

ATHLETE PHOTO · 12 SEP 2026

Sample Athlete #7

Basketball · Guard · Sportoteam U11

DATE OF BIRTH / AGE	04 May 2016 · 10 years
HEIGHT / WEIGHT	145 cm · 38.5 kg
DOMINANT HAND / FOOT	Right / Right
TEST DATE	12 Sep 2026 · Saturday 10:00–10:45
PREVIOUS TEST	First measurement — baseline established
REFERENCE	Age 9–10 male norms (Eurofit + youth athlete literature)
CAPTURE	Single camera · 60 fps · height calibration

OVERALL ASSESSMENT · 8 DOMAINS

VERTICAL JUMP

22.8 cm

CMJ · norm 19–24 monitor

MONITOR

HORIZONTAL POWER

152 cm

SLJ · norm ≥ 150 good

GOOD

SPRINT

2.18 s

10 m · norm ≤ 2.20 good

GOOD

AGILITY

5.74 s

5-10-5 · norm ≤ 5.90 good

GOOD

BILATERAL SYMMETRY

7.6%

SLH left–right difference

MONITOR

BALANCE

7.8%

Right foot anterior–posterior sway

MONITOR

MOBILITY

33°

Right ankle dorsiflexion

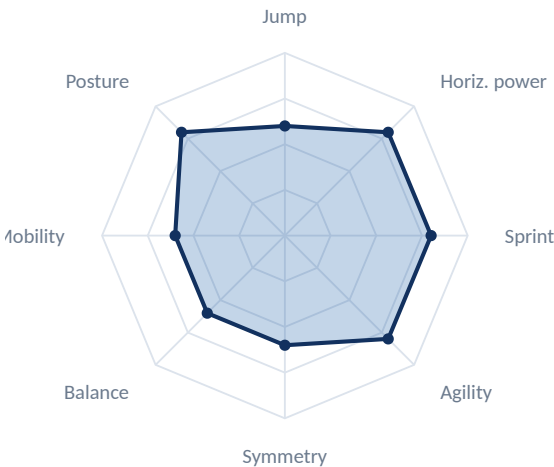
MONITOR

POSTURE

2.4°

Shoulder tilt

GOOD



PERFORMANCE PROFILE

Band score of each domain against the age norm (1 priority → 5 superior). As this is the first measurement there is no comparison line; this profile is the athlete's own baseline. Speed and horizontal power are good for age; vertical jump, right-side symmetry, balance and right ankle mobility are in the monitoring band.

12 Sep 2026 · first measurement

13

TESTS APPLIED · AGE-APPROPRIATE SET

9–10

COMPARED WITH AGE NORM (MALE)

4 domains

IN THE GOOD BAND

4 domains

IN THE MONITORING BAND

0 domains

DEVELOP / PRIORITY

Right

WEAK SIDE IN SYMMETRY, BALANCE AND MOBILITY

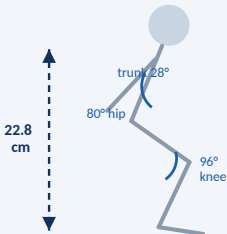
One-sentence summary. The athlete is fast and agile compared with peers; vertical jump is still in the monitoring band and in three separate tests the right side lags behind the left (single-leg hop, balance, ankle mobility). At age 10 this difference is not an "injury" but a development area that can be closed with game-based coordination work; it should be re-measured with the same set after 12 weeks.



1 • JUMP AND EXPLOSIVE POWER

Vertical and Horizontal Jump

Height is calculated from flight time ($h = g \cdot t^2 / 8$). Horizontal distance is calibrated from body height (145 cm). Bands refer to age 9–10 male norms; adult thresholds were not used.



CMJ • DEEPEST COUNTERMOVEMENT

Vertical jump family CMJ • SJ • ABALAKOV

All three tests in the same morning, 3 attempts each, best value taken. Countermovement coordination is still developing in children; a small countermovement was detected in the SJ and the result was accepted as valid.

TEST	HEIGHT	FLIGHT	AGE 9–10 MALE NORM	STATUS
CMJ (hands on hips)	22.8 cm	431 ms	good ≥ 24 • monitor 19–24	MONITOR
Squat Jump (SJ)	20.1 cm	405 ms	good ≥ 21 • monitor 17–21	MONITOR
Abalakov (arms free)	26.4 cm	464 ms	good ≥ 27 • monitor 22–27	MONITOR

ECCENTRIC UTILISATION RATIO

1.13

CMJ + SJ. The stretch-shortening cycle is used well for age (reference 1.05–1.20, age independent).

