



EL CALENTAMIENTO DENTRO DE UNA SESIÓN DE FITNESS

**Asignatura: Actividad Físico-Deportiva Saludable
en Centros Deportivos y de Ocio**

Docentes

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CALENTAMIENTO: CUESTIÓN DE GUSTOS










classic warmup

BY DAREBEE @ darebee.com 10 reps each

 neck hilt	 neck rotations	 torso rotations
 chest expansions	 side arm raises	 arm rotations
 hip rotations	 hops on the spot	 side-to-side hops

BOXER | SPEED

DAREBEE BOXING WORKOUT @ darebee.com
LEVEL I 3 sets LEVEL II 4 sets LEVEL III 5 sets REST 2 minutes
no jump rope? hop on the spot

 15sec push-ups	 15sec jab + cross	 30sec jump rope
 15sec push-ups	 15sec hooks	 30sec jump rope
 15sec push-ups	 15sec uppercuts	 30sec jump rope

CALENTAMIENTO: CUESTIÓN DE GUSTOS



Introducen algún estiramiento dinámico

Hacen algún ejercicio específico

Ejercicios multiplanares y movilidad algo más amplia

CALENTAMIENTO: CUESTIÓN DE CONOCIMIENTOS

1. Activación inicial:
precalentamiento



2. Cardio
coordinativo: 4' - 7'



3. SMR: general o
específica



4. Calentamiento
específico



5. Calentamiento
dinámico: yoga flow



6. Compensatorios:
circuito

CALENTAMIENTO: CUESTIÓN DE CONOCIMIENTOS



WARM UP ELEMENTS



A PRE-MOVILIDAD

Movilidad consciente de la preparación anatómica. Cuello, hombros, espalda, caderas, columna, rodilla, tobillo.

1. CUELLO 	2. HOMBROS 	3. ZONA DORSAL 	4. COLUMNA VERTEBRAL (ONDA) 
5. CADERA 	6. CADERA II 	7. RODILLAS 	8. TORILLOS 

B CARDIO (4-7')

Trabajo cardiovascular con sensación de esfuerzo leve-moderado. Regula el impacto o introduce algún elemento coordinativo si es posible.

CINTA 	REMO 	COMBA 	ELÍPTICA 	BICI 
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C SMR (2' MÁXIMO - LIBERACIÓN MIOFASCIAL ELEMENTS)

Máximo 4-5 repeticiones (10-15 segundos por ejercicio) por las zonas que trabajas con más intensidad. Prolonga y aprovecha para ganar movilidad de forma activa.

1. CUADRADO LUMBAR 	2. GLÚTEO - PIRAMIDAL 	3. TENSOR FASCIA LATA 	4. CUADRICEPS 	SÓLEO - GEMELO 
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LIFE IS MOVEMENT. LOVE ELEMENTS | WWW.ELEMENTSSYSTEM.COM 

Premovilidad avanzada:
diferentes ondas

Elevación de la temperatura:
limitar el impacto

Ligera liberación: aliviar las
fascias

CALENTAMIENTO: CUESTIÓN DE CONOCIMIENTOS

elements **WARM UP ELEMENTS** **Elements College**

D CORE
2x10-15 repeticiones de cada ejercicio de manera controlada y segura. Si hay molestias no fuerces y consulta a un ENTRENADOR.
Los plásticos son antideslizantes para movimientos 2x10-15 segundos.

1. CRUNCH MODIFICADO 2. DISOCIACIONES 3. CRUNCH CON ROTACIÓN 4. CAT - CAMEL
5. BIRD - DOG 6. PUENTE DE CADERA 7. PLANCHA FRONTAL 8. PLANCHAS LATERALES

E FLEXIBILIDAD DINÁMICA
Realiza 6 ocasiones de manera fluida, deteniéndote en cada posición 3-5". Hacer 2-3 vueltas completas.

PROGRESIÓN: IZQ - DCHA

F ACTIVACIÓN ESPECÍFICA CON MANCUERNAS
Realiza 10-15 repeticiones de cada ejercicio, con un peso cómodo de manejar (2-8kg habitualmente).

1. CURL + PRESS 2. REMO 3. PRESS HORIZONTAL 4. PULL - OVER

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Activación central: estática y dinámica

Estiramientos dinámicos globales: cuidando la postura

Ejercicios previos específicos

OBJETIVOS Y CONCEPTOS

Mejora de la
dinámica muscular



Romper a sudar sin
elevar demasiado la
temperatura

Prepararse para un
esfuerzo posterior



ESTIRAMIENTO DINÁMICO

1- Los estiramientos dinámicos son movimientos activos donde las articulaciones y los músculos pasan por un rango completo de movimiento. Se pueden usar para ayudar a calentar su cuerpo antes de hacer ejercicio.

