

Picture Card

111 Step Test



Material:

Step bench (25 cm), computer, speaker, computer program, stopwatch

Purpose:

The test person has to follow the rhythm. The test is over when the test person manages to follow the rhythm 2 minutes and 40 seconds.

Considerations:

The pace has to be kept

The foot first on the bench is also the foot first back on the ground

The legs on the bench should be fully extended



Sources of error:

The rhythm of the pace is not followed correctly

The legs are not stretched when standing on the bench

Instructions 111: The Danish step test – modified short version

Instruction comments – Before

"I will start the computer program now, and if you want to, you can practise the step sequence for a quick try beside the step bench.

When you change to the bench, it is important to step up and stretch your legs each time. The weight of the body should always be distributed evenly over the whole foot. To step up always switch between the left and the right leg.

The movement should be straight up and down without jumping. The pace will slowly increase so try to keep up as long as you can. If you lose the rhythm, try to get back as fast as possible.

The time will be stopped if you are four steps behind the computer programme.

Now stand close to the bench and if you are ready tell me and we will start with the computer programme.

I will tell you if you achieve the given time (2:40 minutes)."

Observation

Pay attention to the following sources of error:

- 1) The rhythm of the pace is not followed correctly
- 2) The legs are not stretched when standing on the bench
- 3) The weight is not distributed evenly on the entire foot

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Catch the rhythm again"
- 2) "Stretch your legs"

Additional information

For the target group of this test profile a step height of 25 cm is recommended.

If the room is big or the distance between computer/tablet and test person is large, you might have to connect a speaker. Make sure before you start that everybody is able to hear the signals.

The step sequence is available to download at the online data platform.

Material:

N-Ex questionnaire, pen, glasses if needed

Purpose:

The test person has to answer one question concerning the activity pattern during a normal week. They have five activity levels to choose from.

Considerations:

Answer should be honest

**Sources of error:**

No correct answers
Wrong interpretation of the question/statement

I Instructions 112: Non-Exercise Test (N-Ex)

Instruction comments – Before

“Read this question and choose your preferable answer. Answer it honestly.”

Observation

The test person should answer honestly and tick by him- or herself. The question should be quite clear, and the instructor shouldn't answer any questions or assist in completing. Other test persons shouldn't be around.

Instruction comments – During

“Choose your preferable answer”

Additional information

The instructor should give as little assistance as possible. The test person should answer intuitively. If the test person wants to check more than one answer, emphasize that the last answer includes all answers given above.

Material:

Slim gymnastic mat, stopwatch, flat plank

Purpose:

The test person tries to maintain the planking position for 15 seconds. If possible, he/she tries to hold the position for another 15 seconds (in total 30 seconds).

Considerations:

The plank touches the body on three hit points: seat, upper back and head

The elbows are below the shoulders (angle of 90°)

The test person looks down (between the two fists, not forward)



Sources of error:

The head is tilted back in the neck

The neck is placed under the chest

A convex back

The hips, head or shoulders drop

Placing the hands too close together

The buttocks are pushed upwards

Instructions 121: Plank Test

Instruction comments – Before

"Please lay down on your stomach with both legs fully extended, feet shoulder-width apart and with the elbows directly under the shoulder. Lift your (upper)body from the floor so only the forearms and toes are in contact with the ground. Make sure your body creates a straight line from head to toes. Tighten your buttocks and pull your belly button in but keep breathing normally! I am going to place a stick on your back to make sure it is straight. The stick should touch the back of your head, your upper back and butt. When you are ready, I will start the stopwatch. Try to maintain this position for 30 seconds."

Observation

Pay attention to the following sources of error:

- 1) Too much arch in lower back
- 2) The head is tilted back in the neck
- 3) The neck is placed under the chest
- 4) A round back, especially the upper part
- 5) The butt protrudes above the knee / rib line out

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Raise your hip!" or push with your finger under the hip to raise the hip in line
- 2) "Squeeze your bottom and your stomach"
- 3) "Place your elbows a bit to the front, creating some distance between your elbows and your feet"
- 4) "Don't hold your breath"
- 5) "Think of something other than the test, sing a song in your head"

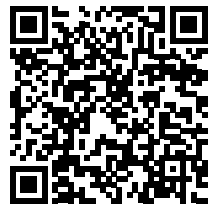
Additional information

It helps to get into good position with your upper body first before going up onto your toes.

It is much more practical to test without the stick, although in that case you have less control over quality.

Material:

Two chairs with flat sitting surface (42 cm & 47 cm high)

**Purpose:**

The test person first tries to get up with both legs, then with the preferable leg and afterwards if possible with the remaining leg.

Considerations:

The test person has to stand straight for three seconds when standing
The hands have to be placed at the costal arch

**Sources of error:**

Touching the floor with the non-weight bearing leg
Losing balance
Falling backwards on the seat
Not possible to reach the correct final-position

Instructions 122: Standing up with one leg

Instruction comments – Before

“Have a seat at the middle of this chair. Try to sit stable, the feet flat on the ground with a 90 degree angle at your knees. You may bent your upper body forward to support the movement, but your nose should not be further than your knees. Your hands should be placed at your costal archs.

Try to get up with both legs and keep standing straight for 3 seconds. Now try to get up with your preferable leg, keep standing straight for 3 seconds. Lastly, try to get up with the remaining leg, keep standing straight for 3 seconds.”

Observation

Pay attention to the following sources of error:

- 1) Touching the floor with the non-weight bearing leg
- 2) Losing balance
- 3) Falling backwards on the seat
- 4) Not possible to reach the correct final-position (standing level)

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) “Try it again and concentrate on your balance”
- 2) “Bend your upper body forward for assistance”
- 3) “Stand straight and keep this position for 3 seconds”

Additional information

Chair height:

42 cm chair height till 165 cm body height

47 cm chair height above 165 cm body height

The chair should have a flat sitting surface for a comfortable test performance.

The knee angle should be at least 90°. The higher chair height, the easier the test performance.

