

FIT TO RIDE

(A weight loss guide)

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There are many ways to help your horse.

You teach them a system of communication so you can handle them on the ground and when mounted.

You develop a health maintenance program.

You implement a consistent and beneficial exercise program for them.

You insist they are provided a healthy nutritional diet.

Yet one of the most important things you can do for your horse is often overlooked; you can be sure you eat a healthy nutritional diet, and that you are as fit and trim and healthy as your horse.

There is one cue that is always in effect when you are mounted. You cannot remove the cue; you can only be sure the cue is always correct. That cue is your weight.

Is your weight appropriate for your horse?

It can be!

I am going to help you help your horse by developing and implementing a healthy program of exercise and diet that will improve your riding skills and take your horse to a higher level of performance without “dieting!”

Lesson One

The Pure and Simple Facts!

America is getting fatter. Obesity statistics show an alarming rise in the number of adults who are overweight. In the past 20 years, obesity has reached epidemic proportions and the situation is worsening.

Hopefully, you are not obese, but you may be an “overweight rider” and not even know it.

Knowledgeable horse people generally agree the horse should not carry more than 20% of its own weight. This includes the weight of the saddle.

In addition to the known serious health risks of cardiovascular disease, diabetes, high blood pressure, stroke and cancer, the obese rider causes health risks for the horse. Excess weight puts unnecessary strain on the horse’s back. Back problems can start for your horse when the overweight rider mounts. When the foot is placed in the stirrup, the saddle is pulled down toward the rider creating a twisting action on the saddle. That twist becomes a twisting pressure on the horse’s back. One incident and the horse’s back can sustain serious injury.

Excess rider weight can strain the horse’s joints, potentially damaging cartilage and creating lameness.

Maintaining an appropriate weight minimizes the creation of minor back conditions, and reduces the possibility of creating a sway-backed horse.

Thousands of dollars are spent every year with trainers, instructors, chiropractors, massage therapists, feeding supplements and specialized equipment to improve the performance and health of the horse.

Seldom do riders think of themselves first, but they should!

Ultimately you are responsible for your horse’s health and safety, and that responsibility begins with your health and safety.

Before anything else, you must be **FIT TO RIDE**, and that is why I have prepared this “weight loss guide.”

THE FIRST STEP IS TO DETERMINE YOUR DESIRED WEIGHT AND/OR BODY FAT PERCENTAGE.

Do you weigh more than you should? This is not an easy question to answer. It is as essential to your personal health as it is to the health of your horse. If you’re not sure, there are many tests to measure the percentage of weight that is fat. They

include: Densitometry, Body Mass Index (BMI), Skinfold Caliper, Bioelectrical Impedance Analysis (BIA) and Height – Weight Tables.

Densitometry (Underwater or Hydrostatic Weighing) – Considered to be the “Gold Standard,” it is one of the oldest techniques for measuring body fat. Although this method is accurate, it is time consuming, requires expensive equipment and specially trained personnel. In addition, it requires complete submersion under water and maximal exhalation, which can be very uncomfortable for many people. Fat floats, the rest of your body tissues sink. Determining how well you float provides an estimated ratio of fat to body mass. Contact your personal physician, local University or large gym in your area to locate a facility for Densitometry.

Body Mass Index (BMI) – The BMI calculation does not take into account whether your weight is composed mostly of fat or muscle. The more muscled body type may have a high BMI without being overweight or obese. When combined with your visual appearance, BMI can provide an estimate of your body fat. BMI is calculated by dividing your weight in kilograms by your height in meters squared.

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m}^2\text{)}}$$

A BMI of 18.5 to 24.9 is considered normal weight, 25 to 29.9 is considered overweight and 30 or higher is considered obese. (Source: Centers for Disease Control and Prevention and National Heart, Lung, and Blood Institute)

Skinfold Caliper – Skinfold Caliper assessments are one of the most popular. Measurements are taken from a variety of sites on the body, then are applied to appropriate formulas to calculate body fat. It is an inexpensive test. The accuracy of this measurement is dependent on the tester’s experience in skinfold assessment. Most fat is deposited beneath the skin. This test measures fat just beneath the skin, but cannot measure fat accumulated inside the abdomen. Most fitness and health

care centers will have the equipment and the personnel who are qualified to administer this test. Administering a skinfold test does require a degree of skill and experience and requires a trained professional for accurate readings.

Bioelectric Impedance Analysis (BIA) – BIA is a very quick and easy to administer technique. It calculates your percentage of body fat by measuring the difference between the electrical characteristics of fat and other tissues in your body. It is conducted by placing electrodes on the skin of the body. An imperceptible electric current is measured. Impedance of the electrical current shows a higher body fat mass. Bioelectric Impedance machines can be purchased at many department stores. They can cost anywhere between \$50 to \$100. Often a Bioelectric Impedance machine will be combined with a scale to monitor body weight.

