

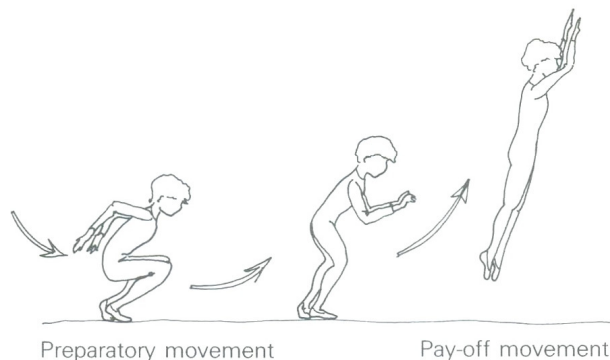
12 *Preparation before vaulting*

Now that we know about all the participating members – the horse, the trainer, the lunger, the children, the parents – the stage is set to start the first session.

Skill analysis

There is a certain technical skill to all movements, and you have to analyse if your children are doing them correctly, even in the warm-up. To make a movement technically correct, the children must use *all* the joints and muscles involved in it (maximum effect through summation of forces), use them in the proper *sequence*, without *gaps or breaks* (continuity of joint forces) and with the proper *timing* between the components of the movement. Usually the joints with the larger muscles are used first, then the smaller ones, resulting in a fast and continuous flow of movement.

Tell the vaulters which joints and muscles must be used in each movement, teach and correct them ‘whole – part – whole’. Explain what you expect from them in ‘slow motion’. It is not obvious to all children that an efficient jump consists of a preparatory crouch (with arm swing) and then a take-off involving thigh muscles, knees, calf muscles, ankle, ball of the foot and toes, all in correct sequence. Many children have the tendency never to use the ball of their foot or their toes for jump-offs and landings (I call them ‘flatfoot’), which is extremely hard on the joints. You should always stress that muscles must be built up, before one can put any stress on the joints, and that to save yourself from injury those muscles must be used correctly to relieve the joints.



Each training session will start with a warm-up for the children. This should never be omitted and is especially important in the winter time, when muscles are cold and limbs are stiff. If you train as we do – all year around in our mild coastal climate – the children have to understand how important it is to keep the muscles warm to prevent injuries in case of falls.

The complete warm-up routine before you actually start on the horse consists of four parts:

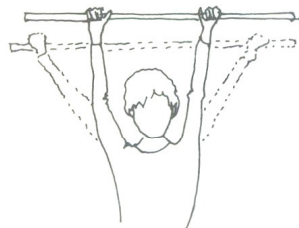
- stretching exercises and breathing
- vigorous exercises (calisthenics)
- rolls and falls exercises
- simulation (training on the stationary horse or barrel)



Training flexibility should be a daily routine

This warm-up will not replace general fitness training, which has to happen on the side – and should happen every day. No stiff body will learn the splits by doing a half-hour warm-up once a week, and no stamina will be built up this way either. Your more serious vaulters, who want to compete, must do their homework: stretching every day and jogging, cycling, swimming or rope skipping to build up endurance, push-ups and so on to increase strength.

The warm-up routine should be systematic (using the correct sequence mentioned above), but show some variety to prevent the children from getting bored (and always coming late to miss it). Make sure they use muscle control during those exercises.



Increase shoulder extension: passing a stick over the head



Grabbing the hand behind the back and pulling

Allow for individual differences between the vaulters; not everyone was given the same talents. The aim is to stretch the muscles, heat the body and prepare the mind for the session to come and to build up strength, flexibility and endurance. Whatever part of this can't happen within your allotted training time should take place on the side (gymnastic and endurance training).

Stretching

Stretching is the beginning of the warm-up and we start with the upper body, bending sideways and stretching to reach the ceiling. Then progress to the leg muscles, bending to touch the toes. Warm up the ankles and knees by moving on the spot. Rotate the arms and improve shoulder flexibility. Proceed into some pre-split exercises, again stretching slowly (take care that the children always breathe correctly) and in a relaxed manner. Do head rolls slowly. Don't let the vaulters jerk their muscles, don't let them force anything to show off. All of this will seem silly to some – explain *why* it is important (especially to the boys, who will complain that they did not join the team to become ballet dancers...) – and do it to music if you can (whatever is 'cool' at the time!); it is more fun that way.