2- Los estiramientos dinámicos pueden y deben ser funcionales e imitar el movimiento de la actividad o deporte que estás a punto de realizar.



ESTIRAMIENTO DINÁMICO

El objetivo principal de esta técnica no es otro que dotar al organismo de una mejor movilidad, fluidez y sensaciones previas al entrenamiento. No se debe olvidar que nuestra principal preocupación es aumentar el ROM ofreciendo diferentes ejercicios para que la musculatura se estire de forma "dinámica"



¿ESTIRAMIENTO PREVIO AL ENTRENAMIENTO?



ESTIRAMIENTO DINÁMICO VS ESTÁTICO

“El estiramiento dinámico antes del ejercicio aumentó la fuerza y la producción de potencia, mientras que el estiramiento estático antes del ejercicio disminuyó ambos parámetros”

Disminución de la potencia del cuádriceps (9,5%)

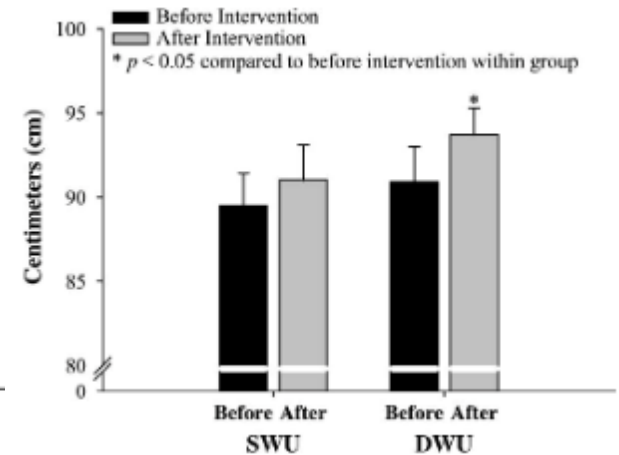
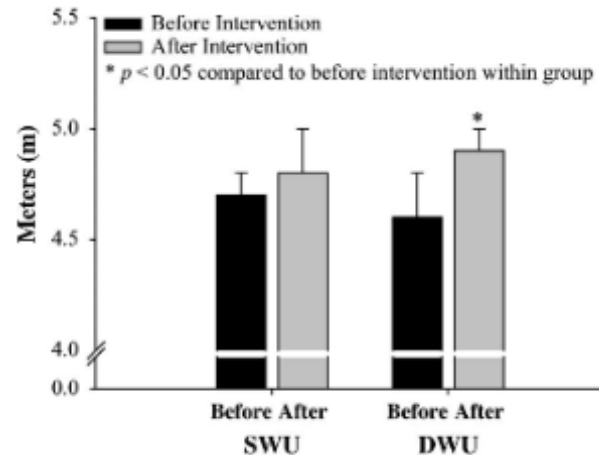
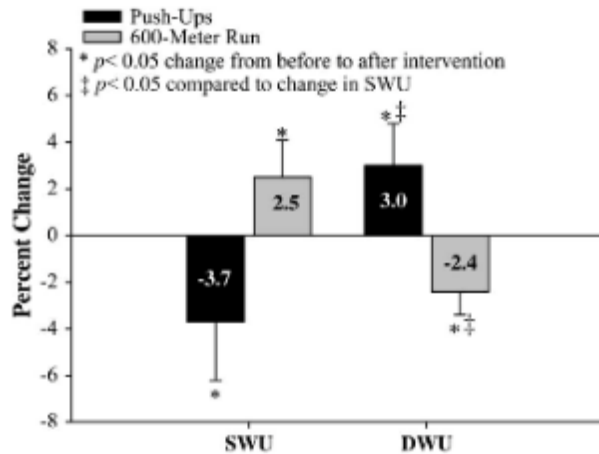


Disminución salto vertical (4,2%)



¿BENEFICIOS DEL ESTIRAMIENTO DINÁMICO?

“Los estudios arrojan resultados muy positivos sobre el rendimiento”



¿BENEFICIOS DEL ESTIRAMIENTO DINÁMICO?

¿En que disciplinas es beneficioso?



