

NORMALIZE FUNCTION ... key to successful MSD outcomes...

Hallux needs full extension ROM at MP joint (late stance phase of gait).

Its flexor needs full flexibility to allow that ROM.

That flexor needs strength, both eccentric and concentric.

MOBILIZATION MP, STRETCH FLEXORS-EXTENSORS, CORRECT PRONATION (BFO),
CLOSED CHAIN BALANCE; TIB POST ECCENTRICS

Longitudinal arch needs articular mobility

Needs passive support to reduce pronation

Needs tibialis posterior strength (closed chain) for dynamic stability at mid-stance

Ankle-foot needs dynamic co-contraction closed chain stability during weight-bearing

Calf group, especially gastroc, needs flexibility-length

Needs gluteus strength to level pelvis at mid-stance reduces pronation forces

CORRECT PRONATION (BFO); MOBILIZATION, CALF STRETCH, UNILAT STANCE BLANCE STABILITY,
TIB POST ECCENTRICS, GLUT MED SIDESTEPPING; NV GLIDES SCIATIC TO TIBIAL NV; LB-SIJ FUNCTION

Tarsal tunnel needs decompression-alignment and quiet proximal inputs (sciatic)

NV GLIDES SCIAITC AND POST TIB NV; CORRECT SIJ-LB-DISC MET-PNF-HEP; LLLT; KINESIOTAPE

Patella needs extensor strength near full extension (VMO function; SAQ)

Patella needs medial force support (VMO function; SAQ)

Patella needs medial glide mobility

MCCONNELL PF TAPE; SAQ EXER; CLOSED CHAIN STABILITY; MOBIL KNEE -PF; BFO; GLUT MED STRENGTH

Knee needs extensor strength near full extension (VMO function; SAQ)

Knee medial structures need support against valgus force (gluteus medius)

Knee needs gluteus maximus participation to stabilize extension controls

Knee needs ankle closed chain dynamic support

Knee needs calf and hamstrings length for knee alignment

MOBILIZATION; CORRECT PRONATION-BFO; SAQ; LLLT; MCCONNELL TAPE; UNILAT STANCE BALANCE;
GLUT MED SIDESTEPPING; STRETCH CALF, HAMS, RECTUS FEMORIS

Hip needs flexibility at iliopsoas, piriformis, hamstrings

Hip needs abduct stability (gluteus medius) and extension stability (gluteus maximus)

Hip needs closed chain unilateral stance stability along entire extremity

Hip needs minimally-stressed properly-aligned sacro-iliac system

MOBIL; MANUAL TXN; STRETCH PSOAS, RECTUS, PIRIFORMIS, MET-PNF AT SIJ; CLOSED CHAIN STABILITY
STRENGTHEN AT CLAMSHELLS, GLUT MED SIDESTEPPING, MINI-QUATS, REPEATED SIT-STAND

Sacro-iliac needs flexibility at piriformis and hamstrings

Sacroiliac needs adequate lumbar extension mobility

Sacro-iliac needs proper disc biomechanics (reduced DDD and HNP) (per McKenzie)

Sacro-iliac needs stabilization (per power-bridges and prone planks)

Sacro-iliac needs adequate foot biomechanics, reduced foot pronation

MET-PNF AT SIJ; DISC MECHANICS (MCKENZIE); CORE STABILIZATION; CORRECT FOOT PRONATION

Lumbar needs adequate ROM in flex-extend-SB-rotation planes

Lumbar needs adequate disc biomechanics (per McKenzie)

Lumbar needs "extrinsic" muscle flexibility-stability (hamstrings, iliopsoas, quadratus)

Lumbar needs ergonomics-posture controls

Lumbar needs core stability

DISC MECHANICS (MCKENZIE); CORRECT SIJ (MET-PNF); CORE STABILIZATION;
FLEXED TXN; ERGO-BODY MECHANICS ADVICE

Thoracic need ergonomics-posture controls

Thoracic needs extension mobility

Thoracic needs extension strength, scapular retraction

Thoracic needs torsion mobility

Thoracic needs costo-vertebral (rib) alignment-correction

MOBILIZATION COSTOVERT & THOR SEGMENTS; FLEXED TXN; SELF-MOBIL; SEATED TORSION STRETCH;
THORACIC-SCAP STRENGTH; KINESIOTAPE; ERGO-BODY MECHANICS ADVICE;
FHP-CERVICOTHORACIC POSTURE AND MOBILIZATION

