

# Index

Page numbers in **bold** refer to figures or tables.

## A

Abdominal muscles,  
146–151  
preexercise bracing, 147,  
**148, 149**  
sit-up type exercises, 18  
toning exercises, 147–151,  
**150, 151**  
weakness, 146, **147**  
Acupuncture, trigger points,  
109, 112  
Adductors of thigh, 20, **20**,  
**21, 96**  
associated problems, 96  
MET position and  
method, 96, **96**  
shortness tests, **24, 30–31**,  
**31**  
Agility, 163–168  
signs of loss of, 163–164  
*see also* Balance  
Agonist and antagonist co-  
contraction  
exercise, 160, **161**  
Agonists, 1  
Antagonists, 1  
Antiarousal breathing  
exercise, 168–169  
Arms behind back,  
breathing exercise,  
170, **171**  
Arthritis, 50

## B

Back-bending stretch, Jones'  
gentle, **125**,  
125–126  
Back muscles  
low, shortness tests, 32,  
**32, 33, 33, 35, 39**,  
**39**  
MET methods, 77–99  
middle, shortness tests,  
32, **32**  
*see also* Erector spinae  
muscles; Multifidii  
(and rotatores)  
muscles

Back problems, 51  
acute, 149  
preventive exercises,  
156–160  
PRT (SCS) exercises,  
177–178, 182–187  
Balance, 163–168  
causes of reduced,  
165–167  
exercise, 165  
retraining tools, **167, 168**  
tests, 164, 165–167, **166**  
Balance board, **167**  
Balance sandals, **167**  
Barrier, 12  
'Beach pose,' for breathing  
retraining,  
169–170, **170**  
Biceps attachment, 76  
MET position and  
method, 76, 76  
Biceps femoris muscle, 20,  
**21**  
shortness tests, **29, 29–30**  
*see also* Hamstring muscles  
Biceps (brachii) muscle,  
75–76  
Body balance, action plan for  
restoring, 49  
Bone tumors, 49–50  
Brachioradialis muscle, 74  
associated problems, 74  
MET position and  
method, 74, **74**  
Breathing, 163, 168–172  
exercises, 168–172  
hi-lo test, 154–155, **155**  
in MET procedures, 9, 14  
preventing rise of  
shoulders, 169,  
**169**  
pursed lip, 155–156  
scalene shortness test, 27  
in yoga, 117  
Brugger's relief position,  
170–172, **171**

## C

Cat/camel exercise for  
thoracic spine,  
128–129, **129**

Cautions  
acute back problems, 149  
MET methods, 23, 49–50  
positional release  
technique, 177  
self-mobilization methods,  
117  
Chest muscles  
MET methods, 68–69  
PRT (SCS) exercise,  
173–174, **174**  
Chilling, trigger points,  
109–110, **110**  
Chin-tuck exercise,  
141–142, **142**  
Co-contraction exercise,  
agonist and  
antagonist, 160,  
**161**  
Cold therapy, trigger points,  
109–110, **110**  
Concentric contractions, 1,  
1–2  
isotonic, 6–7, 7, 11, 15  
Counterpressure, 6, 13  
gravity as, 13, **13**  
immovable object as, 13,  
**13**  
Crossed patterns  
(syndromes),  
18–19  
lower, **19, 118**  
upper, **19, 118**  
Curling stretch, Jones'  
gentle, 125  
Curl-up exercise, 149–151,  
**151**

## D

Dead-bug exercise, 149, **151**  
Deconditioning, 156  
Deltoid muscle, **20, 137**  
toning exercise, 137, **138**  
weakness, 137  
Diaphragm (thoracic),  
153–156  
toning exercise, 155–156  
weakness tests, 153–155,  
**155**  
Digastric muscle *see* Jaw  
stabilizers

