



THE
RESILIENT
TRAINER
COLLECTIVE

Where Personal Trainers Matter

WHAT'S THIS EXERCISE FOR ANYWAY?

Brenda Adams, Ph.D. (candidate), B.Sc. (kinesiology), M.Ed., CPCC,
Founder of The Resilient Trainer Collective

THE LINGO

NOTES

- **Load** – what the muscles are moving (ie. Free weights, medicine ball, our own body weight etc.)
- **Up Phase** – when the load is moving against gravity (the load is going up)
 - aka concentric phase or working phase
- **Down phase** – when the load is moving with gravity (the load is going down)
 - aka eccentric or releasing phase

THE FRAMEWORK - JAFML

Joint – which joint are you analyzing? Critical that you only do one joint at a time
Look at how the bones of that joint are moving

Action – what is the action that is occurring at that joint (flexion, extension, abduction, etc..)?

Force – what is the force that is primarily causing the movement

- Muscle is the main force – the muscle is overpowering gravity
 - Concentric contraction – ALWAYS
- A muscle contracting to go against gravity
 - Gravity is the main force – gravity is overpowering the muscle
 - Eccentric contraction – ALWAYS
 - Gravity is pulling the body down

Muscle – what are the agonists?

- What muscle that crosses the _____ joint is _____(shortening or lengthening) while the joint _____(flexes, extends, etc.)

Line Of Pull (only relevant for free weight and body weight exercises)

- Parallel – the movement is effective
- Perpendicular – the movement is not effective

Hint....if you cannot identify an up phase and a down phase the movement is probably perpendicular

STAY IN TOUCH

brenda@theptcollective.com

@ptccop

@resilienttrainercollective

Movement Analysis



Movement: _____

Joint (only one joint at a time)	Action	Force (who is winning, muscle or gravity?) Muscle = concentric Gravity = eccentric	Muscle (s) (primary movers)	Line of Pull (parallel or perpendicular to gravity – not relevant for cable or tubing exercises) *movements must resist gravity to be effective
Joint =				
Up Phase				
Down Phase				
Joint =				
Up Phase				
Down Phase				
Joint =				
Up Phase				
Down Phase				

www.theptcollective.com

Movement Analysis



Movement: _____

Joint (only one joint at a time)	Action	Force (who is winning, muscle or gravity?) Muscle = concentric Gravity = eccentric	Muscle (s) (primary movers)	Line of Pull (parallel or perpendicular to gravity – not relevant for cable or tubing exercises) *movements must resist gravity to be effective
Joint =				
Up Phase				
Down Phase				
Joint =				
Up Phase				
Down Phase				
Joint =				
Up Phase				
Down Phase				

www.theptcollective.com