

- 1. Intestinal protein supply ↑**
 - protein-rich diet (7–10%)
 - gastrointestinal bleeding (25–30%)
- 2. Protein catabolism ↑**
 - albumin deficiency, bleeding of soft tissue, fever, surgery, infection, hyperglucagonaemia
- 3. Overtaxed detoxifying mechanisms**
 - alcohol, medicaments, chemicals, toxins, endotoxins, infections (10–18%)
 - obstipation
- 4. Tumour necrosis factor ↑**
- 5. Binding to GABA receptors ↑**
 - benzodiazepines, barbiturate, phenothiazine, sedatives/tranquillizers (10–15%)
- 6. Metabolic imbalance**
 - acidosis, lactate acidosis, azotaemia (25–30%)
 - hypoglycaemia
- 7. Electrolyte disorders**
 - potassium ↓, sodium ↓, magnesium ↓
- 8. Circulatory disorders**
 - hypovolaemia, hypoxia
- 9. Inhibition of urea synthesis**
 - diuretics (25–35%), zinc ↓, acidosis
- 10. Manganese ↑**