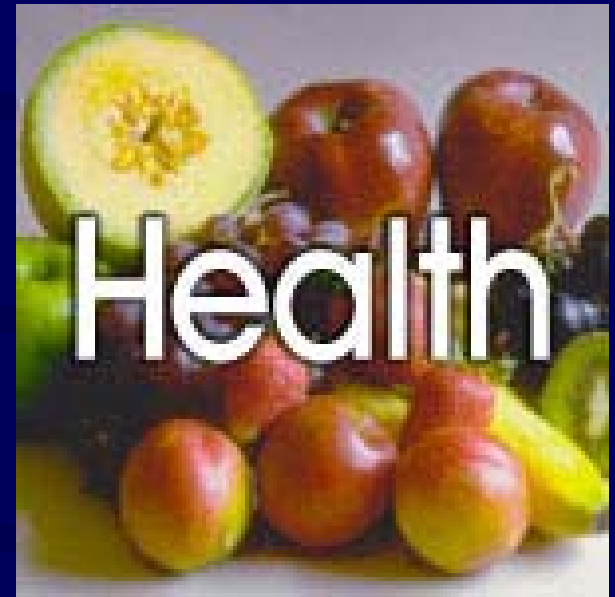


# MY FITNESS PROGRAM



Lewiston High School  
Physical Education  
Regis Beaulieu

Using notes from class presentations and the information provided in your packet you will put together a comprehensive fitness program. Please research the needs of your paper at the library, on the internet, and by interviewing professionals in the field.

You will submit a word processed paper entitled, "My Fitness Paper." The paper will include the following:

## A. A short essay on the benefits of exercise.

### 1. **Effects on cholesterol**

Exercise lowers serum cholesterol while raising your good HDL (High Density Lipids) and decreasing your bad LDL (Low Density Lipids). Cholesterol is a wax-like substance made by your Liver and found in all cells in your body. Too much cholesterol can cause arterial blockage.

### 2. **Effects on blood pressure**

Exercise lowers systolic pressure (upper number) which is the pressure exerted by your heart when it contracts and diastolic pressure (lower number) which is the pressure in your arteries between beats.

### 3. **Effects on adult onset diabetes**

Exercise reduces the chances of getting adult onset diabetes by reducing one's body weight and regulating your body's insulin production.

### 4. **Effects on cardiovascular disease**

Exercise reduces Cardiovascular Disease by strengthening your heart and lung's ability to deliver oxygen and nutrients to the body.

5. **Effects on stress**

Exercise reduces stress which may cause damage to your organs.

6. **Effects on obesity**

Exercise reduces your chances of becoming obese by burning extra calories and toning your body.

7. **Effects on self esteem**

Exercise elevates your self-esteem because you look better, feel better, and are more confident of yourself.

8. **Other: personal appearance, energy level, sleep, bones / muscles, cancer**

Other positive effects are increased energy, you sleep more soundly, develop strong bones and muscles, and reduce your risk of certain Cancers.



## B. An essay on the importance of the 5 components of fitness.

### 1. Body Composition

#### a. **What is body composition?**

Body Composition is the ratio of body fat to lean body tissue (water, bone, cartilage, blood, muscle, etc.)

#### b. **How do you measure body fat?**

Body fat can be measured by a body fat analyzer which sends a current of electricity through your body, calipers which measure folds of skin on certain areas of your body, and total body immersion in water.

#### c. **What's your body fat? What is normal for your gender? What's your BMI?**

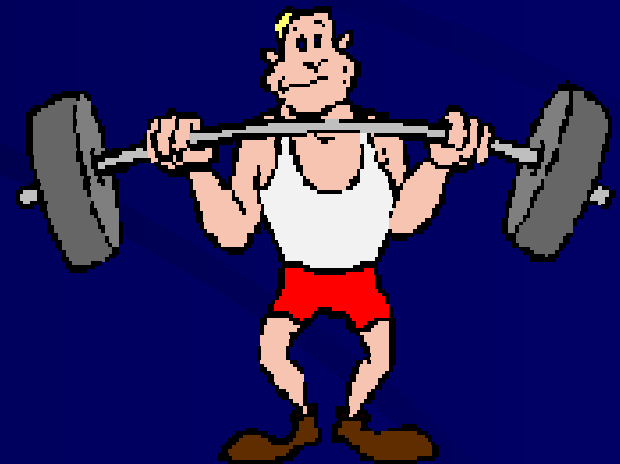
Normal body fat for a teenage girl is 20-25%, while normal for a young man is 15-20%. Your BMI (Body Mass Index) is a height / weight chart that predicts longevity and susceptibility to disease.

d. **How does too much body fat affect your health?**

Too much body fat can put you at higher risk for hypertension, diabetes, high blood cholesterol, heart disease, and some Cancers.

e. **What strategy can you use to maintain healthy body composition?**

A good strategy to maintain healthy body composition would be to stay at your ideal weight, exercise, eat nutritionally balanced meals, and stay away from smoking and drugs.



