# **Digestive Disorders**

## The following are disorders of the human digestive system:

## **Appendicitis**

Inflammation of the appendix causing pain, vomiting and fever. If it is not removed it may burst causing peritonitis.

#### **Jaundice**

This is a manifestation of a disease rather than one in its own right. Caused by an accumulation of bile pigments in the blood causing the skin (and eyes) to appear yellow. Due to blockage of the bile duct or over production by the gall bladder. It is a common symptom of hepatitis.

#### Heartburn

Burning sensation due to stomach contents (acidic) passing back through the cardiac sphincter into the oesophagus. It is caused by the sphincter failing to close adequately after food has entered the stomach.

## **Irritable Bowel Syndrome**

Stomach and bowel pain with usually alternate bouts of diarrhoea and constipation. May be associated with poor diet and stress.

#### **Ulcer**

Auto-digestion of the duodenum or stomach due to over production of acid (or under production of mucous). Often associated with stress. May be bacterial.

## Gall Stones (Biliary calculi)

If there is insufficient bile salts in the bile or excess cholesterol, the cholesterol precipitates and crystallises into gall stones (in the gall bladder). This may lead to jaundice.

## **Diabetes Mellitus**

Inability to control blood sugar levels because either:

- i. pancreas fails to secrete (enough) insulin insulin dependent diabetes.
- ii. insulin target cells do not respond well to insulin non-insulin dependent diabetes.

#### Insulin:

- i. increases the rate of conversion of glucose to glycogen (glycogenesis).
- ii. increases the rate of uptake of glucose by muscles.

This leads to wildly fluctuating sugar levels which may result in coma and death. High blood sugar means low cell sugar. This means that the cells respire. A disproportionate amount of fats and protein producing toxic substances (hyperglycaemia and hypoglycemia).

## **Diabetes Insipidus**

Hyposecretion of ADH therefore copious urine production and thirst. (ADH: Anti Diuretic Hormone). It is treated through the administration of ADH.

### Cirrhosis of the liver

Hardening of the liver principally due to excess alcohol. The alcohol destroys the cells which are replaced by non-active fibrous cells. Also associated with fatty liver.

#### Hernia

Rupture of connective tissue sheath leading to protrusion of an organ into the body space.

## **Constipation**

Excessively dry faeces, which become hard and block the rectum. This leads to infrequent and uncomfortable bowel movements and can cause bleeding (piles).

### Bulimia nervosa

This is the compulsive consumption of what the person considers to be too much (this may range from one unplanned cake to a 20,000 calorie binge) followed by one or more of the following forms of purging:

- self-induced vomiting.
- laxative abuse.
- diuretic (water pills) abuse
- fasting
- excessive exercise.

#### Anorexia nervosa

- i. obsessive concern with dieting and exercise accompanied by an intense fear of being fat or gaining weight, regardless of the degree of emaciation (wasting away).
- ii. rigid and ritualistic behaviour patterns around food and/or exercise that occupy increasing amounts of time, energy and thought.
- iii. significant weight loss or maintenance of low body weight, frequently 15% below ideal body weight.
- iv. Loss of sexual drive and/or cessation of menstrual period in women. Loss of sexual drive and/or impotence in men.

Anorexia nervosa and bulimia are complex psychiatric disorders thought to be caused by a combination of factors including interpersonal interaction, family relationships, cultural values and genetic predisposition.

### **Stress**

Stress may slow down (or switch off) the digestive system leading to ulcers, colitis, IBS, indigestion, nausea, constipation, heartburn, diarrhoea, gallstones, eating disorders including loss or excessive appetite.