

## Core Part II

Low back pain is an epidemic in our modern day society. In 1 year, 36% of our population will suffer an episode of back pain. Low back pain is the most common reason for general activity limitations and work absences in most of the world. The economic effects of low back pain are immense. And unfortunately, low back pain reoccurrence and the prevalence of chronic low back pain are both on the rise and no definitive cause or risk factors have been identified. Sounds pretty ominous! Suffice to say, low back pain is a very common diagnosis I see in the clinic.

Back pain can be acute, subacute, recurring, or chronic. It can be localized to the low back or it can refer into the extremities. It can be present with or without neural compromise such as weakness and sensation loss in the limbs. *Research has shown that in all cases of low back pain, abnormal muscle recruitment patterns in the spine result. In addition, even after the pain had subsided, the muscles that work to stabilize the spine still do not perform normally.*

It is paramount that individuals who are suffering from or have experienced low back pain relearn proper core muscle recruitment. There are many high quality studies which show strong evidence that training your core muscles properly results in less back pain and improved functional levels. I see supporting empirical evidence of this in the clinic with my patients.

There are 2 basic clinical approaches to this problem of core muscle dysfunction. Some believe that doing general core exercises are enough to reactivate the system to "normal". Others believe that specific focused inner core muscle training is needed first with eventual progression to outer core combined with the inner system. (In my last article "What's My Core Anyway", I reviewed the components of the core separating it into inner and outer segments. Please refer back to that article for information on the muscles and specific functions of each of these systems.)

For multiple reasons, I have focused clinically on first reactivating the inner core and then integrating the outer core. It has been quite apparent to me that this is necessary but more difficult. Most of the patients I see fit into the recurrent back pain category. Many have tried general core exercises. But yet when I specifically assess their inner core abilities, it is almost always still compromised. If it was sufficient that general core exercises would do the trick, I would anticipate that when I see them their inner core would be functional. To that matter, wouldn't just general movement or activity rehabilitate their inner core?