Antes de ejercicios de velocidad y potencia



Imprescindibles antes de hacer pesas



Deportes colectivos: reducir lesiones

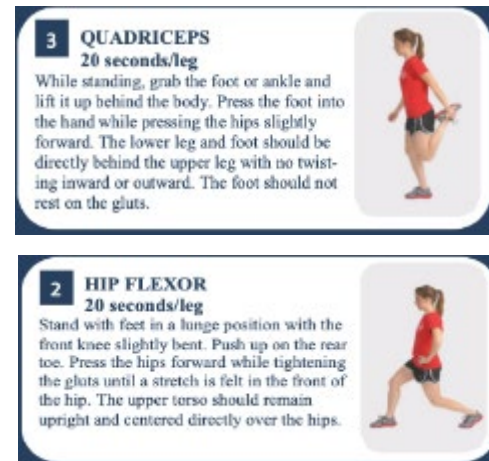


¿BENEFICIOS DEL ESTIRAMIENTO DINÁMICO?

TABLE 1. Stretching exercises.

1. Adductor stretch. In the seated position with an erect spine, touch soles of feet together, bend knees, and allow knees to drop.
2. Modified hurdlers stretch. In a seated position with one leg straight, place the other leg on the inside of the straight leg and reach forward.
3. Hip rotator stretch. In a supine position, cross one leg over the other, forming a figure 4, and flex both hips to or past 90° by pulling on the uncrossed leg.
4. Bent-over toe raise. From a standing position with the heel of one foot slightly in front of the toes of the other foot, dorsiflex front foot towards shin while leaning downward with upper body.
5. Quadriceps stretch. In the standing position with an erect spine, bend one knee and bring heel towards buttocks while holding the foot with one hand.
6. Calf stretch. In a standing position with feet staggered about 2 or 3 feet from a wall, lean against the wall with both hands, keeping the back leg straight and the front leg slightly bent.

5 minutos caminando + 5 minutos estirando pasivo



Fc media: 108 – 118 pulsaciones

¿BENEFICIOS DEL ESTIRAMIENTO DINÁMICO?

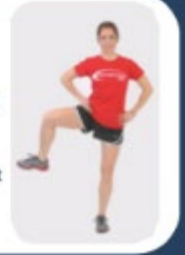
TABLE 2. Dynamic warm-up exercises.

1. High-knee walk. While walking, lift knee towards chest, raise body on toes, and swing alternating arms.
2. Straight-leg march. While walking with both arms extended in front of body, lift one extended leg towards hands then return to starting position before repeating with other leg.
3. Hand walk. With hands and feet on the ground and limbs extended, walk feet towards hands while keeping legs extended then walk hands forward while keeping limbs extended.
4. Lunge walks. Lunge forward with alternating legs while keeping torso vertical.
5. Backward lunge. Move backwards by reaching each leg as far back as possible.
6. High-knee skip. While skipping, emphasize height, high-knee lift, and arm action.
7. Lateral shuffle. Move laterally quickly without crossing feet.
8. Back pedal. While keeping feet under hips, take small steps to move backwards rapidly.
9. Heel-ups. Rapidly kick heels towards buttocks while moving forward.
10. High-knee run. Emphasize knee lift and arm swing while moving forward quickly.

10 minutos de
estiramiento dinámico
variado

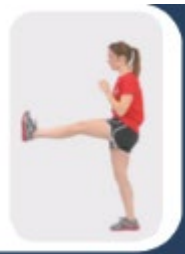
4 HIP ROTATOR WALK 20 seconds

Pretend that there is an obstacle beside you. Facing forward and keeping shoulders and hips square, rotate one leg out at the hip then bring the leg up and over the obstacle placing it back on the ground. Repeat with other leg.



1 STRAIGHT LEG MARCH 20 seconds

Walk with both legs straight. Alternate bringing up each leg as high as possible without jeopardizing form (no bent knees) or leaning backward. The entire body should remain tall and facing forward.



Fc media: 145 – 150
pulsaciones

¿RESULTADOS?

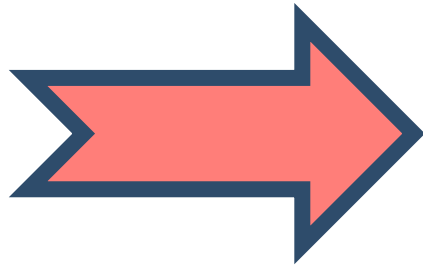
TABLE 3. Fitness performance following 3 different warm-up protocols.†

	SS	DY	DYJ
Vertical jump (cm)	27.6 ± 5.7	29.2 ± <u>6.2*</u>	29.4 ± <u>6.0*</u>
Long jump (cm)	147.6 ± 16.3	149.3 ± <u>16.3</u>	150.4 ± <u>16.1*</u>
Shuttle run (s)	11.3 ± 0.7	11.1 ± <u>0.7*</u>	11.0 ± <u>0.7*</u>
Flexibility (cm)	1.9 ± 8.3	2.4 ± 7.9	1.5 ± 8.7

* $p < 0.05$ vs. SS.