Bending torso



Stretching legs



Kicking and throwing legs

Vigorous exercises

From 'pre-warm' go into 'warm' with running on the spot. Observe if the children use their whole foot correctly: rolling off in the toes, the ball of the foot, the ankle and the knee. This is very important for soft landings after jumps from high positions! A wrong technique can be very hard on the joints. It is also crucial to achieve the best jump-off (and therefore height), as

jumping power comes from the knee as well as the foot, if done correctly. Now let them throw their legs upwards, first with a loose kick in the air, then in a straight and pointed position. Make sure they breathe! A red face is a sign that the children forget to breathe, often because they concentrate so hard, which means in turn that they will get exhausted fast and are not relaxed as they should be.

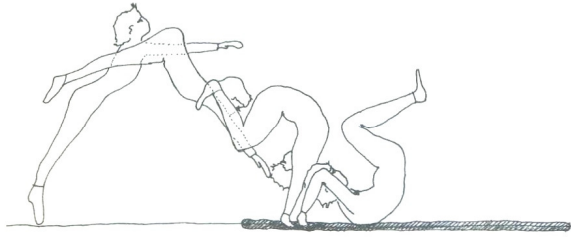
You should basically go through a complete warm-up, touching every part of the body from head to neck, to shoulders, torso, hips, to legs and feet. If you teach your vaulters to take this part seriously, they will be able to do this warm-up by themselves after being shown a few times. If one of the parents does jazzercise, he or she might correct the children in the warm-up. Always make sure though that the vaulters do not arrive 'cold' and drop into the splits right away. Once a muscle gets pulled, your vaulter is off for several weeks and might not be fully 'usable' again for up to three months! Explain to them that this means letting the team down! Showing off is no part of the warm-up!

Keep in mind that the warm-up should not be used as the time for strenuous exercise to build up stamina. It makes no sense to let the vaulters run for half an hour, if this exhausts them to the point that they are then incapable of showing their best on the horse. The pre-vaulting warm-up should raise no more than a light sweat on the vaulter's forehead. The number of push-ups and chin-ups to build up strength, and the jogging to get heart and lungs into good condition, have to be done on a daily basis aside from your training.

Rolls and falls

If you have a mattress, get it out at this point. If not, try to get permission to use part of the ring (with soft ground) and spread carpet samples.

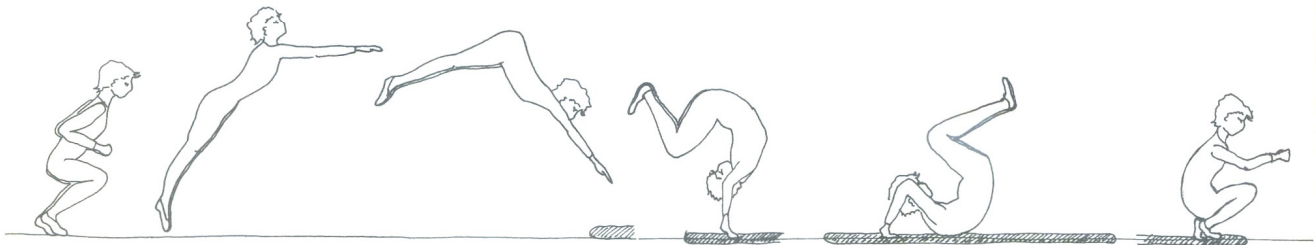
In the rolls and falls routine we try and get the 'protect your



Except for the hands, the shoulder should be the first part to touch the ground

head and roll into a small ball' instinct into the vaulters' system. Children who are able to learn early to do this *instinctively* will not get hurt in falls. Start with somersaults. Make sure they don't touch the ground with their heads — the exercise is to learn falling without *ever* hitting the ground with either neck or head! Check that their backs are properly rounded! Make them observe if they can *hear*

the landing — if they do, it is too hard! Once they can do soft, comfortable and quick somersaults, let them do the same with a jump. Teach them to jump higher, coming down *gently* on their wrists (using *all* the muscles and joints involved in hands and arms!) and roll into a ball *before* touching the ground. Then do the same jumping *wide*. Put a rope onto the ground and increase the jump-off distance. (Please vary the distance of the rope for children of different size and ability! Never increase either height or distance for someone who still has hard and 'loud' landings!)



