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GENERAL DEFINITIONS--ATHLETIC TRAINING

ISOTONIC - Dynamic - e.g. weight lifting. A muscular contraction in which the muscle fibers shorten in length resulting in movement of the adjoining body parts. Muscle works with a change in muscle length.

Concentric - Shortening works

Eccentric - Lengthening works

ISOMETRIC - Static. Contraction of a muscle without movement. A muscular contraction in which the muscle fibers do not shorten in length resulting in no movement of adjoining body parts. Muscle works with no change in muscle length. Builds static strength, but does not improve dynamic strength significantly.

ISOKINETIC - Dynamic. A form of isotonic exercise in which maximum resistance is provided through the full range of movement. Muscle works with a change in muscle length and controlled speed. Requires an accommodating resistance device, e.g. a Mini-Gym.

ANATOMY - The study of structure or form.

PHYSIOLOGY - The study of function.

KINESIOLOGY - The study of human movement.

ANTERIOR - The front of body or body part.

POSTERIOR - The back of body or body part.

MEDIAL - Toward the midline of the body.

LATERAL - Away from the midline of the body; toward the side.

DORSAL - Upper surface (refers to the top of the foot).

VENTRAL - Bottom surface, belly. Opposite of dorsal.

PLANTAR - Ventral aspect of the foot (the sole of the foot).

FLEXION - Bending at a joint or decreasing the angle between two bones.

EXTENSION - Straightening at a joint or increasing the angle between two bones.

PRONATION - Turning the palm downward.

SUPINATION - Turning the palm upward.

INVERSION - Turning the sole of the foot inward.

EVERSION - Turning the sole of the foot outward.

ABDUCTION - Moving a body part away from the midline.

ADDUCTION - Moving a body part toward the midline.

PLANTAR FLEXION - Ankle movement pointing the toe downward.

DORSAL FLEXION - Ankle movement bringing the toe toward the shin.

CLAVICLE - Collarbone.

SCAPULA - Shoulder blade.

HUMERUS - Upper arm bone.

RADIUS - Lateral forearm.

ULNA - Medial forearm.

FEMUR - Thigh bone.

TIBIA - Large bone of lower leg.

FIBULA - Small bone of lower leg.

PATELLA - Kneecap.

CALCANEOS - Heel bone.

CERVICAL - Of the neck, especially the seven vertebrae in the neck.

ARTICULATION - A joint between bones. (the manner of connecting by a joint).
TENDON - A band of dense, tough tissue forming the termination of a muscle and attaching the latter to a bone.
CARTILAGE - Gristle-like padding on or between bones at the joints.
LIGAMENT - A band of non-elastic, tough connective tissue connecting the articular ends of the bones, frequently the stabilizing element of the joint and joint capsule.

CHRONIC - Of long duration, repeating. In athletes, usually a neglected injury or one that has not responded to treatment.

ACUTE - Severe; also rapid or brief.

CONTUSION - A bruise; an injury where the skin is not broken.

HEMATOMA - Swelling composed of blood; internal bleeding, associated with contusions.

EDEMA - Abnormal accumulation of fluid, in tissues or cavities.

HYPERTROPHY - Increase in muscle or tissue size.

ATROPHY - Decrease in muscle or tissue size.

SPRAIN - A stretching or tearing of ligaments.

"AC" SEPARATION - (Acromio-Clavicular) A tear of the ligament which holds the clavicle to the scapula.

STRAIN - Any excessive stretching of a muscle or over use of a part.

DISLOCATION - Complete displacement of a joint.

SUBLUXATION - Incomplete or partial dislocation.

-ITIS - An inflammatory disease of (Suffix)

ADHESION - A sticking together or binding of tissue fibers.

PALPATION - Examination by touch.

INDICATE - To advise a particular treatment.

CONTRAINDICATE - To warn against a particular treatment.

AEROBIC - Work requiring O₂.

ANAEROBIC - Work not requiring O₂.

MODALITY - Method or apparatus for therapy.

HYDROTHERAPY - Treatment by use of water.

CRYOTHERAPY - Treatment by use of cold.

CRYOKINETICS - Treatment with cold and movement.

THERMOTHERAPY - Treatment by use of heat - includes hot packs, analgesics, ultrasound and diathermy.

ANALGESIC - A counterirritant which reduces pain and increases local circulation.

DIATHERMY - Use of electrical current to increase circulation by heating.