## 2. Flexibility

### a. **What is flexibility?**

Flexibility is the ability to move a joint or a series of joints through its full range of motion.

### b. **Why is flexibility important?**

Flexibility is important as it prevents your muscles from being injured and allows you to perform everyday activities without limitations.

### c. **How flexible are you (use tests in video)?**

One way to test your flexibility is the sit and reach test.

### d. **How do you improve flexibility?**

You improve flexibility by performing a series of total body stretches on a daily basis.

### e. **What is the proper way to stretch your muscles?**

The proper way to stretch is to take the muscle through its full range of motion and hold statically for 10 to 20 seconds.

### 3-4. Muscular Strength & Muscular Endurance

a. **What is the difference between muscular strength and muscular endurance?**

The difference between muscular strength and muscular endurance is that muscular strength is the maximum force that can be exerted by a muscle or a muscle group, while muscular endurance is the capacity of a muscle to repeatedly exert force without fatigue, or to maintain a fixed contraction for a period of time.

b. **What are some of the benefits of muscular strength / endurance?**

Benefits of muscular strength and muscular endurance are improved body shape, higher metabolism, stronger bones and muscles, improved posture, makes completing daily tasks easier, and increased productivity.

c. **How does resistance and repetition improve your muscular strength / endurance?**

More resistance allows your muscles to become stronger, while more repetitions allows you to be stronger over time.

d. **How would you measure your strength in your upper, middle, and lower body?**

Your upper body strength can be measured by how many pushups you can do, or a maximum bench press. Middle body strength can be tested by how many sit-ups you can do in a minute, while a good test of your lower body strength would be a maximum squat or a standing long jump.

## 5. Cardiovascular Endurance

### a. **What makes up the CV system?**

The Cardiovascular System is made up of the heart, arteries, veins, and capillaries.

### b. **How does the CV system work?**

The heart pumps blood which carries oxygen and nutrients through the arteries to all cells in the body and eliminates waste products through the veins, thus energizing and detoxifying the body.

### c. **Explain resting pulse and recovery rate**

Your resting pulse is best taken before getting out of bed in the morning and normally is below 60, while recovery rate is how fast your pulse returns to normal after moderate exertion. A healthy person's pulse will return to normal within 2 minutes.

### d. **Explain maximum heart rate and target zone**

Maximum Heart Rate (MHR) is found by subtracting your age from 220. Your target range is found by getting 60% and then 85% of your MHR. This is the range you should train at to receive maximum cardiovascular benefits. Aerobic activities are best used to accomplish this goal.

e. **What does aerobic mean?**

Aerobic exercise is exercise that is continuous and vigorous within your training range done for prolonged periods of time. A minimum of 20 minutes per day is recommended.

f. **Name 3 aerobic activities and how they benefit you**

Aerobic activities make your cardiovascular system stronger, elevate your metabolism, increase your energy level, burn extra calories, and increase your productivity. Some aerobic activities are: running, walking, skating, swimming, bicycling, cross-country skiing, and continuous games.

g. **How does smoking affect your CV system?**

Smoking hardens your arteries, increases your blood pressure, increases your heart rate, and reduces the amount of oxygen that reaches your body's tissues.



**C. Write a short essay discussing the importance of frequency, duration, and intensity in developing a fitness program. Include your training range using the formula found in your notes and what it means.**

***Frequency*** is how often you work out per week. You should work out a minimum of three times a week, preferably every other day. The American Heart Association recommends you work out every day.

***Duration*** is the amount of time you must spend to receive cardiovascular benefit. The minimum amount of time you should work out is 20 minutes. The American Heart Association recommends 30-45 minutes to maximize your benefits.

***Intensity*** is how hard you must work out to receive benefit. The American Heart Association recommends working out at 60-85 percent of your maximum heart rate.

