

# Integrating Flexibility

**R**ecent year trends suggest the number of Americans with postural distortions and back pain continues to increase. This is due partially to weight gain but more so from a chronic lack of activity which has contributed to strength imbalance and changes in seated and standing posture. When bony structures become conditionally manipulated the attached musculature responds by adapting to the environment. The rounded spine and flexed knee seated posture simultaneously shortens hip and trunk flexors and hip extensors. Forward migration of the shoulder further retards the shoulder complex and glenohumeral flexion and external rotation at the shoulder are additionally compromised. This progressive cascade of events leads to tightness in the neck musculature, latissimus dorsi, pectoralis major, subscapularis, rectus abdominis, hip flexors, hip extensors and gastrocnemius. Lack of flexibility and muscle imbalances literally change the way the body functions and limits the number of exercises that can be performed safely. In most cases, squats, deadlifts, flexed hip rows and overhead presses become inappropriate due to the inability to align joints and increased risk of injury, particularly in the low spine. When these limitations present during initial assessments they must be slated for correction for safe exercise participation.

When many trainers create programs for new clients the emphasis tends to be toward self-validation and goal-specific behavior; suggesting the programmatic decisions are more focused on rapid visible outcomes rather than health limitations. This presents a level of incomplete thought process, as emphasizing focus on finite metrics like weight or waist size with disregard for real musculoskeletal issues and overall health is inconsiderate to the client's actual needs. The favorable part of this scenario is a standard exercise program can be changed with the same positive outcomes, while accounting for the defined negative conditions. Essentially the training becomes a blend of musculoskeletal balance, improvements to joint range of motion, and overall muscular fitness in the same workout.

Certainly one can spend time performing strength exercise and cardiovascular exercise and flexibility exercise separately, but the amount of time demanded to live such an

active lifestyle is difficult for many people and of interest to only a few. Separating components into distinct training segments is not as effective as integrated training for low volume exercisers, inclusive of many who hire personal trainers. Additionally, the exercises selected must be specific to the musculoskeletal problems to correct the underlying issues at hand. Simply going to the gym will not fix postural distortions as many fitness enthusiasts and athletes suffer from the same problems as their inactive counterparts. Exercise selection for improving flexibility and balance issues begins with the identification of the problems. While movement screens will provide specific information, certain behaviors also lend themselves to certain problems. Chronic seated postures tend to shorten hip extensors and flexors; routine cardiovascular exercise often leads to hip flexor tightness; advancing age, those who round their shoulders and those who press significantly more than pull experience forward shoulders and tight latissimus dorsi as well as overactive internal rotators including the pectoralis major. These common day after day stressors lead to musculoskeletal adjustments that produce a negative feedback to functional decline. To fix these problems the movements used must be antagonistic to the issues. If everything moves forward – move it back; if things begin to round – straighten them; and if things are tight – loosen them. It is not overly complicated but requires a serious emphasis.

Certain combinations work better than others when making movement and exercise selections. For instance the lats are easier to put through a full range of motion when the hip is split rather than bilaterally flexed. Similarly, the glute requires pelvic stability and also benefits from a split stance for full movement range. Trunk rotation also serves an enhancing role when blended with split hip positions. The uppercross, or anterior shoulder migration, requires shoulder horizontal abduction and the mid and low traps need to be activated particularly in the case of clients with a forward chin. This is more effectively accomplished from a prone or flexed hip position. The following examples can be used to address the key issues.

When employing exercise combinations aimed at im-

## Sample Combinations of Integrated Flexibility.

### *Exercise*

**Reverse Lunge with reach**

**Bulgarian Squat with diagonal chop**

**Split stance Y reaches**

**Forward Lunge with QL reach**

### *Muscles Trained*

Latissimus dorsi, rectus abdominis, iliopsoas, gluteus maximus

Iliopsoas, rectus femoris, obliques

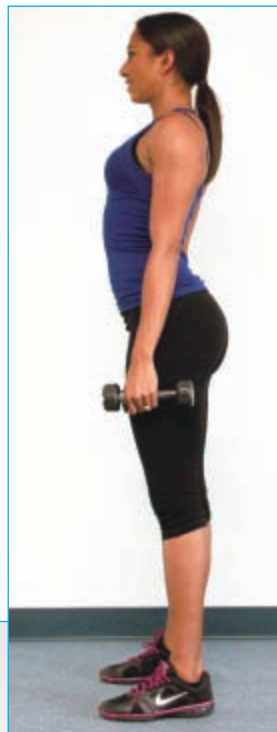
Hamstrings, gastrocnemius, internal rotators

Quadratus lumborum, obliques, hip abductors

proving postural distortions start off the movements in the dynamic warm-up section of the exercise bout where loading is not an emphasis and the rehearsal promotes the warm-up purpose. When no load is used the tendency of the body to attain rounded positions from lack of flexibility is far less consequential compared to loaded conditions. Work on movement technique and proficiency first before progressing. After proficiency has been attained, increase the range of

motion and then add in stability challenges such as light asymmetrical loading. Once the exerciser has mastered these activities they can migrate from the warm-up to the workout, recognizing that increasing load means an appropriate decrease in range and stability emphasis. Integrating exercises particularly for health and performance purposes allow for multiple adaptations and shortens the time to health-related improvements. ●

*Reverse Lunge  
with Reach Start*



*Reverse Lunge  
with Reach End*

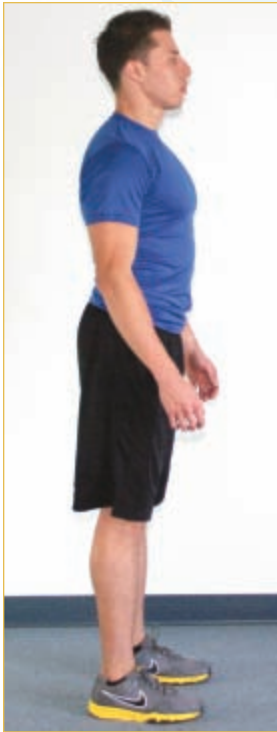


*Split Stance  
Y-Reach Start*



*Split Stance  
Y-Reach End*





*Forward Lunge with QL  
Reach Alternate Start*

*Forward Lunge with QL  
Reach Alternate End*



## Integrating Flexibility



*Forward Lunge with  
QL Reach Start*

*Forward Lunge with  
QL Reach End*



*Bulgarian Squat with  
Diagonal Chop Start*

*Bulgarian Squat with  
Diagonal Chop End*