† SS = static stretching; DY = dynamic exercise; DYJ = dynamic exercise plus drop jumps. Data are presented as mean ± *SD*.

REQUISITOS MÍNIMOS PARA EL CALENTAMIENTO



Premovilidad general +
5'-10' de cardio suave



Estiramientos dinámicos:
al menos 5-6
(8 -10 repeticiones)



Calentamiento específico:
ejercicios similares a la
sesión de entreno



ALGUNOS EJEMPLOS: RUNNING

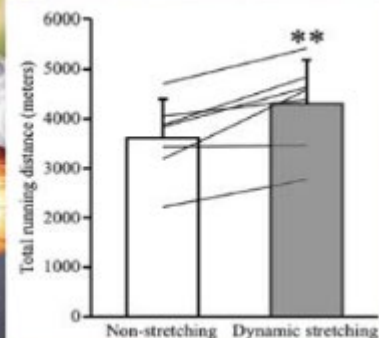
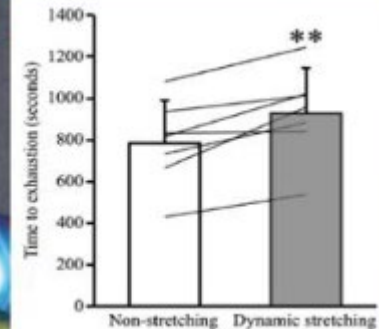
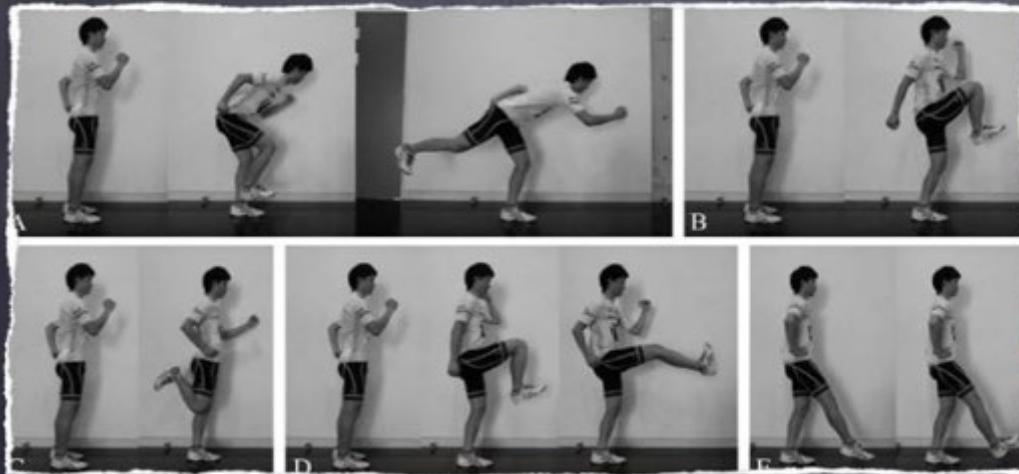


ALGUNOS EJEMPLOS: RUNNING

www.elementssystem.com

Yamaguchi et al. (2015, JSCR)

Estiramiento dinámico y mejora del rendimiento en corredores



- 7 corredores altamente entrenados en media-larga distancia (72.3 ± 3.7 ml/kg/min)
- 1 serie x 10 reps 5 estiramientos dinámicos (total 3'40''): flex-txt cadera y rodilla, ext tobillo.
- Tiempo y distancia al 90%VO₂max (≈ 19.6 km/h)
- Mejora distancia y tiempo hasta el agotamiento sin cambios en parámetros cardiorrespiratorios.

