

# Balance Is Key to Proper Feed Program

*Top-quality rations also offer best chance for success*

**R**acehorse barns at feeding time might look like assembly lines as the cart heads down the shed-row and grooms scoop grain into buckets. However, the most successful operations are the ones constantly making individual adjustments.

"You feed horses a lot through your eye," said John Sadler, who is at or near the top of the trainer's list at all major Southern

California Thoroughbred meetings. "You look at horses, and you see the horses that you want to carry more weight vs. the ones that are carrying too much weight."

Feeding Thoroughbreds in training must be balanced by how much work the horse is being asked to do. Those in heavy training or near a race will be eating much more than horses just beginning to train, laid up by injury, or being rested.

## **Forage**

As with feeding any type of horse, trainers and nutritionists build a program around the forage, or hay. They generally add a grain-based feed that will supplement the nutrition the horse gets from the forage. Because of their daily fitness gallops coupled with the speed required in breezes and races, racehorses in training need more grain than horses performing in most other disciplines.

Amy Gill has a Ph.D. in equine nutrition and exercise physiology and is an equine nutrition consultant based in Lexington. She believes in not only a proper balance in any horse's feeding program, but the importance of hay in the diet.

"We like to try to use the best-quality forage we can find," Gill said. "Preferably, you'd want something that's a little less mature, has a little less fiber because we're



Feeding Thoroughbreds must be balanced by how much work the horse is being asked to do

trying to get as many calories into these horses as possible.”

The bulk fiber found in some hay doesn't help a horse nutritionally, said Gill. She likes to see racehorses get some nutrients from the forage instead of completely from the grain ration.

“The horse is an herbivore—it has to eat forage,” Gill said. “It was more designed to eat forage than any type of grain.”

Thus, a horse's system can more easily metabolize nutrients found in forage than those in grain.

Gill recommends alfalfa for its nutritional value in addition to the timothy hay commonly seen at the racetrack.

“Alfalfa is the best forage product available to a horse in race training,” she said.

Sadler feeds three types of hay—alfalfa, timothy, and oat hay. Horses get their nutrition from the alfalfa and the oat hay, while the timothy gives them something to nibble on all day.

“Timothy is like salad,” said Sadler. “They can eat as much as they want. It's really in there to give them something to do all day, something to pick at.”

Alfalfa and timothy also play roles in the feeding program at John Harris' Harris Farms near Coalinga, Calif. A major breeding and training facility in the state, Harris



Racehorses in training need more grain than horses performing in most other disciplines

has a seven-furlong training track. Horses get up to breezing three-eighths or a half-mile before being sent to the racetrack.

Per Antonsen, who is in charge of the training facility, has been with Harris

since 1981. Like Sadler, Antonsen feeds alfalfa for the protein and timothy as a fill food.

“Timothy is something to entertain them,” Antonsen said. “I like to feed alfal-



## equineperform

- ★ Unparalleled immune support
- ★ Supports healthy digestive function
- ★ Helps support joint flexibility



The Noni Difference

Noni (*morinda citrifolia*) is a unique botanical that contains compounds that work together to support the physical and mental well-being of animals.

learn more at [www.MorindaCare.com](http://www.MorindaCare.com) or call: 866-796-0046

“I have been using Equine Perform on the horses in my racing stable for the last six months. The key benefit I associate with this product is the immune system enhancement of the Noni plant base, which makes it totally unique in the marketplace. The effectiveness, palatability and value of equine Perform have made it the foundation of my supplement program.”

**Gregory Fox DVM,**  
trainer of Tizdejau  
MGSW (\$693,153)

available at



**BRUMFIELD**  
HAY & GRAIN CO.

2285 Maggard Drive Lexington, KY  
Toll Free: 1-800-447-2580

**LOOMIX**  
Specialty Products Division

MAXIMIZE PERFORMANCE & HEALTH  
**NATURALLY!**



Cellarator® feed supplements consist of highly concentrated nucleotides, the basic building blocks of DNA and RNA. Our exclusive ingredient, Cell-rate, is an all-natural, cutting-edge formula, that can help promote natural cell growth to support your animals' need for optimum performance and health.



On the ranch, in the show ring or on the track, Cellarator® helps your animals maximize their potential with **more than 15 years of research.**

### Has Been Shown to Promote:

- **Muscle Mass**
- **Immunity**
- **Digestive Efficiency**
- **Stress Reduction**

### Available in Four Highly-Palatable Forms:

- **Pellets**
- **Meal**
- **Concentrate**
- **Paste**



Discover the science behind Cellarator® at  
**www.cellarator.com**  
**877.788.4448**



fa because of the higher protein. Some trainers don't like to feed alfalfa because they feel it can cause bleeding, but I have never had that problem."