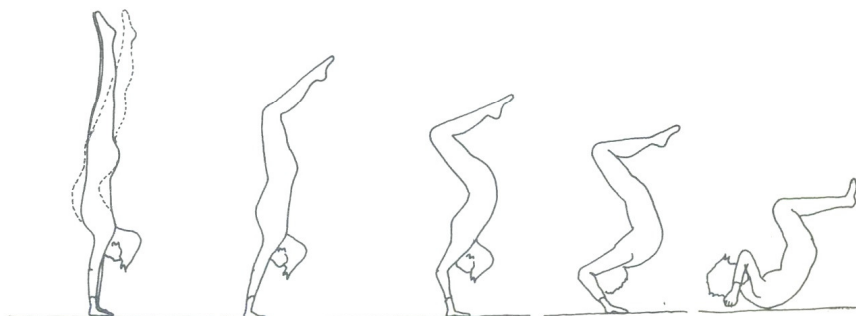
The long jump: the head may not touch the ground

The next step is to do somersaults without touching the ground with the hands. This sounds much more difficult than it actually is, so demonstrate it to them. Make them stoop in front of the mattress and bend their head to the side, hiding it in front of one shoulder (let them choose which side feels more comfortable to them. In this example let's say the left one). Make them pass the arm, of the *opposite* side of where the head lies (in my example

Somersault
without hands

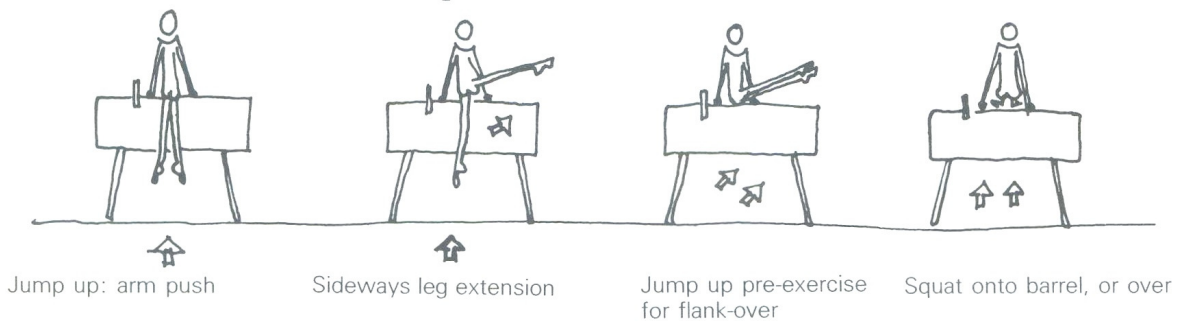
the right one), in front of their stomach, protruding at the other side (in my example the left side). Now tell them to imagine that someone gives them a strong and sudden jerk on that hand – which makes them fall and roll over their shoulder (the one where the head does *not* lie, that is, in this example the right one). Start with a small and low movement with a little hop. Then increase the scope slowly, until your vaulters feel completely comfortable in this exercise.

Another rolling exercise is developed out of the handstand. Once your vaulters are balanced enough to hold a handstand for one or two seconds, let them hold it until you clap your hand and then contract very fast into a ball *before* touching the ground. Spot them in the beginning; many a child will come down as stiff as a plank! Lack of spatial orientation is a great factor in potentially dangerous falls, and often children *think* they are rounded, when indeed they are bent the opposite way! It is important that the command to roll come unexpected, to train the fast reaction you are aiming for. (I do the same in team kur exercises: when I shout ‘fall’ they have to be able to simulate, each person knowing exactly which way to go.)

The quick roll-off out
of the handstand

On the barrel

Now you will proceed to the stationary horse. I always start with some jumping exercises, where we emphasize the importance of using the foot as well as the knees for the jump-off, and the arm action and the timing, *when* the arms kick in. Exact technique of this will be described, when I explain the compulsories on the horse. Start by letting each child jump in front of the barrel, first with legs straight, then open, then both legs to the side, then either flanking over or squatting through. See illustrations for the sequence. If your barrel is approximately 4 feet (or 1.20 m) high, even your little 'flyers' (who will be approximately 1.25 to 1.30 m tall) can all easily squat *onto* it, if they are using the correct technique. Some can even flank over.



If you are lucky you possess a stationary horse, which resembles a horse somewhat in form . . . , and grips that are similar in shape and position to the ones of the real surcingle. You can also build a dummy horse, onto which you can strap your surcingle for practice. New vaulters should be able to learn the various grips and preliminary jump exercises, before they go onto the real horse to save 'horse-time'.

