

OLIVIA'S

Short Reads!



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HOW TO EFFECTIVELY CARROT STRETCH YOUR HORSE: USING TARGET TRAINING & POSITIVE REINFORCEMENT



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WHY SHOULD I STRETCH MY HORSE?



**RESET YOUR HORSES
PROPRIOCEPTORS, STRENGTHEN
MUSCLE AND CONNECTIVE TISSUE
ALL WITH STRETCHING!**

Let's think about this from a human perspective, if you're not a gym-goer think back to the days where you were forced to do PE. You would have a quick warm up, stretch and then begin with the class activities. You would then go through a cool down routine which was inclusive of stretches to finish off. You may have thought this was a waste of time, but it was included in your curriculum for a reason! To improve performance and to reduce the risk of injury! Regardless if your horse is a non-ridden companion, a ridden leisure horse or a 5* competition horse; stretches really ought to be a staple to your horses routine.

Stretches that are held for at least 30 seconds are able to assist with resetting your horses proprioceptors (Lesté-Lasserre, 2010) - these little receptors are found within muscles, tendons, ligaments and joints. During an injury these receptors remodel due to negative sensations (i.e. pain) which then generates a "guarded response" as a means to limit movement. Alternatively, the body can instead recruit other muscles to replace the roles of the guarded muscles; but this can create a magnitude of compensatory stresses on your horses body (Equisearch, 2017).

Aside from resetting your horses proprioceptors; stretches can strengthen muscle, help to alleviate pain and to prevent overused/underused muscle and connective tissue from becoming stiff – which can make injury more prevalent.

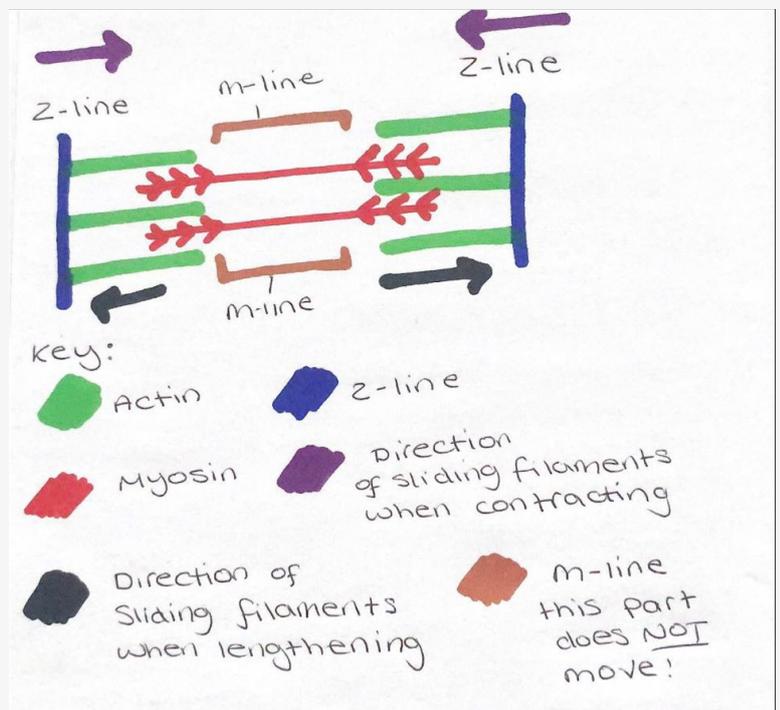
HOW ARE MUSCLES MADE UP?

Tendons attach muscles to bones; muscles are made up of thousands of muscle fibres (myofibrils) – each of which have even finer threads within them called myofilaments (Brega, 2009). These teeny tiny myofilaments are made up of contractile proteins Myosin and Actin (there are a few other proteins involved - but we will go into that during the next issue). If you take a look at the diagram (bottom right) see the positioning of the Myosin and the Actin? Now imagine Myosin has these little head-like projections that come out and then anchor on to the Actin. It essentially pulls the Actin along the Myosin “shaft” if you will – which is what creates contraction (shortening of muscle).

OUR GOALS AND OBJECTIVES

When we stretch our horse, we want to be able to build up towards sustaining the stretches for a few seconds each time, over a 30 second session. It takes a little bit of practice, and we also want this to be an effective stretch. What I mean by this is that we do not want the horse to be snatching for a carrot; as ultimately the stretch will not be engaging the muscles in the way that we want; and the duration will not be long enough to initiate the proprioceptor reset as described by (Lesté-Lasserre, 2010).

