**Equine Nutrition Plan**

Work with a partner to create a nutrition plan for the horse you are assigned. You will need a clip board, pencil, weight tape, tape measure, calculator or smart phone, hay net, hanging luggage scale, kitchen scale with a bowl, and the assigned horse packet. Many of these things you will need to share with other members.

1. Prepare your mount
	1. Halter the horse and tie with a quick release knot in a stall. If you need to leave your horse alone for a bit, you may keep your mount in a stall, but do not leave your horse tied.
	2. Remove the blanket properly if your mount is wearing a blanket. If you are not sure how to do this…ask a more experienced member to help you.
	3. Thoroughly groom the horse.
2. Use the BCS Chart to determine your mount’s Body Condition Score.
	1. Determine the individual score for each area of the horse’s body.
	2. Calculate the average of those values. This is the BCS for your mount.
3. Determine the height and weight of the horse.
	1. First using a weight tape to determine height/weight.
	2. Next measure your horse in four locations to determine the actual weight and the ideal weight of the horse using an app on Ginger’s phone.
	3. When you are done, you can put the blanket back on your horse, remove the halter, and turn the horse back out.
	4. Calculate your horse’s weight using a simple calculation that does not take breed into consideration.
	5. Which weight estimate do you think is more accurate and why?
4. Based on your horse’s Body Condition Score, weight, and level of work…Determine the total amount of feed (in pounds) that your horse will need per day.
5. Using a nutrition label and feeding directions of the concentrates given, divide the total amount of feed up into roughage and concentrates.
	1. Measure the weight of several flakes of hay to determine how many flakes of hay per day your mount should be eating.
	2. Measure the weight of a scoop of concentrate, and determine how many scoops of concentrate your mount should be eating.
6. Review the amount of supplements your horse will need and calculate the appropriate amount based on your horse’s weight.
	1. Make sure you understand what each supplement does and determine if it is appropriate for your mount.
7. Create a daily feeding schedule for your mount that takes into account his nutrition requirements.

**Body Condition Score Chart**

Fat is assessed in the following areas: the loin, ribs, tailhead, withers, neck, and shoulders. A numerical value is assigned based on the cumulative fat in all six areas.

**Loin:** An extremely thin horse will have a negative crease and a ridge down the back where the spinous processes projects up. No fat can be felt along the back of the horse. However, this is one of the first areas to fill in as a horse gains weight. Fat is first laid down around body organs, then along the base of the spinous processes. As the horse gets fatter, an obvious crease or depression forms down the back because of fat accumulation along with the spinous processes.

**Ribs:** The next place to look is in the ribs. Visually assess the rib area, then run your fingers across the rib cage. A very thin horse will have prominent ribs, easily seen and felt, with no fat padding. As the horse begins to gain weight, a little padding can be felt around the ribs; by level 5 the ribs will no longer be visible but can be easily palpated by passing a hand down the rib cage. Once the horse progresses towards obesity, feeling the ribs will be impossible.

**Tailhead:** In a very thin horse up to a number 3, the tailhead is prominent and easily discernible. Once the horse starts gaining weight, fat fills in around the tailhead. Fat can easily be palpated, and as the horse becomes obese, the fat will feel soft and begin to bulge.

**Withers:** Conformation of the withers may affect your assessment of body condition. The prominence or sharpness of the withers may vary between breeds; a thoroughbred typically has more prominent withers than a quarter horse. However, if a horse is very thin, the underlying structure of the withers will be easily visible. At a level 5, the withers will appear rounded. At levels 6 through 8, varying degrees of fat deposits can be felt along the withers. In obese horses, the withers will be bulging with fat.

**Neck:** The neck allows for refining the assessment of body condition. In an extremely thin horse, you will be able to see the bone structure of the neck, and the throatlatch will be very trim. As the horse gains condition, fat will be deposited down the top of the neck. A body condition score of 8 is characterized by a neck that is thick all around with fat evident at the crest and the throatlatch.

