

MUSCLE CONTRACTIONS DURING EXERCISES

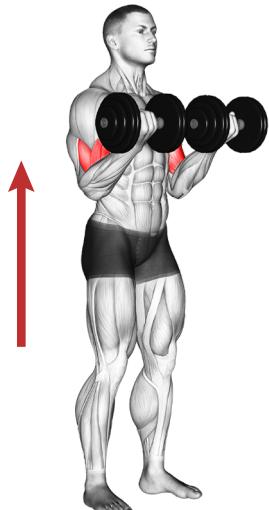
CONTRACTION TYPES:

Eccentric: Muscle **lengthens** under contraction.

Concentric: Muscle **shortens** under contraction.

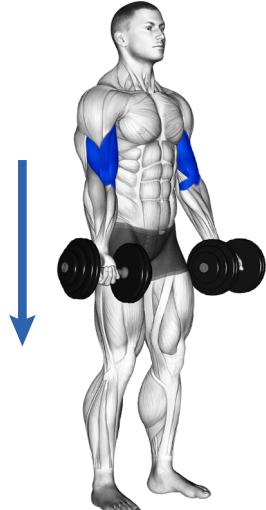
Isometric: Muscle stays the **same length** under contraction.

BICEP CURL CONCENTRIC:



Bicep Curl Concentric Contraction = Muscle shortens under tension
- Bicep concentrically contracts/shortens

BICEP CURL ECCENTRIC:



Bicep Curl Eccentric Contraction = Muscle lengthens under tension
- Bicep eccentrically contracts/lengthens

BICEP CURL ISOMETRIC:



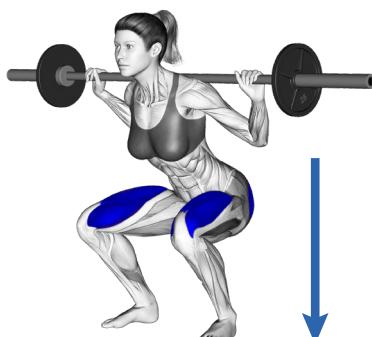
Bicep Curl Isometric hold = The muscle length stays the same under tension
- Biceps isometrically contracting

SQUAT CONCENTRIC:



Squat Concentric Contraction = Muscle shortens under tension
- Gluteals concentrically contract/shorten
- Quadriceps concentrically contract/shorten

SQUAT ECCENTRIC:



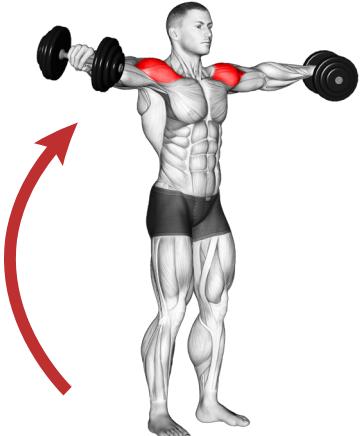
Squat Eccentric Contraction = Muscle lengthens under tension
- Gluteals eccentrically contract/lengthen
- Quadriceps eccentrically contract/lengthen

SQUAT ISOMETRIC:



Squat Isometric hold = The muscle length stays the same under tension
- Gluteals isometrically contracting
- Quadriceps isometrically contracting

LATERAL RAISE CONCENTRIC:



Lateral Raise Concentric Contraction = Muscle shortens under tension
- Deltoids concentrically contract/shorten

LATERAL RAISE ECCENTRIC:



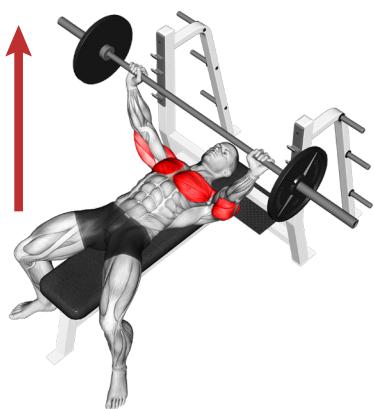
Lateral Raise Eccentric Contraction = Muscle lengthens under tension
- Deltoids eccentrically contract/lengthen

LATERAL RAISE ISOMETRIC:



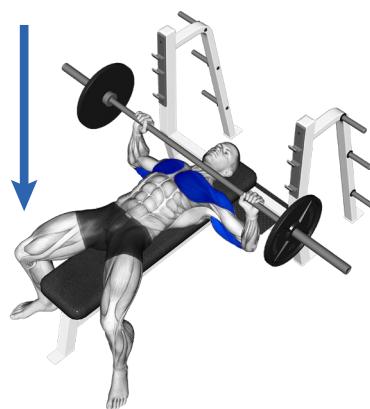
Lateral Raise Isometric hold = The muscle length stays the same under tension
- Deltoids isometrically contracting

BARBELL BENCH PRESS CONCENTRIC:



Bench Press Concentric Contraction = Muscle shortens under tension
- Anterior Deltoid concentrically contract/shorten
- Pectorals concentrically contract/shorten
- Triceps concentrically contract/shorten

BARBELL BENCH PRESS ECCENTRIC:



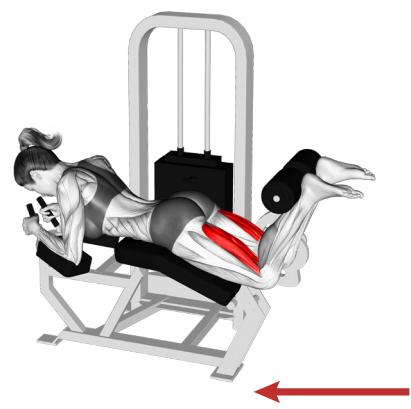
Bench Press Eccentric Contraction = Muscle shortens under tension
- Anterior Deltoid eccentrically contract/lengthen
- Pectorals eccentrically contract/lengthen
- Triceps eccentrically contract/lengthen

BARBELL BENCH PRESS ISOMETRIC:



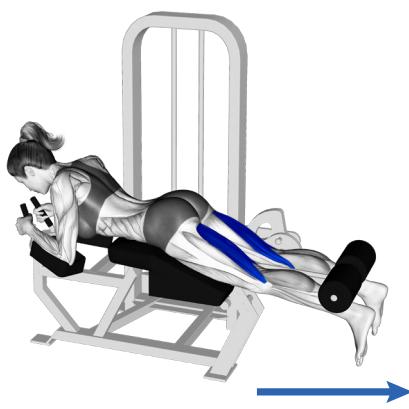
Bench Press Isometric hold = The muscle length stays the same under tension
- Anterior Deltoid isometrically contracting
- Pectorals isometrically contracting
- Triceps isometrically contracting

LYING HAMSTRING CURL CONCENTRIC:



Hamstring Curl Concentric Contraction = Muscle shortens under tension
- Hamstrings concentrically contract/shorten

LYING HAMSTRING CURL ECCENTRIC:



Hamstring Curl Eccentric Contraction = Muscle lengthens under tension
- Hamstrings eccentrically contract/lengthen

LYING HAMSTRING CURL ISOMETRIC:



Hamstring Curl Isometric hold = The muscle length stays the same under tension
- Hamstrings isometrically contracting