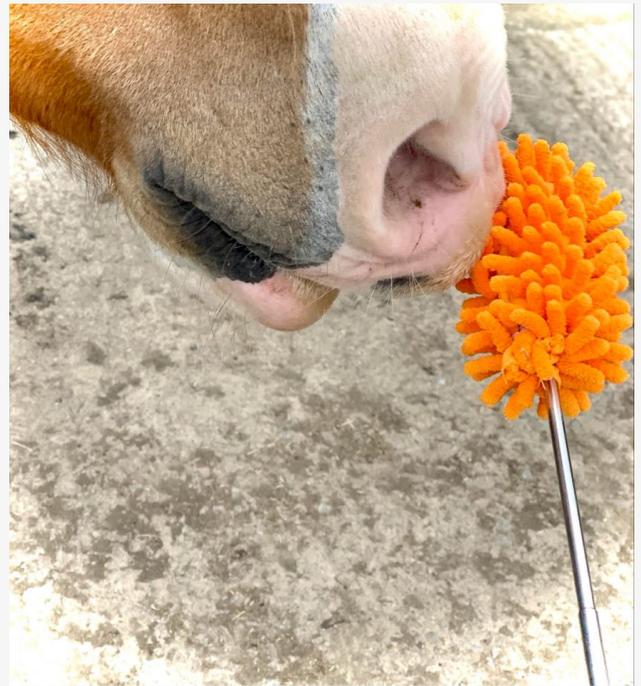
That is an incredibly simplified explanation however, I need a whole issue dedicated to explaining muscle fibre arrangement, the different types of fibres and how contraction actually works! As there are different organelles within the cells that are recruited; and several processes that take place on a microscopic level that allow for muscles to physically contract. It will make for an interesting read – but for now, let’s stick with the basics or else it will go over your head! But imagine it works a bit like an Accordion.



HOW TO USE POSITIVE REINFORCEMENT TO INTRODUCE A TARGET

THE TARGET WILL ALLOW FOR SMOOTH MOVEMENT WHEN STRETCHING OUR HORSES MUSCLES; WHICH MEANS THE STRETCH WILL BE FAR MORE EFFECTIVE!

So what's the purpose of the target in all of this? Traditionally, therapists would advise owners to do carrot stretches. The stretches themselves are simple to perform however, through my observations in the 4 years I have been treating horses, carrot stretches can cause a horse to go above threshold when following a carrot, which can result in pushy behaviour; and more to the point an ineffective stretch that isn't really engaging the muscles in the way we want! Whilst following a carrot in the traditional sense of "carrot stretches" will work the muscle, it is the holding of the stretch that is going to have more profound results; by lengthening muscle fibres and unlocking that proprioceptor-guarded response we briefly discussed earlier.



A TARGET WILL HELP TO REDUCE THE LIKLIHOOD OF YOUR HORSE GOING ABOVE THRESHOLD, IT WILL MAKE IT EASIER TO HOLD THE STRETCH AND TO ENGAGE THE MUSCLES EFFECTIVELY

Unlike predator species such as dogs; horses do not have a hunting instinct. Therefore, when you present them feedstuff and then move it away from them – they get a little bit frustrated and will often show signs of aggression; or may suddenly forget your personal space boundaries! However, we can fix that – and this is how we are going to do it.

Firstly, we are going to establish a verbal marker - this needs to be a replicable noise that you can create repeatedly. Either with a physical clicker or by using your voice. I personally prefer using my voice as it leaves my hands free! I do a “kissy” noise to signal to my gelding that he’s doing what I want, and that he is doing a good job. The initial step in this process is to associate the click to some type of reward (positive reinforcement). Positive reinforcement is anything that your horse will enjoy! So whilst I am using the example of a food reward (my gelding is very food orientated), this could actually be a scratch on your horses favourite itchy spot!

So how do we start associating the verbal marker to the positive reinforcer (the reward of your choice)? If you can have a barrier between you and your horse; this can be particularly useful at creating space and instilling boundaries. So for example, your horse could be loose in the school and you’re on the other side of the school fence. I don’t recommend a stable as it may encourage door kicking which is what we don’t want!

We want your horse to be focused on you but not trying to mug you – so be sure that you only make the verbal marker sound when they aren’t trying to get in to your pockets! Providing your horse is relaxed and standing next to you patiently, go ahead make the noise and then follow up with your chosen positive reinforcer. Repeat this several times, always being sure that your horse is NOT rooting through your pockets for a food reward. This is incredibly crucial as it is setting the boundaries from the beginning. To begin with expect that once your horse starts making the association with the noise, that they will turn their head to you to receive the reinforcer. This is fine in the early stages and is something that can be refined as you go through the training process.

