

## Stepwise Training for an Advanced Integrated prosthetic Routine (STAIR)

Phase	STAIR level	Examples of tasks/activities
<b>Integration</b>	<b>1</b> Wear the prosthesis	Sit, stand and walk when wearing the prosthesis. Spontaneously move and preposition the prosthesis. Position the wrist and elbow in an ergonomic way. Sit by a table. Get up from sitting. Walk, with swinging arms.
	<b>2</b> Use as support and assistance	Use the prosthesis as support when rising up from sitting to standing position, and as assistance to fixate the paper when writing.
<b>Structured control training</b>	<b>3</b> Control the grasp	Open and close the hand when sitting with arm supported, when standing with arm NOT supported, and with arm in different positions around the body.
	<b>4</b> Place objects in the prosthesis and grasp	Preposition the hand by turning the wrist. Place objects of different shapes and materials in the prosthesis and grasp.
	<b>5</b> Switch between grasps and grip patterns <i>Only advanced prosthesis</i>	Switch between different grasps and grip patterns, with and without support, when sitting, standing and with the arm in various positions.
	<b>6</b> Select grasp/ position depending on object <i>Only advanced prosthesis</i>	Sit with arm supported and grab objects in various shape and texture with the different individually selected grasp.
<b>Activity performance</b>	<b>7</b> Use power grip in bimanual tasks	Ride a bike, open a PET bottle, open a door using the handle. Carry a glass, rake leaves, handle a pepper mill.
	<b>8</b> Use pinch grip in bimanual tasks	Play cards. Use scissors and hold the paper/object with the prosthesis. Read a paper. Open a teabag. Pull up a zipper, open a toilet bag or small purse, refill pens in a pencil.
	<b>9</b> Use individually chosen grasps in bimanual tasks <i>Only advanced prosthesis</i>	Practice to grip, hold and release different object with the individually chosen grasps. <i>(see Examples showing different grasps in advanced prosthesis)</i>
	<b>10</b> Adjust grip force	Grab a sponge without squeezing. Grab and hold a thin plastic mug. Peel and cut eggs, vegetables or fruit. Plant flowers.
	<b>11</b> Use the hand in various positions around the body	Adjust the wrist/elbow in the most ergonomic position. Make a bed, hang laundry, set the table, skip rope. <i>For advanced prosthesis: Choose between all grasps, select the most suitable.</i>
	<b>12</b> Manipulate objects	Repetitive grip and release. Wrap a gift, sew in buttons, tie shoelaces. <i>For advanced prosthesis: Manipulate with the different types of grasps available.</i>
	<b>13</b> Flow, timing in coordination	Play boules. Serve a badminton ball. Put on an apron and tie.

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