Use the following formulas to find your maximum heart rate and your training range:

$$\text{Maximum Heart Rate} = 220 - \text{Age}$$

$$\text{Target Heart Range} = \text{Maximum H.R.} (220 - \text{age}) \times .60 \text{ and } .85$$

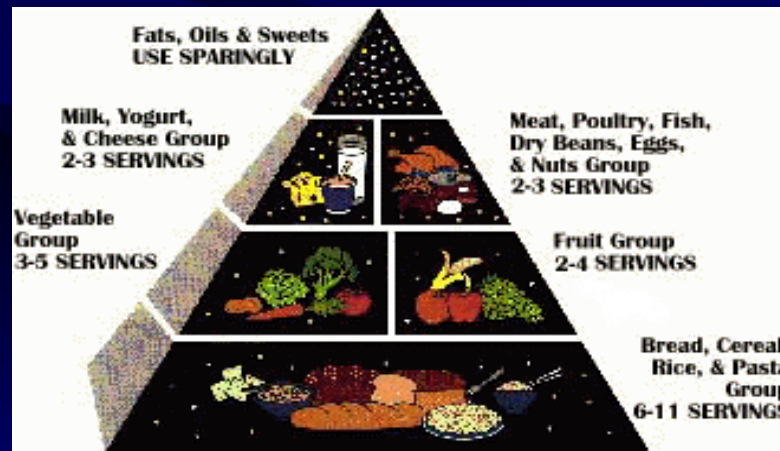
## D. Write an essay on the role of nutrition in your life.

a. **What is the food pyramid?**

The food pyramid categorizes food into 5 food groups, indicating a range of servings for each that a person is advised to eat daily.

b. **How many servings should you eat from each food group?**

Bread, cereal, rice, pasta	6-11 servings
Vegetables	3-5 servings
Fruit	2-4 servings
Milk, yogurt, cheese	2-3 servings
Meat, poultry, fish, beans, nuts	2-3 servings
Fats, oils, sweets	use sparingly



**c. How many calories does the average adult male / female need each day?**

Average adult male = 2500 calories

Average adult female = 2000 calories

**d. How many calories are there in a gram of fat? Carbohydrate? Protein? Alcohol?**

1g Fat = 9 calories

1g Carbohydrate = 4 calories

1g Protein = 4 calories

1g Alcohol = 7 calories

**e. Name the 6 nutrients and why you need them**

Protein, carbohydrates, fat, minerals, vitamins, and water. Nutrients are substances in food that your body needs to function properly, grow, repair itself, and supply you with energy.

**f. Why is water important in your diet? How many glasses do you need each day?**

- Water carries nutrients to and transports waste from your cells
- Water lubricates your joints.
- Water allows you to swallow, digest food, absorb nutrients, and eliminate waste.
- Water through perspiration cools the body.
- On average you need about 8 glasses of water a day. Juice, milk, fruit, and vegetables are good sources.



## **E. List 3 measurable goals to measure your success.**

**a. Example: I weigh 230 pounds and my goal is to weigh 200 in 15 weeks.**

**b. Example: I presently can walk/jog/run 2 miles in 22 minutes....  
My goal is to jog 2 miles in 18 minutes, 12 weeks from now.**



## F. You will write out a 5-day workout program for 1 week.

Include:

- a. Warm-up: stretches / calisthenics / lead-up activities
- b. Aerobic activity and / or weight training program
- c. Cool-down



## **G. You will write out a Stretch Program with a minimum of 12 stretches named and described.**

***Stretching (flexibility)* is moving a joint, or series of joints, or muscle(s) through its full range of motion. Once a full range of motion is achieved it should be held statically for 10 to 20 seconds. Slight discomfort is encouraged while pain should be avoided during the stretch.**

**Stretching will increase your flexibility and minimize your chances of pulling or tearing muscles; it will also improve your performance. A flexible muscle reacts and contracts faster, and with more force, than a non-flexible muscle. Flexibility also increases your agility and balance.**

**Example: Quadriceps Stretch.... Lying on your side you will grab your right ankle and pull the heel of your foot to your butt.... Hold for 10 seconds, repeat.... Now do with left leg.**



**The following is a list of stretching exercises you can incorporate into your workout. Hold each stretch for 10 seconds and do not bounce. Breathe deeply during the stretch.**

**Neck Rotation**

**Shoulder Stretch**

**Forearm Stretch**

**Triceps Stretch**

**Trunk Stretch**

**Torso Twist**

**Chest Stretch**

**Back Stretch**

**Hip Roll**

**Lower Back Reach**

**Butterfly Stretch**

**Lateral Hip Stretch**

**Hamstring Stretch**

**Standing Hamstring Reach**

**V-Stretch**

**Leaning Calf Stretch**

**Standing Calf Stretch**

**Quadriceps Stretch**

**Standing Quad Stretch**

**Groin Stretch**

## **H. You will write out a Callisthenic Program with a minimum of 8 exercises named and described.**

**Example: Push Up.... Lie face down on the floor and position your hands shoulder width apart and parallel to your shoulders.... Your legs and body should be straight and your head should be in line with your spine.... Press yourself upwards, fully extending your elbows and supporting the lower body with the toes.... Return to starting position.**

***Calisthenics*** are exercises designed to use your own body weight to develop muscular strength and muscular endurance.