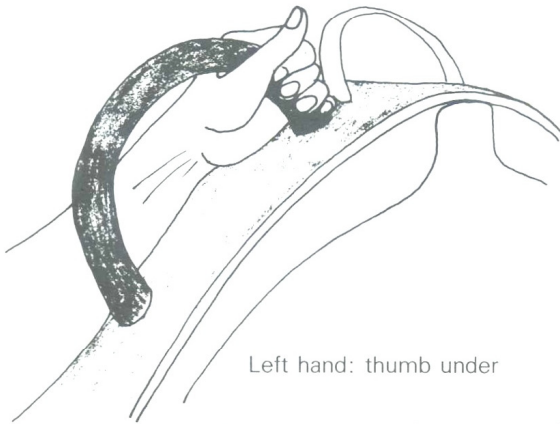
Apart from the energetic jump-off with both feet, the vaulter must learn also to use his arms correctly for a good mount. The aim is to fly up and land softly, with the vaulter's gravity point coming down directly over the gravity point of the horse, and in the right place behind the surcingle. The mount is described in



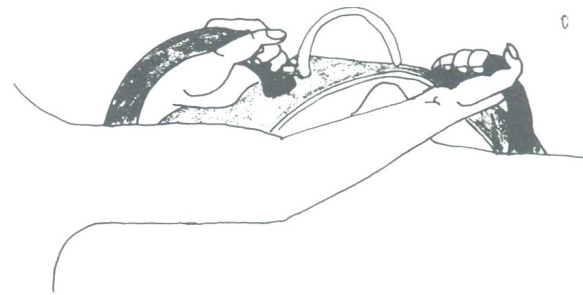
Small vaulter grabs inside grip only
(seen from back)



Medium size vaulter grabs inside grip
and centre loop



Left hand: thumb under



Tall vaulter uses both grips

detail under the compulsory exercises, but the way to grip the handles can greatly assist the vaulter in achieving a good mount.

See how the small vaulter in the illustration uses the elbow, and later the wrist, to push the upper body into the correct position. Please note that these drawings were done 'slow motion' and that the trick with the wrist should not be this visible! Taller vaulters grip both handles so they rely less on the wrist trick, because their outer arm can do more effective pulling. So the arms must do three things during the mount: the inner arm pushes, the outer arm pulls, and both arms give directional control, so the vaulter lands in the correct spot, right behind the surcingle.



Grips for mount of small vaulter: on inside grip, or inside grip and loop



Working over the elbow: right arm pulls, left pushes



In a fast twitch the vaulter switches from elbow to wrist: quick push to bring upper body up



Once on the horse, there are basically four ways of holding the grips, and no rules prescribing which ones the vaulter must use. Let your vaulter try out: depending on their strength they will choose what works best for them. Grip 1 is used for the seat and mill etc., grip 2 by many for scissors and flank. I usually advise the vaulters first to use the grips from below (palm up) for the swinging exercises, because it seems easier that way to most. Some vaulters grab the outside grip down low (as shown in 3) to flank off. Grip 4 is used on either side for various exercises, but mostly in the flank, or the backwards scissors (right palm up).

With beginners you will go through all the compulsory exercises on the barrel, where they have to work reasonably well,



