

## Nutrition in hospital

This issue's special feature, on which these questions are based, was commissioned from independent authors. The information in the box (below, right) should help readers to identify knowledge gaps and undertake continuing professional development. All readers are invited to complete the questions overleaf on nutrition in hospital, to test their understanding of the articles, and send their answers, together with a stamped and addressed C5 envelope, to:

Life-long Learning — nutrition  
*Hospital Pharmacist*  
1 Lambeth High Street  
London SE1 7JN

Entries must be received by 27 December. Results will be returned with a certificate of completion.

Your name, address and scores will be held on a database for the purpose of awarding prizes. Should you wish your details not to be held in this way, please tick the box. If you do this, you will be sent a certificate, but you will be ineligible for a prize.

### Life-long Learning competition

The 2005/06 Life-long Learning series ended with the July/August issue of *Hospital Pharmacist*. Details of the winner and runners up of the competition appear on p349. Details about the next Life-long Learning competition are currently being finalised, but readers are invited to continue to answer the Life-long Learning questions for continuing professional development purposes. Accreditation by the College of Pharmacy Practice remains unchanged.

### Hospital Pharmacist online

*Hospital Pharmacist* is available online at [www.pjonline.com/hp/index.html](http://www.pjonline.com/hp/index.html). The website contains the current issue and an archive of back issues from January 2000 onwards. There are also links to the regular features in *Hospital Pharmacist* (eg, Life-long Learning, meeting reports, comments, careers, focus on technicians) and forthcoming special features.

The site also contains advice to contributors to *Hospital Pharmacist*, information about the annual *Hospital Pharmacist* conference, a link to *The Pharmaceutical Journal* careers website and information on subscribing to the journal.

There is a diary page with information about reunions, meetings, courses and health events ([www.pjonline.com/diary](http://www.pjonline.com/diary)).



Name: \_\_\_\_\_

RPSGB registration number: \_\_\_\_\_

Address: \_\_\_\_\_

Post code: \_\_\_\_\_

### How to undertake continuing professional development

#### Identify knowledge gaps

- ◆ To be aware of the effect of nutritional status on disease and how pharmacists can help detect undernutrition
- ◆ To have a knowledge of how drugs can affect nutrition and the potential interactions with enteral feeds

#### Act

- ◆ Read the articles in this issue
- ◆ Test your knowledge by answering the multiple-choice questions overleaf

#### Evaluate

- ◆ What have you learnt?
- ◆ How has it added value to your practice?
- ◆ What will you do now and how will this be achieved?

The feature on nutrition has been accredited by the College of Pharmacy Practice against the Royal Pharmaceutical Society's general and hospital practice areas of competence, which can be accessed via *Hospital Pharmacist* online ([www.pjonline.com/links/hp](http://www.pjonline.com/links/hp))

Reading the feature and completing the questions will help readers to fulfil aspects of the following competency areas, depending on their area of practice and application of learning: G1, G5, G8, G9, HP1, HP2, HP4, HP5, HP10.

Completion of the questions entitles undergraduates to one point towards the Professional Development Certificate, a joint initiative between the British Pharmaceutical Students' Association and the College.

The assistance of the College of Pharmacy Practice is acknowledged in producing the CPD elements of this month's special feature.

Further information on how hospital pharmacists are approaching the challenges of CPD can be found in articles in the February 2005 issue of *Hospital Pharmacist* (2005;12:65–72).



To answer the questions, tick either the True or False column

	True	False
<b>1. Concerning undernutrition:</b>		
a) Undernutrition in hospital patients costs the NHS half the projected cost of obesity		
b) The incidence of undernutrition is lower in hospitals and nursing homes than in the community		
c) Depression and confusion are causes of undernutrition		
d) Skin exudates from burns may contribute to nutritional losses		
e) Undernutrition may cause impaired thermoregulation		
<b>2. Concerning the malnourished patient:</b>		
a) People who are malnourished are always underweight		
b) All undernourished people have a body mass index of less than 20		
c) Most undernourished patients lose more weight during their hospital stay		
d) Severely malnourished patients may experience an increase in glomerular filtration rate		
e) NICE recommends that hospital patients should have their nutritional status screened monthly		
<b>3. Regarding nutrition in hospital:</b>		
a) Up to 10 per cent of patients admitted to hospital show signs of undernutrition		
b) The prevalence of constipation and urinary tract infections is linked to poor nutrition in hospital		
c) Hospitals are advised to move the main meal of the day to the morning		
d) Food should be available in hospitals for 12 hours a day		
e) Hospital food services form part of the Patient Environment Action Team's inspection		
<b>4. Nutrition and medicines:</b>		
a) Proton pump inhibitors may enhance the effects of vitamin B <sub>12</sub>		
b) Tetracycline antibiotics can form insoluble complexes with minerals and trace elements		
c) Doxycycline may increase the risk of undernutrition by causing oesophagitis		
d) The half-life of metronidazole has been shown to be longer in malnourished children than in healthy children		
e) Anti-epileptic therapy increases levels of folic acid		
<b>5. Drug handling in undernourished patients:</b>		
a) Pharmacists should consider the possibility of undernutrition as a risk factor for adverse drug reactions		
b) Plasma levels of fat-soluble drugs decrease in underweight patients		
c) Levels of free drug, which are usually highly protein bound, may increase in undernutrition		
d) Protein deficiency increases levels of CYP1A2		
e) Animal studies suggest that protein energy malnutrition increases paracetamol clearance		
<b>6. Nutritional requirements and assessment:</b>		
a) Undernutrition is often unrecognised in hospital		
b) Patients' nutritional requirements are likely to increase during periods of illness		
c) Inflammatory conditions such as active inflammatory bowel disease may decrease nutritional requirements		
d) Albumin levels can be used to accurately assess nutrition in acutely ill patients		
e) NICE recommends that a pharmacist should be present on each trust's nutrition group		
<b>7. Concerning enteral nutrition:</b>		
a) Enteral nutrition is only indicated where oral or parenteral nutrition has failed		
b) Motility agents may be required in patients who have poor tolerance to enteral nutrition		
c) Suspensions are not considered to be suitable for administration down an enteral tube		
d) Crushing tablets for enteral administration should be considered as a last resort		
e) Solutions containing high electrolyte levels may destabilise enteral feeds		
<b>8. Concerning parenteral nutrition:</b>		
a) The use of parenteral nutrition is increasing in post-operative patients		
b) A fistula is an example of a condition in which the patient may require parenteral nutrition		
c) Parenteral nutrition can be administered peripherally for treatment courses of over two months		
d) NICE recommends that, initially, parenteral nutrition should start at 10 per cent of the estimated requirements		
e) Patients with losses from a stoma may require higher electrolyte levels in the feed		
<b>9. Regarding the peri-operative period:</b>		
a) Pre-operative feeding should be considered for patients who are undernourished		
b) Assessing nutritional status before operating can help identify patients at risk from post-operative vomiting		
c) Serum albumin levels rise post-operatively		
d) Nutritional needs change post-operatively depending on the scale of the operation		
e) One of the goals of nutritional support in the peri-operative period is to encourage prompt return of gut function		
<b>10. Concerning post-operative gut function:</b>		
a) Epidural anaesthesia and analgesia increases the incidence of post-operative ileus		
b) All abdominal operations are associated with impaired gastrointestinal motility		
c) Colonic motility usually returns after three to five hours		
d) Small bowel motility usually returns after 24-48 hours		
e) Opiates and 5HT <sub>3</sub> -receptor antagonists affect gastrointestinal motility		