Height – Weight Tables – This can give you a basic reference point to determine your suggested weight based on the 1983 Metropolitan Life Insurance Company statistics which were developed to show risks of mortality. Like the Body Mass Index calculation, it does not take into account whether your weight is composed mostly of fat or muscle. The more muscled and larger framed body types weigh more without being overweight or obese. When combined with your visual appearance, height – weight tables can provide an estimate of your body fat.

To determine your weight, use a good quality scale, which has been recently calibrated. Place the scale on a flat, uncarpeted surface. Wear light clothing and remove your shoes.

Measure your height using a measuring tape mounted on the wall.

A quick reference guideline for determining the appropriateness of your weight can now be calculated using the following table. Estimate your frame size as small, medium or large. The table is separated into two charts, the left side is for men and the right side is for women. Find your height in feet and inches to the left of the chart then locate the numbers to the right which represent an estimate of your ideal weight in pounds.

Table 4.2
Metropolitan Height-Weight Tables, 1983 (pounds)

Men				Women					
Height		Frame		Height		Frame			
Feet	Inches	Small	Medium	Large	Feet	Inches	Small	Medium	Large
5	2	128-134	131-141	138-150	4	10	102-111	109-121	118-131
5	3	130-136	133-143	140-153	4	11	103-113	111-123	120-134
5	4	132-138	135-145	142-156	5	0	104-115	113-126	122-137
5	5	134-140	137-146	144-160	5	1	106-118	115-129	123-140
5	6	136-142	139-151	140-164	5	2	108-121	118-132	128-143
5	7	138-145	142-154	149-168	5	3	111-124	121-135	131-147
5	8	140-148	145-157	152-172	5	4	114-127	124-138	134-151
5	9	142-151	148-160	155-176	5	5	117-130	127-141	137-155
5	10	144-154	151-163	156-180	5	6	120-133	130-144	140-159
5	11	146-157	154-166	161-184	5	7	123-136	133-147	143-163
6	0	149-160	157-170	164-188	5	8	126-139	136-150	146-167
6	1	152-164	160-174	168-192	5	9	129-142	139-153	149-170
6	2	155-168	164-178	172-197	5	10	132-145	142-156	152-173
6	3	158-172	167-182	176-202	5	11	132-148	145-159	155-176
6	4	162-176	171-187	181-207	6	0	138-151	148-162	158-179

Weight according to frame (ages 25 to 59) for men wearing indoor clothing weighing 5 lbs.; for women wearing indoor clothing weighing 3 lbs.
 Source: Reprinted with permission from the Metropolitan Life Insurance Company, New York.

When determining your desired weight for your horse, remember to weigh your tack, as it is part of the equation. Your combined weight, with tack, should be less than or equal to 20% of your horse's weight.

THE SECOND STEP IS TO DETERMINE THE WEIGHT OF YOUR HORSE.

The most common way to determine the weight of your horse is to use an equine weight tape, which can be purchased at most feed stores and tack shops. Place the tape around the horse's heart girth just behind his front legs, wrap it over his back just behind the withers, and continue around to where you started. This will give you a fairly accurate estimate of your horse's weight.

If you own a 1000-pound horse, then your weight, including the weight of your clothing and saddle, should be no more than 200 pounds.

DEVELOPING A PLAN TO REACH YOUR DESIRED WEIGHT.

Do you want to lose 20, 30 or more pounds?

Do not be overwhelmed!

Keep it simple!

Set a **S.M.A.R.T.** goal. Make your goal **S**pecific, **M**easurable, **A**ction-oriented, **R**ealistic and **T**imed. Determine a small, easy to accomplish goal.

Determine your **S**pecific goal. Examples might be:

1. "I will reduce my caloric intake by 100 calories per day.
2. "I will use the stairs instead of the elevator at work.
3. "I will walk my horse by hand instead of using the hot walker.

Develop a **M**easurement chart. A measurement chart would be:

1. A daily nutritional intake chart.
2. A weekly exercise record for aerobic and strength training programs.

Develop an **A**ction-oriented plan. Daily or weekly plans could include:

1. Reduce caloric intake by 100 calories per day.
2. Perform 20 minutes of aerobic exercise three days per week.
3. Read the Nutritional Fact label found on the packaging of all foods.

Decide on a **R**ealistic goal. Realistic goals could include:

1. Changing from 2% milk to 1% milk or 1% milk to skim milk.
2. Perform 20 minutes of aerobic exercise three days per week.
3. Strength train two days per week.
4. Drink water instead of soda.

Determine a **T**ime to complete your accomplishment. Setting a completion date will help you with motivation.

1. "I will exercise 20 minutes, three days a week, for the next three months.
2. "I will give myself three months to accomplish my first weight loss goal."

Learning to set **S.M.A.R.T.** short term goals will help you achieve the ultimate long term goal of healthy body weight.

Modifications in nutrition, behavior and exercise are essential to weight management. Often a lifestyle change is the key to success.

There are many fallacies associated with weight control. Don't be fooled! Although drinking water is essential for your health, there is no truth to the belief that drinking lots of water will "flush out the fat."