Dorsiflexion, foot, 38–39, **39**

## E

Eccentric contractions, 2, 2  
isotonic, 7, **8**, 11, 15  
Effort, degree of, 8, 14  
Endurance, 133  
Erector spinae muscles, 20, **21**  
mid and lower back, 80  
associated problems, 80  
MET position and method, 80, **81**  
mid-spine, 78–80  
associated problems, 78  
MET positions and methods, **78**, 78–80, **79**  
shortness tests, **39**, **39**  
upper, 77–78  
associated problems, 77  
MET position and method, 77, 77–78  
Extensor muscles of arm, 21, 75–76  
associated problems, 75  
MET position and method, **75**, 75–76  
shortness testing, 47, **48**  
Extensor muscles of toes, 99  
associated problems, 99  
MET position and method, 99, **99**  
External oblique (abdominal) muscle, 21  
Eye movements, 9

## F

Fect  
dorsiflexion test, 38–39, **39**  
golf ball massage, 113–115  
Flexibility, 118  
Flexibility exercises  
Jones', 123–126  
Kirk's, 119–122  
specific regions, 126–131  
Flexor muscles of arm, 20, 20, 75–76  
associated problems, 75  
MET position and method, **75**, 75–76  
shortness tests, **24**, 47, **48**  
Force, degree of, 8, 14  
Fukuda–Unterberger (stepping) test, 165–167, **166**

## G

Gastrocnemius muscle, 20, **21**, 98–99  
associated problems, 98  
MET position and method, **98**, 99  
shortness tests, **24**, 29, **29**, 32, **32**, 38–39, **39**  
Gluteus maximus muscle, 21, 135  
toning exercises, 135, **136**  
weakness test, 135  
Gluteus medius and minimus, 21, 136  
toning exercise, 136, **137**  
weakness test, 136  
Golf ball massage, feet, 113–115  
Gravity, as counterpressure, 13, **13**

## H

Hamstring muscles, 20, **21**, 93–95  
associated problems, 93  
MET positions and methods, 94–95  
overstretched, 32, **32**, **34**, 34–35  
shortness tests, **24**, **29**, 29–30, **32**, **32**, **33**, **33**, **34**, **34**  
Headache, 52, 57–58  
Head/neck coordination test, 140, **141**  
Hi-lo breathing pattern test, 154–155, **155**

## I

Iliopsoas muscle (including psoas), 20, **20**  
shortness, 84–87  
associated problems, 84  
functional tests, 26, **26**, 27, 27  
MET positions and methods, 84–87, **85**, **86**  
shortness tests, **24**, 33, **34**, 35, 36, **37**  
weakness, 152–153  
tests and reasons for, 152, **152**  
toning exercise, **152**, 153  
Iliotibial band (ITB), 95  
associated problems, 95

MET position and method, 95, **95**  
shortness tests, 35–36, **36**  
Immovable object, as counterpressure, 13, **13**  
Infraspinatus muscle, 20, 70–72  
associated problems, 70–71  
MET position and method, **71**, 71–72  
pulsed MET, 72  
shortness tests, **24**, 41, **41**, 42, **42**, 44  
Internal oblique and transversus abdominis muscles, 146–151  
preexercise bracing, 147, **148**, **149**  
toning exercises, 147–151, **150**, **151**  
weakness, 146, **147**  
Internal oblique muscle, 21  
*see also* Oblique abdominal muscles; Quadratus lumborum (QL) and internal oblique muscles  
Ischemic compression, trigger points, 109, **110**  
Isokinetic contractions, 7, 11  
duration, 14  
force (effort), 14  
indications for use, 14, 134  
major variables, 8–9  
repetitions, 14  
small joints, 102  
summary, 16  
Isometric contractions, 3, **3**, 11–12  
duration, 8, 9, 14  
ending, 8, 12–13  
force (effort), 8, 14  
indications for use, 14  
major variables, 8–9  
repetitions, 14  
starting, 8, 12  
*see also* Postisometric relaxation; Reciprocal inhibition  
Isotonic contractions, 6–7  
concentric, 6–7, 7, 11, 15  
duration, 14  
eccentric, 7, **8**, 11, 15  
force (effort), 14  
indications for use, 14, 133–134  
major variables, 8–9  
repetitions, 14

