



***Real Time Ultrasound (RTUS) imaging of the stabilizing muscles of the spine and torso is now available at Ascent Physical Therapy.***

### Stabilizing Muscles of the Spine and Torso

Core Muscles that are strong and effectively stabilizing the spine and torso are a major component of wellbeing. These core muscles create a girdle around your body to maintain dynamic posture and are critical to optimal health and strength.



Having difficulty making the “Core Connection”? Working hard on your “core” exercises but unsure if you are actually using the muscles the exercises are meant to target? Have no idea what is meant by ‘your deep abdominals and back muscles or inner unit’? Come visit **Ascent Physical Therapy** for a **Real Time Ultrasound (RTUS)** assessment that allows both you and your physiotherapist to see how your “core” muscles function as you perform your exercises!!

This **new & cutting edge RTUS service** is available at Ascent Physical Therapy. The RTUS research supported assessments are ideal for accurate and objective assessment of the vital core stabilizing muscles. RTUS display provides you with important **visual feedback** which enables you to learn to recognize the **sensation of correctly contracting the core muscles**, enabling you to train these muscles efficiently. Once this is achieved you will be given an individualized muscular retraining program and will receive either a digital video or photograph of your muscles functioning. Please feel free to **contact us at 403-678-8855** to make an **appointment for a RTUS assessment**. Each consultation will be a standard 40 minute physiotherapist visit .All assessments are conducted by an experienced physiotherapist to determine if your core muscles are functioning optimally.

**For more information please visit [www.ascentphysio.com](http://www.ascentphysio.com)**

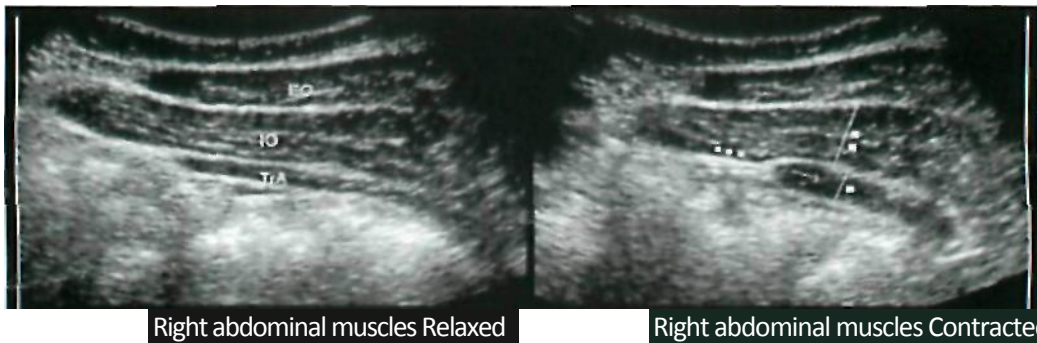
Ascent Physical Therapy - #206, 830 – 8 Street – Canmore AB – T1W 2B7  
Phone: (403) 678-8855 – Fax: (403) 678-8799 [www.ascentphysio.com](http://www.ascentphysio.com)

## What is Real Time Ultrasound (RTUS) imaging?

RTUS imaging is basically sonar, the same system that bats use to navigate. RTUS involves the sending of inaudible sound waves through the body with an ultrasound transducer. The transducer is placed on the client's skin & functions as a loudspeaker creating sound waves, as well as a microphone that records the resulting sound waves. These sound waves are reflected by internal body tissues & then displayed as a real-time picture on a computer monitor. The *RTUS* allows you & your physiotherapist to visualize the contraction of the deep muscles of the trunk. Research has shown that these 'core' muscles are critical for stabilizing the spinal column and pelvis. As core muscles are located deeper than other layers of muscle they are difficult to feel & cannot be seen without using this technology.

### RTUS images of the abdominal muscles:

(EO = external oblique, IO – internal oblique, TrA = transverses abdominus)



Right abdominal muscles Relaxed

Right abdominal muscles Contracted

## Who Might Benefit From Real Time Ultrasound (RTUS) imaging?

If you are a patient whose spinal pain has not improved with therapy, core muscle training, pilates, or yoga it may be because your core muscles are not contracting correctly. If you are unsure as to whether you can correctly activate these muscles, a RTUS assessment would be of great benefit.

### **Anyone without pain including Athletes can benefit greatly from RTUS in the following ways:**

- Recreational and Elite level athletes who want to determine if they are using their core muscles effectively during training or sporting activities i.e. identifying over or under use of any component of the core muscles
- Athletes who may or may not recognize that they have poor core Stability
- Those athletes who are finding that they are getting repetitive tightness in the same torso, hip or leg muscles that is not easing with stretching or other treatment
- Increases prevention of injury and enhanced performance by ensuring optimal core muscle usage.



Therapist using RTUS on an athlete

The physiotherapists at Ascent Physical Therapy welcome referrals from physiotherapists, athletic therapists, chiropractors, fitness trainers, strength & spoil coaches, yoga & pilates instructors, massage therapists & physicians. Our goal is to augment & facilitate your existing treatment plans for your patients. We welcome you to book your own appointment with us to find your own core connection! For an appointment please call : 403-678-8855