TABLE 1. Comparisons of change in oxygen uptake ($\dot{V}O_2$), blood lactate accumulations, and heart rate between both pretreatments.*

	Rest	Exhaustion
$\dot{V}O_2$ (L·min ⁻¹)		
Nonstretching	0.12 ± 0.12	4.27 ± 0.57
Dynamic stretching	0.21 ± 0.14	4.23 ± 0.56
Lactate (mM·L ⁻¹)		
Nonstretching	1.04 ± 0.33	6.11 ± 1.59
Dynamic stretching	1.07 ± 0.18	6.67 ± 1.79
Heart rate (b·min ⁻¹)		
Nonstretching	71.3 ± 5.4	185.4 ± 9.7
Dynamic stretching	73.3 ± 7.3	185.6 ± 6.2

ALGUNOS EJEMPLOS: ESPECÍFICO CADERA

1 Pigeon Stretch

1. Start with your hands and knees on your yoga mat, and bring your left ankle to your right hand. Your knee should be aligned between your hands if possible.
2. As you do so, slide your right leg straight back, keeping your hips in line with your wrists.
3. Inhale, lift your chest to lengthen your spine.
4. Hold for a few deep breaths and switch legs.

2 Head-to-Knee Stretch

1. Begin seated with your back straight and your legs out in front of you.
2. Bend your left knee outward and bend your knee to bring your left foot to the inside of your right thigh.
3. Draw your torso away from your sit bones. Tilt your pelvis forward to straighten your back.
4. Place your arms above your head and exhale while bending at the hips to bring your chest towards your leg. Rest your hand on your ankle, shin, or foot.
5. Hold for a few breaths and repeat on the other side.

5 HIP FLEXOR STRETCHES

3 Spider-Man Stretch

1. Start by sitting tall on your knees. Bring your right knee forward, bending at the hip. Your left knee and toes should be touching the floor.
2. Step forward with your front foot and bring both hands to the ground beside it.
3. Relax your back leg, bring your left knee to the ground.
4. Hold for a few breaths as you drive your left hip towards the ground. Hold for a few breaths.
5. Bring your right hand to the right of your right foot and shift your weight to sit on your left thigh. Your right leg should straighten out as you do so. Hold for a few breaths.
6. Return to the main position and twist your chest towards your right knee. Hold for a few breaths.
7. If you'd like, repeat the motion twisting away from your knees.
8. Return to the starting position and repeat on the other side.

Happy Baby Yoga Pose

1. Lie on your mat and pull your knees to your chest.
2. Place your hands on outside of your feet, opening your knees and hips wide.
3. Press your feet into hands while simultaneously pulling down on your feet to create resistance.
4. Breathe deeply and hold for 30 seconds or so.

5 Frog Pose

1. Get down on all fours, with your palms on the floor and your knees on a yoga mat.
2. Slowly widen your knees until you feel a comfortable stretch in your inner thighs, keeping the inside of each calf and foot in contact with the floor. Make sure to keep your ankles in line with your knees and flex your knees.
3. Lower down to your forearms and keep your back straight. Look forward.
4. Hold for 30 seconds, breathing deeply.

<https://dailyhealthpost.com/hip-flexor-stretches/> ©2017 DAILYHEALTHPOST.COM

Estiramiento dinámico
previo a un día de pierna

Sesión de recuperación:
30' cardio suave + esta
tabla

Incluirla al final del
calentamiento antes de un
WOD

ALGUNOS EJEMPLOS: DEPORTES COLECTIVOS

1. THE 'SIX'-METER SHUTTLE-RUN

BENEFITS FOR SPEED, ENDURANCE AND CORE STABILITY

Measure out a distance of approximately 6 m, with 1 m offset markings. Running at three-quarter pace, touch each three and touch, progressing each side through by 1 m to a maximum of 6 m for the left side, about double for. Alternate your leading foot at each end of each shuttle. Maximum distance covered = 60 m per set. Perform two sets, before moving onto the next exercise.



3. THE BUTT-SMART 'SIX'

BENEFITS FOR GLUTES, LOWER BACK, HAMSTRINGS AND CORE STRENGTH AND STABILITY

Get into a starting position with arms tucked as close to the chest. Place a cushion next to your lower leg in order to support a dynamic position with your knees. Tighten your glutes and hamstrings and do not lean forward in the hip. Bring your feet off at a slight frequency, gradually but progressively increase the left shoulder movement as long as possible. When you can no longer make your left shin vertical, control down to a neutral position. Then repeat back up to where you can tighten the hamstrings and glutes to achieve 10 and bring ground back to the start position. Repeat six times.



5. THE 'SIX'-BOK LUNGE

BENEFITS FOR THE FEET, KNEE AND ANKLE STRENGTH AND STABILITY

Stand upright with the hands held behind the head. With your feet and back straight, lunge forward with the left leg. At the end of the lunge, push up with the back left leg, and bring your back right leg through while lifting the right knee. Hold this position briefly and with control, reverse the movement back to the start. Alternate between left and right leading leg. Perform 10 reps, 3 on each leg.



