either a nasojejunal tube or (preferably) a feeding jejunostomy.^{33 34}

Most likely to benefit from immediate enteral feeding are patients with a high risk of complications or of needing intensive care postoperatively. Enteral feeding is suitable for patients with acute and chronic pancreatitis provided that the feed enters the gut distal to the duodenum.³⁵ This type of nutritional support is contraindicated in patients with small bowel anastomoses or intrinsic small bowel disease and those receiving an aortic graft.

Few adequate studies have assessed the cost effectiveness of total parenteral nutrition, partly because of the difficulty in estimating the cost of total parenteral nutrition and its complications.^{36 37} Enteral feeding is much cheaper than total parenteral nutrition,³⁸ and with all the evidence that it improves morbidity it is undoubtedly, in our opinion, more cost effective. The time has come for formal comparisons of enteral with parenteral nutrition in severely ill patients.

NICHOLAS D MAYNARD
Lecturer in Surgery
DAVID J BIHARI
Director, Intensive Care Services

Guy's Hospital,
London SE1 9RT

- 1 Dudrick SJ, Wilmore DW, Vars HM. Long-term parenteral nutrition with growth in puppies and positive nitrogen balance in patients. *Surgical Forum* 1967;18:356-7.
- 2 Buzby TP. Perioperative nutritional support. *Journal of Parenteral and Enteral Nutrition* 1990;14(suppl):197-9S.
- 3 Meguid MM, Campos AC, Hammond WG. Nutritional support in surgical practice: part 1. *Am J Surg* 1990;159:345-58.
- 4 Detsky AS, Baker JP, O'Rourke K, Goel V. Perioperative parenteral nutrition: a meta-analysis. *Ann Intern Med* 1987;107:195-203.
- 5 Wolfe BM, Ryder MA, Nishikawa RA, Halsted CH, Schmidt BF. Complications of parenteral nutrition. *Am J Surg* 1986;152:93-9.
- 6 Driscoll DF, Blackburn GL. Total parenteral nutrition 1990. A review of its current status in hospitalised patients, and the need for patient-specific feeding. *Drugs* 1990;40:346-63.
- 7 Jeejeebhoy KN, Marliss EB. Energy supply in total parenteral nutrition. In: Fischer JE, ed. *Surgical nutrition*. Boston: Little, Brown, 1983:645-62.
- 8 Hulman G, Fraser I, Pearson HJ, Bell PRF. Agglutination of intralipid by sera of acutely ill patients. *Lancet* 1982;iii:1426-7.
- 9 Levene MI, Batisti O, Wigglesworth JS, Desai R, Meek JH, Bulusu S, et al. A prospective study of intrapulmonary fat accumulation in the newborn lung following intralipid infusion. *Acta Paediatr Scand* 1984;73:454-60.
- 10 Puntis JW, Rushton DI. Pulmonary intravascular lipid in neonatal necropsy specimens. *Arch Dis Child* 1991;66:26-8.

