



INDIVIDUAL MUSCLE ACTIONS OF THE EXTRAOCULAR MUSCLES FROM THE 1° POSITION
 (1° = PRIMARY OR NEUTRAL POSITION: LOOKING STRAIGHT AHEAD INTO THE DISTANCE)

MUSCLE	1° ACTION	2° & 3° ACTIONS * ¹	4° ACTION
MEDIAL RECTUS = MR	ADDUCTION OR MEDIAL GAZE	NONE	RETRACTION OF THE EYE * ²
LATERAL RECTUS = LR	ABDUCTION OR LATERAL GAZE	NONE	
SUPERIOR RECTUS = SR	ELEVATION OR UPWARD (VERTICAL) GAZE	ADDUCTION & INTORSION	PROTRACTION OF THE EYE * ²
INFERIOR RECTUS = IR	DEPRESSION OR DOWNWARD (VERTICAL) GAZE	ADDUCTION & EXTORSION	
SUPERIOR OBLIQUE = SO	MEDIAL ROTATION OR INTORSION	ABDUCTION & DEPRESSION	
INFERIOR OBLIQUE = IO	LATERAL ROTATION OR EXTORSION	ABDUCTION & ELEVATION	

*¹ REFERENCES DO NOT AGREE ENTIRELY AS TO WHICH ACTION IS 2° AND WHICH IS 3°. THIS IS NOT UNUSUAL NOR SURPRISING AS ALL AGREE THAT THE EYE MUSCLES DO NOT FUNCTION INDIVIDUALLY. THEY FUNCTION IN YOKE PAIRS OR TRIADS BUT WITH ALL SIX MUSCLE PAIRS BEING INVOLVED IN EVERY EYE MOVEMENT COUPLED WITH HEAD-NECK MOVEMENTS.

*² IN NORMAL EYE MOVEMENTS THESE TWO ACTIONS CANCEL OUT EACH OTHER, YET THESE ACTIONS ASSIST IN HOLDING THE EYE IN PLACE IN THE ORBIT ALONG WITH THE MEDIAL AND LATERAL CHECK LIGAMENTS AND THE BULBAR SLING.

NOTE: IN NORMAL VISUAL MOVEMENTS THE SIX PAIRS OF EXTRINSIC (EXTRAOCULAR) EYE MUSCLES AND THE LEVATOR PALPEBRAE SUPERIORIS MUSCLES FUNCTION IN CONCERT. THESE COMBINED MUSCLE ACTIONS INVOLVE ALL THREE AXES THUS ALL MOVEMENTS ARE EXTREMELY COMPLEX. TO SIMPLIFY THESE ACTIONS REMEMBER THE.....
CONVERGENCE TRIAD = MEDIAL RECTI, SUPERIOR RECTI, AND INFERIOR RECTI, NEAR VISION;
DIVERGENCE TRIAD = LATERAL RECTUS, SUP. OBLIQUE & INF. OBLIQUE FOR FAR VISION.
 SEE PAGE _____ ILLUSTRATING THE FUNCTIONAL TRIADS AND EXAMPLES OF THESE MOVEMENTS.