Work over your elbow and wrist: outer arm pulls, inner pushes



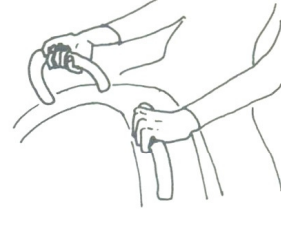
1 Gripping from the top



2 From the bottom



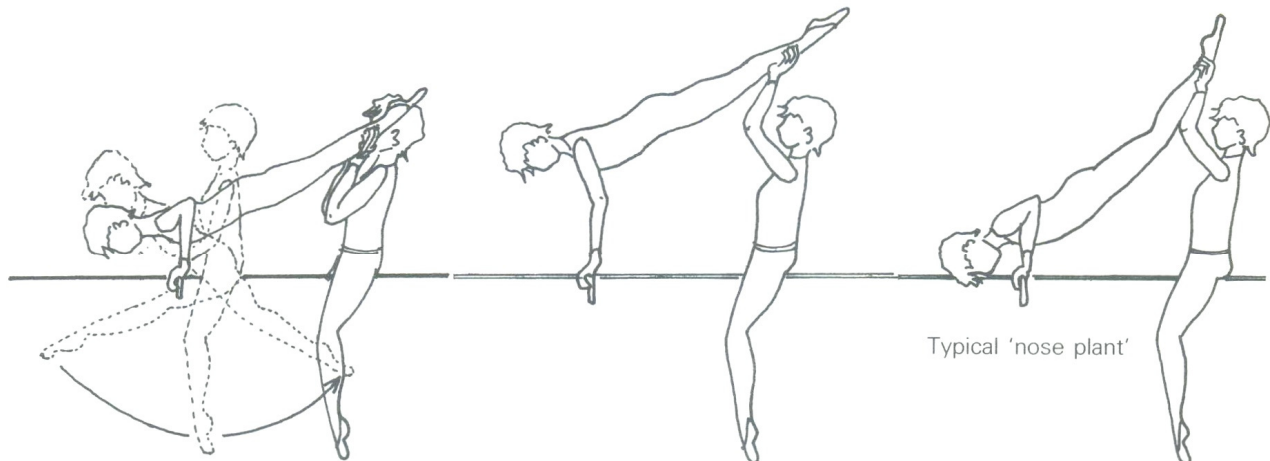
3 At bottom of outside grip



4 Any combination of 1 and 2

before being tried on the horse. See the chapter on compulsories for correct technique. With more advanced vaulters, you should always go through pre-flanking and pre-scissor exercises to warm up the arm muscles, regain the feel for the correct swing and prove control of those soft landings, without which these exercises should not be allowed on the live horse.

A very good exercise for swings on the barrel is the assisted swing into handstand with a partner. The vaulter goes into the swing as described under the vault-off, scissor and flank exercises, and a partner catches his up-swinging legs. He then pushes the partner into the handstand, who in turn needs strong armpush, good balance and good body tension to make it up there! The vaulter will learn from his nose-dives: more push-ups at home . . .



Assisted swing to handstand

and how to find the balance point, where his gravity point is actually over his hands. Emphasize continued armpush, when coming down. This is how the vaulters learn soft landings. This is a very good exercise, which should work reasonably well on the barrel, before a beginning vaulter starts swinging on the horse.

When we get to the section on compulsory exercises I will explain in depth how to train for correct procedures. The basic skills in vaulting, namely balance, strong jump and soft landings can all be practised on the barrel to at least the extent that strong disturbance is spared to the horse, when you start trying it out 'for real'.

Arm control (crucial for soft landings on the horse and safety), spatial orientation, accurate timing, and correct technique for carrying of partners (see chapter on team kur exercises), should all be practised and explained on the stationary horse to a great extent, to save training time on the horse later.

The coordination of several vaulters and their individual timing as partners within a group exercise, and their communication with each other *while* in the exercise, is a crucial part of the barrel training. Coordination in case of a fall should be practised on the barrel for each high exercise. See chapter 23 on team kur exercises and 'bailing out'. Set different scenarios, which can be demonstrated on the barrel:

what happens, in case the horse speeds up or spooks during the exercise? What will it feel like?
which way will you fall?
who should jump free and who should try to stay on? why?
what happens if the horse stops?
which way do you fall? why? should you get off? who first?
etc.

In the 'kur' part of the book I will give some examples of how to train for falls out of particular high exercises. I think it is important for the mental attitude of the vaulters to consider the

fall an integral part of each exercise. Expecting it means being prepared for the eventuality, and having practised it means avoiding broken bones, as well as being able to vault without fear or panic.

The last thing you train on the barrel is the flow of a complete performance. Teach your vaulters to save time on approaches, mounts, transitions and dismounts. The horse should never run 'empty'. Dismounts in a kur should be away from the next approaching vaulters, who should be mounting as soon as the last vaulter 'disconnects' from the horse. The vaulters and the trainer develop a feeling for the rhythm of their horse's canter stride (or you can use a metronome) and a show becomes much more predictable. The better your team gets, the more they will want to be sophisticated and perform to music, recorded particularly for this show (the mood: a Christmas Show is different from one designed for a Rodeo! The pace: mixture of walk–trot–canter, because you include your beginners, or all in canter for a top-notch performance with your best). Practising the flow of a performance on the barrel does not only save time on the horse and increase the discipline of the team, it is also valuable help for timing run-in and bows, warm-up canter round, performance and run-out for recording the music.