ARM CONTRIBUTION

+3.6 cm

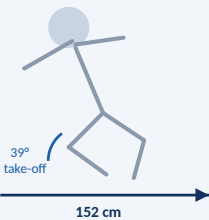
Abalakov – CMJ = 16%. Arm-leg coordination is in the normal range (10–18%).

COUNTERMOVEMENT DEPTH

96°

Knee angle at the deepest point. 90–105° is typical in children; no technical issue.

Reading. All three vertical jumps are in the Monitor band of the age norm and are internally consistent (ratio and arm contribution normal). This table does not mean "weak", it means "not yet developed": at age 10 vertical jump increases by 2–3 cm per year through growth and neuromuscular maturation. The priority is jump-landing technical games, not resistance training.



SLJ • TAKE-OFF

Horizontal jump SLJ • STANDING LONG JUMP

MEASURE	VALUE	AGE 9–10 MALE NORM	STATUS
Jump distance	152 cm	superior ≥ 165 • good 150–165 • monitor 135–150	GOOD
Flight time	418 ms		– INFO
Distance / height	1.05	good ≥ 1.00 (age independent)	GOOD
Take-off angle	39°	38–45°	GOOD

Reading. Horizontal power is in the Good band of the age norm and one band ahead of the vertical jump. The take-off angle is in the optimal range and the arms contribute well to the jump. A positive sign for first-step and horizontal explosiveness in basketball.



2 • BILATERAL SYMMETRY AND BALANCE

Left-Right Balance and Control

Single-leg tests were captured separately for left and right. LSI = weak side ÷ strong side; thresholds are age independent (10% monitor, 15% priority). A low-volume set was used at age 10: only SLH and Flamingo.

RIGHT LEFT



SLH • RIGHT LEG LANDING

Single-leg hop SLH • LEFT / RIGHT

TEST	LEFT	RIGHT	LSI	DIFF.	STATUS
Single Leg Hop (SLH)	118 cm	109 cm	92.4%	7.6%	MONITOR
Distance / height	0.81	0.75	—	—	INFO
Landing knee valgus	3°	9°	—	6° diff.	MONITOR
Result	—	—	92.4%	7.6%	Right weaker

DIRECTIONAL CONSISTENCY

3 / 3

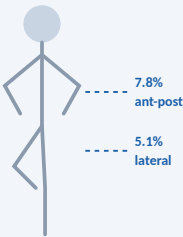
In hop, balance and ankle mobility the weak side is always the right. Not coincidence; coordination-focused work is required.

AGE CONTEXT

7.6%

At age 10 differences of 5–10% are common; above 10% is monitored if it persists. Currently below the monitoring threshold.

Reading. The right leg is 7.6% behind and the knee collapses inward by 9° on landing (3° on the left). At this age this picture is not structural but a matter of neuromuscular control: it is expected to close within 12 weeks with single-leg landing games, lateral hops and "silent landing" drills.



FLAMINGO • RIGHT FOOT • 20 S

Single-leg balance FLAMINGO • 20 S • HANDS ON HIPS

Sway is the standard deviation of the hip centre ÷ trunk height × 100. As no child norm exists, the bands are a broad in-report reference (good ≤ 6% · monitor 6–9 · develop 9–13); the left-right difference is meaningful regardless of age.

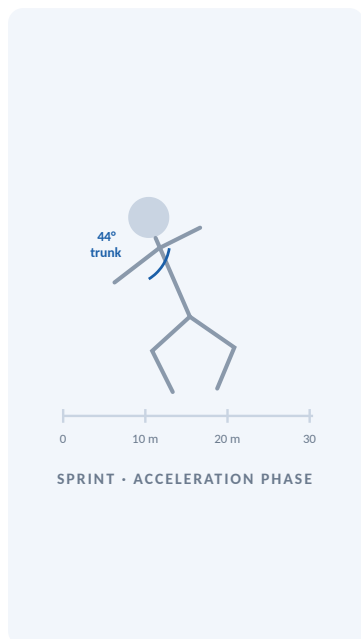
MEASURE	LEFT	RIGHT	DIFF.	STATUS
Anterior-posterior sway	5.2%	7.8%	+50%	MONITOR
Lateral sway	4.0%	5.1%	+28%	GOOD
Sway path	214%	268%	+25%	MONITOR
Stable time	20.0 s	18.4 s	1 correction on the right	MONITOR

Reading. Balance on the left foot is good; on the right foot anterior-posterior sway is 50% larger and there is one correction step. Anterior-posterior sway depends on the ankle strategy — it points in the same direction as the right ankle mobility restriction on the next page.