There's no proof that eating after 8/P will make you fat. The body's metabolism operates on a 24 hour a day time clock. Those who believe that removing all the carbohydrates from their meals are only denying their bodies the fuel necessary for energy.

Eliminating carbohydrates will cause your body to become dehydrated. Water is the most important nutrient in the body. It is second only to oxygen in its importance for life. The body is comprised of 50% to 70% water. Dehydration, while dangerous to all of the cells that make up your internal organs, skin, brain, muscles etc., will show up as weight loss on the scale. It is not indicative to the amount of body fat that has been lost. In addition, if the body does not have carbohydrates, it will locate its next source of energy.

Protein, found in muscles, is the next source used for energy. The body will break down your muscles in order to burn fat.

Finally, there is no such thing as spot reduction. Working those "problem areas" is a myth. Doing sit-ups and crunches to remove your belly fat will not work! Performing endless squats and thigh toning exercises will not make either of them smaller!

Making the choice to follow a healthy meal plan is an important step to weight loss and weight maintenance. Despite what is advertised on the radio and in magazines, there are no quick fixes.

Dieting is a \$31 billion-dollar-a-year industry.

Diets don't work; many of them are dangerous.

Very low calorie diets, fasting, low-protein diets, low- carbohydrate diets, diet pills and poor nutrition are dangerous. They could seriously damage your health. If you follow a well-balanced meal plan you can reduce your body fat, maintain a healthy weight and help your horse.

The definition of a calorie as found in Merriam and Webster's dictionary is: "the amount of heat required to raise the temperature of one kilogram of water one degree Celsius." The calorie is a way of measuring the potential heat in the food we eat. It takes 3500 calories to make 1 pound.

Weight loss is simple math.

Burn 3500 calories through a combination of healthy eating and exercise and you've lost 1 pound. Research has suggested that the maximum safe rate of weight loss is between 1 and 2 pounds per week. Losing more than 2 pounds per week is not recommended.

A certain number of calories are required for just being alive and awake. This is known as Resting Metabolic Rate (RMR) and is about 60% to 70% of daily expenditure. Most adult women, over 5 feet tall, have an RMR of 1200 calories per day. Women, less than 5 feet tall, generally have an RMR of 1000 calories per day. Most men have an RMR of 1500 calories per day. These numbers are the suggested absolute minimum daily dietary intake requirements for adults. Consuming less than the suggested amount of calories per day could impair the body's ability to maintain cardiac function, neural function and repair cells.

Aerobic exercise is the key to stimulating your body to burn calories and reduce body fat.

In addition to reducing the likelihood of injury to your horse, reducing your body fat and improving your fitness level will reduce your fatigue while riding and allow you to be a better rider.

Increasing your physical activity in your daily life, through activities other than riding, will help you and your horse to be a better team. It is not necessary to join a

gym to exercise. There are many activities that you can do in the privacy of your home or barn that do not require expensive equipment or fancy clothing.

Making the decision to change your lifestyle and maintain an appropriate weight for your body frame and height will improve your health. Choosing to keep your combined weight and weight of your tack at 20% of your horse's weight will benefit your horse's health and ultimately improve your performance as a team.

Lesson Two

Developing a healthy eating plan

Congratulations! You've come this far.

You've made the decision to take control of your health to benefit both you and your horse.

This decision is your commitment, and shows you are now ready to take charge of your future!

You can do this! You can meet your **S.M.A.R.T.** goals! You can be successful!

There are no quick fixes. Books, magazines and weight loss control programs that promise miracles will only make their authors wealthy. The business of weight loss is often more misleading, than sound advice.

It is not necessary to be perfect in your eating habits every day. The key to a successful, healthy diet is through variety, a balance of exercise and moderation. Removing your favorite treat from your diet permanently could leave you feeling deprived. Feeling deprived is no way to live! It might even encourage you to overindulge.

Follow an overall healthy diet and you will be successful.

Changing your lifestyle may take some time.

Results will not happen overnight. Keep reminding yourself to put your health first.

Implementing healthy changes to your nutritional intake will make you feel better, look better, have more energy and help your horse.

Meal planning is essential to effective weight management. Make sure you have healthy meal alternatives in your cabinets and your refrigerator at all times. Eliminate foods that are a problem for you, such as snack foods that you can't resist. Expecting that you will have the self-control to not eat tempting foods, while the rest of your family is indulging, is unreasonable.

Healthy eating habits should be for the entire family.

Skipping meals will only cause you to overeat at another time. It may even make you cranky. (Think about how your horse behaves when you're late with his breakfast!)

The body does not burn fat when you skip a meal. Instead, it turns to the next available source of energy – the breakdown of muscle tissue. Muscle tissue is important for a strong metabolism. Planning to eat three healthy meals a day will help you to feel full, have energy and manage your weight.

Calories are found in the three nutrients: protein, carbohydrates and fats. These nutrients are essential for sustaining life and each performs a vital purpose in our diet. They help to grow, maintain and repair all cells in the organs and tissues of the body and maintain body temperature.

