

Supplementary Table 1. Grasp type, intensity of activity, and maximum forces measured per finger per ADL														
ADL	Predominant grasp type	Activity intensity			Maximum force measured (Newtons)									
		Light	Moderate	Heavy	L 5th digit	L ring	L middle	L index	L thumb	R 5th digit	R ring	R middle	R index	R thumb
<b>Personal care and hygiene</b>														
Wash body with washcloth*	Lateral tripod	X			2.85	3.41	3.92	5.74	5.83	1.22	3.04	3.34	4.23	6.55
Wash hair*	Precision sphere	X			1.67	2.30	2.99	2.41	1.57	0.57	2.30	1.05	2.25	3.54
Squeeze water out of sponge*	Power sphere	X			2.85	6.69	4.78	2.68	3.41	0.86	3.04	3.34	3.80	5.41
Wring water out of washcloth*	Small diameter		X		2.59	5.57	3.04	3.76	1.95	0.50	5.41	1.27	1.87	6.12
Open and close small, round tap*	Tripod	X			0.33	0.96	1.39	8.12	2.34	0.34	2.85	7.78	1.26	3.28
Open and close small, cylindrical tap*	Prismatic 3 fingers	X			1.00	1.65	6.23	1.96	3.09	0.46	2.56	0.73	0.72	8.49
Open and close large, round tap*	Quadpod	X			3.34	5.57	4.23	2.96	5.83	1.36	3.25	3.31	3.01	4.98
Carry bucket containing 5 L of water**	Small diameter		X		0.08	5.57	3.96	2.03	3.44	0.05	8.69	2.96	1.78	2.56
Carry zinc basin containing 10 L of water*	Fixed hook		X		1.51	6.02	7.78	1.80	0.87	0.52	3.84	2.28	1.11	2.70
Dry body with towel*	Lateral tripod	X			0.32	0.54	0.67	0.46	1.88	0.27	1.13	1.96	3.54	3.88
Dry hair with hairdryer*	Medium wrap	X			0.95	2.49	3.92	1.17	2.17	1.86	5.26	2.56	0.55	5.74
Dry hair with towel*	Lateral tripod	X			0.41	1.11	1.05	1.80	2.66	0.68	1.78	2.46	1.50	5.74
Brush hair*	Small diameter	X			0.22	3.25	1.85	2.54	3.20	0.04	2.96	1.91	0.76	5.41
Tie hair with elastic*	Quadpod	X			0.59	3.72	4.29	1.92	4.38	0.003	0.90	2.89	1.05	2.44
Apply foundation*	Prismatic 2 fingers	X			0.001	2.64	0.63	0.92	2.15	0.56	5.26	3.76	3.92	11.67
Apply mascara to eyelashes*	Prismatic 2 fingers	X			0.18	1.44	1.88	3.31	2.08	0.02	2.99	2.51	0.74	9.34
Wash clothes using hands and 150 g soap bar*	Lateral tripod	X			0.71	1.79	1.85	1.90	5.04	0.45	1.95	2.66	1.26	4.55
Hang washing on clothesline*	Prismatic 2 fingers	X			0.10	0.53	0.59	0.73	2.36	0.22	0.63	1.86	0.42	2.62
Use pegs to secure items on clothesline*	Palmar pinch		X		0.002	0.93	1.59	3.57	5.57	0.001	0.21	2.58	4.23	6.55
Dry water out of clothes by hand*	Medium wrap	X			2.47	3.04	8.12	2.42	5.74	1.08	2.60	2.44	2.56	4.33
Brush teeth with toothbrush*	Prismatic 4 fingers	X			0	0.39	1.57	0.63	1.60	0.003	5.26	2.05	0.94	7.62
Squeeze toothpaste from 75 ml tube*	Prismatic 2 fingers	X			0.001	2.15	1.56	1.15	2.68	0.38	6.79	2.28	2.01	7.78
Dress*	Prismatic 3 fingers	X			0.20	0.60	3.14	5.74	4.84	0.49	0.95	2.49	2.07	6.55
Don t-shirt*	Prismatic 3 fingers	X			0	0.36	2.31	3.06	5.26	0.17	0.33	0.16	2.20	3.84
Remove t-shirt*	Prismatic 3 fingers	X			0.001	0.37	3.84	4.78	2.49	0	0.40	2.49	2.62	3.23
