KAPI'OLANI SPORTS & DANCE MEDICINE

CORE STRENGTH, BALANCE AND PROPRIOCEPTION

WHAT IS CORE STRENGTH?

- Core muscles are the muscles that stabilize the spine and pelvis, which is the core or center of the body.
- The core muscles consist of abdominal muscles, hip muscles, butt muscles and back muscles. Some people will also argue that the core should include the upper back and shoulder blade muscles especially in overhead athletes.
- In athletes, power comes from the core. For example, a pitcher uses his arm to throw the ball, but the power behind the throw should not come from his arm, but from his core muscles.
- When the core is strong, it also improves your balance which can help to prevent injuries.
- A recent study shows faster 5,000 meter times after a core strength training program showing that it can also improve athletic performance.
- Another study shows that after a hamstring strain, rehabilitating your hamstring and strengthening your core reduces the risk of re-injury by about 90%.
- When all of your core muscles are working together, it makes any type of physical activity easier.
- You still need to do strength training and conditioning, but you will be engaging or using your core to do this as well.
- You can test and strengthen your core with the same exercises as shown. Goal is to be able to hold these positions for 1 minute without wobbling, working yourself up to a minute in 10 second increments.

WHY IS BALANCE SO IMPORTANT?

- Balance is a basic skill that is needed in all sports and even in normal daily activities.
- The better your balance is, the more agile you will be.
- To a small extent, the ability to balance is genetically based, inherited from your parents. However, it is a skill that can be developed with practice and training.

WHAT IS PROPRIOCEPTION?

- Proprioception is the awareness of joint space, meaning knowing where your body parts are in relation to the space around you.
- Proprioception training is important in the rehabilitation of injuries, but is also equally important in the prevention of injuries.
- Some sports require highly developed proprioceptive skills, such as gymnastics, diving, aerial maneuvers in surfing, skateboarding and snowboarding.

HOW IS ALL OF THIS RELATED?

- Core strength and balance gives you the ability to develop your proprioception.
- When your proprioception is optimal, you are less likely to get injured. A good example is running on a soccer field. During a game you're running down the field with the ball, your foot falls into a small divet in the field. Because your proprioception, balance and core is good, you are able to shift your weight and not sprain your ankle.

PLANK POSITION

REVERSE PLANK POSITION

QUADRUPED

KAPI'OLANI SPORTS & DANCE MEDICINE PROGRAM

Kapi'olani offers complete medical care to the dancer and athlete—from treatment for musculoskeletal injuries to performing with chronic and acute illnesses. Our goal is to balance therapeutic treatment with return to optimal performance.

Call 945-3766 to learn more or to make an appointment.

Our office is located at:
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