Good Health

- Change Bad habits to Good ones
- Exercise (Aerobically)
- Sleep get enough rest
- “Diet” way of life the best diet is No diet eating healthy is the way to go!

Benefits of exercise

- Improves self-image/confidence
- Improves the way you feel (psychological well being)
- Reduces stress and tension
- Reduces chances of heart, lungs, joints, problems
- Promotes getting proper sleep and relaxation
- Reduces excessive adipose tissue which needs supplied blood
- Improves circulation
- Helps one live a healthier life
- Along with proper diet controls weight
- Fun!
Types of exercise

- **Aerobic** (with oxygen) exercise-The use of the major muscles of your body over a long period of time continuously at a moderate pace while working within your target zone. The source of fuel is Body Fat!

Requirements for aerobic exercise

Intensity-exercise at a moderate pace within your target zone (50%-85%) of your maximum heart rate.
Duration- (20-30) minutes per session including warm-up and cool down
Frequency- (3-5) times per week
Exercise Major Muscles of your body
Continuously-Non-stop for the duration

Examples of Aerobic exercise are walking, jogging, bike riding, rowing, dancing, swimming, jump rope, cross country skiing, cardio boxing.

- **Anaerobic exercise**- A high sudden oxygen demand work must be carried out by muscles without oxygen. Source of fuel is Blood Sugar.
Examples of Anaerobic exercise are basketball, floor hockey, volleyball, football, tennis, weight training, golf, and bowling.

How to monitor your Aerobic Exercise

- To work Aerobically you should workout within your target zone. Your Target Zone is a set of numbers, which determines how hard you are exercising.

Use the “Karvonen Formula” 220 rule to calculate your target zone.

\[
\text{220 - age (______) = Max Heart Rate (______)}
\]
\[
\text{Max Heart Rate (______) - Resting Heart Rate (______) = Range (______)}
\]
\[
\text{Range (______) \times \% (______) + Resting Heart Rate (______) = Target Zone (______)}
\]

****Percentage Chart:
50%-60%-Never exercise
60%-70%-Exercise sometimes
70%-85%-Exercise regularly – in great shape!
Example Work-Out scale/program

Warm-Up (5-10 min.)  Aerobic (10-30 min.)  Strength (10-15 min.)  Cool Down (3-7 min.)
“What should I eat before I run?”

-Bud James-

That is a good question! It is a question that I have had to answer countless times each week. The simple answer is to eat something that your digestive system can tolerate as you are running. That would mean foods that are high in energy and low in fat as they will more readily digest. Foods that are high in water content are also good. Some examples would be fruits, light grains such as you would find in a muffin or a bagel, energy bars such as a Powerbar or any of the other energy bars. Be careful to look at these closely for content and always drink water with them to aid in digestion. Bananas are my favorite food to suggest as a pre-run food as they are soft and easily digest. They are a great source of carbohydrate and aid in keeping your electrolytes in balance with their potassium content. Here are some basic guidelines to follow!

Daily Nutrition

- 8-10 servings per day of carbohydrates (breads, pasta, rice, cereal etc.)
- 4-5 servings of vegetables
- 3 servings of fruit
- 2-3 servings of dairy-(milk, yogurt, cheese)
- 2 servings of protein- (fish, poultry, meat, beans, tofu, eggs)

Breakdown of Nutritional components for energy maintenance

Breakfast- 80% carbs, 20% protein Carbs provide 2-3 hours of energy after which blood sugar levels dip and then the body relies on protein.

Lunch- 60% carbs and 40% protein

Dinner- 50% carbs and 50% protein
Protein is harder to digest so the body does not become hungry during sleep.

Snacks- Snacks keep the blood sugar levels up in between meals.

<table>
<thead>
<tr>
<th>Breakfast</th>
<th>Snack</th>
<th>Lunch</th>
<th>Snack</th>
<th>Dinner</th>
</tr>
</thead>
<tbody>
<tr>
<td>80% carbs</td>
<td>Variety</td>
<td>60% carbs</td>
<td>Variety</td>
<td>50% carbs</td>
</tr>
<tr>
<td>20% protein</td>
<td>40% protein</td>
<td></td>
<td>50% protein</td>
<td></td>
</tr>
</tbody>
</table>

Snacks are important as they help to generate your metabolic rate.
Weight Training Rules/Guidelines

1. Master Technique before weight lifting
2. Breathing: Exhale when contracting muscles (hardest part). Inhale when relaxing muscles (easier part)
3. Work opposite muscles groups to maintain good skeletal balance
4. Go through the full range of motion
5. Control your lift. Go slow, get max muscle workout. Don’t slam the weights.
6. Only contract the muscles in use
7. Always lift with a partner for free weight (to spot)
8. No food, playing around in the fitness room
9. Be considerate
10. Keeping a daily log is helpful to monitor progress

Strength workout-Heavier weight less repetitions (8-12)
Endurance workout-Light weight more repetitions (12-20)
Repetitions-Numbers of lifts
Set-One series of repetitions

Care for injuries (RICE)

Rest
Ice
Compression
Elevation
**Quadriceps:** Rectus Femoris, Vastus lateralis, Vastus Medialis, and Vastus Intermedius.

