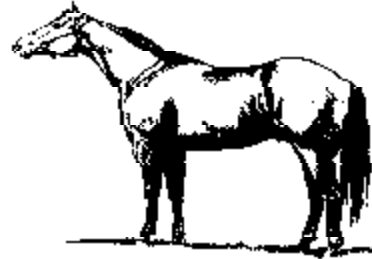


Animal Science Horse Information Series

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PERFORMANCE IN OLDER HORSES

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There are more senior citizens today than ever before. It is not unusual to see them jogging, swimming or doing aerobics. In fact, there are even senior Olympic competitions.

Much the same thing is true of horses. There are also more senior horses today. It is estimated that about 20 percent of the U. S. horse population is over 20 years old. And many of these older horses are ridden and perform various tasks.

Do older horses perform as well as younger ones?

Research from Rutgers University compared exercise in older and younger mares. The average age of the six young mares was 5.3 years, while the six older mares averaged 22 years old. They were kept on pasture, fed a typical hay-grain ration and were not exercised or

trained for four months before being tested on a treadmill.

The treadmill was inclined 6 percent and started at 4 meters/second, was increased to 6 meters/sec, then increased 1 meter/second until the horses fatigued.

There were differences in total running time, maximum oxygen uptake and maximum velocity (or speed) obtained.

These data indicted that older horses did not perform as well as younger ones. Older horses were slower, were not able to take in as much oxygen as younger horses and fatigued sooner.

Both groups of horses were physically unfit as neither had been exercised for four months prior to this study.

Younger mares in this study had an oxygen capacity of 117 ml/kg/min. Oxygen consumption is considered a measure of athletic ability. Older mares were about 24 percent less efficient at exercise than younger mares. They also performed work less efficiently than younger mares as noted by their performance on the treadmill.

Interestingly, older mares are probably better athletes than older women as well as fit human athletes. Moderately fit, healthy, older women have an oxygen uptake of 22 ml/kg/min compared to 60-80 ml/kg/min of oxygen uptake by elite Olympic-caliber human athletes. Older women are only 28-36 percent as efficient as better human athletes.

Elite, fit horses have the capacity of greater than 145 ml/kg/min oxygen uptake. The older mares in this study had an oxygen capacity of 90 ml/kg/min. So they were three times better than older (but fit) women athletes and slightly better than fit, human athletes. But the

older mares were only 62 percent as efficient as elite, fit horses.

How does one relate this information to the performance of older horses?

For one thing, we should not expect as much from older horses as from younger ones.

But older horses are still good athletes.

Yet older horses must be properly fit before being required to perform strenuous activities.

Pleasure and trail riding are not strenuous activities. But, one does not take a 24-year-old gelding out of the pasture and ride eight hours on Saturday without preparing the horse for such exercise.

Older horses will probably take longer to get physically fit compared to younger horses. So factor in extra time in your conditioning and training programs for senior equine athletes.

They will fatigue quicker, too. Stop strenuous activities and allow them to recover before proceeding.

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