

# MUSCLE CONTRACTIONS DURING EXERCISES

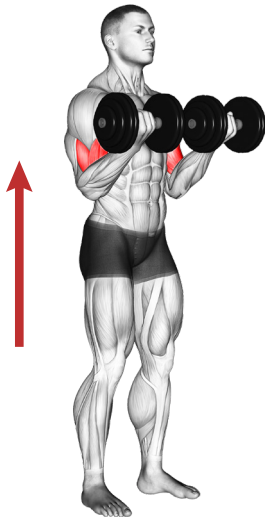
## CONTRACTION TYPES:

**Eccentric:** Muscle **lengthens** under contraction.

**Concentric:** Muscle **shortens** under contraction.

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

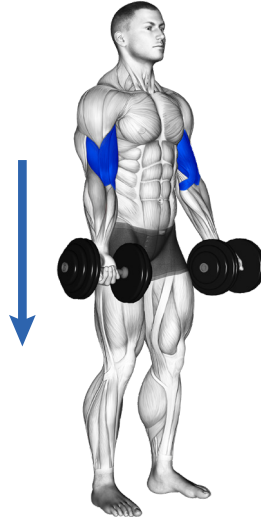
### BICEP CURL CONCENTRIC:



**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

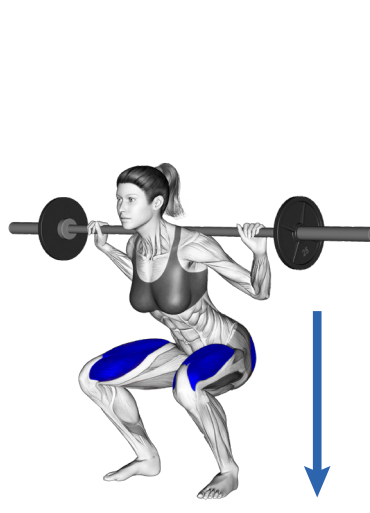
### SQUAT CONCENTRIC:



**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

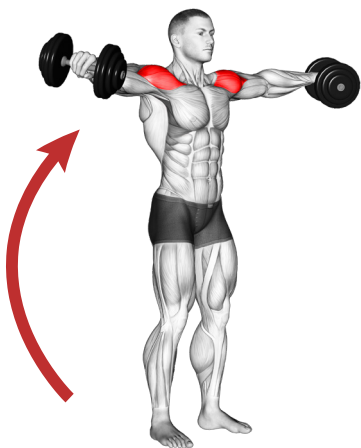
### SQUAT ISOMETRIC:



**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:



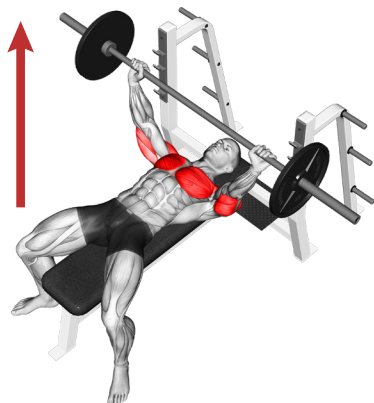
**Lateral Raise Eccentric Contraction = Muscle lengthens under tension**  
- Deltoids eccentrically contract/lengthen

### LATERAL RAISE ISOMETRIC:



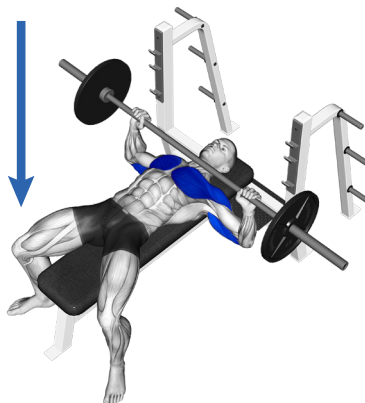
**Lateral Raise Isometric hold = The muscle length stays the same under tension**  
- Deltoids isometrically contracting

### 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:



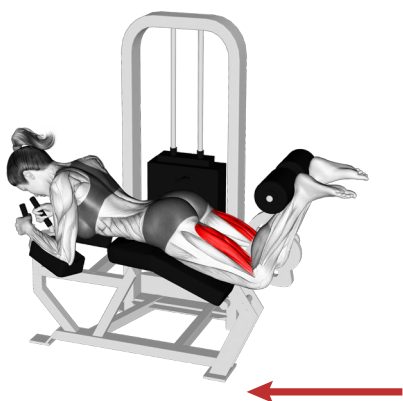
**Bench Press Eccentric Contraction = Muscle lengthens under tension**  
- Anterior Deltoid eccentrically contract/lengthen  
- Pectorals eccentrically contract/lengthen  
- Triceps eccentrically contract/lengthen

### BARBELL BENCH PRESS ISOMETRIC:



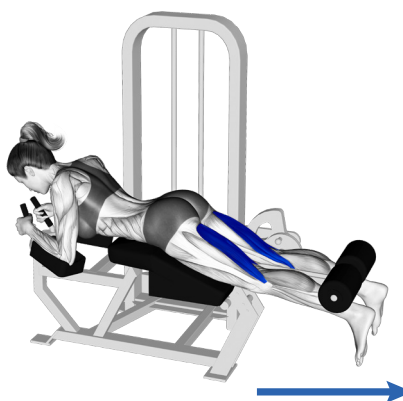
**Bench Press Isometric hold = The muscle length stays the same under tension**  
- Anterior Deltoid isometrically contracting  
- Pectorals isometrically contracting  
- Triceps isometrically contracting

### 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