Calories are also found in alcohol. Alcohol is not a nutrient. Alcohol does not aid in the growth, maintenance or repair of body tissue. The calories per gram of protein, carbohydrates, fats and alcohol are varied.

1 gram protein = 4 calories

1 gram carbohydrate = 4 calories

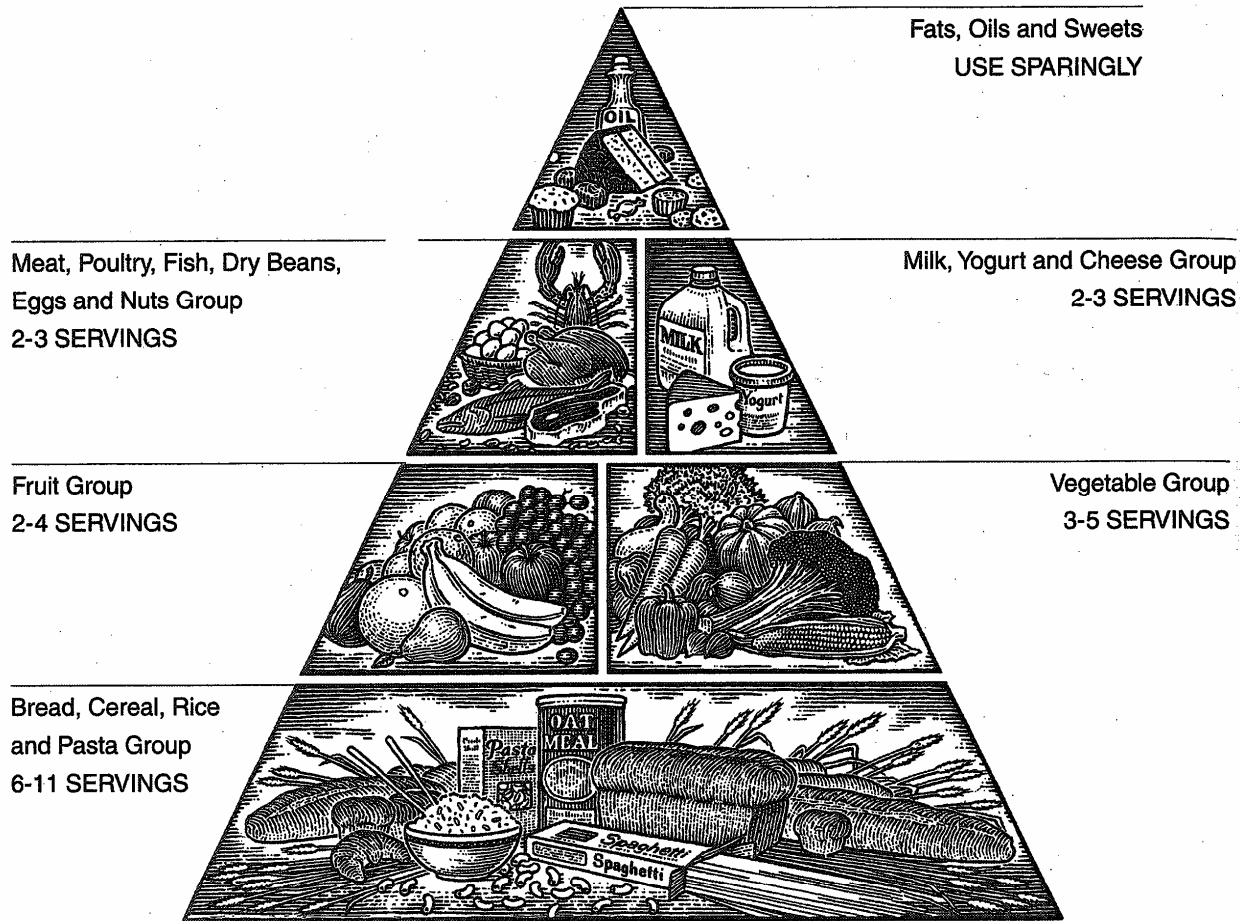
1 gram fat = 9 calories

1 gram alcohol = 7 calories

The **Food Guide Pyramid** is helpful as a general guide toward a lifestyle of healthy eating and weight control.

Eating a combination of the three nutrients will aid in the digestion and absorption of food. This will help you to feel full. All of these foods are found at your local grocery store.

Stay away from special foods and drinks for the sole purpose of weight loss. They will not help you in your long-term healthy lifestyle goal.



Use the Food Guide Pyramid to help you eat better every day ... the Dietary Guidelines way. Start with plenty of Breads, Cereals, Rice and Pasta; Vegetables; and Fruits. Add two to three servings from the Milk group and two to three servings from the Meat group.

Each of these food groups provides some, but not all, of the nutrients you need. No one food group is more important than another — for good health you need them all. Go easy on fats, oils and sweets, the foods in the tip of the Pyramid.