## J

- Janda, Vladimir, 133  
 Jaw imbalance test, 164  
 Jaw muscles, 100–101  
   associated problems, 100  
   MET positions and methods, **100**, 100–101, **101**  
   shortness testing, 48  
 Jaw stabilizers (including digastric), 143  
   toning exercises, 143, **144**  
   weakness, 143, **143**  
 Joints  
   inflamed/swollen, 50  
   pain/stiffness, 14–15, 51  
   small, isokinetic MET methods, 102  
   strains or pains, PRT (SCS) exercises, 187  
   tight/stiff, MET methods, 51, 102  
 Jones, Lawrence  
   self-mobilization exercises, 123–126  
   strain and counterstrain (SCS), 175

## K

- Kirk, Chester, self-mobilization methods, 119–122

## L

- Latissimus dorsi muscle, 20, **21**, 83  
   associated problems, 83  
   MET position and method, 83, **84**  
   shortness tests, **24**, 40, **41**  
 Leg muscles, MET methods, 77–99  
 Levator scapulae muscle, 20, **21**, 59–60  
   MET positions and methods, 59–60, **60**, **61**  
   shortness tests, **24**, 27–28, **28**, 45, **45**  
 Lewit, Karel, 133  
 Liebensson, Craig, 133  
 Longissimus muscle,  
   shortness tests, 45, **45**  
 Low back  
   and back of thigh, gentle release, 126, **126**

- backward-bending strains,  
   PRT (SCS)  
   exercises, **186**, 186–187  
 breath-assisted release,  
   126–127, **127**  
 forward-bending strains,  
   PRT (SCS)  
   exercises, 185, **185**  
 muscles, shortness tests,  
   **32**, **32**, **33**, **33**, **35**, **39**, **39**  
 rotational mobilization,  
   128, **128**  
 strains, PRT (SCS)  
   exercise, 177–178, **178**  
   and trunk stretch, Kirk's,  
   122, **123**  
 Lumbar spine *see* Low back

## M

- Manual treatment, 173  
 Massage therapy, 173  
 Masseter muscle, 100–101  
   associated problems, 100  
   MET positions and methods, **100**, 100–101, **101**  
   shortness testing, 48  
 MET *see* Muscle energy technique  
 Mobility, excessive, 118  
 Mobilization methods *see* Self-mobilization methods  
 Multifidi (and rotatores)  
   muscles, 21, 156–160  
   toning exercises, 159–160, **161**  
   weakness tests, 156–159, **157**, **158**, **159**  
 Muscle energy technique (MET), 1–16  
   cautions, 23, 49–50  
   indications for use, 14  
   isotonic, 6–7  
   major variables, 8–9  
   postsometric relaxation *see* Postsometric relaxation  
   pragmatism and common sense, 23  
   pulsed, *see* Pulsed muscle energy technique  
   reciprocal inhibition *see* Reciprocal inhibition  
   regular use, 14  
   summary of methods, 11–16  
   treatment/self-treatment methods, 51–102

## N

- Neck  
   lower, mobilization, 131, **131**  
   MET sequence, 52–58  
   stiffness/pain, 52, 57–58  
 Neck muscles, 52–58  
   associated problems, 52  
   back (extensor)  
     deeper, MET method, 56, **57**  
     MET method, 53–54, 54, **54**, **55**  
     short (suboccipital), MET method, 58, **59**  
   shortness tests, **24**, 45, **45**  
   causes of stress, 52  
   deep flexor, 21, 140–142  
   isotonic concentric MET, 55–56, **55**  
   toning exercises, 141–142, **142**  
   weakness, 140, **141**  
   MET positions and methods, 52–57  
   pulsed MET, 53, 54, 57  
   rotator  
     MET method, 57, **57**  
     shortness tests, **44**, 44–45  
   side  
     MET method, 52–53, **53**  
     shortness tests, **46**, 46–47, **47**  
   *see also specific muscles*  
 Neck rotation exercise, 177, **177**