Material:

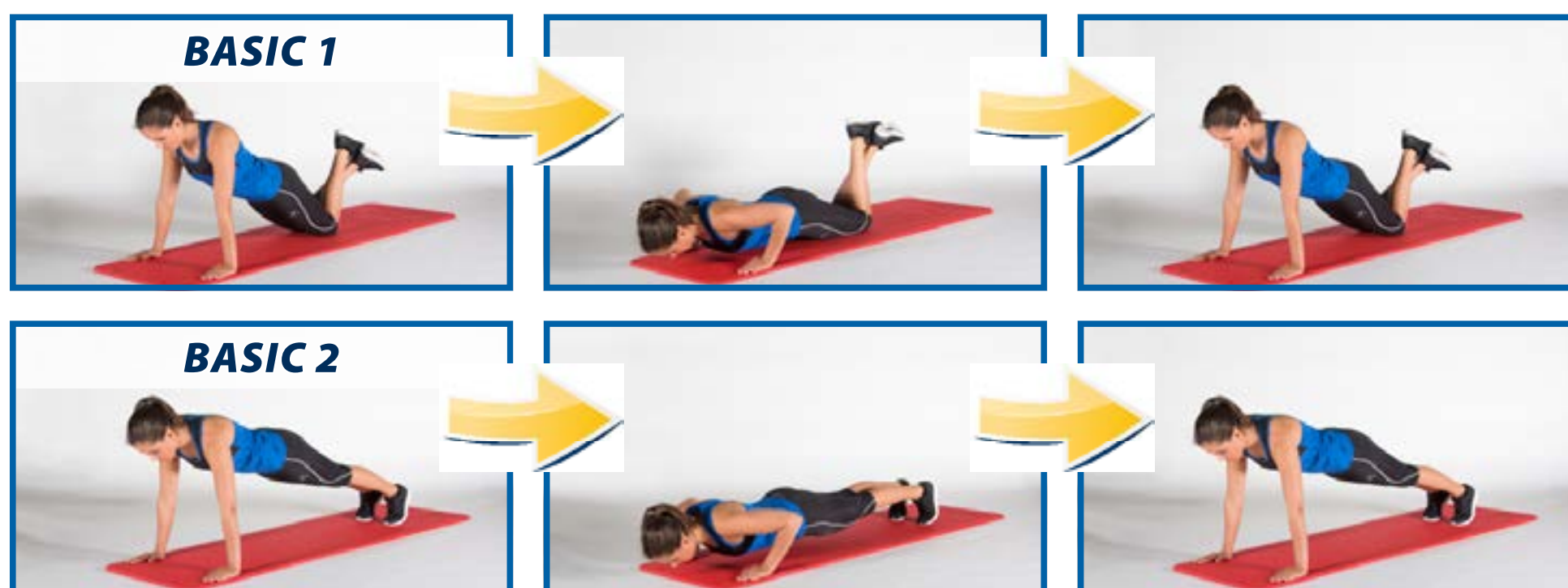
Slim gymnastic mat

Purpose:

The test person has to perform five push ups with crossed lower legs. After five repetitions the legs will be lifted and the test person tries to perform again five normal push-ups.

Considerations:

Only the correct performed push-ups count
The thumbs should be directly under the shoulders

**Sources of error:**

Push-ups are not done correctly (hip drops)
The arms are not straight in top position of the movement
The whole body is not pushed up in one move
The face touches the floor

I Instructions 123: Push-ups – combined version

Instruction comments – Before

"Please go into a prone position on the floor. Your thumbs should be directly under the shoulders. Your knees are steady on the floor. Now lift the upper body from the floor, your knees are still steady, cross the lower legs and try to do 5 modified push-ups.

Lower the body to the floor until the arms are bent to 90° (the nose nearly touches the floor) and then push up again.

I am going to count only the correct performed push-ups.

(If test person repeated five times)

Now lift your knees and perform 5 repetitions without the knees touching the floor."

Observation

Pay attention to the following sources of error:

- 1) Push-ups are not correctly done (hip drops)
- 2) The arms are not straight in top position of the movement (the range of motion for the arms should be between straight and a 90° angle)
- 3) The whole body should be pushed up in one move
- 4) The face touches the floor

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Be stable at the core"
- 2) "Tighten your whole body and push it up at once"
- 3) "Imagine that your body is a wooden board"
- 4) "Your head should be an extension of your upper body"
- 5) "Do not move just with the hips – bend your arms"

Material:

