Glossary

- Active joint movement Movement of a joint by the patient/client, in contrast to *passive joint movement*, in which all motion is produced by the therapist.
- Adaptation The process whereby the person or the area responds to physical, chemical or psychosocial demands. E.g. Muscles adapt to regular exercise by gaining in bulk and strength; while the person as a whole adapts to exercise by gaining aerobic fitness.
- Adherence Used in the context of whether a patient/ client 'adheres' to ('sticks to, or follows) the advice given by a therapist/practitioner. Previously described as 'compliance', and more recently called by some 'concordance'.

Alexander technique A postural re-education system

- Algometer A pressure gauge used to measure amount of force being applied during treatment of, say, trigger points.
- **Amplitude** In the context of manipulation how the distance over which an adjustment's force is applied. HVLA High velocity (very rapid), low amplitude (short distance) is the way chiropractic and osteopathic manipulation is described.
- **Ankylosing spondylitis** An autoimmune disease, mainly affecting males, that leads to a gradual fusion of the spine and pelvic joints, resulting in the individual being locked into a very stooped posture ('bamboo spine').
- Antagonist The opposite muscle to one that is active (known as the agonist). E.g. the flexor muscles of the arm are the antagonists of the extensor muscles of the arm.
- Anterior oblique muscle system Muscles that run obliquely across the abdomen forming part of the core stabilizing muscles.
- Anti-arousal breathing A slow rhythmical breathing pattern (similar to pranayama yoga breathing) in

which exhalation lasts at least twice as long as inhalation, and which reduces sympathetic arousal.

- **Articulation** A joint is an articulation. The word articulation can also be used to describe a mobilizing approach that moves a joint through its full range of motion.
- **ARTT acronym** ARTT stands for Asymmetry, Range of motion restriction, Tenderness, Tissue texture change.
- **ASIS (anterior superior iliac spine)** The prominence on the front of the pelvis that is frequently used as a landmark during palpation.
- Aston patterning A system of postural and self-use methods, devised by Judith Aston.
- **Asymmetry** Unequal from side to side; left side different from right side.
- **Attachment point** A trigger or tender point close to a tendon or site of periosteal attachment.
- **Ayurvedic (Indian) massage** Traditional Indian methods deriving from Ayurvedic methods of treatment.
- **Balance training** Learning to enhance the ability to balance by means of specific exercises.
- **'Beach pose'** A position used in breathing retraining to stabilize shoulder movement on inhalation, in which the hands are interlocked behind the neck as in the position often seen when lying on a beach sun-bathing.
- **Bending loading (force)** The forces generated in specific tissues during bending.
- **'Bind'** A shorthand term (the opposite of 'ease') describing tension, increased or unnatural levels of tone, or restriction.
- **'Blockage'** A shorthand term describing a restricted range of motion in a joint.
- **Breathing wave assessment** Evaluation of the response/movement of the spine to deep inhalation when lying prone on a firm surface.

- **Brügger's relief position** A particular sequence applied by the seated individual to enhance posture and function during performance of breathing exercises.
- **Catastrophizing** Fearing the worst will happen; imagining that disaster lies just around the corner.
- **Cat–camel exercise** An exercise performed on all fours in which the spine is sequentially flexed and extended (in part replicating a cat's stretching movements).
- **Catecholamine** Any of various amines (as epinephrine, norepinephrine, and dopamine) that are derived from tyrosine, and that function as hormones or neurotransmitters or both.
- **Cauda equina syndrome** A condition involving the roots of the upper sacral nerves that extend beyond the termination of the spinal cord at the first lumbar vertebra in the form of a bundle of filaments within the vertebral canal resembling a horse's tail.
- **Central point** A trigger point that lies close to the motor end-point, near the belly of a muscle.
- **Centrifugal direction** Spinning or rotating towards the centre.
- **Centripetal direction** Spinning or rotating away from the centre.
- **Chakra** Concept of energy centres deriving from Ayurvedic (Indian) traditional medicine.
- **Chi Gung** An ancient Chinese martial art system, often used in the West for assisting postural and breathing functions. (Note: it has similarities to Tai Chi.)
- 'Chin-poke' head position A posture in which the head is held forward of its ideal position with the chin poked forward.
- **Cognitive behavior therapy (CBT)** CBT is an interactive, directive approach that aims to help people who are ill or disabled to confront thoughts, beliefs and behaviors associated with their health.
- **Colloidal matrix** Colloidal material in intercellular tissues.
- **Combined loading (force)** A combination of forces applied to an area, for example shear force as well as compression.
- **Comfort zone** A place, time or position where distress is minimized.
- **Compensation** The consequence of an adaptation response. For example if there is pain when placing weight on the right foot a compensation will occur in which weight is transferred elsewhere in order to reduce discomfort.
- **Compression fracture** A fracture that results from a compression (crushing) force.
- **Compression (compressive) loading (force)** A force that crowds tissues, as in application of pressure by a hand or thumb.