Source: U.S. Department of Agriculture

We have now determined that to lose 1 pound of body fat through diet, you must remove 3500 calories from your consumption of food. To determine a daily caloric intake appropriate for weight loss, use the following formula:

Determine your target weight in pounds. Multiply it by 10 for light activity, 15 for moderate activity, 20 for heavy activity. Subtract 100 calories if you are between the ages of 35 and 44, subtract 200 calories if you are between the ages of 45 and 54, subtract 300 calories if you are between the ages of 55 and 64, subtract 400 calories if you are 65 or older.

For example: A 38 year old person with a moderate activity level has a target weight of 150 pounds.

$$150 \times 15 = 2250$$

$$2250 - 100 = 2150$$

2150 calories per day would be an appropriate average goal for this person.

In order to determine how many calories you are eating per day, it is necessary to read the nutrition-fact labels found on the packaging of all foods. These labels will list serving size, calories per serving, fat calories per serving and nutritional information in addition to other information. It is important to decide if the serving size that is listed on the label is realistic for your needs.

Making one small change to your daily eating habits is an easy and attainable goal. Starting the day with a healthy breakfast would be a **SMART** idea.

A **S**pecific goal might be to have carbohydrates and protein every morning.

A **M**easurable goal would be to keep a daily food log of what you eat every day for breakfast.

An **A**ction-oriented plan could include low fat or fat free dairy for protein, such as milk or yogurt.

A **R**ealistic goal could be to change from croissants, donuts or muffins to bagels or cereal for quality carbohydrates.

The **T**ime to take to implement these changes may take one or two weeks. It is easier to make small changes over time than to change everything overnight. Small

changes can become a good habit. Once you've developed a good habit for breakfast, then it will become easier to work on a healthy eating plan for lunch.

There are many alternatives to choose from for a healthy lunch.

Many fast food restaurants are now offering a variety of low fat, healthy meal options. Salads with low fat or fat free dressing, and broiled chicken sandwiches (hold the mayonnaise,) are among the options now available almost anywhere. Make the choice to eliminate unhealthy, high calorie food choices such as fried foods, French fries and chips, from your meals.

There are numerous low calorie, fat free canned soups available that can make a quick, nutritious and tasty lunch.

Sandwiches, made at home, are an easy way to choose a healthy lunch. Breads are available with low fat options along with 100% whole wheat and high fiber. Fat free mayonnaise, ketchup, mustard or salsas are the best choices for spreads.

Be wary of deli meats that end in a vowel. Pepperoni, salami and pastrami are often full of fat while chicken, turkey and ham can always be found in low fat varieties. Top your sandwich off with lots of dark green lettuce, tomatoes and pickles and you've got a healthy, low fat, low calorie meal.

Remember to be **SMART** when implementing a new lunch option plan. Take the time to develop good lunch habits before moving forward to dinner. It is important not to become overwhelmed.

Once you are comfortable with the choices you've made for breakfast and lunch, it's time to concentrate on dinner.

A colorful plate of food is a great source for high nutrition and low calories. A variety of multi-colored vegetables will help you to feel full and reduce the total calorie count of your meal.

If plain vegetables just aren't your thing, consider topping them with salsa or calorie free spray butter.

Chicken, without the skin, fish cooked on the grill, baked or broiled, or low fat meats are a good choice for protein.

Potatoes, with fat free sour cream or spray butter, are a great source for carbohydrates.

Rolls and breads will only add excess calories.

If you're going out for dinner and are confused with the menu options, don't be afraid to ask your server to recommend a low-fat choice. Often restaurant portions are huge. A good way to control your portions is to ask your server to put half of your dinner in a take home container before bringing it to the table.

And don't be afraid to ask the server to eliminate rolls and butter; that solves the problem of having enough self-control to not eat them.

Appetizers and desserts add an enormous number of calories. Make a **SMART** goal not to eat them!

Snacking can be **SMART** too! Make sure you have healthy snack alternatives in your cabinets.

Eliminate snack foods that are a problem.

Fruits, sugar free applesauce, raw vegetables, fat free frozen yogurt and fat free popcorn with spray butter are all **SMART** choices for a mid-morning, mid-afternoon or after dinner snack.

Changing your eating habits will take some time. Developing healthy eating habits will require some commitment. Take charge of your future and be **S.M.A.R.T!**

Lesson Three

Aerobic Exercise

Consult with your physician prior to beginning an exercise program. If you have any of the following risk factors; history of heart or lung disease, hypertension, past difficulty with physical exercise, chronic illnesses, muscular skeletal problems, recent pregnancy or surgery, age over 40 for men and over 45 for women, you must discuss your health with your physician prior to beginning an exercise program.

If you are in satisfactory health, you should be able to start an exercise program. Regular exercise can help improve your endurance, balance and flexibility while riding.

Improving your fitness level can help your horse as he will not have to compensate or adjust his back to accommodate a rider who is off balance or inflexible. His performance will improve as you improve your level of fitness.

If riding your horse gets you out of breath you are definitely working too hard on your riding! Horseback riding is not considered an aerobic exercise.