In fact, alfalfa has other advantages. Gill said that the calcium in alfalfa can help buffer stomach acid to help prevent ulcers and that alfalfa has a high calorie content. Plus, horses like it better than other hays and will eat more of it.

Timothy hay is often not cut early enough to give the optimum nutrition, said Gill, because the yield improves with cutting it later.

The protein content in timothy can be as little as 6-7%. Protein levels in hay can vary widely, and it is important to look for a consistent level so that the balance with the grain remains the same.

Alfalfa fed on dairy farms in California, for example, can have a protein rate of up to 23% and high calcium levels also.

"What you want to look for is something that's in the 14-15% protein range," Gill said, "maybe a

little stemmier than what you would find them feeding to the high-end producing dairy cows. You do want to have a certain amount of good-quality fiber as well."

Unfortunately, high-quality alfalfa isn't always readily available at a decent price throughout the country. But Gill feels that the advantages alfalfa brings to the race-horse diet are worth the cost.

**"Timothy is like salad, they can eat as much as they want."**

JOHN SADLER

While many training barns will put hay nets right outside a horse's stall, Gill recommends feeding hay on the ground level of the stall because horses can put their head down in a more normal grazing position.

"It's much more conducive to getting them to eat more if it's on the ground," Gill said. "How we feed these horses is as important as what we feed. They are grazing herbivores designed to eat on a continuing basis."

### Grain

The next component of feeding race-horses in training is the grain. Some training stables buy one of the commercial products on the market balanced for horses at the track, while others customize their own.

Harris Farms works with a nutritionist, Dr. Jack Algeo, to design its own blend. David McGlothlin, the horse division man-

ager, said that Harris has three different customized feeds—one for breeding stock, one for foals and young horses, and a third for the horses in training.

"The training ration has a fat content of 8.1%, while the fat content of both the mare and foal ration is 4%," McGlothlin said.

McGlothlin said that the training ration contains 12% more digestible energy than the mare and foal rations.

"You need the higher energy for horses in training," he said.

The protein percentage also differs, with

## Dandy Products, Inc.

### Padding & Flooring Specialists



### "Padding At Its Best"

Breeding Sheds, Stocks, Stalls, Trailers, Exercise & Training Areas,  
Induction & Recovery Rooms Table & Surgical Pads, Neo-Natal Foal Beds

### Non-Slip Safety Floors for All Areas

Pavesafe Bricks & Tiles, Trac-Roll & Vet-Trac Floors, Wash Stall, Grooming, Aisleway and Trailer Mats

Toll-Free 888-883-8386 • 513-625-3000 • FAX 513-625-2600  
3314 State Route 131, Goshen, Ohio 45122 • [www.dandyproducts.net](http://www.dandyproducts.net)



Horses in training, breeding stock, foals, and young horses should have customized feeding programs

15% protein for the training ration, 17% for the mare ration, and 19% for the foal ration. The young, growing horses need the extra protein, as do mares that are raising foals and/or are in foal.

Like Sadler, Antonsen feeds the in-training horses individually, and he adjusts the amount of grain fed depending on the amount of activity he asks the horse to perform.

"Usually, I'll give them four pounds of the training ration in the morning and four pounds of a bran mash at night," Antonsen said. "But it depends on the level of the horse in training. If he is close to breezing,

then he'll get another four pounds of the training ration at 11 a.m."

Antonsen begins breaking horses at 18 months of age, and he gives those horses about six pounds of the training ration a day. He then turns them out in pasture until they are ready to begin serious training, at which point they receive two to four pounds a day, depending on the time of year and the nutrients they are getting from the pasture grasses. That amount is increased again when the horse is brought back into training at the farm.

The bran mash at night helps in the prevention of colic, Antonsen said.

"We also wet the hay before we feed it," he said. "That moisture also helps keep down the colic."

Sadler receives young horses in his barn after they have undergone a breaking and training regimen similar to that at Harris Farms. He will confer with farm personnel to see what the horse has been eating up to that point.

"When they come in from a training center or a farm and they haven't been on a lot of high protein, you introduce the grain to them over a period of time," said Sadler.

Sadler's grain ration includes flax seed and bran, both of which help with diges-

## The Solution to Problem Hooves and Unbalanced Diets...

### Farrier's Formula® Double Strength

Pelleted Nutritional Supplement

- Provides nutrients important for healthy hoof structure and growth.
- More economical to feed compared to original Farrier's Formula®.
- Twice the concentration - Lasts twice as long!



