

## ENVIRONMENT & NUTRITION PATH MCQS:

1. In this time of lockdown, chronic excess alcohol intake may lead to
  - A: elevated levels of HDL cholesterol
  - B: postural hypotension
  - C: restrictive cardiomyopathy
  - D: systemic hypertension ✓
2. Vitamin D
  - A: is almost all supplied by the average Western diet
  - B: reaches its most active form in the kidney ✓
  - C: stimulates release of parathyroid hormone
  - D: UVB radiation increases binding of vitamin D to D-binding protein
3. Deficiency in vitamin A is associated with
  - A: increased absorption of dietary fat
  - B: increased sensitivity to light
  - C: nephrolithiasis ✓
  - D: squamous-to-columnar metaplasia
4. Mr and Mrs Oat-Almonde have been feeding their infant a raw plant diet. Baby is at the 10th percentile for weight and height, cranky, tachypnoeic and oedematous. The underlying disease is
  - A: kwashiorkor ✓
  - B: marasmus
  - C: scurvy
  - D: zinc toxicity
5. Carbon monoxide
  - A: binds to haemoglobin with 200 times the affinity of oxygen ✓
  - B: causes unconsciousness and death when it saturates 30% of haemoglobin
  - C: is associated with a brownish discolouration of blood
  - D: persists for hours in ambient air
6. Lead
  - A: absorption in children is 50% less than in adults
  - B: binds to sulfhydryl groups in proteins ✓
  - C: is stored in fatty tissue
  - D: reduces bone density in adolescents
7. The local dry cleaner has had a large solvent chemical spill. The workers present with
  - A: acute haemolysis
  - B: cardiac arrhythmias
  - C: dizziness and confusion ✓
  - D: respiratory distress
- 8: A 35 year old trade presents with months of dyspnoea and is now unable to climb stairs. You hear bilateral crackles on auscultation. He has been working unsafely with
  - A: benzene
  - B: lead
  - C: silica ✓
  - D: vinyl chloride

9. A patient with 30% body surface area burns is likely to have
- A: early onset bacteraemia
  - B: elevated levels of carboxyHb
  - C: oedema due to vascular leak ✓
  - D: triple the usual metabolic rate
10. Electrical injury is most likely to be severe when
- A: direct current is involved
  - B: dry skin lowers resistance at the site of contact
  - C: entry or exit burns are present
  - D: tetanic spasm results from alternating current exposure ✓
11. Mr Simpson is brought in after a mishap at the local nuclear reactor. His estimated dose of radiation is 7 Sv. Likely consequences are
- A: cerebral oedema
  - B: even worse than usual jaundice and hepatic failure
  - C: leukopaenic sepsis ✓
  - D: severe diarrhoea
12. Hypothermia can cause injury by
- A: decreased intracellular salt levels
  - B: increased blood viscosity ✓
  - C: reduced affinity of haemoglobin for oxygen
  - D: vasodilatation