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**What kind of grass should I plant for my obese/insulin resistant/laminitic horse?**

This is a very common question, and I'm afraid not easy to answer. The 'best' low sugar grasses to plant will depend on a lot of different factors, including: details of climate (not only how much does it rain, but when?), soil type and fertility, drainage, horse/acreage ratio, availability of irrigation, level of management inputs, the existing grasses and how competitive they are. Are you set up already for rotational grazing, which will offer more choices of grasses that might not hold up under constant grazing? Another important consideration is how hard are you willing to work to get new grasses established? Are you willing to kill off existing sod, plow, disc, pack and re-plant a whole new eco-system? Have you access to real farming equipment, or are you dragging around your arena harrow with a 4 wheeler? Are you willing to use chemicals, or can we utilize herbicides and fertilizer to give the new grass a better chance to establish? How much are you able to spend? Native grasses may offer better choices, but native seed is very expensive, and can run up to several hundred dollars per acre, where some medium carb content grasses might only cost \$20/acre for seed. Killing off existing stands of perennial grass requires at least two applications of Roundup. It may take 3-4 weeks to prepare a site for native grass. If you are willing to limit grazing of an 'at-risk' horse, some risk reduction on existing improved grass species can be accomplished by timely mowing, managing for optimum fertility, and knowing when to reduce or eliminate grazing time.

How critical is sugar content to your horse? Is the horse just too plump, or are we talking severely insulin resistant with chronic laminitis? Frankly I cannot offer ANY choices that do not carry risk for a foundered horse to graze free access 24/7. No matter what kind of grass you plant, your laminitic horse must be monitored very closely, and still taken off during times when the grass is stressed from drought or frost. It's taken me 4 years of experimenting on pasture management to allow my 3X foundered mare to graze for 3 hours a day on improved species of grass during optimum conditions. There is a huge difference in carbohydrate content in grass species, but just planting a different grass is just the beginning of a holistic program of management for an insulin resistant and/or foundered horse.

I suggest you section your pasture, and only redo a portion of it at a time. DO NOT graze at all the first year of establishment, or maybe only very lightly the fall of the first year if the grass did very well. You must allow the grass to establish a strong root system and accumulate enough carbs to get through the first winter or drought. Low carb grasses are more susceptible to overgrazing. Grazing too early or too hard the first year can impact the stand for many years to come. Proper establishment of a healthy, vigorous stand of grass will make management far simpler in the future.

Planting grass is time consuming and can be expensive, and we want to do it right the first time. In order to offer a plan as to what you should plant,

**Things I need:**

- A complete soil sample done by Servi-Tech. This lab does all the tests I need to evaluate your soil without being there. The test and shipping will cost \$25. Yes, you can get it done cheaper elsewhere, but it won't have nearly this much information, which I need to help get your minerals properly balanced. I can take care of sending it. You need to send me a quart of soil, which has been randomly sampled with at least 30 cores of a soil probe approx. 8-12 inches deep from each area of distinctly different soil in your pasture. Mix well in a CLEAN bucket, and send a quart of soil. Borrow a soil probe from a local fertilizer dealer, or sometimes they will sample for you if you promise to buy fertilizer from them. Or hire a local professional crop consultant to sample for you, and ID weeds while she does it. (expect to pay \$50-70/hour) If you have the same kind of soil throughout the pasture one sample is enough. For example, if you have river bottom ground in one area, and a higher piece of land that never gets flooded, then you should send 2 samples. If the soils have a different farming history, they should also be sampled separately, i.e., a new piece of ground that has not been fertilized the same as your other ground. If you have a small pocket of very different soil that you don't want to manage separately, don't include it in the random sample you submit.
- A source of online data for your Climate Summary (which is different from weather). Do a search on 'Your state, climate summary' and find a source of climate data for your town. NOAA weather data costs \$10/page to download, so other sources are preferred. Usually your ag extension agent will have

the link handy. I might also be able to find this on my own for those not comfortable with search engines, but this will be added to your consulting bill.

- A brief summary of available equipment we have to work with. Large seeded grasses can be planted with a conventional grain drill on a firm seedbed. Some grain drills have a special accommodation for small seeded crops. Small seeded grasses might be better broadcast, and scratched or packed into soil if the right equipment is not available. If renovating existing pasture, can you rent a no-till seeder?
- A brief explanation of your stand on the use of chemicals and fertilizer. If you are committed to organic farming methods, we will have to pick grasses that are more competitive, which are also often higher in sugars. You CANNOT graze the first season of establishment, so anything we use to get the grass established would be long gone by the time your horses eat the grass.
- A brief description of your land:
  1. Topography, any waterways or low spots? Hills, gravel bars, adobe spots, boggy areas, or high, dry and level?
  2. Number of acres and horses. How much are they turned out? Have you more grass than horses, or the other way round?
  3. Irrigation availability.
  4. Existing vegetation. Kinds of grasses and weeds. If you cannot get a local expert to identify, you can press them to dry in an old phonebook and mail to me taped to cardboard. Do you want to renovate, or start all over with bare soil?
- Your budget constraints. Is cost effectiveness highest priority? Or is doing the very best job possible within your means? My basic philosophy is that if you are going to do something, best to do it right, or not bother at all. If budget is very tight, I suggest re-doing a portion of your pasture each year, BUT doing it right. This also gives us an opportunity to fine-tune your pasture establishment program as we go along. If certain grasses don't do well the first year, we can eliminate them from the mix and try something perhaps better suited to your microenvironment and management practices.
- Consulting for a complete pasture establishment and management program is based on a rate of \$70/hour and will run a total of around \$400 for a written plan, depending on the detail of information you require. People familiar with farming won't need nearly as much advice. You will get:
  - A list of recommended lower carbohydrate grasses to choose from that should grow well in your situation.
  - Details on how to prepare the soil for planting, when to plant (probably in spring)
  - Fertilizer and lime recommendations to optimize and balance nutrients in the grass. Some things I can't fix, for which I'll say so. Mineral supplementation of animals cannot be avoided in most situations. It is just not economically feasible to correct certain trace element deficiencies or imbalances through fertilization of forage. Organic is a lot harder, with fewer choices and less chance for error. I do have the list of National Organic Standards, and it is very limited for nitrogen sources, which is very critical to vigorous, healthy grass.
  - Herbicide or cultural weed control recommendations pertaining to those weeds of greatest impact. Those with minimal environmental impact will be of first choice, but if poisonous plants are on the premises, we may have to get more aggressive.
  - Irrigation scheduling as needed.
  - Management guidelines for rotational grazing to optimize plant vigor and minimize carbohydrate concentration.

A down payment of \$100 along with a soil sample will start the process. Make check or money order to: RMRC, Inc.  
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