



STRENGTH & CONDITIONING

OVERVIEW

- What is Strength Training
- Types of Strength Training
- Strength Training Recommendations

MUSCLE CONTRACTIONS

- **Dynamic:** Produces movement of a skeletal body part such as and upper or lower limb of the trunk
 - **Concentric:** Occurs when a muscle shorten and joint movement occurs as tension develops.
 - **Eccentric:** Occurs when external resistance exceeds muscle force and the muscle lengthen while developing tension.
- **Static:** Muscle activation without and observable change in muscle fiber length.
 - **Isometric:** Occurs when a muscle generate a force and attempts to shorten but cannot overcome the external resistance.

WHAT IS MUSCULAR STRENGTH

- Muscular Strength is the maximum force or tension output generated by a muscle or related groups.

How do we become stronger?

DOES STRENGTH TRANSLATE TO SPORT PERFORMANCE?

- Is it important?
- For what sports?
- Is the biggest, fastest athlete always the best?

MAYBE? MAYBE NOT?

TYPES OF STRENGTH TRAINING

- Maximum Strength
- Bodybuilding
- Power Training
- Concurrent Training

STRENGTH TRAINING RECOMMENDATIONS

		Load (%1RM)	Goal Repetitions
1	Strength*	=> 85%	<= 6
2	Power: Single-effort Multiple Effort	80-90% 75-85%	1-2 3-5
3	Hypertrophy	67-85%	6-12
4	Muscular Endurance*	=<67%	=>12

The image features a solid red background with decorative circuit-like lines in a lighter red color. These lines are located in the four corners, forming abstract patterns of lines and circles that resemble a printed circuit board or a network diagram. The central text is white and reads "QUESTIONS?".

QUESTIONS?