### Barn Bag®

Pleasure and Performance Horse  
Pelleted Feed Concentrate

- Barn Bag® is a concentrated nutrient source designed to balance and increase the feed efficiency of equine hay and pasture diets.
- Have peace of mind that your horse is receiving needed nutrients.
- Barn Bag® is a tool for weight management - effective for the hard keeper and ideal for the obese or metabolic syndrome horse.



Life Data®  
LABS, INC.

Life Data Labs, Inc.  
12290 Hwy 72  
Cherokee, Alabama 35616  
Product of the USA

256 370 7555  
800 624 1873  
www.LifeDataLabs.com  
cservice@LifeDataLabs.com



tion. He often includes carrots in the mix to make the feed even more palatable.

“Getting enough into them can be challenging,” he said. “You’re asking them to perform at

such a high level that they have to eat a lot. What’s tricky is if they’re not good eaters.”

Sadler feeds three times a day—early in the morning before training, late in the morning after training, and again in the evening. Feeding several times a day simulates a horse’s natural grazing state, which is another way to get horses to eat better.

Fillies can sometimes get very nervous and pose feeding challenges.

“The hardest horse to train is a skinny filly that you’ve got to try to train and yet keep the weight on,” Sadler said. “The nervous ones may not want to eat well. You try feeding them different ways. You may cook the oats. It’s like the baby at the table. You’re going to find a way to get the food in his mouth.”

Gill encourages trainers to feed smaller portions more often rather than just a couple of big meals each day.

“The biggest problem you have with racehorses is getting them to eat everything you put in front of them,” Gill said. “Forage should be fed free choice, and then the concentrate should be fed according to the condition of the horse. Feed smaller portions more frequently instead of just dumping a huge load in front of them

twice a day. They don’t like stale food. If a horse is out grazing, it keeps moving onto fresh pasture.”

Trainers need to be cautious of conditions such as laminitis that can sometimes result from overfeeding, though that is usually not a problem for a racehorse.

“It’s hard to overfeed a racehorse that’s in training,” said Gill. “There’s always that individual that if you dumped 50 pounds of feed in front of him, he might eat it. But my experience is the hardest thing about feeding racehorses is getting them to finish up.”

Part of the difficulty is that racehorses spend most of their time in their stalls.

**“But my experience is the hardest thing about feeding racehorses is getting them to finish up.”**

AMY GILL

“They get very finicky when they’re put up in stalls and stressed out,” said Gill.

Some trainers, whenever possible, will have their horses walked and grazed during the day. European trainers have found this advantageous, and the setup of their training yards is more conducive to that type of activity than American racetracks.

Gill has performed nutritional analysis of feed for top racehorse trainers. She recommends a grain mix with a lower starch concentrate when the horses first enter training.

“They’re not using muscle glycogen as

much when they’re not in heavy training,” she said.

Gill has horses in training with John Booker Jr. She said that at their Kentucky Thoroughbred Center barn, they switch the horses to a feed with higher starch content as the horses get up to breezing levels.

When developing a feeding program, trainers should make sure that all the macro and micro minerals and vitamins are in balance and in the correct ratio to each other. For example, the proper calcium/phosphorus ratio should be around 2:1 but never lower than 1:1. Too much phosphorus in the diet can cause severe porosity of bone.

“A racehorse’s bone turnover is going to be pretty big because of the constant remodeling of the bone,” said Gill. “So it is important to provide the correct amount and ratios of calcium and phosphorus to allow optimum formation of bone to occur.”

Gill cautions about bran in the diet because it has an inverted calcium/phosphorus ratio. That is another reason that a horse’s entire diet should be analyzed, to be sure that one portion of it doesn’t unbalance another portion.

Not only do trainers have to introduce young horses to their feeding program gradually, but they have to do the same for older horses returning from a lay-up.

At Harris, lay-ups don’t receive the morning grain feeding. These horses are at the farm due to injury or for freshening. Either way, they aren’t getting the exercise they received at the track and therefore don’t need the high-energy grain ration.

## Good Shoes



The Fast Break and Synergy XT can be used on any surface, including those that require an insert of 2 mm or less.

## Good Hands



## Good Foot

Whether **Kerckhaert** is designing shoes for different race surfaces - or finding solutions for the traditional problems with breakover - they are always listening and responding with innovative products. Even their traditional designs have improved support and strength.