Don long-sleeve shirt and close buttons*	Prismatic 3 fingers	X			0.29	0.02	2.34	2.82	2.21	0.002	0.52	2.05	4.33	4.19
Don long-sleeve shirt with buttons open*	Prismatic 3 fingers	X			0.18	0.64	2.68	1.23	7.95	0.10	2.96	1.32	2.02	4.14
Don tie*	Prismatic 3 fingers	X			0	0.24	1.89	2.08	2.25	0.004	0.35	3.01	1.37	5.11
Don trousers*	Prismatic 2 fingers	X			4.84	3.65	2.51	3.06	1.33	0.41	7.33	1.93	1.80	4.78
Remove trousers*	Prismatic 4 fingers	X			0.70	0.94	2.44	0.88	2.60	0.25	1.89	1.42	1.76	9.34
Zip up trousers*	Prismatic 2 fingers	X			0.93	1.39	2.72	1.80	6.12	0.21	0.31	1.00	6.67	8.49
Zip down trousers*	Prismatic 2 fingers	X			1.43	1.65	0.49	0.14	1.82	0	0.15	0.140	3.06	6.44
Don socks*	Prismatic 3 fingers		X		0.02	0.77	3.44	6.92	5.26	0.50	0.44	1.80	15.54	7.62
Remove socks*	Prismatic 3 fingers	X			0.48	0.97	0.36	2.78	4.18	0	0.32	0.73	6.44	4.38
Don shoes*	Prismatic 3 fingers	X			0.25	1.42	2.89	2.96	10.38	1.33	3.31	1.83	8.69	6.67
Remove shoes*	Prismatic 3 fingers	X			1.10	0.94	4.23	1.30	2.96	0.36	1.18	3.34	6.12	5.57
Tie shoelaces*	Prismatic 2 fingers	X			0.28	1.46	2.78	2.70	3.12	0.13	1.04	2.01	4.78	5.66
Don belt*	Prismatic 2 fingers	X			0.64	0.26	2.07	2.90	5.49	0.50	2.51	1.37	3.34	6.02
Operate belt buckle*	Prismatic 3 fingers		X		0.29	0.87	1.70	7.19	2.85	0.20	4.28	2.31	5.57	5.26
<b>Transport and moving around</b>														
Close car door**	Fixed hook	X			2.54	4.33	3.31	1.61	3.34	1.78	6.44	1.89	2.94	3.54
Turn key in ignition**	Lateral	X			0	1.85	2.47	2.36	2.74	0.43	4.00	8.69	2.91	9.11
Turn steering wheel**	Fixed hook		X		0.76	2.15	7.05	3.23	4.44	2.72	8.30	7.95	4.84	7.95
Shift car gears**	Sphere 4 fingers	X			0.28	2.94	10.38	0.28	1.76	0	1.53	0	0.30	6.33
Turn circular doorknob**	Sphere 4 fingers		X		0.23	3.80	4.18	0.90	3.68	0.01	7.47	2.15	2.78	5.26
Open door (long horizontal)**	Adducted thumb		X		1.01	5.04	8.69	3.80	10.89	1.32	5.66	3.80	1.40	4.09
Hold onto rail in taxi**	Adducted thumb			X	0.61	11.67	12.04	6.67	7.19	0.001	13.83	8.69	3.96	5.49
Close taxi door**	Adducted thumb	X			2.10	4.09	1.70	1.64	0.0009	4.97	0.94	0.74	2.51	0.76
<b>Home environment</b>														
Make bed**	Lateral tripod	X			0.47	2.99	3.57	0.98	3.04	0.32	1.27	1.67	3.24	3.88
Carry shopping bag**	Fixed hook	X			0.71	4.91	5.49	0.15	1.03	0.58	6.23	1.61	0.41	4.55
Mop floor**	Small diameter	X			2.64	3.12	4.33	1.89	4.09	1.97	3.76	2.54	2.02	7.95
Dust**	Light tool	X			0.97	3.92	0.86	0	1.59	1.15	2.99	1.84	1.99	3.96
Sweep floor with broom**	Small diameter	X			3.88	3.23	2.36	1.30	2.45	1.88	4.38	2.05	1.15	2.25
Vacuum carpet**	Medium wrap	X			0.17	3.34	4.84	0.93	3.31	1.28	6.92	1.80	1.10	2.96
Wash dishes**	Palmar	X			0.82	4.33	4.38	0.93	4.97	0.49	6.12	1.78	1.49	15.54
Dry dishes**	Palmar	X			4.38	4.66	1.37	1.10	5.26	1.56	5.04	1.42	1.16	3.88