3 • SPRINT AND CHANGE OF DIRECTION

Speed and Agility

Times were calculated by frame marking (60 fps → ±17 ms). At age 10 the 30 m sprint and the 505 were not performed; 10–20 m and two agility tests are sufficient.



Linear sprint 10 • 20 M

DISTANCE	TIMESPLIT	SPLIT SPEED	AGE 9–10 MALE NORM STATUS
0–10 m	2.18 _s 2.18	16.5 km/h	superior ≤ 2.05 • good 2.05–2.20 • monitor 2.20–2.35 GOOD
0–20 m	3.96 _s 1.78	20.2 km/h	superior ≤ 3.75 • good 3.75–4.00 • monitor 4.00–4.30 GOOD

ESTIMATED MAX SPEED

20.2 km/h

From the 10–20 m split. 19–21 km/h is the typical upper range for 10-year-old boys.

ACCELERATION PROFILE

55%

Share of the first 10 m within the 20 m time. Start is strong; the desired profile for basketball.

TRUNK LEAN

44°

From vertical during the first steps. Reference 45–50°: starts slightly upright, correctable.

Reading. Linear speed is in the Good band of the age norm and consistent across both distances. The high share of the first 10 m overlaps with the good horizontal jump result: explosive start is this athlete's strength.

Change of direction 5-10-5 • T-TEST

TEST	TOTAL	PHASE TIMES	TURNS	AGE 9–10 MALE NORM STATUS
Pro Agility 5-10-5	5.74 s	1.32 • 2.88 • 1.54	2	superior ≤ 5.50 • good 5.50–5.90 • monitor 5.90–6.30 GOOD
T-Test	13.4 s	–	4	superior ≤ 12.5 • good 12.5–13.5 • monitor 13.5–14.5 GOOD

LEFT / RIGHT TURN

1.32 / 1.54

In the 5-10-5 the first phase turns left and the last phase right: braking and pushing off with the right foot is 0.22 s slower. Same direction as the symmetry page.

DECELERATION SHARE

50%

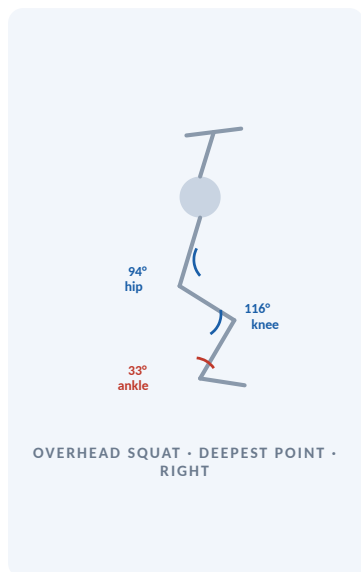
The middle phase (2.88 s) is half of the total; braking mechanics mature late in children, which is normal.

Reading. Both agility tests are Good; however the turn on the right foot is clearly slower. This is the fourth piece of evidence for the main finding of this report (right-side control). Agility training should include repeated right-foot braking and push-off.

4 • MOVEMENT QUALITY, MOBILITY AND POSTURE

Movement Screen

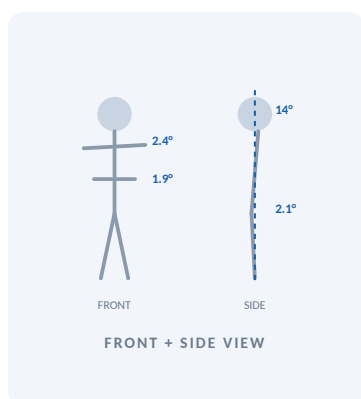
Overhead squat, posture and sit & reach thresholds are largely age independent; for sit & reach the age 9–10 male norm was used. The Nordic test is not performed at this age.