Stopwatch

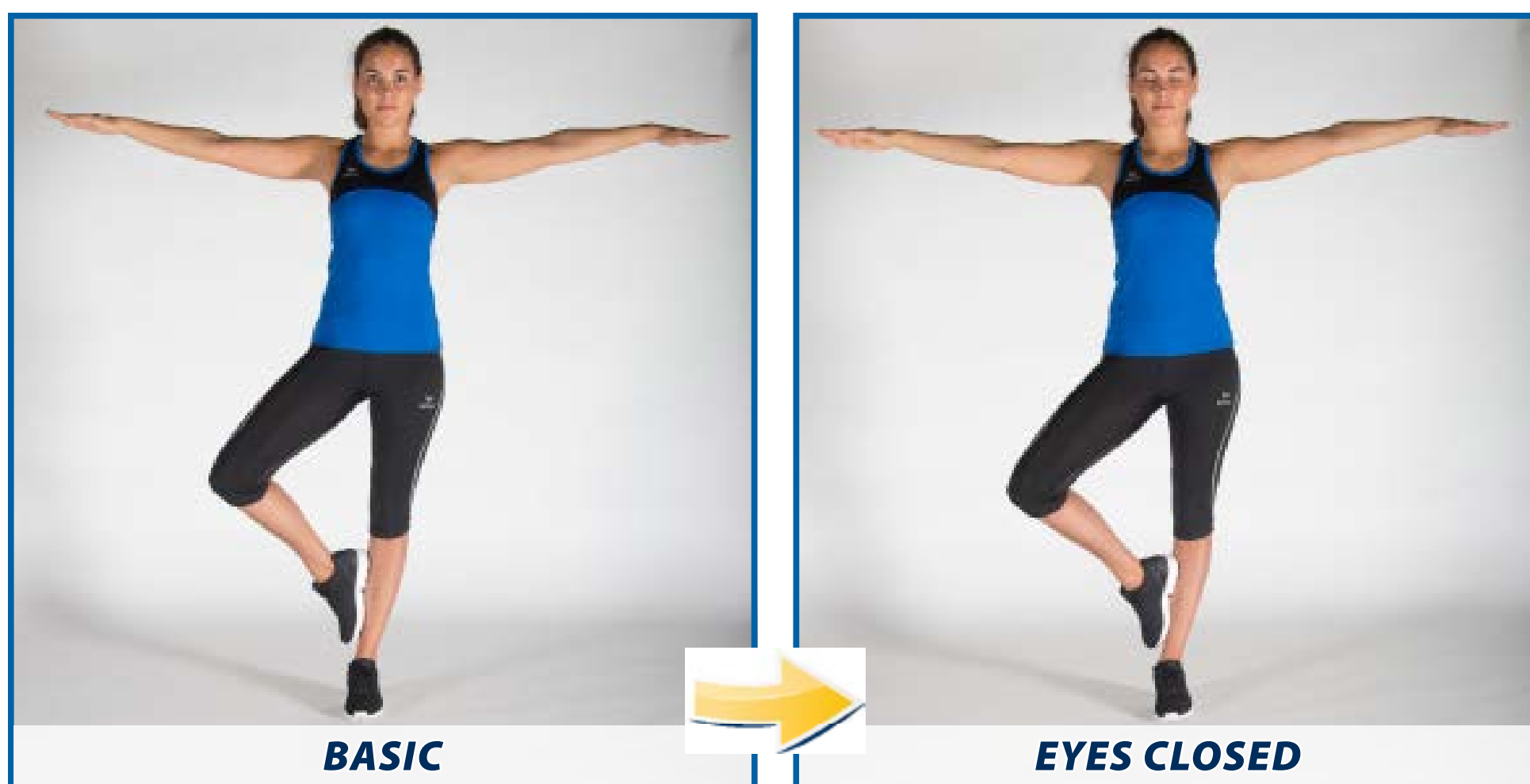
**Purpose:**

The test person has to stand on the preferred leg for 15 seconds. Afterwards the eyes have to be closed and the test person has to stand for another 15 seconds like this.

Considerations:

Keeping balance on one leg

The heel of the lifted leg is placed at the lower part of the standing leg (and the knee is rotated outwards)

**Sources of error:**

Losing balance by touching the ground with the non-weight bearing leg
Opening the eyes before 15 seconds are over

I Instructions 131: Balancing on one leg

Instruction comments – Before

"Stand relaxed on both legs.

Now try to stand on the preferred leg for 15 seconds without losing balance or touching the ground with your second leg. The heel of the lifted leg is touching the lower part of your standing leg and the knee is rotated outwards. Your arms can be used for keeping balance. If you move your feet, the test is over and you have to start again.

(If test person succeeds)

Now try to close your eyes and stand for another 15 seconds without losing the balance."

Observation

Pay attention to the following sources of error:

- 1) Losing balance by touching the ground with the non-weight bearing leg
- 2) Opening the eyes before 15 seconds are over

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Try to fix one point with your eyes to concentrate on the balance"
- 2) "Get into the balance position again"

Material:

No material needed

**Purpose:**

The test person has to repeat the jumping jack movement ten times fluently.

Considerations:

The movement has to be fluent

The movement has to be repeated ten times

**Sources of error:**

Feet do not hit the ground at the same moment the hands clap above the head
In the upper position the palms of the hands do not perform a clap

I Instructions 132: Jumping Jack

Instruction comments – Before

“Stand upright with your feet together and the arms down by the side. Then jump sideways (more than shoulder-width) and raise your arms above the head (the palms touch each other above the head) in one motion. Immediately jump back into the starting position. Repeat this movement 10 times fluently.

I will tell you if it is not a fluent movement.”

Observation

Pay attention to the following sources of error:

- 1) Feet do not hit the ground at the same moment the hands clap above the head
- 2) In the end position palms do not perform a clap

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) “Try to get into the rhythm again”
- 2) “Always clap with your hands above your head”
- 3) “Move your legs and arms at the same time”

Material:

Slim gymnastic mat, sit and reach box, specific measuring tape

**Purpose:**

The finger tips have to reach forward as far as possible.

Considerations:

The feet are facing upwards

The legs have to stay on the ground

The tape to measure is between the feet

The step is placed against a wall or similar to avoid its movement

**Sources of error:**

The position of the hands cannot be held for one to two seconds

The legs are not straight

Instructions 141: Sit and reach

Instruction comments – Before

"Sit on the floor with your legs stretched out straight ahead. The soles of your feet are placed flat against the box. Both knees should be locked and pressed flat on the floor.

Now, reach forward along the measuring line as far as possible with your palms facing downwards and the hands on top of each other or side-by-side.

Your hands should be at the same level during the whole time and the whole movement should be fluent.

Hold that position for one to two seconds while I record the distance."

Observation

Pay attention to the following sources of error:

- 1) The position of the hands cannot be held for one to two seconds
- 2) The legs are not straight

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Reach as far as you can, but you should be able to hold the position"
- 2) "Put your legs down in one straight line"
- 3) "Stretch your legs"

Additional information

Manual for the measuring line: see the material alternatives at the toolbox.

Instead of a box, a turned gymnastic bench placed against a wall can be used for having a flat surface.

Material:

2 m-straightedge, scale, flexible measuring tape

Purpose:

Measuring weight, height and waist circumference to calculate body composition index.

Considerations:

When length is measured the test person looks straight and the heels have to touch the wall

Both feet must be on the scale during the weighing

The test person takes a deep breath, then breathes out and holds the breath to execute the measure of the waist circumference

**Sources of error:**

The waist circumference is not measured as in the description above

Measuring fault at the determination of height and weight

Wrong input into the calculator

| Instruction 151/251: A Body Shape Index (ABSI)

Measuring notes

For the determination of the ABSI you have to measure the body height (in cm XXX), the body weight (in kg XX) and the waist circumference (in cm XX).

During the measure of the waist circumference the test person has to stand upright and the weight should be equally distributed on both legs. The arms should hang naturally at the sides.

Now you feel for the highest point of the ilium and the lowest point of the costal arch. In the middle of these two points you have to attach the measuring tape and pass the measuring tape around the waist parallel to the floor.

The test person should take a deep breath, then breathe out and then hold the breath to execute the measure of the waist circumference. As an additional help the test person can point out where his/her waist is placed.

Body height and body weight should be measured without shoes.

For the calculation 0.5-1.5 kg of the weight (depending on worn clothes) should be subtracted.

Instruction

"Please stand stable on both legs, feet hip width. Arms are hanging beside your body. I will measure your waist circumference now. Please take a deep breath, breathe it all out and hold it for 5 seconds for me to measure."

Additional information

Be careful during the measurement. Some test persons might not feel comfortable.

Tell the test person each step you are doing in advance and ask for permission before each measurement. If the test person still feels uncomfortable, let him/her hold the measuring tape him/herself.