There are many benefits to aerobic exercise. Aerobic exercise burns calories. Burn 3500 calories and you've lost a pound! In addition to weight management, the benefits include improved cardiovascular endurance and increased muscular strength.

There are some simple lifestyle changes that you can make immediately that will jump-start your exercise plan.

Remember your **S.M.A.R.T.** goals. Can you fit any of the following into your daily or weekly routine?

- Park your car further away from your place of employment or barn.
- Use the stairs instead of the elevator whenever possible. If your destination is a very high floor then use the elevator only part way.
- Start a walking group with co-workers or friends for lunch instead of meeting in the cafeteria or a restaurant.
- Find a book on tape that you've been planning to read and listen to it only when you are exercising.

Getting your aerobic exercise through outdoor activities can be fun. Bicycling, rollerblading, cross-country skiing, snowshoeing, ice-skating and swimming all provide enjoyable options for exercising. Walking or jogging with your friends, dog and even your horse is a great way to increase your heart rate and improve your aerobic level of fitness.

Just as you make sure that your horse is outfitted with the correct tack for your discipline of riding, make sure that you are wearing the proper safety gear and shoes for your activity.

Sometimes the weather or outdoor location does not permit you to exercise outdoors. There are a variety of machines that can be found in fitness centers or purchased for your home that are designed to help you improve your body composition. Some of those machines include indoor stationary cycles, treadmills, elliptical machines and stair steppers.

Before making the investment in purchasing one of these machines, make sure you are comfortable with its operation and feel. Try out each one for comfort and ease of operation. Many machines are available with pre-programmed fitness routines based on your level of fitness. These programs can help to keep you interested and challenged. High tech electronic gadgetry is not always necessary unless your physician recommends it to monitor your heart rate or for other reasons.

Some machines come outfitted with water bottle storage bins and fans. These luxuries can make your exercise time more pleasurable.

Be sure to check with the sales representative for warranty restrictions and discuss who will be available to perform maintenance and repair if necessary. The machine you like the best is most likely the one that you will use regularly. Advice from a friend is nice, but make your own decision. What works for your friend, may not be right for you.

Aerobic classes can be found in many locations from fitness centers to senior centers. Ranging anywhere from 30 minutes to 90 minutes, aerobic classes are an exceptional way to improve your cardio-vascular fitness and burn calories while having fun. Classes vary from beginner to advance levels.

As learning how to do a posting trot on the correct diagonal, aerobic classes are a learned skill.

If you've never taken a group exercise class before, it is best to find a nationally certified instructor who teaches a basic or beginner class. Talk to the instructor before class and tell him or her that you are new. Make sure you mention any health

issues the instructor needs to know about such as previous injuries or things your physician thinks are relevant.

Be patient with yourself. It takes time to learn the language and movement patterns. Just like learning to post, it takes more than one class to learn how to do aerobics!

No, you do not have two left feet. No, it's not necessary to be able to dance. It is helpful if you can hear the beat of music. Can you tap your foot to the beat of a song? If so, you are hearing the beat!

Aerobic instructors take pride in their classes. They want to help you to get a good workout while having fun.

All aerobic exercises should include a warm-up, an aerobic workout and a cool-down.

Does this sound similar to your horse's workout? It should! A good warm-up at low to moderate speed will help increase blood flow to the working muscles and get them ready for the main part of your workout.

A proper cool-down is essential to help bring your heart rate back to normal. During aerobic exercise your heart rate increases. Your heart pumps faster and stronger in order to increase blood flow to the working muscles. Those muscles, during exercise, help to return the blood to the heart. If you slow down suddenly or stop exercising the heart will still continue to work at a higher rate. This can cause excess strain on the heart. It can also create excessive blood pooling in the extremities, causing swelling.

Make sure your routines always include a good warm-up and cool-down; they help reduce your chance of exercise related injuries.

Following the **F.I.T.** principal will help you to keep your aerobic goals manageable. Increasing the **F**requency of exercise will increase your level of cardiovascular fitness and burn more calories. Increasing the **I**ntensity of your workout will increase your level of cardiovascular fitness and burn more calories.

Increasing the **T**ime or duration of your workout will increase your level of cardiovascular fitness and burn more calories.

It is not recommended that you increase all of the above at the same time. Varying each section of the **F.I.T.** principal will help keep your routine interesting, increase your cardiovascular fitness, burn more calories and reduce your chance of exercise related injuries.

There are many factors that affect the number of calories you burn per hour. A person weighing 130 pounds will burn calories at a different rate than a person weighing 155 pounds or 190 pounds. Your metabolism and level of conditioning will also affect the amount of calories that you burn. Consider the following information to determine an estimated calorie cost per hour, per activity and body weight.