Neck strains  
 backward-bending (rest of neck), PRT (SCS) exercise, 181–182, **182**  
 backward-bending (top of neck), PRT (SCS) exercise, **180**, 180–181, **181**  
 lower, PRT (SCS) exercise, 179, **180**  
 upper, PRT (SCS) exercise, 178–179, **179**  
 Neutral spine coordination exercises, 147–148, **150**  
 Norris, Chris, 133

## O

Oblique abdominal muscles, **20**, 89–90  
 associated problems, 89–90  
 MET position and method, **89**, **90**  
*see also* Internal oblique muscle  
 Osteoporosis, 49–50

## P

Pain  
 cautions, 49–50  
 choosing PIR or RI, 6  
 trigger points as source of, 103, 106–108  
 Pectineus muscle, 96  
 Pectoralis major muscle, **20**, **21**, 68–69  
 associated problems, 68  
 MET position and method, **68**, 68–69  
 shortness tests, **24**, **40**, **41**  
 Pectoralis minor muscle, shortness tests, **40**, **41**  
 Pelvic diaphragm, 153  
 toning exercise, 153, **154**  
 weakness, 153  
 Pelvis, MET methods, 77–99  
 Peroneus muscles, 21  
 PIR *see* Postisometric relaxation  
 Piriformis muscle, **20**, **21**, 92–93  
 associated problems, 92  
 MET positions and methods, 92–93, **93**  
 shortness tests, **24**, **26**, **26**, **30**, **30**

Plan, action, 49  
 Point of bind, 3, 12  
 Positional release technique (PRT), 173–187  
 exercises, 177–187  
 self-help formula, 176–177  
*see also* Strain and counterstrain  
 Postisometric relaxation (PIR), 3–4, **4**, **6**, 11–12  
 choosing, 6, 12  
 counterpressure, 13, **13**  
 duration of effect, 15  
 example of use, 4–5  
 gravity-induced, 13  
 indications for use, 14  
 mechanism of effect, 12  
 summary, 15  
 Posture  
 crossed patterns, 18–19, **19**  
 observation, 25  
 Prone trunk extension test, 158–159, **159**, 160  
 PRT *see* Positional release technique  
 Psoas muscle *see* Iliopsoas muscle  
 Pulsed muscle energy technique (MET), 10, 11  
 example of use, **10**, 10–11  
 neck muscles, 53, 54, 56  
 Pursled lip breathing, 155–156

## Q

Quadratus lumborum (QL) and internal oblique muscles, 144–146  
 toning exercises, **145**, 146  
 weakness, 144–146, **145**  
 Quadratus lumborum (QL) muscle, **20**, **20**, **21**, 80–81  
 associated problems, 81  
 MET position and method, 81, **82**  
 shortness tests, **24**, **25**, **26**, **40**, **40**

## R

Reciprocal inhibition (RI), **2**, **3**, **6**, 11–12  
 choosing, 6, 12  
 duration of effect, 15  
 example of use, 5  
 indications for use, 14

mechanism of effect, 12  
 in MET, 2–3  
 summary, 15  
 Rectus abdominis muscle, **20**, 88–89  
 associated problems, 88  
 MET position and method, **88**, 88–89  
 Rectus femoris muscle, **20**, **20**, 87–88  
 associated problems, 87  
 MET position and method, **87**, 87–88  
 shortness tests, **24**, **33**, **34**, 36–37, **37**, **38**  
 Repetitions, 9, 14  
 Resistive duction method *see* Pulsed muscle energy technique (MET)  
 Rheumatoid arthritis, 50  
 Rhomboid muscles, 21  
 shortness, 82–83  
 associated problems, 82  
 MET position and method, 82–83, **83**  
 weakness, 137–139  
 reasons for, 137  
 toning exercises, 138–139, **139**, **140**  
 RI *see* Reciprocal inhibition  
 Rotator cuff muscles, 20  
 shortness tests, **43**, 43–44, **44**  
*see also* Infraspinatus muscle;  
 Subscapularis muscle;  
 Supraspinatus muscle  
 Rotatores *see* Multifidi (and rotatores) muscles