**Shoulder:** The shoulder will also help you refine the condition score, especially if conformation factors have made some other criteria less helpful. As a horse gains weight, fat is deposited around the shoulder to help it blend smoothly with the body. At increasing condition scores, fat is deposited behind the shoulder, especially in the region behind the elbow.



**Estimating Body Weight of horses**

Breed or Type of Horse: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Weight Tape: ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lbs

Take these measurements in inches:

1. Measure the length of the neck from the poll to the withers.
2. Determine the mid-point of the neck.
3. Measure around the neck at that point (N).
4. Measure the height at the withers using a stick with a level (H).
5. Measure around the heart-girth at the withers (G).
6. Measure the body length from the point of shoulder to a perpendicular point of the buttock using a stick with a level (L).

Neck Circumference (N): \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Height (H): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Heart-Girth Circumference (G): \_\_\_\_\_\_\_\_\_ Body Length (L): \_\_\_\_\_\_\_\_\_\_\_\_

Enter them into the Healthy Horse App to determine the actual bodyweight of your mount and the ideal bodyweight of your mount.

Actual Weight: ­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lbs Ideal Weight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ lbs

Should your mount gain weight or loose weight? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ How many pounds? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If you don’t have access to the app, a simple calculation is: \_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_\_\_\_\_ x \_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_

 Heart Girth (G) x Heart Girth (G) x Length (L) = Bodyweight

Why do you think the app is the most accurate method? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Even though a weight tape is not very accurate for many horses, it is handy as a tool to monitor changes in a horse’s weight.

**Basic Nutritional Needs of a Horse**

All horses must have access to clean fresh **water** 24/7. In the winter you must ensure the water they are drinking does not freeze.

If you are using buckets in a stall, your horse must have at least two 5-gallon buckets hung at the horse’s point of shoulder. These buckets must be emptied and cleaned daily and checked often to make sure your horse does not run out of water.

If you are using a large water trough, the container should be cleaned weekly to remove algae from the water and scum from the container. This also helps to reduce mosquito larvae and other pests.

All horses must have access to **salt**. Ideally a salt block is available 24/7, so that your mount can get salt when it is needed. You may also add loose salt to feed if you do not feel your mount is getting enough electrolytes and minerals from the free choice salt provided.

**Roughage** sometimes called forage is the primary source of calories for a horse. The most basic requirement in a horse’s diet is long-stem forage. Ideally, this comes in the form of fresh grass. If grass is not available, free-choice grass hay is the next best choice. Keeping hay in front of horses at all times allows them to most closely mimic their natural grazing behavior. When this feeding arrangement is not practical, horses should receive between 1-2.5% of their body weight each day in forage, divided into as many meals as possible. For a 1000-pound horse, this is about 10-25 pounds of hay per day by weight, not by volume (flakes).

It is important to feed the type of hay/roughage that best benefits your horse. Pure alfalfa is typically too rich, but a hay with a mix of grass and alfalfa is generally acceptable. Many horses do fine on simple grass hay. There are different cuttings of hay available. Some cuttings are more palatable than others and you may find certain horses do better on 1st cutting, while others need 2nd or even 3rd cutting. The different cuttings of hay may also have different protein, calories, and other nutrient levels. You can get your hay analyzed to better understand it’s protein, vitamin, mineral, and caloric content if you have concerns. This can help fine tune the supplements that may be needed if the hay you feed is deficient in specific vitamins and minerals.

Because grass is deficient in certain minerals and hay is deficient in certain vitamins and minerals, horses need more than just forage as their diet. This is where concentrates and supplements come in. **Concentrates** are grains. They contain more calories per pound than roughage. (Their caloric density is more concentrated). Examples of concentrates are oats, corn, barley, sweet feed, and pelleted feed.

