

The Power Position

The human body is a magnificent machine. It is designed to perform a variety of motions, generate force, and assume numerous postures. Studies of the body have demonstrated that there are certain body postures that allow the body to generate the most force with the least effort. These postures are called the anatomical neutral or power positions.

When a basketball player getting ready to jump or a linebacker getting ready to tackle an opposing player notice that they place their legs in a similar position—a moderately bent knee position. This moderately bent knee position is the power position of the legs.



The power position of the spine is the three natural curves. In this position the vertebrae and discs are able to absorb the most shock and the muscles of the back are in their strongest position. The further a person moves out of the power position, the greater the demands on the body. For this reason, this is the position chosen by professional weight lifters when lifting large amounts of weight.

Remember: It is not possible, or practical, to maintain the three natural curves all day long. The spine is designed to bend, rotate, and work in a variety of positions. The problem is that people frequently choose to use their backs in its weaker positions, even when the task allows them to do it in a stronger posture. The three natural curves, or power position becomes most critical when the heaviest loads are lifted or when numerous repetitions are required.

THE POWER POSITION

Talking Notes

POINTS TO REVIEW

1. Your back works best when used the way it was designed.

We know that there are machines and tools that work better when used the way they are designed. The same holds true for the spine. This machine works best when you maintain the three natural curves. This is because all of its components can work together for the greatest strength and shock absorption.

2. The more often you can use your body the way it was designed, the better your chances of avoiding a back injury.

No one is saying that all lifts must be performed in the power position, this is not possible. However, the closer you can get your back to its power position, the safer the lift will be. This means attempting to lift better, or as well as the environment allows.

3. Proper positioning becomes more critical as the work becomes more demanding.

You don't want to remain in the power position all of the time. Your spine is designed to change positions and needs a variety of movements to stay healthy. It is when the work is the most demanding that the power position becomes more critical.

QUESTIONS FOR DISCUSSION

- 1. Can everything be picked up using the power position? What item can? What items can't? And, why not?**
- 2. What happens to the strength of our leg muscles when you go into a deep or full squat?**
- 3. What happens to the strength of your back muscles when you bend over incorrectly to pick something up?**

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