## S

Sacroiliac (SI) joint ligaments, 90–92  
 associated problems, 90  
 MET positions and methods, 90–92, **91**  
 mobilization, 127, **127**  
 Sacrospinalis muscle, **20**, **21**  
*see also* Erector spinae muscles  
 Safety, self-help approach, 23  
 Scalene muscles, **20**, **21**, **22**, 66–67  
 associated problems, 66  
 in MET neck sequence, 52–53, **53**  
 MET position and method, 66–67, **67**  
 shortness tests, **24**, **27**

- SCS *see* Strain and counterstrain
- SEIS (slow eccentric isotonic stretch), 7, 14
- Self-mobilization methods, 117–131
- Jones' exercises, 123–126
  - Kirk's exercises, 119–122
  - specific regions, 126–131
  - variations on theme, 118
- Semimembranosus muscle, 20, 21
- shortness tests, 29, 29–30
- Semispinalis muscle, shortness tests, 45, 45
- Semitendinosus muscle, 20, 21
- shortness tests, 29, 29–30
- Serratus anterior muscle, 21
- Shortened (tight) muscles
- crossed patterns, 18–19, 19
  - identification, 24
  - joint problems and, 14–15
  - MET methods, 14
  - observation, 25
  - order of treatment, 17–18, 49
  - PIR *versus* RI, 6
  - postisometric relaxation, 3–5
  - reciprocal inhibition, 2–3, 5
  - testing for, 22–23, 24, 24–48
    - assessment tests, 28–48
    - functional tests, 25–28
- Shoulder-related muscles, MET methods, 68–76
- Shoulders
- motion testing, 43, 43–44, 44
  - preventing rise, breathing exercise, 169, 169
  - restraint, breathing exercises, 169–170, 170, 171
  - see also* Rotator cuff muscles
- Side bridge position, 144–146, 145
- Side-lying test, 25–26, 26
- Side-of-body stretch, Kirk's, 119–120, 120
- Side stretch, Jones' gentle, 124, 125
- Sideways arm raise test, 28, 28
- Slow eccentric isotonic stretch (SEIS), 7, 14
- Sniff test, 155
- Soleus muscle, 20, 21, 97–98
- associated problems, 97
  - MET positions and methods, 97, 97–98
  - shortness tests, 24, 29, 29, 32, 32, 38, 38
- Spinal extension test *see* Trunk extension test
- Spinal mobilization
- Kirk's prayer position, 121–122, 122
  - rotational, low back, 128, 128
  - thoracic *see under* Thoracic spine
  - upper, and lower neck, 131, 131
- Spinal stretches
- Jones' gentle gravity-induced, 123, 124
  - Kirk's
    - middle back, 121, 121
    - seated, 119, 119
    - twisted, 120–121, 121
- Spine
- areas of flattening, testing, 24, 28–30, 29
  - flexibility testing, 28–29, 29, 31, 31–32, 32
  - massage with tennis balls, 113, 114
- Spine coordination exercises, neutral, 147–148, 150
- Squat test, 38, 38
- Stability, 133
- balance with flexibility, 118
  - core, toning exercises, 134–160
- Standing arm elevation test, 157, 158
- Stepping test, 165–167, 166
- Sternocleidomastoid (SCM, sternomastoid) muscle, 20, 20, 64–66
- associated problems, 64
  - in MET neck sequence, 52–53, 53
  - MET positions and methods, 64–66, 64, 65
  - shortness tests, 24, 44, 44–45
- Stiffness, 50
- Strain and counterstrain (SCS), 173
- chest muscle exercise, 173–174, 174
  - exercises, 177–187
  - guidelines for self-application, 175–176
  - Jones' work, 175
- Strength
- percent used, 8, 14
  - and stability, 133
- Stress, influence on trigger points, 103–104
- Stretching exercises, 51–102, 173
- back, pelvis and leg muscles, 77–99
  - chest and shoulder-related muscles, 68–76
  - jaw muscles, 100–101
  - MET neck sequence, 52–58
  - normalizing muscular imbalance, 51–52
  - small joints, 102
  - specific neck-related muscles, 58–67
  - tight joints, 102
- Suboccipital muscles
- MET (PIR) method, 58, 59
  - in MET neck sequence, 54, 54
- Subscapularis muscle, 20, 72–74
- associated problems, 72
  - MET position and method, 72–73, 73
  - pulsed MET, 73–74
  - shortness tests, 24, 40, 41, 42, 42, 43
- Supinator muscle, 75–76
- Supraspinatus muscle, 20, 69–70
- associated problems, 69
  - MET position and method, 69–70, 70
  - shortness tests, 24, 42, 42, 43