Material:

2 m-straightedge, scale

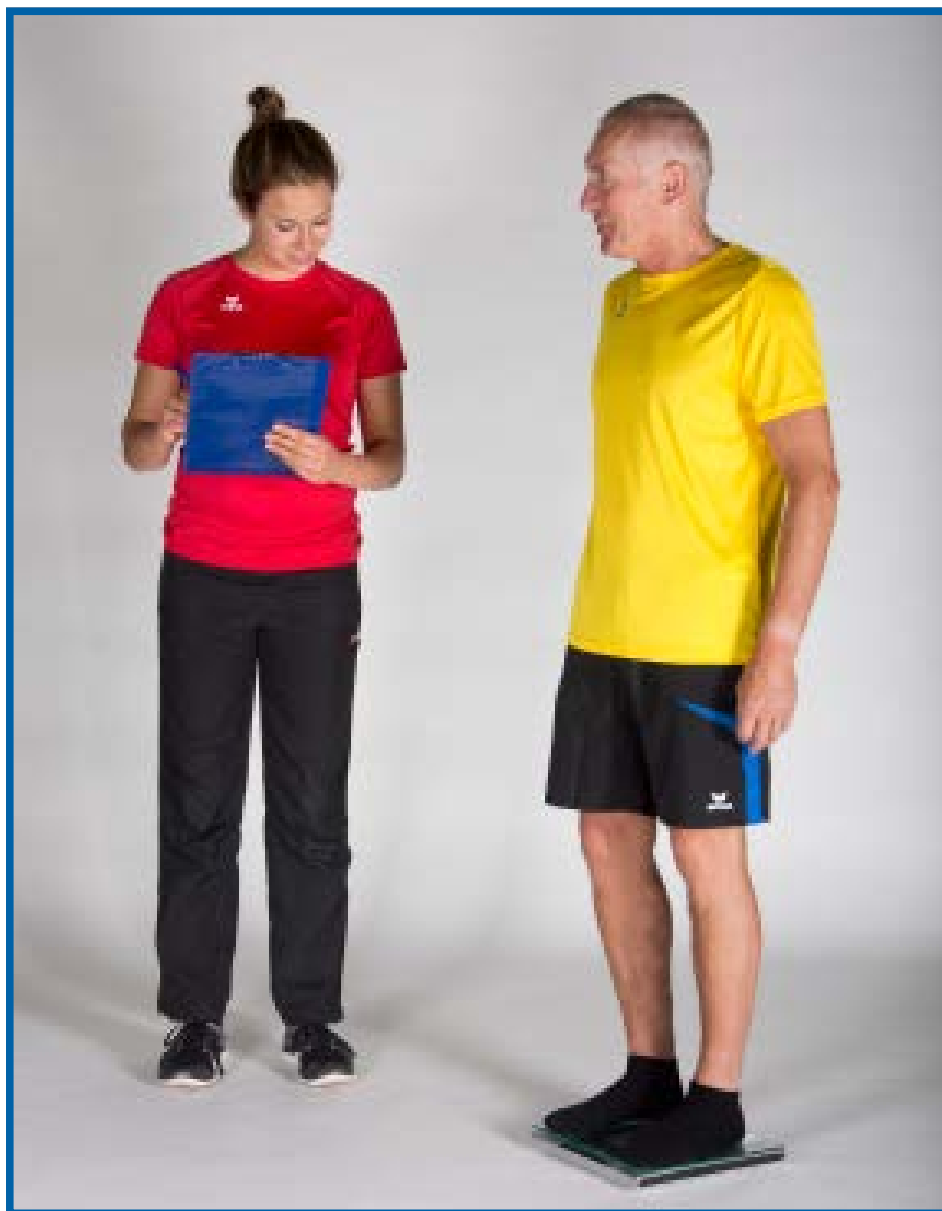
Purpose:

Measuring weight and height to calculate the Body-Mass-Index.

Considerations:

When length is measured the test person looks straight ahead and the heels have to touch the wall

Both feet must be on the scale during the weighing

**Sources of error:**

Mistake during measuring the body weight / height

I Instructions 152/252: Body-Mass-Index (BMI)

Measuring notes

To calculate the BMI you have to measure the body weight (in kg XX) and the body height (in cm XXX).

For the weight measurement the test person should not wear additional clothes (like a jacket).

Body height and body weight should be measured without shoes.

For the calculation 0.5-1.5 kg of the weight (depending on worn clothes) should be subtracted.

Additional information

Be careful during the measurement. Some test persons might not feel comfortable.

Tell the test person each step you are doing in advance and ask for permission before each measurement.

Picture Card

161 & 261 Posture Test



Picture	Description	Score
Perfect Position	No remarks or special observations.	A
	The ears are clearly in front of the shoulder joint.	B
	The lower back has an abnormally large arch. The pelvis has rotated forwards. The knees are hyperextended.	C
	“Forward head position (2)” and “Hollow lower back (3)” occurs together.	D (B+C)
No performance	The test could not be performed due to pain or injury.	E

I Instructions 161/261: Upright standing posture test (USPT)



Instruction comments – Before

"I will observe your standing posture for a few seconds now. The aim of this test is to look for postures that can cause pain in your back or in your neck. For example, do you sit a lot during the day? You know, sitting may evoke a bad posture and increases the risk of neck and back problems. That is what we are trying to see here. Okay, let us start the test. Take a normal standing posture which is comfortable and feels natural to you. Look forward and hold your arms relaxed beside you. Now count backwards from 10 until 0."

Observation

- 1) Observe the test participant while standing to the side of him/her, at least 3 meters away. Try to observe the test person for at least 5 seconds.
- 2) When you are observing, try doing some small talk with the test person, or ask him/her to count backwards from 20 until 0. Try to reassure the test person because this might feel a bit odd for him/her.
- 3) Do not instruct the test person on how he or she needs to stand, don't comment on what you see during the test. Just observe.

Picture Card

211 Step Test



Material:

Step bench (30-40 cm), computer, speaker, computer programme, stopwatch



Purpose:

