## Hwa Yu Tai Chi Therapeutic Diaphragmatic Breathing



Many people ask why Tai Chi Therapeutic (TTC) breathing is facilitated through the nostrils. The answer is simple. The nostrils were created specifically to maximize the health benefits of breathing. The nasal passages contain a natural filtering and humidifying system. It keeps the air we breathe at a proper temperature and humidity. The nasal filtering system also helps keep out allergens, pollutants and other irritants. Doctors tell us that the majority of people in the United States are mouth breathers. They say that mouth breathing bypasses the nasal filtering system and allows those irritants into the bronchial tubes and lungs.

Tai Chi Therapeutic movement exercise fills about 75 to 80% of the lungs with air. The breath is in unison with the movements of the body. Each meditative movement is natural, heightens perception of body awareness and cultivates (Life-force). The breathing is long, slow, smooth, rhythmic and continuously linked to each movement. The Hwa Yu Tai Chi movement vocabulary are to be expressed like a lively dragon - up and down, left and right, in and out, allowing all movement to move from the waist. Your movements are spherical and smooth. Thus, your movements look both esthetically balanced and lively.



The <u>lungs</u> are a pair of spongy, air-filled organs located on either side of the chest <u>thorax</u>). The <u>trachea</u> (<u>windpipe</u>) conducts inhaled air into the lungs through its tubular branches, called <u>bronchi</u>. The bronchi then divide into smaller and smaller branches (bronchioles), finally becoming <u>microscopic</u>.

The bronchioles eventually end in clusters of microscopic air sacs called <u>alveoli</u>. In the alveoli, <u>oxygen</u> from the air is absorbed into the blood. <u>Carbon dioxide</u>, a waste product of <u>metabolism</u>, travels from the blood to the alveoli, where it can be exhaled. Between the alveoli is a thin layer of cells called the interstitial, which contains blood vessels and cells that help support the alveoli?

## Hwa Yu Tai Chi Diaphragmatic Breathing, Continue



The diaphragm is a thin domeshaped muscle which separates the thoracic cavity (lungs and heart) from the abdominal cavity (intestines, stomach, liver, etc.). It is involved in respiration, drawing downward in the chest on inhalation, and pushing upward in exhalation.

People breathe in one of two ways. The first is to expand the intercostals located between the ribs (intercostals breathing). The second is to expand the diaphragm below the lungs (diaphragmatic breathing). Breathing by expanding the intercostals muscles means a person can fill only the top half to two thirds of the lungs with air. The bottom third of the lungs is not used. The diaphragm is a large muscle located between the chest and abdomen. Inhaling causes the diaphragm to move down. That causes the abdomen to move out (swell). Exhale and the diaphragm moves up. That causes the abdomen to move in (contract). Breathing by expanding the diaphragm below the lungs brings in the most air to the lungs because the bottom third of the lungs are filled along with the middle third and much of the top third.

Filling the lungs beyond 90% capacity puts unusual stress on the lungs and could be harmful. Abdominal breathing also massages the organs in and around the abdominal cavity. Doctors say abdominal breathing aids the long-term health of intestines, abdominal organs, fascia's and reproductive systems. The lower lobes of the lungs have a larger amount of blood than the middle and upper lobes. Abdominal/diaphragmatic breathing helps the lobes to receive proper ventilation. Abdominal breathing fuels the cells with oxygen-rich blood during inhalation and removes toxins and waste from the body through exhalation. To breathe diaphragmatically, or with the diaphragm, one must draw air into the lungs in a way which will <u>expand the stomach</u> and <u>not the chest</u>. It is best to perform these breaths as long, slow intakes of air – allowing the body to absorb all of the inhaled oxygen while simultaneously relaxing the one breathing.

Ddiaphragmatic breathing is achieved when the Hwa Yu Tai Chi student practices the movement forms with slow, relaxed, calm concentration of the mind. The principle of movement practice is to combine and kinetically link every movement pattern with diaphragmatic breathing. When the body rises and opens the student inhales naturally and when the student movement lowers and closes the student naturally exhales. Every movement combines with the breathing naturally.