



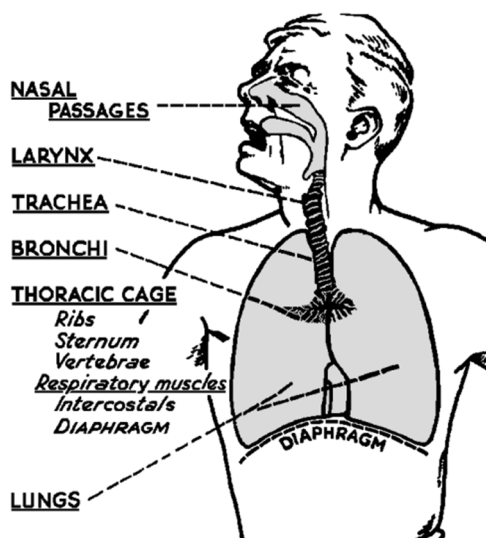
DIAPHRAGM

Diaphragm Function

The diaphragm is a broad, flattened dome like muscle which separates the abdominal cavity from the chest cavity. It is an extremely important muscle involved in the breathing mechanism.

Good diaphragm tone is required to provide mechanical support to the physical structure (bones, joints and ligaments) when the body is under load (think of trying to lift something heavy without guarding or contracting your midriff). A faulty diaphragm can contribute to structural issues and injuries to the mid and low back. Loss of diaphragm integrity transfers loading away from the compact abdominal contents and onto the joints, muscles and ligaments of the spine and pelvis.

In addition, the diaphragm is involved in the healthy resolution of emotional responses (think of a child trying not to cry – they can do so as long as they don't relax their breathing or try to talk). Locked down emotional reactions seem to create tension and tightness in the diaphragm. Muscles lose their ability to function optimally when contracted. This resultant loss of proper function leads to load dependent injuries such as occur during lifting.

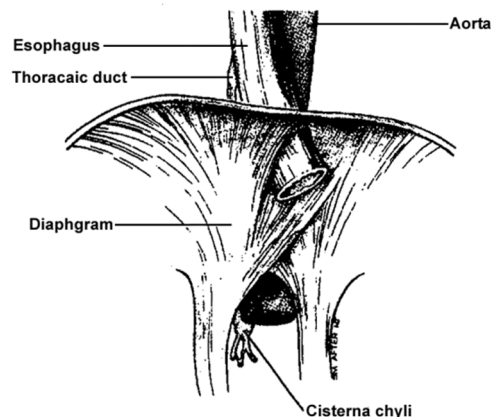


Major blood vessels plus esophagus (tube like structure that connect mouth to the stomach) travel through the diaphragm muscle, therefore muscular imbalance can cause problems to the functioning of these important structures resulting in circulation problems, gastric reflux, hiatus hernia, heartburn with pain radiating into the 'mid back area'

Any of these symptoms presenting to the clinic are seen as an indication that diaphragm may not be functioning optimally.

Signs and symptoms indicating diaphragm involvement

- Pain in bottom of the sternum (Breast Bone) along the lower rib margin.
- Pain in the mid back and between the shoulder blades
- Hiatus hernia
- Gastric Reflux
- Indigestion or heartburn
- Tight diaphragm/ lower rib cage inflexibility.
- Breathing difficulties such as asthma, chronic bronchitis
- Abdominal (paradoxical) breathing pattern



Cross section looking at the under surface of the diaphragm from the front of the body. (Figure from Moore's Clinically Oriented Anatomy, 3rd Ed)

Assessment

At Integrated Health Care you have completed a thorough health questionnaire at the onset of your treatment. This is used in conjunction with kinesiological testing to ascertain the function of the diaphragm. Most likely a diaphragm fault will be only one part of the picture. Examination, together with personal history, will highlight the physical (loading), chemical (food and nutrition), and emotional (past and present trauma) stresses that may be contributing to your particular problems.

Treatment

Treatment for diaphragm faults will depend on what is found during assessment. We use a variety of different techniques which may include physical massage to the diaphragm itself, the application of homeopathic remedies, Chiropractic (spinal adjustment), meridian therapy, nutrition, and lifestyle advice.

The goal is to optimize diaphragmatic function using total holistic approach in order that the physical, chemical and emotional components of the problem are addressed.

Emotions that affect diaphragm function are - **fear, hope, grief, and guilt.**