- **Connective tissue massage** A German manual system that uses strong finger or thumb strokes in order to elicit a reflex response.
- **Core stability (exercises)** Exercises (such as Pilates) that aim to produce a balanced degree of tone, strength and stamina to the core muscles of the trunk (for example abdomen, low back, diaphragm).

Cortisol A hormone produced in response to stress.

Counterirritation For example briskly rubbing a painful area produces sensations that help to mask the pain, and this is a counter-irritation.

Crohn's disease An auto-immune inflammatory bowel disease.

- **Crossed syndrome** Patterns of weak and tight muscles identified as alternating across the body for example weak gluteals and tight psoas; or weak deep neck flexors and tight cervical erector spinae muscles.
- **Cystitis** An irritation or inflammation of the bladder leading to feelings of urgency to urinate, and sometimes to burning discomfort on doing so.
- 'Dead-bug' exercise (test) A position in which a test of the strength/stamina of particular (core) muscles can be carried out, or in which strengthening exercises can be performed, that is reminiscent of a dead insect because the person lies on their back with legs and arms in the air.
- **Deconditioning** When someone is out of condition, specifically when someone has not been performing aerobic activity.
- **Deep longitudinal muscle system** Muscles that run in line with the body as opposed to muscles which run in different directions (e.g. obliques), and which are not superficial, i.e. they are deep.

Deep tissue massage Massage that addresses deeper soft tissue structures rather than superficial ones.

- **Depression** A state of feeling sad; a psychoneurotic or psychotic disorder marked especially by sadness, inactivity, difficulty with thinking and concentration, a significant increase or decrease in appetite and time spent sleeping, feelings of dejection and hopelessness, and sometimes suicidal thoughts or an attempt to commit suicide.
- **Displacement** The act or process of removing something from its usual or proper place or the state resulting from this.
- **Distress** Pain or suffering affecting the body, a bodily part, or the mind, e.g. gastric distress.
- **Drag palpation assessment** Use of a light finger stroke across tissues seeking a sensation of 'drag' created by increased water content (sweat) presumed to result from increased sympathetic activity in deeper tissues.

Duration The length of time something takes to occur.

Dysmenorrhea Painful menstruation.

Effleurage A light stroking movement used in massage.

- **Elastic limit (barrier)** The limit, barrier, end-of-range to which tissues can be taken without damage.
- Elasticity The quality or state of being elastic.
- **Embryonic point** The early stages of development of a new trigger point.
- 'End feel' The palpated sense of the quality of resistance as a joint or muscle comes to its end of range – for example a 'soft end-feel' in a normal joint, or a 'hard end-feel' in a dysfunctional or degenerated joint.
- **Endorphin** Any of a group of self-produced hormones (such as enkephalin) found especially in the brain that bind chiefly to opiate receptors and produce some of the same pharmacological effects (as pain relief) as those of opiates.