	<u>130 pounds</u>	<u>155 pounds</u>	<u>190 pounds</u>
• Aerobics	354	422	518
• Bicycling outdoors Moderate effort 12-13.9 mph	472	563	690
• Running 6 mph (10 min. mile)	590	704	863
• Walking Moderate pace 3 mph (walking dog)	207	246	302
• Swimming leisurely	354	422	518
• Horseback riding Walking	148	176	216

Following the **F.I.T.** principal and finding an aerobic exercise that you enjoy will help you achieve your cardio-vascular goals and burn calories. Once again, remember that it takes a reduction of 3500 calories to lose a pound. Increasing your activity level by 350 calories per day, 5 days a week will allow you to lose 1 pound in 2 weeks.

REVIEW: aerobic exercise is the key to stimulating your body to burn calories and reduce body fat.

In addition to reducing the likelihood of injury to your horse, reducing your body fat and improving your fitness level will reduce your fatigue while riding and allow to you to be a better rider.

Increasing your physical activity in your daily life, through activities other than riding, will help you and your horse to be a better team. So, stay moderately active on a regular basis and you will be successful!

Lesson Four

Resistance Training

Resistance training can help you to lose body fat. It can also help you to be stronger and increase your endurance.

Maintaining lean muscle mass is essential for weight control. Like an automobile's engine, the amount of muscle that you have will effect the amount of fuel burned during exercise. An automobile with a large engine will burn a lot of fuel while driving at 65 miles per hour on the highway. A body with a significant amount of lean muscle mass will burn more fat during aerobic exercise than a similar body with less lean muscle mass.

In addition, a body with a significant amount of lean muscle mass will have a higher basal metabolism. Your body's internal organs require a certain amount of calories to function. Activities such as breathing and digestion require calories to perform.

Increasing your body's metabolism through resistance training will increase the caloric requirement during all activities including sleep, sitting at your desk, riding your horse or performing your daily chores.

So, will resistance training increase your muscle size so dramatically that you will no longer fit into your clothes and suddenly you will look like you belong on the cover of a muscle magazine? No! That type of body is very genetic and requires an intensity and commitment to weight lifting that is well beyond the scope of coverage in this course.

Men have 20 to 30 times more of the hormone testosterone than women, which allows their muscles to grow in size called hypertrophy. With a significant amount of resistance training many men will increase their muscular size and definition along with increases in strength and endurance.

Most women have much less testosterone. Although some women have the genetics to increase their muscular size, most will only experience increased definition along with increases in strength and endurance.

As with aerobic exercise, it is important to consult your physician before beginning a resistance-training program. Any concerns should be thoroughly discussed before beginning your resistance-training program.

If you choose to hire a personal trainer, make sure that person is certified through a nationally recognized organization and ask for references. Not all trainers who work for fitness centers and gyms are certified and some may only have a limited amount of knowledge in the fitness industry. Only a nationally certified group fitness instructor should teach group resistance training classes.

There are many options to choose from when deciding what will provide the resistance for your program. Fitness centers and gyms offer a variety of equipment from machines to free weights. Swimming pools can provide resistance from the water. Elastic tubing and exercise balls are relatively inexpensive and can be purchased at department or fitness stores.

It is not necessary to purchase any equipment. Many household or barn items can be used as free weights.

Weight lifting through the use of one's own body weight for resistance, called Calisthenics, can also be very effective. Crunches, push-ups, squats and calf raises are all examples of calisthenic exercises. Calisthenic exercises, like other weight bearing exercises, will help to improve strength in the major muscle groups.

Whatever type of equipment you chose, proper form should be maintained while performing each exercise.

Standing exercises should always be performed in a neutral position. Stand in similar position as you would while sitting on your horse when he is standing still or at a walk.

To Place your body in a neutral position:

1. Keep your head neutral and your neck relaxed.
2. Your shoulders should be down and back.
3. Lift your chest.
4. Contract your abdominal muscles.
5. Keep your knees relaxed. Make sure they are never in a locked position.

Proper breathing technique is also essential to provide your working muscles with oxygen. Make sure that you exhale on the concentric (shortening) or exertion phase of each movement. Inhale on the eccentric (lengthening) or negative phase of each movement. Never, ever hold your breath as this can increase pressure in your chest and place excess stress on your heart.

The intensity of your strength training is important for your safety. To reduce your risk of injury while exercising, it is important to be able to perform a minimum of 8 repetitions (reps) per exercise. If the weight that you are trying to lift is so heavy that

you are unable to complete 8 reps, then you risk the chance of injury to your muscles and connecting tissue.

The intensity of your strength training is also important for you to achieve optimal strength gains. The maximum amount of reps for each exercise should be 15. If you are able to perform more than 15 repetitions per exercise then the weight that you are lifting is probably too light for your ability. Optimal strength gains are achieved when the intensity is between 8 to 15 reps per exercise.

It is important to consider the amount of sets that you wish to do for each exercise. Most of your strength gains will occur after the completion of just 1 set of 8 – 15 reps. As your strength increases you may want to consider adding additional sets.

Generally, performing 1 to 3 sets of 8 – 15 reps per exercise is appropriate for strength gains.

Rest as needed, approximately 1- 2 minutes, between each set. If the amount of time you have available to exercise is limited it is best to perform at least 1 set of each exercise.

