

How To Choose the Right POWERbreathe Device for You:

Research has demonstrated that the most effective way to train your respiratory muscle is to work at 60-80% of your Maximum Inspiratory Pressure. This is effectively, the maximum amount of “weight” your diaphragm can “lift.” Clinically, we like to start with a lower load than 60% to ensure we get the proper technique – using a high load right off the bat can sometimes mean you inadvertently train your neck/chest muscles (lifting the ribcage) instead of the diaphragm (expanding the ribcage). You can use the chart below to determine what your predicted maximum inspiratory pressure is, then choose a device that works for you based on each products resistance levels.

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TABLE 4
Maximal inspiratory pressure (MIP) for men and women in different age groups derived from the random-effects model used in the meta-analysis

Age group, years	Men		Women	
	Studies, n/sample size, n	MIP, cmH ₂ O, mean (95% CI)	Studies, n/sample size, n	MIP, cmH ₂ O, mean (95% CI)
18–29	6/96	128.0 (116.3–139.5)	6/92	97.0 (88.6–105.4)
30–39	6/69	128.5 (118.3–138.7)	6/66	89.0 (84.5–93.5)
40–49	6/72	117.1 (104.9–129.2)	6/71	92.9 (78.4–107.4)
50–59	5/61	108.1 (98.7–117.6)	5/60	79.7 (74.9–84.9)
60–69	5/65	92.7 (84.6–100.8)	5/66	75.1 (67.3–82.9)
70–83	5/63	76.2 (66.1–86.4)	5/59	65.3 (57.8–72.7)



Model	Load (cmH ₂ O) at 1 l/sec-1										
	Level 0	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Level 10
LR	17	25	33	41	49	58	66	74	82	90	98
MR	23	39	55	72	88	104	121	137	153	170	186
HR	29	53	78	102	127	151	176	200	225	249	274

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Load Setting	No Spring & No Valve Assembly	No Spring	Load (cm H ₂ O) @ 1l/sec										
	-	-	0	1	2	3	4	5	6	7	8	9	10
cm H ₂ O	1 (including ball)	3	9	16	23	29	36	43	50	57	64	71	78

Note: A load of 3cmH₂O can be achieved by removing the spring and replacing the valve assembly for training (see page 10 & 11, diagram 1 – 5). In addition, a load of 1 cm H₂O can be achieved when the complete valve assembly is removed and the POWERbreathe breathing indicator ball is installed (see page 10 & 11, diagram 6).