## T

- Teeth imbalance test, 164
- Temporalis muscle, shortness testing, 48
- Temporomandibular joint problems, 48
- Tennis balls, trigger point treatment, 113, 114
- Tensor fascia lata (TFL) muscle, 20, 20, 95
- associated problems, 95
  - functional tests, 26, 26
  - MET position and method, 95, 95
  - shortness tests, 24, 35–36, 36, 37
- Teres major muscle, 83
- associated problems, 83
  - MET position and method, 83, 84
  - shortness tests, 40, 41

- Thigh  
 adductors *see* Adductors of thigh  
 back of, gentle release, 126, 126  
 muscles, 20, 21
- Thoracic spine  
 extension strains, PRT (SCS) exercise, 183–185, 184  
 flexion strains, PRT (SCS) exercise, 182, 182–183, 183  
 mobilization  
 cat/camel exercise, 128–129, 129  
 gravity-assisted, 129–130, 130  
 seated position, 130–131, 131
- Tibialis anticus muscle, 21
- Tibialis posterior muscle, 20, 21
- Tight muscles *see* Shortened (tight) muscles
- Timing, MET contractions, 8, 9, 14
- Toning exercises, 133–134  
 specific muscles, 134–160
- Toothpicks, for toning jaw stabilizers, 143, 144
- Transversus abdominis muscle *see* Internal oblique and transversus abdominis muscles
- Trapezius muscle, 21  
 middle, 82–83  
 associated problems, 82  
 MET position and method, 82–83, 83  
 middle and lower, 21, 63–64, 137–139  
 associated problems, 63
- PIR position and methods, 63, 63  
 pulsed MET, 64  
 reasons for weakness, 137  
 toning exercises, 138–139, 139, 140
- upper, 20, 61–62  
 associated problems, 61  
 functional tests, 27–28, 28  
 in MET neck sequence, 52–53, 53  
 PIR position and method, 61–62, 62  
 shortness tests, 24, 45, 45, 46, 46–47, 47  
 weakness, 137
- Travell, Dr Janet, 109, 111–112
- Trigger points (TPs), 103–115  
 active, 103  
 as alarm signals, 105–106  
 associated symptoms, 111–112  
 common sites, 104–107  
 embryonic, 103  
 finding, 108–109  
 influence of stress, 103–104  
 latent, 103  
 satellite, 103  
 as source of pain, 106–108  
 treatment, 108, 109–115, 110  
 in inaccessible sites, 113–115  
 MET, 111, 112–113  
 old (chronic) and new (acute) TPs, 111  
 rules, 112  
 types, 103
- Trunk extension test, 156, 157  
 as exercise, 159  
 prone, 158–159, 159, 160
- Trunk flexion test, 27, 27
- ## U
- Upper back mobilization, 131, 131  
*see also under* Thoracic spine
- ## V
- Vastus muscles, 21
- ## W
- Weak muscles  
 crossed patterns, 18–19, 19  
 isotonic MET methods, 7  
 MET methods, 14  
 order of treatment, 17–18, 49  
 testing for, 22–23, 48–49  
 toning, 133–134  
 toning exercises for specific, 134–160
- Weights, 134
- Wobble board, 167
- ## Y
- Yoga, 117