Try to set aside 2 – 3 days per week for strength training on non-consecutive days. Just as with your horse, over-training can lead to injury.

Giving your muscles a chance to rest between workouts will allow them to become stronger.

Upper Body Exercises

Bicep curls– Stand or sit in a neutral position. Hold a similar weight in each hand, palms facing forward and arms relaxed by your sides. Keeping your elbows at your sides, lift the weights up toward your shoulders, pause and lower slowly to the starting position. This exercise can also be accomplished by holding a broom handle with a shoulder width, underhand grip and 2 buckets of water weighing the same amount hanging at each end. Be careful not to lean backwards when performing this exercise.

Tricep extensions– Lie in a prone (face down) position on the floor. Position your hands directly under your shoulders. Extend your arms fully without locking your elbows and keep knees on the floor while keeping your body straight from your knees to your shoulders. Do not allow your back to arch. Face your elbows toward your feet and keep your fingertips pointing forward. Lower your body as far as you can, keeping your elbows next to your sides, then push back up to the starting position. Be careful not to let your head drop or allow your midsection to sag.

Shoulders – Stand or sit in a neutral position. Hold a similar weight in each hand with elbows slightly bent and arms at your sides. Raise your arms outward to the side until your arms are parallel to the floor or shoulder height, pause and lower slowly to the starting position.

Chest – Lie in a prone position on the floor. Position your hands slightly wider than your shoulders. Extend your arms fully without locking your elbows. Keep knees hip width apart. This exercise can be performed for the beginner off of your knees or for the advanced exerciser off of your toes. Keeping your body straight, lower slowly as far as you can, then push back up to the starting position. Be careful not to let your head drop or allow your midsection to sag.

Upper back – Lie prone on a high bench or a couple of hay bales placed end to end. Hold a similar weight in each hand and allow your arms to hang straight toward the floor. Keeping your arms straight, draw your scapular (shoulder blades) together, pause and release to starting position. This exercise uses a very small range of motion. It is very helpful in improving posture while riding.

LOWER BODY EXERCISES

Quadriceps, Hamstrings and Gluteus Maximus – Squats. Stand in a neutral position. Position your feet shoulder width apart. Descend slowly while keeping your hips back and weight centered over your heels. Lower slowly to a maximum of 90 degrees of knee flexion or until your upper leg is parallel to the floor. Never allow the angle of your knee joint to be less than 90 degrees. This exercise can also be performed against a wall. For the advanced exerciser, weights can be held in each hand or the exercise can be performed on 1 foot.

Gastrocnemius (calf muscle) – Stand in a neutral position on one foot. Use a support, such as a wall, for balance. Rise up on your toe until your calf muscle is fully flexed. This should feel like your are trying to look over the back of a horse who stands 1 hand taller than you. Lower slowly and repeat. Change legs and repeat the exercise.

CORE OR TORSO EXERCISES

Abdominal Crunches – Lie supine (face up) on the floor with knees bent and feet flat on the floor. Place your hands by your sides. Visualize a grapefruit tucked underneath your chin. Do not drop your chin toward your chest or allow your head to extend backwards. Raise your head, shoulders and upper back off the floor by contracting your abdominal muscles while reaching your hands toward your ankles. Lower slowly and repeat. This exercise can also be performed with your arms crossed over your chest or with your hands placed, unclasped, behind your head with elbows out to the side. If you choose the more advanced exercise of placing your hands behind your head, be extra cautious not to pull your head to your chest when raising your body.

Erector Spinae (low back) – Lie prone on the floor with your hands clasped under your forehead and elbows out to the side. Keeping your feet on the floor and your hands against your forehead, raise your head, shoulders and chest. Pause and return to the floor. This exercise must be done

slowly and smoothly. If there is any back pain or discomfort, discontinue exercising immediately and consult a physician before attempting this exercise again.

These are basic body exercises using body weight resistance and free weights for the major muscle groups. They are low cost and require little to no equipment. All exercises should be performed through a full range of motion with controlled speed of movement and continuous breathing. Remember that every body is different and no specific exercise program is perfect for everyone. When beginning an exercise program it is always best to err on the side of caution. Overexertion, overtraining and/or poor form when lifting can lead to injuries. Consult a certified exercise professional whenever questions arise.

Your Decision

In the end, this is your decision. The quality of your life and the relationship that you have with your horse depends on if you are ready to take charge of your health and fitness level.

You have developed a health maintenance program for your horse.

You have implemented a consistent and beneficial exercise program for your horse.

You have insisted that your horse be provided a healthy, nutritional diet.

Now it's time for you! You have the tools to determine if your weight is correct for you. You know your **S.M.A.R.T.** goals. You can develop your own healthy eating plan based on your lifestyle without dieting. You know how to burn calories by making small changes to your daily routine and understand the benefits of aerobic exercise. You know that resistance training will increase your metabolism and improve your strength and endurance. You **WILL** improve your riding skills and take your horse to a higher level of performance by achieving your personal best.

You have the tools to be **Fit To Ride!**

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