

## Dynamic Tension-Resistance Exercises for Strength

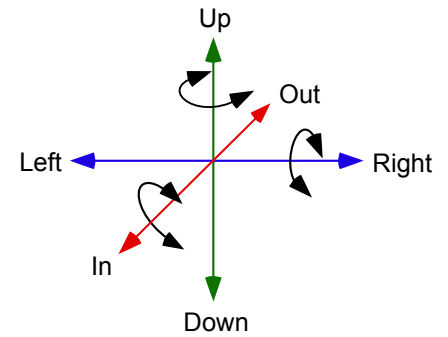
These wonderfully simple exercises increase strength by tensing muscles against each other while moving through a range of motion (instead of static isometrics). Muscles push and pull against each other while moving in a line or in circles. This exercise eliminates the need for weights and you can adjust the amount resistance as desired. They can be done anywhere, even in bed (valuable if bedridden). Push and pull simultaneously, then move up/down, side to side, or in/out (along the 3 axes), or move in circles (around the 3 axes) ... lots of possibilities. You can make up your own workouts. Start gently. Directions:

**Column 1** AREA of the body to work, and the start POSITION

**Column 2** The ACTION and type of RESISTANCE to use, (often the opposite limb is resisting the motion of the other limb as a push/pull, (then reverse the push/pull).

**Column 3** The DIRECTION to resist: up/down, left/right, in/out (Example: If the left arm pulls in, the right pushes out, then switch direction of force.

**Column 4** MOTIONS to use. Just as resistance varies along any axis, (left/right, up/down, or in/out), so can movement be along those axes. You can also move in circles around any axis. Try them to see how it works.



Area - Position	Action - Resistance	Direction of Force	Motions
Whole Body	Tense/Release (all muscles)	Against opposites	Twist L/R, Bend F/B & L/R
Head-Neck/hands, start vertical	Push/pull head with hands Resist twisting of head	Same direction, opposite direction, from the side	L/R, Forward/Back Turning L/R
Hands/in front	Push/pull	L/R, Up/Down, In/Out	3 Circles, xyz axis
Hands/overhead	Push/pull, stretch up	L/R, Up/Down, In/Out	3 Circles, xyz axis
Hands/behind body	Push/pull	L/R, Up/Down, In/Out	3 Circles, xyz axis
Hands/behind head	Push/pull	L/R, Up/Down, In/Out	3 Circles, xyz axis
Hands/small of back	Push, flip hands over, push	Into body	Bend F/B, L/R, Twist
Hands/front of hips	Pull	Towards body	Bend F/B, L/R, Twist
Hands/front, elbows at waist	Biceps curl, push/pull,	Up/Down, (L/R, In/Out)	3 Circles, xyz axis
Sitting	Pull body into chair, push off	Pushing/Pulling	Bend F/B, L/R, Twist
Self hug squeeze	Wrap arms around, Pull	Up/Down	Bend F/B, L/R, Twist
Hands/in front	Roll Shoulders	Roll both ways	Bend F/B, L/R, Twist
Sitting, Ankles locked	Push/pull	L/R, Up/Down, In/Out	3 Circles, xyz axis
Push ups, push-aways	From desk, chair, wall, floor	Up/Down	N/A
Backward push ups	From desk, chair, wall, floor	Up/Down	N/A
In bed, on back	Lift legs, arms, & body	Up/Down	Arms/feet in circles
In bed, on back	Lift hips up above bed	Up/Down	N/A
In bed, on belly	Lift legs & body, rest on hips	Up/Down	N/A
In bed, on side	Lift leg(s), hold	Up/Down, Apart/Back	Small circles
In bed, on side	Legs like scissors	Alternating F/B	Small circles
Each Leg Forward/Back	Half squats, lunging forward	F/B	N/A
Feet: shoulder-width	Full squats, arms - side/front	Allow heels to lift	N/A
Spinal Twist. stand or sit	Twist body, swing arms	Twist L/R	Bend F/B, L/R
Head/Neck/Spine	Stretch Up, Relax	F/B, L/R	Head Rolls
Abdomen (flat belly)	Apply tension, relax. Repeat	Lift up chest	Bend F/B, L/R, Twist