Cervical needs correction of forward head posture
Cervical needs upper thoracic segment mobility
Cervical needs upper thoracic extension with upper cervical flexion (axial extension)
Cervical needs costo-vertebral function
Cervical needs TMJ-cranio-mandibular function
Cervical needs segmental mobility
Cervical needs core stability
Cervical needs thoracic outlet posture-flexibility-ergonomics corrections
POSTURE HABIT REEDUC; AXIAL EXT STRETCH; SCALENI STRETCH; MOBILIZATION UPPER THOR; MWM;
C-TXN AND HOME C-TXN (NON-TMJ METHOD); ERGO ADVICE; SCAP RETRACT STRENGTH; CORRECT TMJ
KINESIOTAPE; PILLOW MODIFICATION; RELAXATION; NEUROPROBE-TENS

TMJ needs unloaded, loose-packed posture
TMJ needs lateral pterygoid coordination of disc mechanics
TMJ needs reduced forward head posture; axial extension
TMJ need posture habits correction
TMJ needs yawning and swallowing correction
PTERYGOID ACTIVATION-COORDINATION EXERCISE; TMJ POSTURE CORRECTION; FHP CORRECTION;
YAWN-SWALLOW CORRECTION; CORRECT CERVICAL AND UPPER THORACIC DYSFUNCTIONS; LLLT
LOW-GRADE MOBILIZATIONS; PNF STRETCH; SLEEP AUTOSUGGESTION; RELAXATION; NEUROPROBE-TENS

Shoulder needs unloading-perfusion-relaxation (Codman's)
Shoulder needs reduced protraction posture
Shoulder needs scapular retraction strength-stability posture control
Shoulder needs ergonomics corrections
Shoulder needs lateral rotation infraspinatus strength-stability
Shoulder needs closed chain stability control-strength
CORRECT PROTRACTED POSTURES; CODMAN'S; ERGO MODIFICATIONS; MOBILIZATIONS; MWM; LLLT;
KINESIOTAPE; SCAP RETRACT STRENGTH; PRONE SCAPTION LIFTS; SHOULDER PULLEY STRETCHES;
CLOSED CHAIN SCAP STABILITY-COORDINATION

Elbow needs reduced wrist loading at proximal ECR-ED attachments (late epi)
Elbow needs pronator flexibility-length-relax
Elbow needs proper rest-sleep posture control (unload cubital tunnel)
Elbow needs forearm flexor-extensor group strength and loading tolerance (med epi)
WRIST GROUPS STRETCHING; KINESIOTAPE; MWM; REDUCE PROXIMAL INPUTS; CORRECT ERGONOMICS;
TFM; MFR; RESTING SPLINTS; ECCENTRIC STRENGTHENING

Wrist needs proper rest-sleep posture control (unload carpal tunnel)
Wrist needs ergonomics posture controls
ADDRESS PROXIMAL INPUTS-TOC; C-TXN; RESTING SPLINT; TMF; KINESIOTAPE; MWM; LLLT;
SENSORI-MOTOR REEDUC; CORRECT ERGO RISKS; STRETCHING ; STRENGTHENING

CMC needs ergonomics and loading controls
CMC need articular mobility
CMC needs resting posture support
THUMB SPLINTING; MOBILIZATION; MWM; KINESIOTAPE; LLLT; KINESIOTAPE; STRETCH-STRENGTHENING

Carpal tunnel needs wrist-digit-proximal ergonomics controls of posture and movement
Carpal tunnel needs cervical, thoracic outlet, and pronator decompression
Carpal tunnel needs inflammation, compression, and fluid dynamics controls
Carpal tunnel needs CMC input controls
RESTING SPLINT; ADDRESS TOC; C-TXN; LLLT; MOBILIZATION; CORRECT ERGONOMICS; STRETCH-STRENGTH