Whilst eagerness is great in training if your horse starts pushing, step away create space and give him a few minutes to mooch around the school. Little bursts of training followed by a break is a great way to keep your horse below threshold, and to reduce the likelihood of developing any unwanted pushy behaviour.

Now let’s discuss what we’re going to do once your horse has associated what the verbal marker actually means! The next stage is picking a target of choice! I use a telescopic fly swatter/microfiber duster that I sourced on eBay for about £3! An inexpensive option, but there are horse-specific targets on the market should you wish for something a little fancier.

Yay! It's now time for the fun bit: introducing the target to your horse. I like to do this whilst the horse is loose and eating a hay net, that way you are keeping the threshold low; as your horse has a constant supply of food and can "opt in" to the training session if they so wish. However, should they not want to engage they still have their hay and there is no pressure for them to participate.

Begin by holding up the target close to them, but far enough away that they have to move over and explore it with their muzzle. Once they engage with it immediately respond with your verbal marker closely followed by the positive reinforcement (in my case it's a treat). Should your horse not want to interact with the target when you present it to them, remove it then try again. If you just hold it there waiting for a response; it just becomes background noise. Whereas if it comes and goes your horse is more likely to want to investigate after a little bit of time – be patient!

More than likely your horse is going to be curious; and will pick up on what they need to do to get the positive reinforcement. Once they start interacting with the target, you can play around with it and begin to move the target – and this is where you can start being creative with your stretches.

It is really engaging for both horse and owner - so I trust you will have fun!



THE DO'S AND DON'TS

HOW TO SAFEGUARD YOUR HORSE THROUGHOUT THE STRETCHES; AND HOW TO STOP ANY UNWANTED BEHAVIOUR.

DO

- Do warm up your horse prior to stretching (a few laps in walk – doesn't have to be ridden)
- Do start with a small stretch and gradually build up the range of movement over time
- Do stay within the range of movement your horse is comfortable with
- Do make this a regular part of your routine ridden or not!
- Do the verbal marker when your horse is calm and is respecting boundaries
- Do give your horse a break when training!

DON'T

- Don't stretch your horse cold! You MUST get the blood circulating and the muscles warm first! (This even applies for those of you who stretch the foreleg to make the girth seat right)
- Don't over phase your horse, progress the stretch incrementally
- Don't stretch an injured/compromised horse unless recommended by a veterinarian
- Don't over stretch in one session, build up the repetitions and limit to 3 on each side
- Don't verbally mark the horse when they are in your personal space (and don't positively reinforce this either)
- Don't over phase your horse when training, it can take time to perfect!



PERFORMING THE STRETCHES!

NOW YOU KNOW WHY, WHAT AND HOW...LET'S GIVE IT A GO!



So I thought it would make sense to make this part of the resource a little more interactive! Below are two video links, copy and paste them in to your web browser; they will open up to a short clip of me performing each of the stretches using the target method! Enjoy!

1. ***Introducing the Target to Your Horse***

<https://youtu.be/1i3QPBiZxgE>

2. ***Carrot Stretches with the Target***

<https://youtu.be/PxD7kzbdh34>

**NOW IT'S TIME TO ENJOY
PRACTICING THE STRETCHES WITH
YOUR OWN HORSE AT HOME!**



So that draws us to a close, I hope you have enjoyed the first issue of "Olivia's Short Reads". I intend on writing lots of fun interactive eBooks in future! Hope it has given you a little bit of inspiration, and find it useful for your own horse!

THANK YOU SO MUCH FOR TAKING THE TIME TO READ THROUGH! PLEASE SUBSCRIBE TO MY MAILING LIST TO KEEP UPDATED ON FURTHER EBOOKS IN THE FUTURE!

REFERENCES AND FURTHER READING

NOT GONE TOO CRAZY WITH THE REFERENCES, BUT HOPEFULLY YOU FIND THESE INTERESTING FOR FURTHER READING

Brega, J. (2009). Essential Equine Studies: Anatomy & Physiology (Book One). London: J.A. Allen.

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Fancy booking an equine sports massage session for your horse?

*I cover Leicestershire and parts of Warwickshire, Derbyshire, Northamptonshire and Nottinghamshire
You can contact me directly through my website, or by visiting www.facebook.com/ocequinesport*

Hope you enjoyed issue 1!

Olivia x



****Please note the contents of this eBook DO NOT replace the care, advice or treatment from your veterinarian. If you're ever unsure please ALWAYS consult a professional****