

1:3 MALNUTRITION:

Malnutrition is under recognized within the UK. Societal trends such as an ageing population and an increase in care are likely to increase the numbers of patients at risk of malnutrition. Within the UK there are at any one time an estimated 3,000,000 people at risk of malnutrition. Of these about 1.3 million are over the age of 65. Whilst most of those affected are living in the community (93% or 2.8 million people BAPEN's Nutrition Screening Week Surveys (2007-11) have shown that:

- 25-34% of patients admitted to hospital are at risk of malnutrition
- 30-42% of patients admitted to care homes are at risk of malnutrition
- 18-20% of patients admitted to mental health units are at risk of malnutrition

Surveys of the 700,000 people living in sheltered housing using 'MUST' criteria have shown that 10-14% is at risk of malnutrition.

What is Malnutrition?

Malnutrition is a state of nutrition in which a deficiency, excess or imbalance of energy, protein, and other nutrients causes measurable adverse effects on tissue (shape, size, composition), function and clinical outcome Malnutrition Advisory Group (2000)

Causes of Malnutrition	
Poor Appetite	Illness, pain/nausea, depression/anxiety, food aversion, medication or alcohol/ drug addiction.
Inability to eat	Diminished consciousness, confusion, effects of medication, weakness in the arms or hands, dysphagia, swallowing, vomiting, painful mouth conditions, poor oral hygiene or dentition, restrictions imposed by surgery, investigations, psychological/ behavioural problems
Lack of food	Poverty, poor quality diet at home, hospital or care home, difficulty with shopping and cooking, mental health problems (food or fluid restriction (e.g. eating disorder / delusional beliefs) or self neglect.
Impaired digestion and/or absorption	Medical and surgical conditions affecting oesophagus, stomach, intestine, pancreas and liver
Altered metabolic nutrient requirements	Increased or changed metabolic demands related to illness/ condition, surgery, organ dysfunction, treatment, medication or behavioural problems
Excess nutrient losses	Gastrointestinal losses due to; vomiting, diarrhoea, fistulae, stomas, nasogastric losses and other drains.
Other losses	Skin exudates from pressure sores/ burns.
Lifestyle	Alcohol, Drugs, social isolation, bereavement, poverty

Adapted from NICE (2006)

Malnutrition left undetected and untreated causes a wide range of adverse consequences:-

Consequences of Malnutrition	
Impaired immune responses	Increased risk of infection and impaired recovery when infected.
Reduced bone / muscle strength and fatigue	Inactivity, poor self care, falls and other accidents.
Reduced respiratory muscle function	Increased difficulties in breathing and expectoration (in turn increasing the risk of chest infection and respiratory failure). Difficulty weaning malnourished patients from ventilators.
Impaired wound healing	Delayed recovery from illness, increased length of hospital stay and delayed return to work.
Inactivity	Increased risk of pressure sores, thromboembolism and muscle wasting.
Water and electrolyte disturbances	<p>Malnourished patients can have;</p> <ul style="list-style-type: none"> <input type="checkbox"/> Depletion in whole body potassium, magnesium and phosphate and simultaneously overloaded in whole body sodium and water. <input type="checkbox"/> A reduced renal capacity to excrete a sodium and water load. <p>These factors can lead to a vulnerability to re-feeding syndrome</p>
Impaired thermoregulation	Hypothermia and falls especially in older individuals.
Impaired psycho- social function	Even when uncomplicated by disease, patients who are malnourished may experience apathy, depression, self neglect, hypochondriasis (excessive fear of having a serious disease), lack of self esteem, poor body image, lack of interest in food, loss of libido and deterioration in social interactions. Malnutrition may also affect other behaviour and attitude.
Hormonal imbalances	Amenorrhoea, impotence, infertility, poorer pregnancy outcome and mother child interactions.

Adapted from Stratton, Green and Elia (2003)