**Crunches**

**V-ups**

**Side-ups**

**Pull-ups**

**Chin-ups**

**Mountain Climbers**

**Jumping Jacks**

**Lunges**

**Squat Jumps**

**Squats**

**Side Jumps**

**Dips**

# I. You will develop a Strength Training program with a minimum of 6 upper-body and 6 lower-body lifts named and described.

Example: Bench Press.... Lie on a bench, face up.... Position your legs at the side of the bench with your feet flat on the ground.... Grab the weight slightly wider than shoulder width and raise it to arm's length.... Slowly lower the weight to your chest, then return to the starting position.... Breathe properly.

## Upper Body

**Curls**  
**Triceps Extension**  
**Lateral Pull-down**  
**Press (standing / sitting)**  
**Dumbbell Press (standing / sitting)**  
**Shoulder Shrugs**  
**Power Cleans**  
**Bench Press**  
**Incline Press**  
**Clean and Jerk**  
**Flys**  
**Pull-overs**  
**Bent Rows**

## Lower Body

**Leg Extension**  
**Leg Curls**  
**Back Squat**  
**Front Squat**  
**Dead Lifts**  
**Leg Press**  
**Calf Raisers**  
**Hack Squat**  
**Lunges with Weights**

# Rubric for Fitness Program

Exceeds standards / meets requirements = 87.5 -100%

1. Word processed, neat, and professional looking
2. Answers all questions completely
3. Written with no problems, grammar / spelling mistakes
4. Shows thought and understanding
5. Turned in before or by due date

Meets standards / meets requirements = 62.5-87.4 %

1. Word processed, neat, and professional looking
2. Answers all questions
3. Written with no major problems, minor grammar / spelling mistakes
4. Shows some thought and understanding
5. Turned in before or by due date

Working toward meeting the standards / partially meets requirements = 37.5-62.4 %

1. Not word processed, not neat or organized
2. Does not answer all questions
3. Some written errors, poor grammar / sentence structure / spelling mistakes
4. Shows lack of thought and understanding
5. Not turned in before or by due date

Does not meet standard = 37.4 %(-)



# Grading

<u>Exceeds Standard</u>	<u>Meets Standard</u>	<u>Partially Meets Standard</u>	<u>Does Not Meet Standard</u>
4+ = 97 - 100	3+ = 87.5 - 80	2+ = 55 - 62.4	1 = 0 - 37.4
4 = 92 - 96	3 = 71 - 79	2 = 46 - 54	
4- = 87.5 - 91	3- = 62.5 - 70	2- = 37.5 - 45	



***Failure to turn in your, “My Fitness Program” by the end of the semester will result in a grade code of “G.” This means your earned grade for the semester (½ credit) will be withheld until you pass in your paper. All papers must merit a score of 62.5 % or higher to be accepted.***



## **Learning Results: Standard A: Physical Education**

Students will acquire the knowledge needed to be physically fit and take part in healthful physical activity on a regular basis.

Students will be able to:

**Indicator 1.** Design and implement a personal fitness program based on an accurately assessed fitness profile using the principles of training.

**Indicator 4.** Demonstrate the knowledge, skills, and behaviors needed to maintain or modify levels of fitness.

## **Learning Results: Standard B: Motor Skills**

Students will develop motor skills and apply these to enhance their movement and physical performance.

Students will be able to:

**Indicator 6.** Design appropriate practice sessions to improve performance.

## Please follow LHS's Writing Process:

**Prewriting:** Think, plan, organize

**Drafting:** Write paper for first time

**Revising:** Rewrite, add, delete

**Editing:** Check for spelling, grammar, capitalization, punctuation

**Publishing:** Write a final copy



# Website Information

You are encouraged to use the internet to research your paper. The following websites will be helpful:

[www.cooperfitness.com](http://www.cooperfitness.com)

[www.global-fitness.com](http://www.global-fitness.com)

[www.intelihealth.com](http://www.intelihealth.com)

[www.discoverfitness.com](http://www.discoverfitness.com)

[www.mayoclinic.com](http://www.mayoclinic.com)

[www.tudefitness.com](http://www.tudefitness.com)

[www.kidshealth.org](http://www.kidshealth.org)

[www.nsca-lift.org](http://www.nsca-lift.org)

[www.americanheart.org](http://www.americanheart.org)