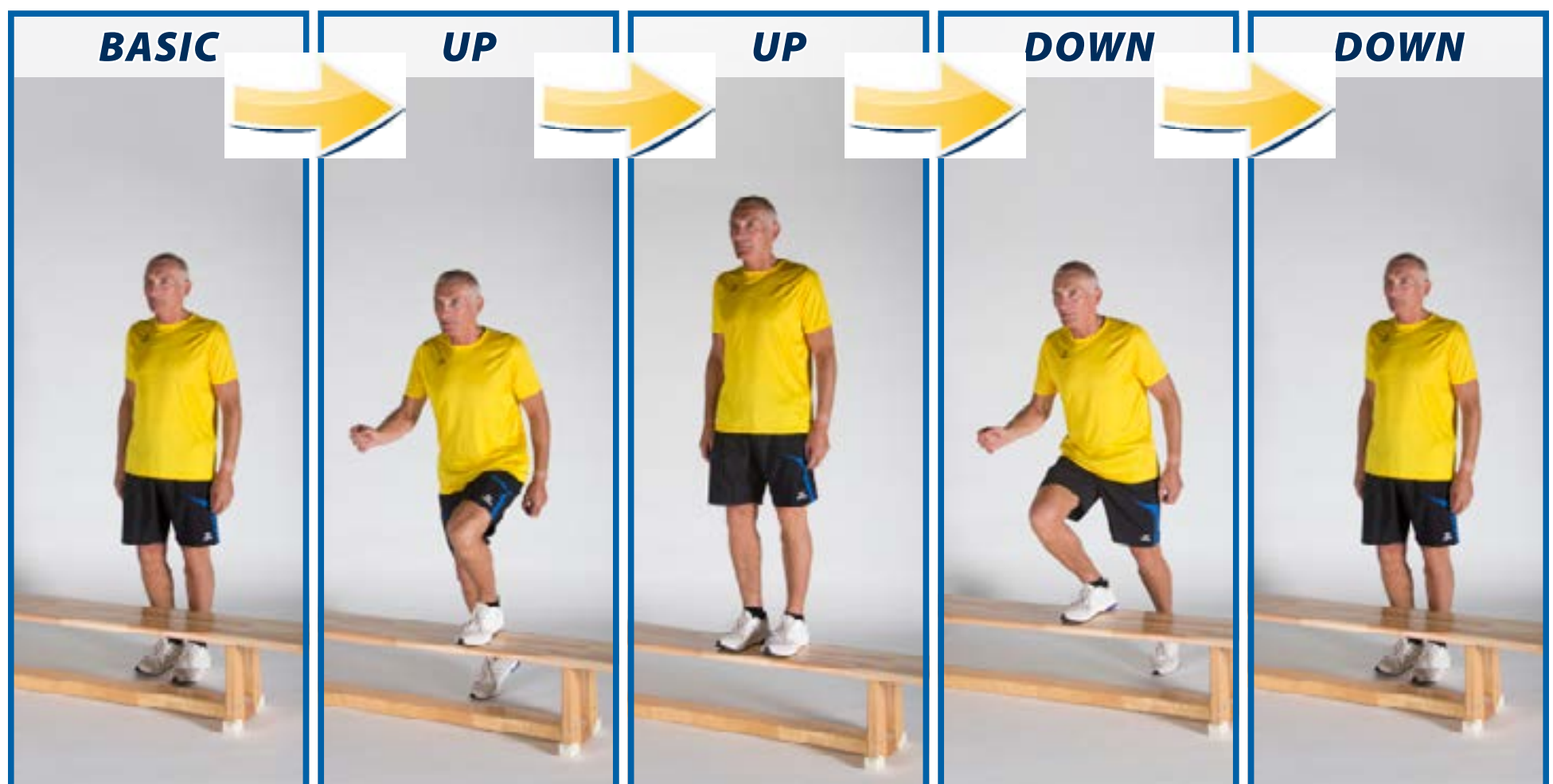
The test person has to follow the rhythm as long as possible.

Considerations:

The test person has to keep the pace

The foot first on the bench is also the foot first back on the ground

The legs on the bench should be fully extended



Sources of error:

The rhythm of the pace is not followed correctly

The weight is not distributed evenly on the entire foot

The legs are not stretched when standing on the bench (towards the end of the test it is ok if the legs are not completely straight as the pace is very quick)

If the test person has a very low ability to coordinate the stepping up and down or if the test person feels dizzy and stops before exhaustion the result is not precise

I Instructions 211: The Danish step test

Instruction comments – Before

"I will start the programme, if you want to, you can practise the step sequence for a quick try beside the step bench.

When you change to the bench, it is important to step on the entire foot and stretch your legs each time. The weight of the body should always be distributed evenly on the foot. Take turns on using the left and the right leg.

The movement should be straight up and down without jumping. The pace will slowly increase so try to keep up as long as you can. If you lose the rhythm, try to get back as fast as possible.

The time will be stopped if you're four steps behind the computer programme.

Now get close to the bench and if you're ready tell me and we'll start with the computer programme.

When you can't follow the rhythm anymore, please give me a sign and I will note your achieved time."

Observation

Pay attention to the following sources of error:

- 1) The rhythm of the pace is not followed correctly
- 2) The weight is not distributed evenly on the entire foot
- 3) The legs are not stretched when standing on the bench (towards the end of the test it is ok if the legs are not completely straight as the pace is very quick)
- 4) If the test person has a very low ability to coordinate the stepping up and down or if the test person feels dizzy and stops before exhaustion the result is not precise

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Catch the rhythm again"
- 2) "Stretch your legs"

Additional information

At the final stage of the test (>5 minutes) it is hard to follow the commands of the computer programme due to the coordination. Be sure the test person just steps up and down in the right pace and do not stop the test if this works.

If the room is big or the distance between computer/tablet and test person is large, you might have to connect a speaker. Make sure before you start that everybody is able to hear the signals. The step sequence is available as a download at the online data platform.

If you test a group of people at the same time, it is important to notice the height of the bench and the time they manage to go on, in order to calculate the correct result afterwards. To calculate the result the weight of the test person is to be included.

| Material:

2 km walking distance outside on a court or inside the gym, stopwatch

| Purpose:

The test person has to walk on the flat for 2 km with the walking technique as fast as possible.

| Considerations:

The test person has to walk 2 km with the walking technique

**| Sources of error:**

Jogging instead of walking
Foot contact with the ground is not maintained

I Instructions 212: 2 km walking test

Instruction comments – Before

“Walk 2 km with the walking technique as fast as possible. Use your arms for swinging.”

Observation

Pay attention to the following sources of error:

- 1) Jogging instead of walking
- 2) Foot contact with the ground is not maintained

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) “Don’t jog”
- 2) “Use your arms for swinging”
- 3) “One foot has to be in contact with the ground the whole time”

Additional information

Optional: pulse control with heart rate monitor. (Pulse should be around 50-70 % of maximum heart rate).

Picture Card

221 Plank Test

Material:

Slim gymnastic mat, flat plank, stopwatch



Purpose:

The test person tries to hold the position as long as possible (maximum of four minutes).

Considerations:

The plank touches the body on three hit points: seat, upper back and head

The elbows are below the shoulders at an angle of 90°

The test person looks down (between the two fists, not forward)



Sources of error:

The head is tilted back in the neck

The neck is placed under the chest

A convex back

The hips, head or shoulders drop

Placing the hands too close together

The buttocks are pushed upwards

I Instructions 221: Plank Test

Instruction comments – Before

"Please lay down on your stomach with both legs fully extended, feet shoulder width apart and with the elbows directly under the shoulder. Lift your (upper) body from the floor so only the forearms and toes are in contact with the ground. Make sure your body creates a straight line from head to toes. Tighten your buttocks and pull your belly button in but keep breathing normally! I am going to place a stick on the back to make sure your back is straight. The stick should touch the back of your head, your upper back and butt. When you are ready, I will start the stopwatch. Try to maintain this position as long as possible."

