MUSCLE INTELLIGENCE M.A.S. (MOBILITY - ACTIVATION - STABILITY)

WARM UP: Scapula, Trunk/Spine, and Pelvic Stability Program

Preparing the body for exercise is not about warming up.
It's about preparing the mind and the nervous system for what you are about to do.
If we go run a mile in 100-degree heat, we would be "warm", but not prepared to squat 500lbs.

Preparing the nervous system to contract more muscle fibers at every rep is the goal.

To maximize growth, you must:

1. Access the range of motion necessary to train a muscle through its entire length. **AKA MOBILITY**
2. Stabilize the range of motion you're training and resist motion. **AKA STABILITY**
3. Apply force strong enough to move a load, challenge a muscle to adapt and recruit more muscle. **AKA STRENGTH**

Trunk/Spine Mobilization and Activation:

Strength at the "Trunk and Spine" is the foundation for all power. If your spine isn't mobile AND stable, the ranges of motion will be impeded, and power output will be reduced at the muscles.

The main goal is to be able to resist motion. Meaning, if you're standing or sitting and someone pushes you from any direction you don't move, bend, twist, rotate. That is anti-flexion/extension.

Primary Objectives of Spinal Mobility and Stability:

- Thoracic Extension and Rotation
- Elevation and Depression
- Upward and Downward Rotation
- Anti-Spinal Flexion (rounding)
- Anti-Spinal Extension (arching)
- Resisting Spinal Rotation
- Differentiating Hip Flexion and Spinal Flexion (learning proper hip "hinge"

HOW:

1. Face-down floor thoracic extension. Arms across chest, extend your chest off the floor/table.
2. Face-down floor thoracic extension held in place, plus arms from side of body to overhead.
   Extend chest off floor/bench, take arms from side of body up over head like a jumping jack.
3. Seated with vertical spine and 90-degree hip angle, arms across chest. Rotations to each side with 5 second holds.
4. Reverse Curl up: Horizontal Back Extension machine. Roll into spinal flexion and roll back into extension. One vertebra at a time.
5. Train Spinal flexion/ab crunch in posterior pelvic tilt.
6. Lying Leg Curl/Knee Flexion in posterior pelvic tilt.

Scapula/Shoulder Mobilization and Activation:

Most shoulder and elbow pain is caused by poor shoulder mobility and stability. This leads to exercising in ranges you can't control.

Create **mobility** to get into ranges, and then **stability** in those ranges (at the extreme ends of the range of motion). Then both **strength** and eventually **growth** are possible.

Primary Objectives:

- Thoracic Spine Extension and Rotation
- Scapula Mobility - horizontally into retraction and protraction
- Scapula Mobility - into upward and downward rotation
- Scapula Stability with active internal and external rotation
- Active protraction with shoulder press in sagittal plane (in front of you); maintain vertical forearm

HOW:

Mobility

1. Sit on the floor, legs straight with spine vertical. (Can you sit up straight? = Thoracic Extension) Try putting your arms straight over head and keeping it there for 30 seconds.

2. Seated: 180-degree of shoulder flexion stretch (arm directly overhead). This is a pec and lat stretch to try to get your arm overhead into 180degrees of shoulder flexion.

3. Pec stretch with external rotation. Think Iron-cross: fully lengthen pec, turn biceps to the ceiling.

4. Lat stretch overhead with external rotation: Hold arm in front of you, parallel to the ground. Turn biceps to the ceiling (externally rotate), protract (shoulder blade pushes forward) and now - while maintaining external rotation and protraction - take the arm up toward being overhead. If you stop when you begin to see the arm internally rotate, that will be the active range of the lat. Stretch in that plane of motion.

Stability

5. Seated 90-degree torso. 3-angles active arm raises from side of body to overhead: in front (sagittal plane), 45-degrees, and at your side (frontal plane). Emphasize scapula movement by reaching up with the arm and moving the scapula down the back.
   Progress in this can be done by adding small amounts of weight OR changing the angle to increase the forward lean.

6. Kettlebell bottom under (in protraction and external rotation).
   Grab the handle of a kettlebell and turn the heavy end up.
   With your arm directly in front of you, and your forearm perpendicular to the ground, press the KB vertically while not allowing the elbow to move away from under the KB and forearm vertical.

7. External Rotation with bands: upper arm parallel to ground - 2 different positions (sagittal and frontal planes).
   Arm in front of you, forearm perpendicular to the ground. Grab a thin rubber band from across your body that will challenge you when you pull your forearm from parallel -> to the ground -> to perpendicular.