'Facilitation'

- **1.** The lowering of the threshold for reflex conduction along a particular neural pathway especially from repeated use of that pathway.
- **2.** The increasing of the ease or intensity of a response by repeated stimulation; the act or process of stimulating.
- False negative Relating to or being an individual or a test result that is wrongly classified in a negative category because of imperfect testing methods or procedures.
- **False positive** Relating to or being an individual or a test result that is wrongly classified in a positive category (as of diagnosis) because of imperfect testing methods or procedures (example: a *false-positive* pregnancy test).
- **Fasciculation** Muscular twitching involving the simultaneous contraction of contiguous groups of muscle fibers.
- **Feldenkrais** Used for a system of aided body movements intended to increase bodily awareness and ease tension.
- **Fibromyalgia** A chronic disorder characterized by widespread pain, tenderness, and stiffness of muscles and associated connective tissue structures that is typically accompanied by fatigue, headache, and sleep disturbances.
- **Fibrosis** A condition marked by increase of interstitial fibrous tissue; fibrous degeneration.
- Filum terminale The slender threadlike prolongation of the spinal cord below the origin of the lumbar nerves; the last portion of the pia mater.
- **Fine-tuning** A shorthand term for perfecting the positioning of a joint or area when identifying the maximum point of comfort, or ease.
- **Flare dysfunction** Describes the positioning of the ilia in relation to the sacrum when a flaring outwards (lateral), or inwards (medial) occurs.

- **Force closure** The influence of muscular forces in stabilization of the sacroiliac joint.
- **Form closure** The influence of joint surfaces' (sacrum and ilium) forces to stabilize the sacroiliac joint.
- Frequency How often something occurs.
- **Friction** The effect of two or more surfaces rubbing together to produce mechanically induced heat and possibly inflammation.
- **GABA** Abbreviation for gamma-aminobutyric acid: an amino acid that is a neurotransmitter that induces neural inhibition.
- **Gait cycle** Gait describes a manner of walking or moving on foot – and the gait cycle describes the complete cycle of activity during the activity of gait when walking.
- **General adaptation syndromes (GAS)** A theory that describes the stages of adaptation ranging from initial alarm, through adaptation, to exhaustion and collapse.
- **Golgi tendon organ** A spindle-shaped sensory end organ within a tendon that provides information about muscle tension called also *neurotendinous spindle*.
- **Grieve's masqueraders** A series of symptoms described by Grieve that mimic simple conditions but which are in fact the result of serious pathology.
- **'Growing pain'** A phrase used to describe pain experienced by a young person that is not easily identified or explained.
- **Guarding** Involuntary reaction to protect an area of pain (as by spasm of muscle on palpation of the abdomen over a painful lesion).
- **Heel strike** The moment of the grounding of the heel during a forward step in the gait cycle.
- **Hip abduction (observation) test** A side-lying test that evaluates the firing sequence of muscles during hip abduction.
- **Hip extension test** A prone test that evaluates the firing sequence of muscles during hip extension.
- **Homeostasis** The maintenance of relatively stable internal physiological conditions (as body temperature) in higher animals under fluctuating environmental conditions.
- **Hydrosis** Increased presence of water in tissues as in perspiration/sweat.
- **'Hyperalgesic skin zone'** An area characterized by increased sensitivity to pain or enhanced intensity of pain sensation.
- **Hypermobility (laxness)** An increase in the range of movement of which a bodily part and especially a joint is capable, commonly due to the looseness of ligaments.