Observation

Pay attention to the following sources of error:

- 1) Too much arch in lower back
- 2) The head is tilted back in the neck
- 3) The neck is placed under the chest
- 4) A round back, especially the upper part
- 5) The butt protrudes above the knee / rib line out

Use the instruction comments to correct the performance of the test person.

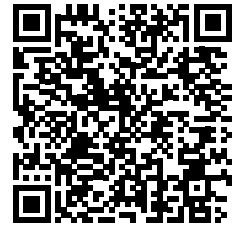
Instruction comments – During

- 1) "Raise your hip"
- 2) "Activate your buttocks and your stomach"
- 3) "Place your elbows a bit to the front, creating some distance between your elbows and your feet"
- 4) "Don't hold your breath"
- 5) "Think of something other than the test, sing a song in your head"

Additional information

It helps to get into good position with your upper body first before going up onto your toes.

It is much more practical to test without the stick, although in that case you have less control over quality.

**Material:**

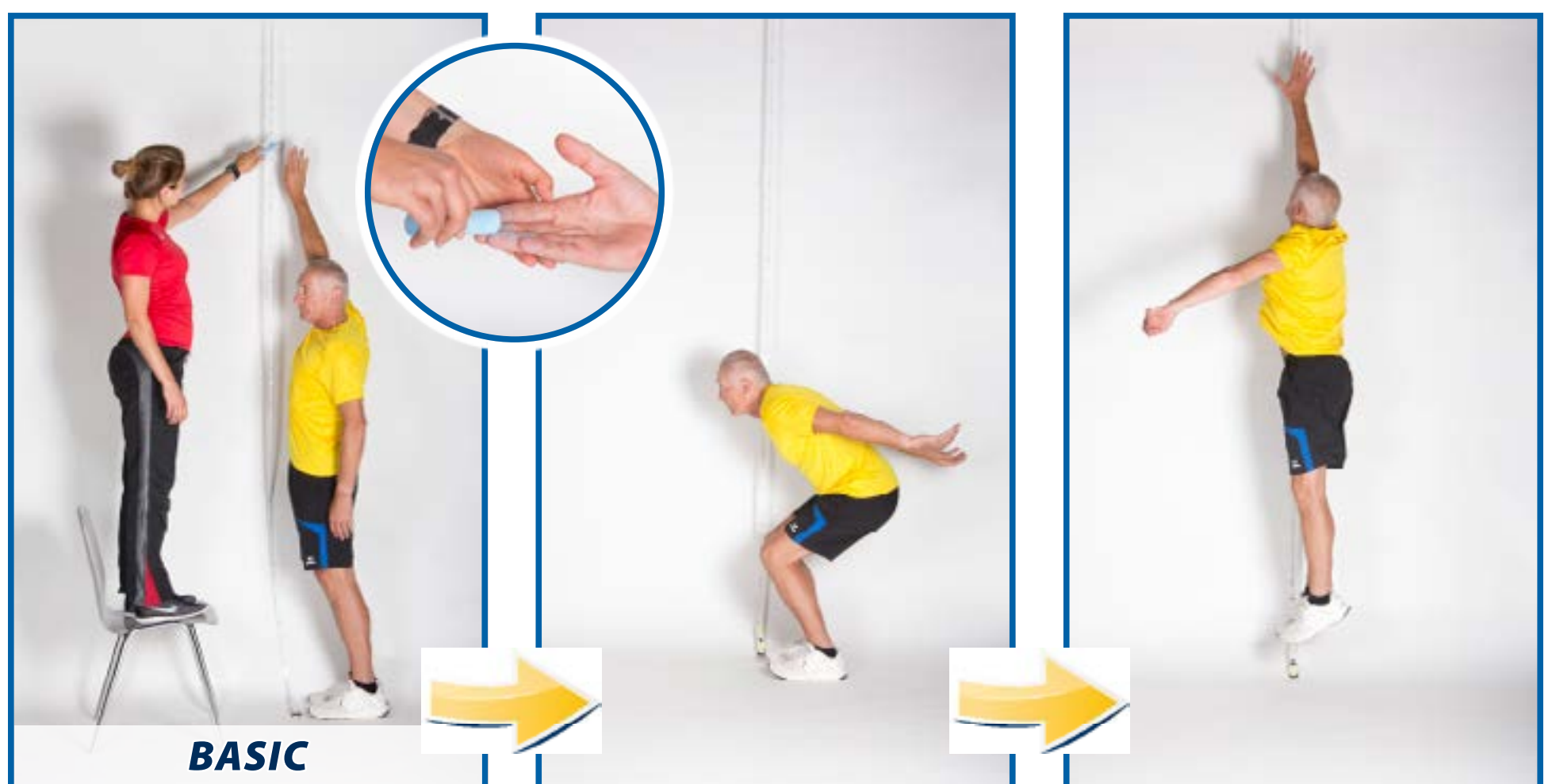
Measuring tape, chalk/magnesia, chair/box or ladder to stand on for measuring

Purpose:

The test person has to jump as high as possible.

Considerations:

- Stretched arm during the first measuring
- Standing sideways against the wall
- Jumping as high as possible
- The wall has to be touched with the fingertips

**Sources of error:**

- Wrong determination of the vertical reach
- Wall is not touched at the highest point while jumping
- Test person takes a run-up with the legs

Instructions 222: Jump and reach

Instruction comments – Before

"I'm going to paint your fingertips with some chalk. Now stand sideways to the wall.

Put the wall-side arm up and mark the highest point with your middle finger. I measure this point.

After that take a one-foot-length step away from the wall and I'm going to paint your fingertips again.

From this position, jump as high as possible. You can use your knees and arms for swinging. Touch the wall with your fingertips at the highest point and I measure this point too.

Now you can have another try."

Observation

Pay attention to the following sources of error:

- 1) Wrong determination of the vertical reach
- 2) Wall is not touched at the highest point while jumping
- 3) Test person takes a run-up with the legs

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Use your arms and knees for swinging"
- 2) "Jump one more time and try to touch the wall at the highest point"
- 3) "Your feet should be stable during the jumping; no steps are allowed"

Additional information

Make sure there is enough space for the test person.

For orientation and simplification during the test use a measuring line (2 meters high) and fix it at the wall at 1 meter height, so the measuring is possible up to 3 meters. For this the usage of a table or a ladder to stand on is the best and safest way.