**Hamstrings:** Biceps Femoris, Semitendinosus, and Semimembranosus.
Examples of Major muscles used with Exercises
(There are also secondary muscles used with all of these exercises that I have not included)

- Angled Seated Calf/ Heel Raises-Gastrocnemus
- Bench Press, Vertical Chest Press, Cable Crossover, Pec Fly-Pectorals
- Bicep Curl- Biceps
- Chin Ups- Biceps Femoris
- Criss Cross Sit-ups-Obliques
- Crunches- Lower Rectus Abdominis
- Dips-Anterior Deltoid
- Hip Flexor-Psoas Major, Iliacus
- Knee/Leg Extension- Quadriceps
- Knee/Leg Flexion- Hamstrings
- LAT Pull downs, Upright row, Curls, Chin Ups, Preacher Curl-Biceps Femoris
- Lat Pull Downs-Latissimus Dorsi and Biceps Femoris
- Leg Press- Gluteus Maximus, Quadriceps
- Lunges- Gluteus Maximus
- Military Press- Anterior Deltoid
- Pull Ups- Triceps Femoris
- Pull Ups, Military Press, Shoulder Press-Triceps
- Push-Ups -Pectorals
- Rear Fly- Middle Trapezius and Teres Major
- Rowing machine-Latissimus Dorsi
- Shoulder Press- Deltoid
- Shoulder Shrug- Trapezius
- Sit Ups-Rectus Abdominis
- Squats-Quadriceps
- Tricep Extension-Triceps
- Upright Row- Rhomboids
Definitions of terms

**Aerobic Exercise**- The use of the major muscles of your body over a long period of time continuously at a moderate pace while working within your target zone. Body fat is the source of fuel.

**Agility**- The power of moving the limbs quickly and easily.

**Anaerobic Exercise**- A high sudden oxygen demand. Muscles without oxygen must carry out work. Source of fuel is blood sugar.

**Barbell**- These are weights attached to a long bar which requires both hands to pick up.

**Body Composition**- An individual’s total body make-up lean and fat body weight. (Ideally you want a low percent of body fat).

**Body Mass Index (BMI)**- The number that reflects the percentage of body fat in proportion to lean body mass.

**Calorie**- Unit measuring the amount of energy obtained from food.

**Cardiovascular endurance**- The ability of your body to transfer oxygen to the working muscles of your body efficiently.

**Cool-down**- Slowing down movements/stretching muscles after exercise. Bring heart rate slowly down.

**Complex Carbohydrates**- Starches, such as grains, breads, rice, pasta, vegetables and beans. They get their name from their complex, chainlike structure. During digestion, starches are typically broken down into sugars and used by the body for energy. Complex carbohydrates offer you more sustained energy levels than simple carbohydrates.

**Flexibility**- The ability of one joint or a series of joints to go through a full range of motion.

**Free Weights**- Weights not attached to a machine nor driven by cables or chains.

**Heart Rate**- Number of times the heartbeats per minute to pump blood through the body. Indicator of fitness level.

**Hypertrophy**- An increase in muscle size, and in increase in girth of fibers already in existence.

**Lean Body Mass**- Bodyweight without body fat: composed of muscle, bone, and other non-fat tissue.

**Max Heart Rate**- The maximum that your heart should beat. You do not want to exercise at your max heart rate.

**Max Lift**- The most poundage possible for one repetition.

**Overload Principle**- To overload muscles gradually constant increase in the demands on the body/working muscles. Without the overload, improvement will be minimal or nonexistent.

**Pulse**- The movement of blood in your arteries caused by the heart beating. You can feel the pulse of the carotid artery located in your neck, by placing your index finger on the throat. To get the pulse for one minute-count the numbers of beats for 6 seconds and then add a zero to the answer.

**Resting Heart Rate**- Your rate at rest. A low resting heart rate is good-indicating that your heart is strong.

**Recovery Heart Rate**- Measures how long it takes for the heart rate indicating that your heart needs less time to recover from the activity/exercise.

**Rep (Repetition)**- One complete movement.

**Set**- Number of reps performed steadily and continuously without a break.

**Strength**- The ability for muscle to move a weight or resistance.

**Target Heart Zone**- A heart zone for exercising.

**Warm-up**- Stretching muscles before an activity/workout.