- **Hyperreactivity** Having or showing abnormally high sensitivity to stimuli for example cystic fibrosis involves *hyperreactive* airways.
- **Hyperstimulation analgesia** Excessive stimulation of an organ or part (e.g. nerve) leading to relief of pain without loss of consciousness.
- **Hypertonicity** The quality or state of being hypertonic (having increased tone).
- **Hyperventilation** Excessive ventilation; *specifically*: excessive rate and depth of respiration leading to abnormal loss of carbon dioxide from the blood called also *overventilation*.
- **Iliosacral test, see Standing flexion (iliosacral) test** Testing the functionality of the iliosacral joints during standing flexion.
- **Illness behavior** Altered functionality resulting from a reaction to symptoms that is inappropriate. Commonly occurs when 'hurt' is translated as 'harm', when in fact no harm would arise from performing normal actions even though they hurt.
- **Imposter (masquerader) back pain (symptoms)** Symptoms that result from more serious conditions/ pathology that mimic 'normal' back pain.
- 'Increased tolerance to stretch' (ITS) The effect that allows more force to be painlessly used in stretching, resulting from the use of isometric contractions in use of methods such as Muscle Energy Technique and PNF.
- **Inflammation** A local response to cellular injury that is marked by capillary dilatation, leukocytic infiltration, redness, heat, pain, swelling, and often loss of function, and that serves as a mechanism initiating the elimination of noxious agents and of damaged tissue.
- **Inflare** When an ilium flares medially in relation to the sacrum as part of a sacroiliac or iliosacral dysfunction.
- Inhibition (ischemic compression) Interference with or retardation or prevention of a process or activity.
- **Integrated neuromuscular inhibition (INIT)** An integrated sequence employed in trigger point deactivation.
- Ischemic compression see Inhibition.
- **Isometric contraction** A contraction where resistance to the effort is complete so that no movement occurs.
- 'Jump sign' A term used in relation to palpation and treatment of trigger points describing an inadvertent 'jump' when the trigger point is pressed.
- **Kneading (see Petrissage)** Massage in which the muscles are kneaded.
- **Kyphosis** Exaggerated outward curvature of the thoracic region of the spinal column resulting in a rounded upper back.

- **Landmark** A feature of the body that can be observed or palpated.
- **Lateral muscle system** Muscle groups that lie laterally rather than medially.
- Laxness see Hypermobility.
- **Load, loading** The application of pressure to tissues in one form or another, for example compressive or shearing.
- **Local adaptation syndromes (LAS)** The same sequence that occurs in the General Adaptation Syndrome, but applied to a local area – for example a shoulder or knee being subjected to repetitive stresses.
- Lomi Lomi massage A form of Hawaiian massage.
- **Lumbar zygapophysial (facet) syndrome** A dysfunctional state of vertebral facet joints in the lumbar region.
- Lumbodorsal fascia The wide band of fascia that links the lumbar spinal region to the pelvic and lower limb fascia (below) and thoracic and cervical fascia (above).
- Lymphatic drainage methods Techniques that encourage enhanced lymphatic flow and drainage.
- Masquerader symptoms see Imposter symptoms.
- **McGill Pain Questionnaire** A specialized questionnaire that helps determine the degree and nature of pain being experienced.
- **Meridian** Any of the pathways along which the body's vital energy flows according to the theory of acupuncture.
- Microtrauma injury A very slight injury or lesion.
- **Mind–body techniques** Methods that attempt to understand and treat somatic and emotional issues that are linked by trauma.
- **Morton's syndrome** A form of metatarsalgia involving compression of a branch of the plantar nerve.
- **Movement therapy** Treatment and rehabilitation methods involving active participation of the patient.
- **Muscle energy techniques (MET)** Use of carefully modulated isometric and isotonic contractions to enhance mobility and length of dysfunctional tissues, developed as part of osteopathic medicine.
- **Muscle fatigue** The temporary loss of power to respond induced in a sensory receptor or motor end organ by continued stimulation.
- **Muscle knot** An area of unnatural tension or fibrosis in a muscle.
- **Muscle shortness tests** Tests to evaluate normal length of muscles.
- **Muscle spindle** A sensory end organ in a muscle that is sensitive to stretch in the muscle, consists of small striated muscle fibers richly supplied with nerve fibers, and is enclosed in a connective tissue sheath – called also *stretch receptor*.

