

CORE STABILITY

PROGRESSIONS

CORE STABILITY 101

The two main functions of the trunk have to do with stabilization and force application. Within these two main buckets we, there is a distribution between force and stabilization both locally and globally.

FUNCTION OF THE TRUNK

Stabilisation



Local System



Global System

Force application



Generate



Transfer


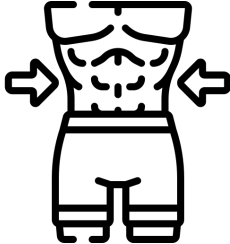



Control



CORE STABILITY 101

A well-planned resistance training programme prepares the athlete for the demands of the sport and reduces injury risks through an understanding of sport-specific movements and its corresponding injury profile

Force application of the trunk		
Generation	Transfer	Control
<ul style="list-style-type: none">• Rotation• Block Rotation• Flexion & Extension• Lateral Flexion & Extension	<ul style="list-style-type: none">• Proximal to distal• Lower to upper body• Posterior to anterior• Medial to lateral	<ul style="list-style-type: none">• Postural control• Resist deformation to external forces• Resist deformation to internal forces
		

CORE STABILITY MATRIX



Progression

Movement category	Anterior (Anti-extension)	Posterior (Anti-flexion)	Lateral (Anti-lateral flexion)	Anti-rotation
Foundation	Deadbug	Superman - hold	Modified side plank (knees on ground)	Quadruped single arm flexion
+	Single leg lowers	Superman - alt limb extension	Modified side plank w/ straight arm	Quadruped single leg extension
Development	Front plank	Glute bridge	Side plank	Bird dog
+	Front plank w/ straight arm	Single leg glute bridge	Side plank w/ straight arm	Bird dog (high plank)
Performance	Swissball roll out (Knees on ground)	Back extension (45 degree bench)	Copenhagen plank (bent knee)	Kneeling palloff press
+	Swissball roll out (Legs straighten)	Back extension (Glute Ham Device)	Copenhagen plank (straight leg)	Kneeling chop and lift

CORE STABILITY COMPETENCY CHECKLIST

FRONT PLANK

- ☐ Ensure elbows are aligned below shoulders
- ☐ Maintain a neutral spine and activate glutes
- ☐ Ensure chin is tucked
- ☐ Maintain regularly breathing pattern

GLUTE BRIDGE

- ☐ Lay supine with knees bent
- ☐ Lift hips upwards till hips are in line with the shoulders and knees
- ☐ Use the heels to initiate the movement (instead of having feet flat to the ground)
- ☐ Maintain a neutral spine

SIDE PLANK




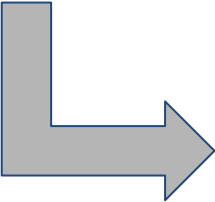
- ☐ Ensure elbows are aligned below shoulders
- ☐ Maintain a neutral spine and activate glutes
- ☐ Ensure head is inline with body
- ☐ Maintain regularly breathing pattern

BIRD DOG

- ☐ Ensure hands and knees are aligned below shoulders and hips respectively
- ☐ Extend opposite arm and leg inline to the body
- ☐ Maintain a neutral spine
- ☐ Ensure chin is tucked

COMPLEMENTARY: FOUNDATIONAL MOVEMENT

Foundational movements promote body control and limb stability, while establishing good movement patterns. This serves as a basic introduction to resistance training to 6 - 9 year old juniors

Basic Movement		
Body control	Locomotor skills	Object control
<ul style="list-style-type: none">• Tumbling• Rolling• Crawling• Climbing	<ul style="list-style-type: none">• Run• Jump• Hop• Skip	<ul style="list-style-type: none">• Throwing• Catching• Hitting• Kicking
		
		
<p>► Having excellent movement quality and competency in general movement assures more complex specific movements may be performed with ease in training and competition.</p>		

COMPLEMENTARY: FOUNDATIONAL MOVEMENTS



Progression



Movement category	Crawling / Animal movements	Rolling / Tumbling
Foundation	<u>Frog</u>	<u>Pencil roll</u>
+	<i>Duck walk</i>	<i>Partner pencil roll</i>
Development	<u>Bear crawl</u>	<u>Log roll upper / lower</u>
+	<i>Lizard</i>	
Performance	<u>Crab</u>	<u>Forward roll</u>
+	<i>Scorpion</i>	<i>Back roll</i>

REFERENCES

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