Material:

Slim gymnastic mat, stopwatch

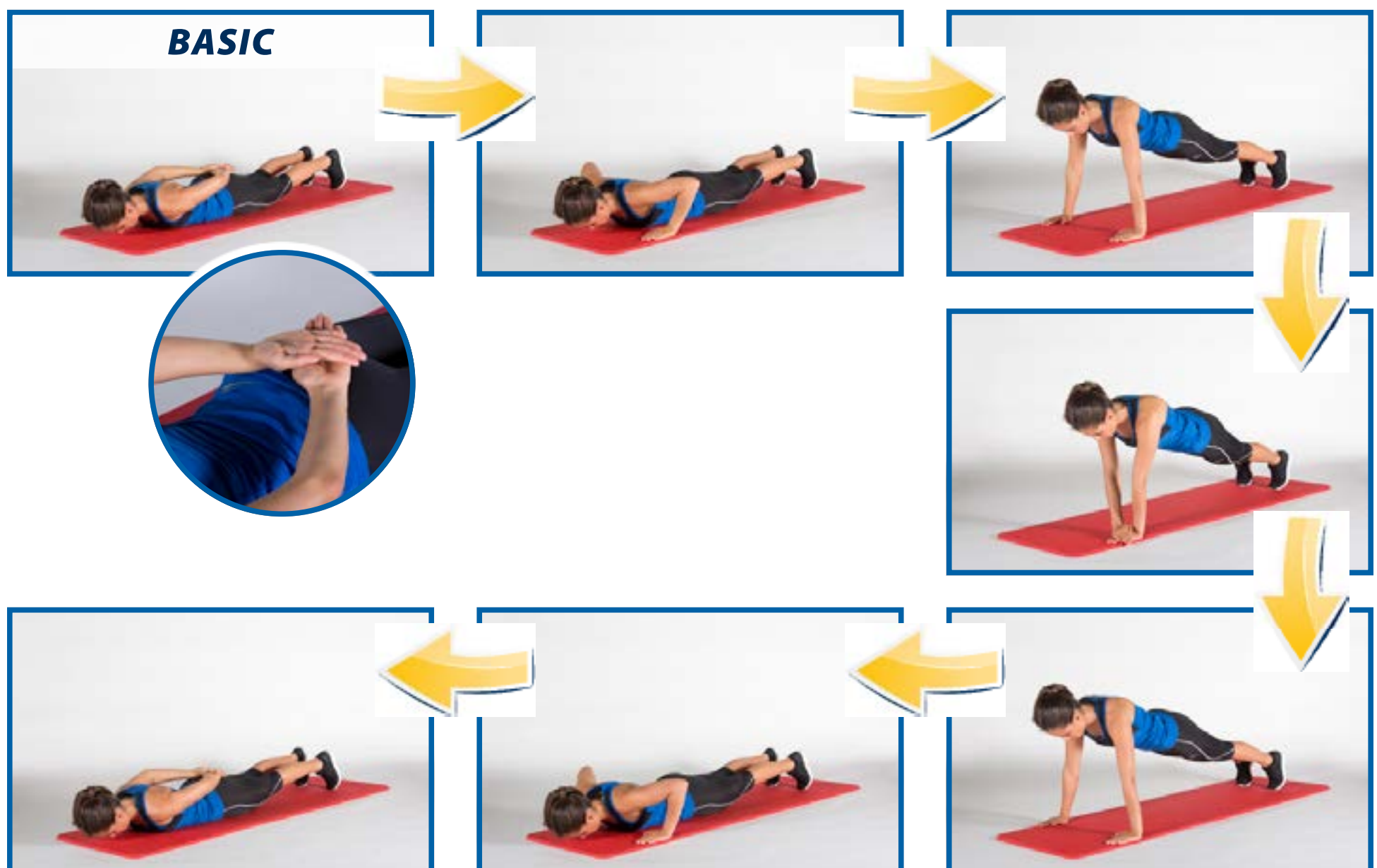
Purpose:

The test person should perform as many push-ups as possible in 40 seconds.

Considerations:

Hands tap on the back in the prone position

Hands are tapping each other



| Sources of error:

Feet and upper body are not pushed up at the same time

Hands do not touch behind the back

In the upright position one hand is not lifted to touch the other hand

Face touches the floor

Instructions 223: Push-ups – special version

Instruction comments – Before

"We will try this special version of a push-up once and then we start the test.

Please lay down on the ground in the abdominal position. Your hands should be touching behind your back. Your feet are spread hip width.

Now detach your hands, put them close to your shoulders and push up your whole body in one move until the arms are stretched and only hands and feet are touching the ground.

In this position one hand (preferable one) should be detached and has to touch your other hand. During this procedure only one hand and the feet are in contact with the ground. The trunk and the feet are stretched.

After that the hand goes back in the push-up position. And you lower your body down to the starting position.

Now go back into the starting position.

If you are ready, we will start with the test and I am going to count the correct performed push-ups. I will announce half time and when the 40 seconds are over."

Observation

Pay attention to the following sources of error:

- 1) Feet and upper body are not pushed up at the same time
- 2) Hands do not touch behind the back
- 3) In the upright position one hand is not lifted to touch the other hand
- 4) Face touches the floor

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Push the whole body at the same time, as if your body is a wooden board"
- 2) "Make a clap behind the back, then you know you touched"
- 3) "Lift one hand and touch the other"

Additional information

Make sure that the orders are clear for the test person. But just try once or twice before the test starts. Otherwise the test person will get tired.

If necessary, repeat the obligatory steps verbally during the performance.

Material:

Balance beam, stopwatch, flat gymnastic mat

**Purpose:**

The test person should keep balance on the beam for 60 seconds without touching the floor with the feet.

Considerations:

- Feet must be straight on the balance beam
- If the feet touch the ground or each other, it counts as a mistake
- If the test person loses balance, time stops
- The time starts when both feet are off the ground
- Both legs are always stretched
- The person is looking forward

**Sources of error:**

- Second leg is touching the ground, the beam or the balancing leg = bottom contact
- Test person leaves the balancing beam with both legs = fall

Instructions 231: Flamingo balance

Instruction comments – Before

“Please stand on this beam with your preferred leg. Stretch the other leg sideways and try to keep the balance. Use your arms for balancing.

During the 60 seconds I am going to count how often you are touching the ground with your unused leg or if your legs are touching.

Be careful not to fall down. If this occurs, I stop the stopwatch until you are on the beam again. But if this occurs more than twice the test will be stopped and you get the lowest result of 30 fails.

If you are ready, I will start the 60 seconds.”

Observation

Pay attention to the following sources of error:

- 1) Second leg is touching the ground, the beam or the balancing leg = bottom contact
- 2) Test person leaves the balancing beam with both legs = fall

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) “Fix one point on the ground or the gym with your eyes for concentrating”
- 2) “Use your arms for balancing”
- 3) “Try to get up again”

Additional information

For safety reasons the beam should have a wider platform for stabilisation.

This test should be performed with shoes.

After two complete falls, the scoring to note is 30 fails. But to motivate and satisfy the test person, he/she can finish the test until 60 seconds are over.