- **Muscle weakness tests** Tests to evaluate normal strength of muscles.
- **Myofascial release (MFR)** A form of treatment that encourages increased length of the myofascial tissues by application of load in two directions simultaneously.
- **Nerve root compression** Pressure on a nerve root, for example as a result of disc herniation.
- **Neuromuscular techniques (NMT)** A series of manual treatment methods that use the effects of specific pressure and stretch approaches on the nervous system and myofascial tissues. There is a British (Lief's) NMT as well as an American version derived from the work of Nimmo.
- **Neuroresponse** The response of the nervous system to a stimulus.
- **Nociceptor** A receptor for injurious or painful stimuli; a pain sense organ.
- **Nodal point** Either of two points so located on the axis of a lens or optical system that any incident ray directed through one will produce a parallel emergent ray directed through the other.
- **Operant conditioning** Conditioning in which the desired behavior or increasingly closer approximations to it are followed by a rewarding or reinforcing stimulus.
- **Oscillation** The action or state of oscillating (rhythmically or harmonically vibrating).
- **Osteitis deformans (Paget's disease)** A chronic disease of bones characterized by their great enlargement and rarefaction with bowing of the long bones and deformation of the flat bones.
- **Osteopathy** A system of medical practice based on a theory that diseases are due chiefly to loss of structural integrity which can be restored by manipulation of the parts supplemented by therapeutic measures (such as use of medicine or surgery).
- **Osteoporosis** A condition that affects especially older women and is characterized by decrease in bone mass with decreased density and enlargement of bone spaces producing porosity and brittleness.
- **Outcome based massage** Massage methodology based on anticipated outcome.
- **Outflare** When an ilium flares laterally in relation to the sacrum as part of a sacroiliac or iliosacral dysfunction.
- Paget's disease see Osteitis deformans.
- 'Pain behavior' see Illness behavior.
- **Pain drawing** A sketch made by a patient of his/her pain.
- **Pain threshold** The level of pressure or irritation required to trigger a sense of pain in the patient is the threshold.
- **Passive joint movement** Movement produced by the practitioner without help from the patient.

- **Percussion** Massage consisting of the striking of a body part with light rapid blows called also *tapotement*.
- Petrissage (kneading) see Kneading.
- **Physiatry** The practice of physical medicine and rehabilitation.
- **Physical therapy** The treatment of disease by physical and mechanical means (such as massage, regulated exercise, water, light, heat, and electricity) called also *physiotherapy*.
- **Pilates** Used for an exercise regimen typically performed with the use of specialized apparatus and designed to improve the overall condition of the body.
- Pliability Being supple and flexible.
- **Positional release technique (PRT)** Treatment methods that allow spontaneous improvement of dysfunctional tissues by placing them in a degree of supported comfort or 'ease' and either holding them there or taping them into an unloaded position.
- **Post-isometric relaxation (PIR)** A response of tissues to be held in an isometric contraction.
- **Prolotherapy** An alternative therapy for treating musculoskeletal pain that involves injecting an irritant substance (such as dextrose) into a ligament or tendon to promote the growth of new tissue.
- Prone hip extension test see Hip extension test.
- Prone trunk extension test see Trunk extension test.
- **Proprioception** The reception of stimuli produced within the organism.
- **'Pseudo-sciatica' referral pattern** A painful pattern in the lower limb that mimics true sciatica but which derives from other sources, such as a trigger point.
- **PSIS (posterior superior iliac spine)** A landmark at the medial end of the crest of the pelvis posteriorly.
- **Pulsed MET** Use of repetitive mini-isometric contractions against a restriction barrier to achieve a release.
- **Pursed lip breathing** In breathing rehabilitation, exhaling slowly through a narrowed aperture created by pursing the lips as though blowing through a drinking straw.

Radicular pain Relating to, or involving a nerve root.

- **Range of motion** The normal physiological range of motion of a joint or muscle.
- **Reciprocal inhibition (RI)** The neurological effect affecting a muscle after its antagonist has been isometrically contracted.
- **Red (yellow)** flags Red flags are signs or symptoms that suggest that a serious pathological condition exists. Yellow flags are signs or symptoms that suggest that psychosocial factors exist that increase the risk of developing, or perpetuating chronic pain and long-term disability.