For more information and to view the full line of Kerckhaert shoes, visit [www.farrierproducts.com](http://www.farrierproducts.com) | 1-800-468-2879 | [fpd@farrierproducts.com](mailto:fpd@farrierproducts.com)

That helps the trainer when the horse is ready to return to the track. Sadler prefers to see lay-ups come in on the thin side rather than on the heavy side.

"It's less pressure on their legs," Sadler said. "If you had a horse off with an injury and he was turned out, if he comes in heavy, it gets much harder to bring him back. It takes a lot longer to get them fit."

Sometimes horses have minor injuries, and trainers will keep them at the racetrack. In those cases, trainers cut back on the rations because the horse isn't galloping every day.

"Say you have a horse that's been running, and all of a sudden he has a foot issue and can't leave the barn for 10 days," Sadler said. "You've got to cut that grain back. Otherwise, they'll get too heavy too fast. Mentally, he can get too jacked up as well."

### Supplements

Beyond forage and grain, the diet of Thoroughbreds in training should include salt and possibly various supplements, with perhaps something to guard against ulcers. A good-quality grain ration formulated to meet the needs of a racehorse in training will contain the vitamins and minerals that a racehorse needs.

"You shouldn't need to be adding amino acids, vitamins, and minerals," said Gill. "If you are feeding the correct type of concentrate, those nutrients should already be supplied in the correct amounts."

Gill recommends only what she calls "targeted nutritional therapies," or nutrients that would not be found in hay and grain rations. These can include joint supplements such as bioavailable silicon and omega-3 fatty acids. Other supplements, such as beta glucan, can stimulate the immune system, which can proactively help a horse remain healthy. Gill noted that targeted nutrient therapy is very effective in providing horses with the nutrients they need to correct nutritional imbalances or deficiencies.

"Above all, be sure you aren't adding anything redundant or something that you simply don't need," Gill said.

With supplements, Gill said to be sure the product has an active ingredient at a therapeutic level.

"Don't use products that have a little bit of everything in it and not enough of any of them to actually exert an effect," said Gill. "There are many labels on products sold on the market today that confuse the average horse person because they 'impress' with a long list of ingredients but lack enough of the active ingredients to cause a beneficial change in the health of the horse."


Antonsen noted that it is also essential to keep up with regular worming and tooth care, both of which not only keep



Top-quality feed, balanced rations give trainers and owners a better chance at success

horses healthy, but allow their systems to optimize the nutrition they receive from their feed.

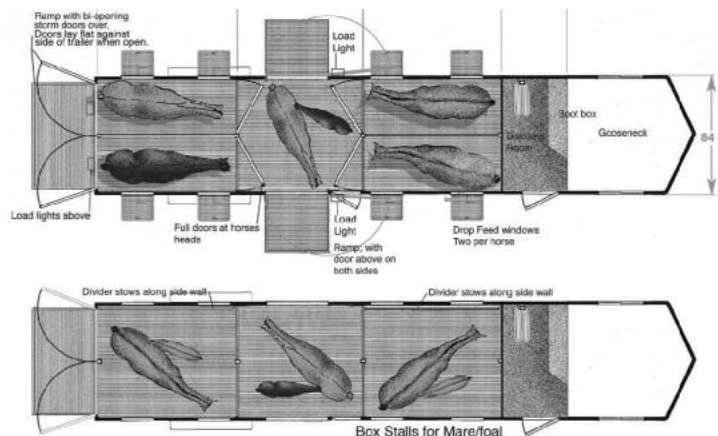
Trainers who use top-quality feed and see that the rations are balanced best for horses in training are more likely to succeed. They treat the horses individu-

ally and adjust the feed based on where the horses are in their training program. Feeding several times a day is the best way to see that athletic horses eat what they need to perform at their best level. And a few carrots along the way are also always appreciated. 

## THOSE WHO KNOW PULL A TURNBOW

PROUDLY SERVING THE INDUSTRY FOR 50 YEARS

### TURNBOW'S COMMERCIAL HAULING TRAILER



Hauls horses head-to-head or converts to box stalls.



### TURNBOW TRAILERS, INC.

P. O. Box 300 • Oilton, OK 74052  
(918) 862-3233 • 1-800-362-5659 • Fax (918) 862-3803  
E-mail: [info@turnbowtrailers.com](mailto:info@turnbowtrailers.com)  
Internet: [www.turnbowtrailers.com](http://www.turnbowtrailers.com)

CALL 1-800-362-5659 FOR MORE INFORMATION