2. THE 'SIX'-POINT LUNGE

BENEFITS FOR POSTURE, CORE STRENGTH AND STABILITY

Starting in the middle, with hands on hips, and leading with your left foot, lunge towards the 12 position. After down and hold the position, slowly then push back to the start. Repeat lunge to the 12 position, after down, hold briefly then push back. Continue the pattern up to the 12 position with the left foot leading. Repeat shoulders and hips square to the foot. Once completed with the left foot, then swap with the right foot, and follow the 12 - 10 movement pattern. Repeat the back foot or non-leading foot position at least three times.

LEFT LEG LEAD 01-12 12-10 10-12 12-10



4. THE 'SIX'-ON-A-SIDE PUSH-UP AND TWIST

BENEFITS FOR SHOULDER, SPINAL CONTROL AND CORE STRENGTH AND STABILITY

Complete a push-up with the hands placed slightly wider than the shoulders. Maintain a straight body, without arching or rounding in the lower back. At the end of the push-up, balance on one arm, head and rotate the upper body and leading arm slowly away from the supported side with the hand pointing towards the sky. Alternate between left and right sides. Perform 10 reps, 5 on each side.



6. 'SIX' DYNAMIC REACHES

BENEFITS FOR SHOULDERS AND CORE STRENGTH, CORE STABILITY, STABILITY, BALANCE AND CONTROL

Balance on the left leg while keeping the left leg tightly bent at the knee. Lean slowly forward, watching as far as you can with both arms, and not moving backwards when touching the ground at all times. At this point bring the leading leg up to form a straight line with the upper body, when lowering the leg square to the ground. Hold this position for six seconds. Alternate left and right leg between reps. Perform 8 reps, 3 on each side.



ALGUNOS EJEMPLOS: ESTIRAMIENTOS TRX

UPPER BODY	<p>01 TRX Chest Stretch Increases upper body mobility and improves flexibility of the shoulders and wrists. Tip: To stretch, take longer and forward of feet rather than square feet.</p> <p>FACE AWAY Head to toe</p> <p>PERFORM ON BOTH SIDES</p>	<p>02 TRX Upper Back Stretch Helps release tension between shoulder blades. Tip: Bring left and right to chest while feet are on square feet.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>03 TRX Shoulders to Calf Stretch Increases shoulder and calf flexibility, opens hip flexors and calves. Tip: Feet should be evenly pulled apart and heel lifted. Breathe and stretch by pulling one foot into ground.</p> <p>FACE AWAY Head to toe</p> <p>PERFORM ON BOTH SIDES</p>	<p>04 TRX Standing Neck Stretch Increases neck mobility, opens up back and shoulders. Tip: Footed to stretch each.</p> <p>PERFORM TO TRX</p> <p>PERFORM ON BOTH SIDES</p>
	<p>05 TRX Wide Stance Hip Hinge Provides tension to lower back. Tips: gentle and slow tempo. Tip: To stretch, sit slightly forward of feet and lower hips to floor.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>06 TRX Offset Hip Hinge Helps release tension, increases stretch in hamstring as well as lower back. Tips: one foot only.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>07 TRX Seated Figure-4 Stretch Increases deep hip mobility, good for improving hip stability and better lower body performance. Tip: To stretch, raise feet to grounded feet.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>08 TRX Hamstring Stretch Stretch from calves, hamstrings, and lower back. Tip: Stretch deeper each time you stretch.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>
	<p>09 TRX Lower Back Stretch with Rotation Increases flexibility in lower back and hamstrings. Tip: For maximum stretch, make up to an overhead reach using.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>10 TRX Cervical Stretch Helps ease tightness in lower hip flexors and neck. Tip: Pull your head forward and separate arms to get maximum neck flexion stretch.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>11 TRX Long Torso Twist Great for deep stretch in hips and back. Tip: Focus on leg and torso to rotate back. Stretch can be done on carpet.</p> <p>FACE TRX</p> <p>PERFORM ON BOTH SIDES</p>	<p>12 TRX Suspended Hip Flexor and Cervical Stretch Increases thigh, hamstring, hip flexor, and neck stretch for improved posture. Tip: Fully release locked joint and lower shoulders.</p> <p>FACE AWAY Head to toe</p> <p>PERFORM ON BOTH SIDES</p>
	CORE			

ALGUNOS EJEMPLOS: SUPERBAND

1.



2.



3.



4.



5.



6.





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