For constructing a beam see the material alternatives at the toolbox.

Material:

6 m-adhesive tape, measuring tape, stopwatch

**Purpose:**

The test person walks backwards as fast as possible on a straight line of 6 m. The toe must touch the heel every step.

Considerations:

- The heel of the first foot touches the toe of the second foot every time
- The feet must be straight on the line
- The test person has three attempts

**Sources of error:**

- The feet do not touch each other
- The test person does not walk on the line

I Instructions 232: Walking backwards

Instruction comments – Before

"Please walk along this 6 m line backwards as fast as possible. You will have three attempts.

First, concentrate on the correct performance and after the safe attempt you can increase your speed.

While walking backwards your toe must touch the heel of the other foot. There may not be a gap between toes and heels.

Both feet should be over the 6 m line, and then the time will be stopped.

If your movement is not correct the test will be stopped and the time and the length will be measured until that point.

With the second and third attempt you can try to increase the speed."

Observation

Pay attention to the following sources of error:

- 1) Feet do not touch each other
- 2) Test person does not walk on the line

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Do it slowly and correctly, your feet should always touch each other"
- 2) "Try it again and slow down, looking down to the line for a correct movement"
- 3) "The first attempt is just for a safe result"

Additional information

A measuring line should always be available. If 6 m are not reached completely, the farthest attempt (in m X,XX) is to be written down.

Always use the first attempt for a safe result.

Material:

Slim gymnastic mat, sit and reach box, specific measuring tape

**Purpose:**

The finger tips have to reach forward as far as possible.

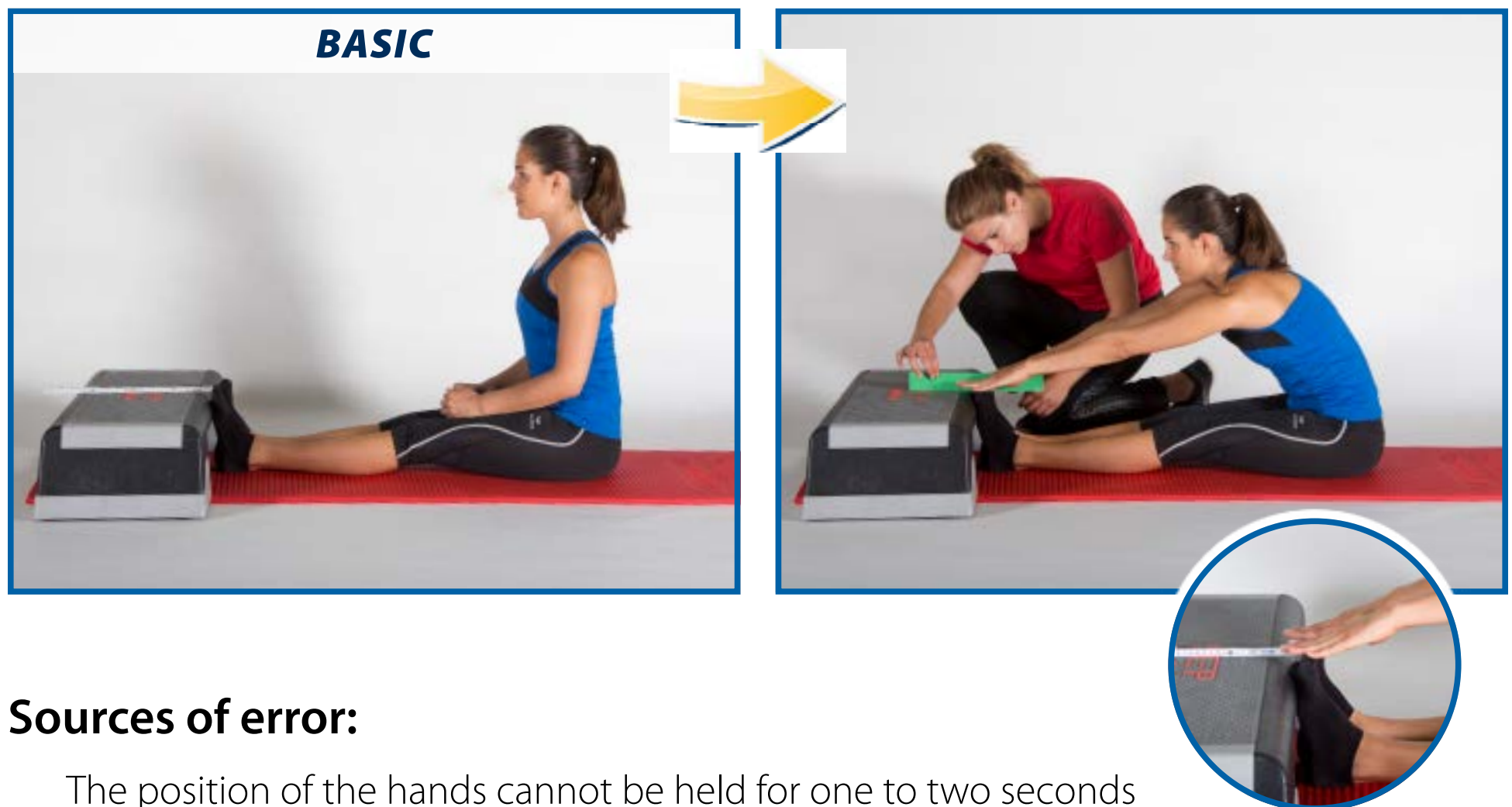
Considerations:

The feet are facing upwards

The legs have to stay on the ground

The tape to measure is between the feet

The step is placed against a wall or similar to avoid its movement

**Sources of error:**

The position of the hands cannot be held for one to two seconds

The legs are not straight

Instructions 241: Sit and reach

Instruction comments – Before

"Sit on the floor with your legs stretched out straight ahead. The soles of your feet are placed flat against the box. Both knees should be locked and pressed flat on the floor.

Now, reach forward along the measuring line as far as possible with your palms facing downwards and the hands on top of each other or side-by-side.

Your hands should be at the same level during the whole time and the whole movement should be fluently.

Hold that position for one to two seconds while I record the distance."

Observation

Pay attention to the following sources of error:

- 1) The position of the hands cannot be held for one to two seconds
- 2) The legs are not straight

Use the instruction comments to correct the performance of the test person.

Instruction comments – During

- 1) "Reach as far as you can, but you should be able to hold the position"
- 2) "Put your legs down in one straight line"
- 3) "Stretch your legs"

Additional information

Manual for the measuring line: see the material alternatives at the toolbox.

Instead of a box, a turned gymnastic bench placed against a wall can be used for having a flat surface.