**Supplements** may be fed to balance out vitamins and minerals your horse needs. They may have other purposes as well. Examples include fly control, sand colic prevention, added fat, improvement of joints/tendons/muscle development, and improvement of gut bacteria. Supplements are expensive, so it is important to only feed supplements that have been recommended by a veterinarian or that have sound scientific evidence to backup the manufacturer’s claims.

Fortunately, there are a variety of ways to meet a horse’s nutrient requirements that don’t tie needed vitamins and minerals with calories. The simplest option is to provide your pasture horse with minerals or your horse on hay with a multi-vitamin/mineral supplement. If you provide vitamins and minerals with a protein source (amino acids), then you are feeding what’s known as a ration balancer. Fortified grain is the next link in the chain, because it provides vitamins, minerals, protein and energy. Finally, some senior horses and those with certain medical problems (such as airway disease or dental issues) thrive on what is called a complete feed, which is like having hay and grain in the same bag. That is, these products provide all the necessary vitamins, minerals, protein and energy together with a source of fiber, so additional pasture or hay is not absolutely required. It is important to read the label on each of these products and feed the correct amount:

Mineral or Multi-vitamin/mineral supplement: 1 - 4 ounces

Ration balancer: 1 - 2 pounds

Fortified grain: 5 - 7 pounds

Complete feed: 12 - 14 pounds

**Daily Feeding Plan**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mount’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Water Source** | **Heated?** | **AM Instructions** | **PM Instructions** | **Free Choice** | **Total Daily Amount Needed**Use the Cool Clear Water article as a guide. |
| Well water in buckets |  |  |  |  |  |
| Well water in trough |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Salt/Mineral Source** | **AM Instructions** | **PM Instructions** | **Free Choice** |
| Salt added to feed |  |  |  |
| Trace mineral salt block |  |  | X |
| White salt block |  |  | X |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Roughage** | **AM** | **PM** | **Free Choice** | **Total Daily Amount** | **Conversion** |
| 1st Cutting Grass Hay |  |  |  |  | 1 flake = lbs |
| 2nd Cutting Grass Hay |  |  |  |  | 1 flake = lbs |
| Grass/Alfalfa Mix Hay |  |  |  |  | 1 flake = lbs |
| Soaked Beet Pulp |  |  |  |  | 1 dry black scoop = lbs |
| Soaked Alfalfa Cubes |  |  |  |  | 1 dry black scoop = lbs |
| Grass Pasture |  |  |  |  | 1 hr eating grass = lbs |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Concentrate** | **AM** | **PM** | **Free Choice** | **Total Daily Amount** | **Conversion** |
| Oatsbasic grain for calories, not fortified |  |  |  |  | 1 scoop = lbs |
| Tribute Kalm Ultrahigh fat, high calories, fortified |  |  |  |  | 1 scoop = lbs |
| Tribute Seniorfortified, high calories, easily digested |  |  |  |  | 1 scoop = lbs |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Supplements**  | **AM** | **PM** | **Purpose** | **Conversion**Either measure using a scale or check for a conversion on the label. |
| Aloe Vera |  |  |  | 1 | describe measuring tool | = | unit |
| Barn Bag |  |  |  | 1 | describe measuring tool | = | unit |
| Farrier’s Formula |  |  |  | 1 | describe measuring tool | = | unit |
| Flax |  |  |  | 1 | describe measuring tool | = | unit |
| Garlic Flakes |  |  |  | 1 | describe measuring tool | = | unit |
| Omneity MB |  |  |  | 1 | describe measuring tool | = | unit |
| ProBios |  |  |  | 1 | describe measuring tool | = | unit |
| Sand Clear |  |  |  | 1 | describe measuring tool | = | unit |
| SimpliFly |  |  |  | 1 | describe measuring tool | = | unit |
| Smart Flex Senior |  |  |  | 1 | describe measuring tool | = | unit |
|  |  |  |  | 1 | describe measuring tool | = | unit |
|  |  |  |  | 1 | describe measuring tool | = | unit |