

# Autogenic Training and Physical Illness

## The Respiratory System - Standard Exercise 4 - It Breathes me

The Respiratory system is made up of a sequence of highly specialised hollow tubes delivering Oxygen to the lungs and removing Carbon dioxide from them.

### It is made up of:

- The nose which purifies warms and humidifies the inspired air
- The Pharynx; the back of the throat
- Sinuses and Eustachian tubes for hearing and resonance of sound
- The Larynx, voice box for production of sound and speech
- Trachea and Bronchi delivering air to the lung cells
- Lung cells where gaseous exchange takes place
- Intercostal muscles which drive the breath

These tubes are muscular and highly specialised; they are lined with mucus membrane which secretes mucus both in health and disease

Control of breathing is both voluntary (I will decide how I breathe) intentional action, and involuntary (I am breathed) the respiratory centre responding to signals from the body and stimulating the breath by

- Levels of CO<sub>2</sub> and O<sub>2</sub> in the blood
- The acidity of the blood (ph normally 7.4)
- Stretching of the respiratory muscles and lung cells
- Stimulation of the respiratory centre in the brain

*AT engages the relaxation response thereby reducing O<sub>2</sub> need for cell metabolism with an associated decrease in the respiratory rate*

### Asthma

Asthma is a condition where there is narrowing of the air tubes due to bronchial muscle tension and increased secretions which are thick and sticky and adhere to the lining of the tube.

This causes a narrowing of the lumen with difficulty in inspiration and particularly expiration (the wheeze) also causing coughing in an attempt to clear the tubes. Many factors combine to cause asthma. Cystic fibrosis; excess of secretions, recurrent infections, damage to the lungs

- Immune response, air pollution, infection, familial
- Treatment: inhalers, steroids
- Hospital admissions, missing school, anxieties and fears, family anxieties
- Can be severe, life threatening, fatal

*The response to AT is usually good both for the patient and family; personal formulae*

## **Hyperventilation Syndrome**

Rapid breathing triggered by anxiety, fear or panic leading to alteration in blood chemistry caused by blowing off CO<sub>2</sub>

There can be symptoms in all systems

- Tight throat
- Cold hands and feet
- Tingling and numbness in limbs
- Fear of death    catastrophic thinking
- Fear of recurrence leading to heightened vigilance

*AT especially standard exercise 4 is prophylactic with renewed trust in breathing*

### **Upper respiratory tract conditions:**

- Nose:    hay fever    polyps    sinusitis    misery
- Pharynx:    infections    tonsillitis
- Larynx:    voice changes    loss of voice

*These symptoms may indicate a crying need*

### **Lower respiratory conditions**

- Bronchitis
- Pneumonia
- Pleurisy
- Bronchiectasis
- Cystic fibrosis
- Emphysema

*Infection can develop in any area of the respiratory system*

*Cancer can develop in any area of the Respiratory system*