EXERCISE SELECTION FOR SPORTS

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TYPING VARIOUS SPORTS

Proper movements MUST be chosen to find a needed response to athletes in various sports. If we can think about strength qualities needed for various sports, it makes exercise selection MUCH easier. As coaches, we need to break down the athlete into various groups based off their dominant sport or their "in-season" sport or perhaps their favorite sport as a competitor. Once the main sport(s) are selected, we must refer to the strength qualities needed! Let's refresh this aspect of programming.

POWER STRENGTH SPORTS

The goal when training power sports is to continuously focus on mobility while enhancing their speed, strength and power. The only basis of endurance training is based around

Throwing Weightlifting Long Range Golf

actual sport specific endurance. For instance, if an athlete is taking 30-35 throws as a shot putter on a regular basis, that is the extent of their "endurance." The entire basis of their development is focused on strength, power, speed and mobility. The next step is to find movements that transfer very well to strength, power, speed and mobility. There are specific movements in the strength world that can lead to the development of those four qualities.

POWER ENDURANCE SPORTS

Power endurance sports are sports VERY closely related to power sports, however their competitive stage may be longer in duration and they may be involved in more repetitive competition

Volleyball Gymnastics Cheerleading

and can have some endurance modalities within their sport. If we compared a volleyball player (power endurance) to a shot putter (power sport), the volleyball player MUST be extremely explosive, they must have a very high touch point and they must be able to react rapidly, just like a shot putter. However, the endurance factor is based around longer sets and even long rallies. Some rallies can last over 2 minutes in duration! That is where the endurance factor comes into play and must be factored into their training.

POWER AND STRENGTH ENDURANCE SPORTS

Power and Strength Endurance sports are a bit different from power endurance sports. These are sports that typically are field or court sports and often times athletes need to be engaging with an opponent. For instance, Wrestling Football Field Hockey Lacrosse

using wrestling as an example, a wrestler needs to be very STRONG, they must be very EXPLOSIVE and they must have proper ENDURANCE. This is similar to field hockey or football. Endurance becomes much more of a factor. When training a power and strength endurance athlete, much of their time is spent developing strength and power with about 20% of their time focusing on endurance to enable proper recovery from training and to support a longer period of power output during competition.

ENDURANCE SPORTS

Endurance based sports need power, strength, speed and mobility to enhance their training and enhance their recovery. However, the main goal

Cross Country Swimming Long Course Triathalon/Iron Man

here is to focus on endurance development. A distance runner may focus on stride length which can be trained through power output and mobility but ultimately they need to maintain a longer stride length while under stress for a long duration of time. The same holds true for triathletes. These are individuals that certainly benefit from strength, power and speed but much of their training is based around endurance volume work.

EXERCISE SELECTION

Now that we remember how to define the four types of athletes, we need to dive into the next part of the puzzle. What plane do they train/compete on? No, not the 747 or A350, I am talking about sagit-tal, frontal or transverse. At the simplest method, think of planes in this regard:

PLANES OF MOVEMENT



Comprehending motion and plane of motion and comprehending the qualities that need to be trained are great! BUT, we also need to comprehend one more aspect. Do they compete/train on these planes of movement in a bilateral or unilateral movement pattern and what is the time spent bilateral vs. unilateral? There is a lot that goes into selecting exercises for sports but this is the bread and butter that I generally use on a regular basis. I want to provide a simple example for the four sports I train the most and how I would select movements for them specifically.

WRESTLING

SNATCH

Bilateral power, speed and mobility work on sagittal plane





FRONT SQUAT

Bilateral strength and mobility work on sagittal plane



SLED

Unilateral strength, power, speed work on sagittal plane



Bilateral or unilateral strength and speed work on sagittal plane



ROTATIONA ABS

Transverse plane and trunk work for mobility





Bilateral power, speed, mobility and strength work on sagittal plane



Unilateral power, speed, mobility and strength work on sagittal plane



Bilateral OR unilateral speed work on sagittal plane







PULL UP

Bilateral strength, mobility, and power with specific strength on sagittal plane



Speed, power and mobility on transverse plane





FOOTBALL / FIELD HOCKEY / LACROSSE



POWER CLEAN

Bilateral power, speed and strength work on sagittal plane





HOPS

Bilateral power and speed work on sagittal plane

ONE LEG BOUNDS

Unilateral power and speed work on sagittal plane



CHIN UPS

Bilateral strength, mobility and power work on sagittal plane



Unilateral strength and mobility work on transverse plane





Bilateral strength, power and speed work on sagittal plane





Unilateral power, speed, mobility and strength work on sagittal plane



Unilateral and bilateral strength and speed work on sagittal plane

ROTATIONA JUMP LUNG

Unilateral power, speed and mobility work on transverse plane



Bilateral strength and speed work on sagittal plane













OLYMPIC WEIGHTLIFTING

SNATCH

Bilateral competitive movement for speed, power and mobility on sagittal plane





Bilateral strength, power and mobility movement on sagittal plane



SNATCH PULL

Bilateral strength and power movement on sagittal plane



PUSH PRESS

Bilateral strength and power movement



CLEAN **AND JERK**

Bilateral competitive movement for speed, power, strength and mobility on sagittal plane



BACK Squat

Bilateral strength, power and mobility movement on sagittal plane



CLEAN PULL

Bilateral strength and power movement on sagittal plane



THROWING

SNATCH

Bilateral competitive movement for speed, power and mobility on sagittal plane





Movement for power, speed and mobility



PULL UPS

Bilateral strength and mobility work and power on sagittal plane



Unilateral/bilateral power, speed, mobility and strength work on transverse plane





THROWS

Unilateral/bilateral power, speed, mobility and strength work on transverse plane





Bilateral competitive movement for speed, power, strength and

mobility on sagittal





plane

Unilateral and bilateral strength and speed work on sagittal plane



ONE LEG SQUAT

Unilateral power, speed, mobility and strength work on sagittal plane



Unilateral/bilateral power, speed, mobility and strength work on transverse plane





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