

Supplemental online material

Supplementary material. Examples of exercises from the pilot version of injury prevention training (Table 3 in paper) developed by the research team based on the results from workshops with experts and end-users. Exercises are handball-specific, integrated within handball practice, and include injury prevention physical principles with integrated psychological aspects. Each exercise includes written instructions and video clip to meet key aspects (why, what, how, and when) emphasized by end-users’.

Exercise	How to execute	Why?	Keep in mind	Video clip
Plank with arm wrestling and ball	<ul style="list-style-type: none"> • Kneeling with straight back • One forearm on the floor, ball in other hand • Press ball in different directions, like “arm-wrestling” • Tip: Use sweater or equivalent under knees 	<ul style="list-style-type: none"> • Core and shoulder muscle strength • Upper body balance and stability • Grip strength • Increase motivation (competition, pairwise) 	<ul style="list-style-type: none"> • Hips parallel to the floor • Knees shoulder-width apart for better balance • Activate core muscles • Avoid shrugging shoulder 	Supplemental online material 5 “Plank with arm wrestling and ball”
Slow-motion feint with elevated arm	<ul style="list-style-type: none"> • Perform a feint in slow motion with elevated arm and ball in hand • After taking three steps, jump and land softly on both feet 	<ul style="list-style-type: none"> • Body awareness and control • Mindful muscle activation • Leg and core muscle strength 	<ul style="list-style-type: none"> • Slow movement • Hip-knee-foot alignment • Core activation 	Supplemental online material 6 “Slow-motion feint with elevated arm”
Jumping, cutting, throwing, and landing	<ul style="list-style-type: none"> • Player 1 moves backwards and passes ball to player 2 • Players 2 takes a three-step feint, jumps, and lands controlled and softly on both feet while catching the ball, then passes the ball back • Change roles and direction 	<ul style="list-style-type: none"> • Practice landing on both feet • Improve balance during jump and landing • Reduce risk of ankle and knee injuries • Increase motivation (pairwise) 	<ul style="list-style-type: none"> • Controlled and soft landing • Arm in elevated position (should approx. 90 degrees abduction) 	Supplemental online material 7 “Jumping, cutting, throwing, and landing”