DIET DURING LUNG DISEASE
What is chronic lung disease?

- It is a general term used to describe long-term illness of the breathing system.
- Diseases such as asthma, chronic bronchitis and emphysema are chronic lung diseases.
- Chronic lung disease can affect people of all ages and walks of life.
Asthma

- Airways with asthma are swollen and inflamed
- This obstructs airflow through the lungs
- In asthma airways are also very sensitive to things that can make the condition worse
- The tightening of muscles that surround the airways and mucus production inside the airways cause further obstruction in airways.
• Symptoms include coughing, wheezing, shortness of breath and chest tightness

• Increased response of trachea & bronchi to stimuli

• Reduced airways

• Swelling of airway wall
Chronic bronchitis

- There is a chronic cough and mucus production.

- The airways in the lungs become swollen, irritated and produce more mucus.
• The earliest symptom of chronic bronchitis is a cough with mucus production
• Inflamed airways
• Hyperactive bronchi
• Difficulty in breathing
In emphysema, there is damage to the walls of the alveoli (air sacs) in the lungs. This results in a decrease in total number and smaller size of normal alveoli. The alveoli are not able to transfer oxygen into the bloodstream as well as healthy alveoli. Because of this damage, the lungs lose their elasticity.
Symptoms

Reduced lung surface area

Destruction of air sacs & air spaces

Wheezing

Chronic cough

Chest shape distorted to barrel shape
Nutritional status

- Poor nutrition is related to inadequate pulmonary function.

- Patient with respiratory or inadequate respiratory function has an inadequate food intake which is related to:
  - Anorexia, shortness of breath
  - GI distress, shortness of breath
  - Consumption of meals may limit kilocalorie intake, fatigue
Increased energy requirements, weight loss is common

Malnutrition may also result in decreased lung tissue cell replacement or growth

Malnutrition increases the risk of respiratory tract infections
Diet therapy

- The aim is to prevent malnutrition
- Many patients with COPD suffer from CO2 retention & O2 depletion
- For CO2 retainers there is a decrease in the blood level of CO2
- Fat kilocalories produce less CO2 than carbohydrate kilocalories
- High fat diet is recommended
- Care must be taken not to overfeed patient with reduced respiratory function

- Energy needs to be met, excess intake can raise the demand for O2 & production of CO2

- The total number of kilocalories fed should be closely monitored
• Diet should include foods with low respiratory quotient
• RQ of fat, protein & carbohydrate is

• Non-protein calories can be given with high fat to carbohydrate ratio which decreases CO2 production
Small frequent meals

Rest before meals

Wear loose garments
Caffeine should be avoided

Take medicines with food
Conclusion

- All of this information can help in control of lung disease and life. Doctor’s advise is essential if there are symptoms. Doctor is the partner in taking care of chronic lung disease.

- This involves choosing healthy foods that can work to heal and repair the body and make it stronger against disease.

- Education, exercise and eating well can help to stay healthy and feel good.