Pack dishes away**	Parallel extension	X			2.85	2.14	2.33	0.60	6.33	1.06	3.54	0.98	2.27	3.54
Iron clothes**	Medium wrap	X			0.74	1.29	3.84	1.93	1.24	1.24	2.74	1.27	4.14	1.47
Eat with hands**	Tripod	X			0.11	3.50	4.05	1.27	4.97	0.26	5.41	3.23	1.32	3.06
Hold pint glass**	Fixed hook	X			0.93	3.61	4.44	0.24	1.52	0.08	3.09	1.08	0.65	0.54
Open tight/new jar**	Sphere 4 fingers/precision disk		X		1.65	8.12	8.69	4.66	5.66	0.52	4.33	1.92	4.00	4.28
Eat using cutlery**	Index finger extension	X			1.06	3.72	2.96	1.33	2.34	0.26	3.09	1.21	4.23	3.54
Open heavy door**	Small diameter	X			1.54	4.66	6.67	4.60	6.92	0.16	6.12	3.06	1.98	2.87
Lift 1 kg box onto counter**	Adducted thumb	X			0.56	5.66	2.51	1.92	0.001	0.09	0.76	1.76	1.52	0
Lift 2 kg box onto counter**	Adducted thumb	X			3.23	6.67	3.04	3.14	1.01	0.17	3.50	1.20	2.28	0
Lift 3 kg box onto counter**	Adducted thumb	X			3.47	5.11	3.61	2.58	0.001	0	4.78	0.10	4.18	0
Lift 4 kg box onto counter**	Adducted thumb	X			1.85	3.76	1.60	1.99	0.001	0.001	2.94	0.99	2.64	0
Lift 5 kg box onto counter**	Adducted thumb	X			1.25	4.60	5.83	4.60	0.14	0.23	4.00	1.66	4.14	0.001
Lift 10 kg box onto counter**	Adducted thumb		X		1.98	6.33	4.66	1.99	0.01	0.001	5.11	2.30	3.17	1.78
Lift 15 kg box onto counter**	Adducted thumb		X		2.02	11.67	9.58	2.68	1.96	0.46	7.95	2.17	2.94	0.003
Lift 20 kg box onto counter**	Adducted thumb		X		2.56	5.57	9.34	5.18	0.05	0.003	10.38	2.19	3.12	0.003
Lift 25 kg box onto counter**	Adducted thumb			X	1.34	4.78	7.62	9.34	0.001	0.003	10.38	3.04	3.06	0.003
Lift 30 kg box onto counter**	Adducted thumb			X	1.22	5.33	8.12	7.47	1.50	0.003	10.98	2.32	5.93	0.003
Stir porridge in pot**	Small diameter		X		1.86	1.96	4.66	1.78	3.76	0.76	8.49	1.55	3.04	12.44
Lift pan and place it back down**	Adducted thumb	X			0.97	1.64	3.96	1.00	2.19	0.64	5.18	1.70	1.01	6.23
Lift pot and place it back down**	Palmar	X			2.76	4.97	4.78	3.01	5.74	0.25	6.92	1.60	2.99	4.44
Fill kettle with water and lift it**	Medium wrap	X			3.96	3.01	5.18	2.45	2.85	0.31	4.72	1.33	2.12	5.33
Pour water into cup**	Medium wrap		X		0.69	3.28	3.31	0.37	4.38	0.23	6.44	1.39	1.64	3.31
Change overhead lightbulb**	Sphere 4 fingers	X			0.41	2.58	0.91	1.07	1.26	0.35	1.57	1.32	1.74	4.72
Open can with pull ring**	Inferior pincher	X			0.06	1.36	2.58	1.07	1.41	0.001	1.33	2.42	3.34	2.64
Cut potatoes with knife**	Lateral tripod	X			1.26	6.23	7.47	4.44	6.55	0.30	6.33	0.70	2.54	6.23
Peel carrots with peeler**	Lateral tripod	X			0.24	2.60	3.25	2.80	4.97	0.35	0.84	1.31	2.40	4.33
Grate cheese**	Lateral tripod	X			1.34	3.14	2.99	1.45	2.44	0.48	3.57	1.41	1.54	4.84
Use scissors**	Distal	X			0.10	0.69	1.73	1.87	1.94	3.61	0.20	1.01	2.62	1.73
Twist salt grinder**	Medium wrap		X		0.98	2.85	3.96	2.68	2.30	0.29	3.72	1.19	3.96	5.18
Pick up child**														