 15+ reps • .50% max. weight • Body weight • 1-3 sets • 8-12 exercises 	<ul style="list-style-type: none"> • 70-90% of 1-rep max. • 1-4 sets • 8-12 reps • 8-12 exercises 	<ul style="list-style-type: none"> • Light to moderate
T	<ul style="list-style-type: none"> • 15-60 minutes of continuous activity • Progressive 	<ul style="list-style-type: none"> • 10-20 minutes 	<ul style="list-style-type: none"> • 30-60 minutes • Progressive 	<ul style="list-style-type: none"> • 15-60 minutes • Progressive 	<ul style="list-style-type: none"> • 30-60 minutes • Progressive
T	<ul style="list-style-type: none"> • Large muscle groups • Continual rhythmic • Running, cycling, swimming • Games 	<ul style="list-style-type: none"> • static stretch • controlled dynamic stretch 	<ul style="list-style-type: none"> • resistance training • body weight • circuit training 	<ul style="list-style-type: none"> • resistance training 	<ul style="list-style-type: none"> • aerobic activity • walking, running, cycling, swimming

FREQUENCY

- The number of training sessions per week spent training
- General guideline is 3-5 times per week
- Determination of frequency depends greatly on the athlete's level of fitness, athletic aspirations, and type of training

INTENSITY

- How hard the individual must work
- Taken as a percentage of the individuals maximal aerobic and anaerobic power
- General guideline is 50%-100% of the athlete's maximal ability/effort
- Intensity is also altered by changing the rest of time

TIME

- Amount of time spent in a single training session
- Depends on the athlete's level of fitness, athletic aspirations, and type of training

TYPE

- Refers to the type of training method used
- Depends on the athlete's level of fitness, athletic aspirations, and sport or activity for which he or she is training

PRINCIPLE OF OVERLOAD

- For physiological change, the body must perform tasks that are more challenging than those to which it is accustomed
- Over time the body will adapt, therefore in order to continue to grow, new demands must be incorporated
- Overload can include all aspects of training, i.e., physiological, emotional, mental, and psychological

PRINCIPLE OF PROGRESSION

- In order to constantly improve, an athlete must progressively increase the overload over time
- The athlete must be aware that loads and demands on the body must occur over time to increase performance and decrease injury

PRINCIPLE OF SPECIFICITY

- In order for specific outcomes to occur, training must be specific to those outcomes
- Example: if you want to improve your vertical jump, your exercise prescription should include explosive power exercises that target the legs
- Specific physiological adaptations will occur if training is specific
- Training must reflect athlete's sport specific needs

PRINCIPLE OF INDIVIDUAL DIFFERENCES

- Every athlete has a different physical and psychological make-up
 - Pre-training fitness levels
 - Requirements within their sport
 - Age and gender
 - Ability to recover from workouts
 - Ability to recover from injury
 - Body type

PRINCIPLE OF REVERSIBILITY

- “Use it or lose it”
- Muscles will start to lose training effects as soon as training stops
- Atrophy (muscle degeneration) will occur during sustained period without training
- Significant training benefits can be lost after 2 weeks of not training – i.e. Christmas Break
- Reasons include: injury, lack of motivation, overtraining, and burnout

PRINCIPLE OF DIMINISHING RETURNS

- A person's training gains will reflect that person's prior level of training
- Individuals who do not train or train very little will see significant gains
- Highly trained individuals will see little gains as they experience performance plateaus
- Changing training programs and philosophy are ways to help prevent performance plateaus

CEILING EFFECT

- As you approach your ATHLETIC POTENTIAL (genetic) the rate of increase in your fitness and strength will start to slow.
- When this occurs a temporary lay-off, change of routine, or a decrease in intensity may be needed to further your progress.



PRINCIPLE OF RECOVERY

- Adequate rest is important in a training program because the body repairs itself when you rest (sleep) and grows.
- Along with proper rest, it is equally important that you refuel the body with proper nutrition as close as you can after the workout.



- **General Rules:**
 - Aerobic Activity = 24 hours between workouts
 - Anaerobic Activity = 48 hours between workouts
 - Intensity and Duration may dictate the rest period

PRINCIPLE OF REVERSIBILITY

- If a training program is discontinued completely, the training effect will be lost at 1/3 of the rate it took to obtain it.
- For example: An improvement in muscular strength that took 2 months to obtain will be lost completely in 6 months.
- The rate of regression is even faster when talking about aerobic fitness decreases.

TEDIUM

- Tedium means boredom
- Basically if you carry out the same workout routine day after day, you are likely to become bored with the program. You may lose motivation.
- To keep the motivation high you should vary your program by adding new exercises, training a different energy system, or change up your workout venue.