Overhead squat screen ROM • 3 REPS • SIDE VIEW

JOINT	LEFT	RIGHT	ASYM.	REFERENCE	STATUS
Ankle dorsiflexion	36°	33°	3°	≥ 35°	MONITOR
Knee flexion (deepest)	114°	116°	2°	≥ 110°	GOOD
Hip flexion	94°	94°	0°	≤ 95°	GOOD
Trunk lean from vertical		35°	—	≤ 40°	GOOD
Squat depth	hip level with knee		—	full	MONITOR

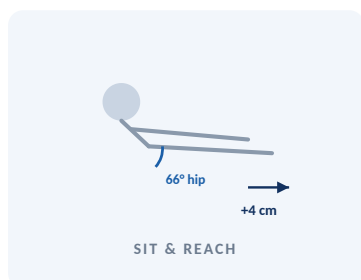
Reading. Right ankle dorsiflexion is 33° — 2° below the reference and 3° less than the left. On its own a small difference; but combined with the right-side balance and the knee valgus on right landing it forms a consistent chain. In children ankle mobility is gained quickly through play (ankle circle games, heel-to-toe walks).



Posture FRONT + SIDE • 5 S STATIC

MEASURE	VALUE	REFERENCE	STATUS
Shoulder tilt	2.4° (right ↓)	≤ 3°	GOOD
Pelvic tilt	1.9°	≤ 3°	GOOD
Forward head position	14°	≤ 15°	GOOD
Forward trunk lean	2.1°	≤ 5°	GOOD

Posture angles are not a diagnosis. Forward head position is close to the threshold (14°); screen time and school-bag load should be asked about and it should be re-checked in 3 months.



Flexibility SIT & REACH

MEASURE	VALUE	AGE 9–10 MALE NORM	STATUS
Reach (relative to toes)	+4 cm	good ≥ +3 • monitor -2...+3	GOOD
Hip flexion (min)	66°	—	INFO

Calibrated from body height (145 cm). Hamstring flexibility is good for age; a decrease during the growth spurt (12–14 years) is normal and it should be re-measured in that period.



5 • FIRST MEASUREMENT ASSESSMENT • 12 SEP 2026

Single Measurement, Compared with the Age Norm

DOMAIN	MEASURE	AGE 9-10 MALE NORM	BAND	NOTE
Vertical jump	22.8 cm (CMJ)	good ≥ 24	Monitor	Expected to rise with age; technical games
Horizontal power	152 cm (SLJ)	good ≥ 150	Good	Strength
Sprint	2.18 s (10 m)	good ≤ 2.20	Good	Strength
Agility	5.74 s (5-10-5)	good ≤ 5.90	Good	Right turn slower
Symmetry	7.6% diff. (SLH)	$< 10\%$	Monitor	Right weaker, consistent 3/3
Balance	7.8% (right AP)	$\leq 6\%$	Monitor	Right foot
Mobility	33° (right ankle)	$\geq 35^\circ$	Monitor	Right ankle
Posture	2.4° shoulder	$\leq 3^\circ$	Good	Forward head 14° to be monitored

COACH ASSESSMENT AND DECISION SUPPORT NOTE

General. Against the age 10 norm the athlete shows a **fast and agile** guard profile: 10 m, 20 m, 5-10-5 and the T-test are all in the good band, and so is the horizontal jump. Vertical jump is in the monitoring band; this is an expected picture at this age and it develops through jump-landing technical games, not through resistance training.

The finding that gathers under one heading. In four separate tests (single-leg hop, balance, ankle mobility, right turn in agility) the weak side is the **right**. At age 10 this is not a structural problem but a difference in neuromuscular control and mobility; however, because it is consistent, it should not be ignored. Since landing and change-of-direction load will increase in basketball during adolescence, closing it now is the least costly moment.

Next 12 weeks (game-based, 2 × 15 min per week). (1) Single-leg landing games: "silent landing", hop-and-stick, lateral hops — right foot first. (2) Ankle mobility: heel-to-toe walks, knee-to-wall ankle touches, 3 min daily. (3) Braking and pushing off with the right foot: short version of the 5-10-5 (5-5), right-turn repetitions. (4) Jump technique: arm-swing jump games; no weights, no maximal repetitions.

Re-test. The same 13-test set after 12 weeks (December 2026). Success criteria: SLH difference $< 5\%$, right ankle dorsiflexion $\geq 35^\circ$, right foot anterior-posterior sway $\leq 6\%$, CMJ ≥ 24 cm. If body height has increased by more than 3 cm, the results are read together with the growth effect.

All measurements were produced from a single camera using skeletal tracking; jump heights were derived from flight time (60 fps, ± 8 ms) and distances were calibrated from the athlete's body height. The bands are approximate thresholds compiled from Eurofit and the youth athlete literature for age 9-10 males; they are not a definitive norm table and will be calibrated with club data. Tests not performed due to age: Nordic control, RSI 10/5, BOSCO, triple/crossover hop, 505, 30 m sprint, pupillary light reflex.