- **Reflex activity** An automatic and often inborn response to a stimulus that involves a nerve impulse passing inward from a receptor to the spinal cord and thence outward to an effector (such as a muscle or gland) without reaching the level of consciousness and often without passing to the brain, for example the knee-jerk *reflex*.
- **Reflexology** A form of treatment based on the belief that reflex areas exist in the hands and feet (for example) which when compressed or rubbed, influence functions and systems distant from the area being treated.
- **Rehabilitation exercises** Exercises used during the physical restoration of a sick or disabled person by therapeutic measures and re-education to participation in the activities of a normal life.
- **Restriction barrier** The point beyond which easy, free, movement is not possible.
- **Rhythmic traction** Repetitive traction performed in a rhythmic manner.
- **Rotation (torsion) loading (force)** Application of load using a twisting (rotational) action.
- **Rotational dysfunction** A dysfunctional situation either caused by a rotational movement, or preventing a rotational movement.
- Scoliosis A lateral curvature of the spine.
- **Seated flexion (sacroiliac) test** A flexion test performed with the patient seated to assess the presence of a restriction in the SI joint.
- **Serotonin** An important neurotransmitter that is a powerful vasoconstrictor and is found especially in the brain, blood serum, and gastric mucous membrane of mammals.
- **Shear loading (shearing force)** A loading force that creates a shearing pattern of strain in tissues.
- **Shiatsu** Acupressure especially of a form that originated in Japan.
- **Side bridge exercise** An exercise that assists in creating core stability in which the patient lies on his/her side and creates demands for support from lateral muscle groups.
- **Sliding force** A loading force that causes one tissue to slide on another (for example skin on fascia).
- **Spondylolisthesis** Forward displacement of a lumbar vertebra on the one below it and especially of the fifth lumbar vertebra on the sacrum producing pain by compression of nerve roots.
- **Standing flexion (iliosacral) test** Testing the functionality of the iliosacral joints during standing flexion.
- **Stenosis** A narrowing or constriction of the diameter of a bodily passage or orifice.
- Strain/counterstrain (SCS) A positional release method.

Stress

- **1.** A force exerted when one body or body part presses on, pulls on, pushes against, or tends to compress or twist another body or body part; *especially*: the intensity of this mutual force commonly expressed in pounds per square inch. The deformation caused in a body by such a force.
- **2.** A physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation. A state of bodily or mental tension resulting from factors that tend to alter an existent equilibrium.
- **Subluxation** Partial dislocation (such as of one of the bones in a joint). Used in chiropractic to describe an area of restriction/dysfunction.
- **Substance P** A neuropeptide that consists of 11 amino acid residues, that is widely distributed in the brain, spinal cord, and peripheral nervous system, and that acts across nerve synapses to produce prolonged postsynaptic excitation.
- **Synergism** Interaction of discrete agents such that the total effect is greater than the sum of the individual effects such as a group of muscles working together.
- **Tai chi** An ancient Chinese discipline involving a continuous series of controlled, usually slow movements designed to improve physical and mental well-being called also *t'ai chi ch'uan, tai chi chuan.*
- Tapotement Percussion during massage.
- **Taut band** A localized area of tissue tightness associated with trigger points.
- **'Tender' point** An area that is more tender to pressure than is appropriate (i.e. where pain threshold has lowered).
- **Tension (tensile) loading (force)** A loading force that creates tension in the tissues being treated.
- **Tissue texture** What tissue feels like to the therapist when palpated (fibrous, swollen, loose etc.).
- **Toe-off** The moment that the foot leaves contact with the surface during the gait cycle.
- Tone Normal tissue tension or responsiveness to stimuli.
- **Torsion** The state of being twisted.
- **Transcutaneous electrical stimulation** Passage of an electrical current across painful tissues to produce pain relief.
- **Triage** The sorting of patients according to the urgency of their need for care.
- **Trunk extension test** A test to evaluate strength of the multifidi in which the prone patient extends the spine while ensuring legs and feet remain in contact with the floor at all times. Failure to do so suggests weakness.

- Tuina methods Traditional Chinese Medicine massage and manipulation methods.
- **Type I muscle fibers** Fibers that have a primarily supportive/postural function in muscles.
- **Type II muscle fibers** Fibers that have a primarily phasic/movement function in muscles.
- Vapocoolant spray A spray that cools tissues.
- Visceral drag The effect of sagging organs as in visceroptosis.
- Visceroptosis Downward displacement of the abdominal organs.
- **Visual analog scale (VAS)** A tool (line on a piece of paper) on which the degree of pain being experienced can be recorded by the patient.

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