- 11 Freeman J, Goldmann DA, Smith NE, Sidebottom DG, Epstein MF, Platt R. Association of intravenous lipid emulsion and coagulase-negative staphylococcal bacteremia in neonatal intensive care units. *N Engl J Med* 1990;323:301-8.
- 12 Muller JM, Keller HW, Brenner U, Walter M, Holzmueller W. Indications and effects of preoperative parenteral nutrition. *World J Surg* 1986;10:53-63.
- 13 Seidner DL, Mascioli EA, Istfan NW, Porter KA, Selleck K, Blackburn GL, et al. Effects of long-chain triglyceride emulsions on reticuloendothelial system function in humans. *Journal of Parenteral and Enteral Nutrition* 1989;13:614-9.
- 14 Robin AP, Arain I, Phuangsab A, Holian O, Roccaforte P, Barrett JA. Intravenous fat emulsion acutely suppresses neutrophil chemiluminescence. *Journal of Parenteral and Enteral Nutrition* 1989;13:608-13.
- 15 Gogos CA, Kalfarentzos FE, Zoumbos NC. Effect of different types of TPN on T lymphocyte subpopulations and NK cells. *Am J Clin Nutr* 1990;51:119-22.
- 16 Pitkanen O, Hallman O, Andersson S. Generation of free radicals in lipid emulsion used in parenteral nutrition. *Pediatr Res* 1991;29:56-9.
- 17 Bulow J, Madsen J, Hojgaard L. Reversibility of the effects on local circulation of high lipid concentrations in blood. *Scand J Clin Lab Invest* 1990;50:291-6.
- 18 Fisher RL. Hepatobiliary abnormalities associated with total parenteral nutrition. *Gastroenterol Clin North Am* 1989;18:645-66.
- 19 Clarke PJ, Ball MJ, Kettlewell MGW. Liver function tests in patients receiving parenteral nutrition. *Journal of Parenteral and Enteral Nutrition* 1991;15:54-9.
- 20 Fiddian-Green RG. Studies in splanchnic ischaemia and multiple organ failure. In: Marston A, Bulkley G, Fiddian-Green RG, Haglund U, eds. *Splanchnic ischaemia and multiple organ failure*. London, Melbourne, Auckland: Edward Arnold, 1989:349-63.
- 21 Rush BF, Sori AJ, Murphy TF, Smith S, Flanagan JJ, Machiedo GW. Endotoxemia and bacteremia during hemorrhagic shock—the link between trauma and sepsis. *Ann Surg* 1988;207:549-54.
- 22 Meakins JL, Marshall JC. The gut as the motor of multiple system organ failure. In: Marston A, Bulkley G, Fiddian-Green RG, Haglund U, eds. *Splanchnic ischaemia and multiple organ failure*. London, Melbourne, Auckland: Edward Arnold, 1989:339-48.
- 23 Alexander JW. Nutrition and translocation. *Journal of Parenteral and Enteral Nutrition* 1990;14(suppl):170-4S.
- 24 Steiner M, Bourges HR, Freeman LS, Grey SJ. Effect of starvation on the tissue composition of the intestine in the rat. *Am J Physiol* 1969;215:75-7.
- 25 Levine GM, Deren JJ, Steiger E, Zinno R. Role of oral intake in maintenance of gut mass and disaccharide activity. *Gastroenterology* 1974;67:975-82.
- 26 Souba WW, Herskowitz K, Salloum RM, Chen MK, Austgen TR. Gut glutamine metabolism. *Journal of Parenteral and Enteral Nutrition* 1990;14(suppl):45-50S.
- 27 Alverdy JC, Ayo E, Moss GS. TPN promotes bacterial translocation from the gut. *Surgery* 1988;104:185-90.
- 28 Spaeth G, Specian RD, Berg RD, Deitch EA. Bulk prevents bacterial translocation induced by the oral administration of TPN solution. *Journal of Parenteral and Enteral Nutrition* 1990;14:442-7.
- 29 Shepherd AP. Metabolic control of intestinal oxygenation and blood flow. *Federation Proceedings* 1982;41:2084-9.
- 30 Moore F, Feliciano D, Andrassy R, McCord AH, Booth F, Morgenstein T, et al. Enteral feeding reduces post-operative septic complications. *Journal of Parenteral and Enteral Nutrition* 1991;15(suppl):22S.
- 31 Wells C, Tinckler L, Rawlinson K, Jones H, Saunders J. Postoperative gastrointestinal motility. *Lancet* 1964;i:4-10.
- 32 Tinckler LF, Kulke W. Postoperative absorption of water from the small intestine. *Gut* 1963;4:8.
- 33 Heberer M, Bodoky A, Iwatschenko P, Harder F. Indications for needle catheter jejunostomy in elective abdominal surgery. *Am J Surg* 1987;153:545-52.
- 34 Page CP. Needle catheter jejunostomy. *Contemporary Surgery* 1981;19:29-47.
- 35 Havala T, Shronts E, Cerra F. Nutritional support in acute pancreatitis. *Gastroenterol Clin North Am* 1989;18:525-42.
- 36 Eisenberg JM, Glick H, Hillman AL, Baron J, Finkler SA, Hershey JC, et al. Measuring the economic impact of perioperative total parenteral nutrition: principles and design. *Am J Clin Nutr* 1988;47(suppl):382-91S.
- 37 Twomey PL, Patching SC. Cost-effectiveness of nutritional support. *Journal of Parenteral and Enteral Nutrition* 1985;9:3-10.
- 38 Page CP, Carlton PK, Andrassy RJ, Feldman RW, Shield CF. Safe, cost-effective post-operative nutrition. *Am J Surg* 1979;138:939-45.

Tobacco and the European common agricultural policy

European gold kills

Through its Europe Against Cancer campaign the European Commission aims to reduce cancer by 15% by the year 2000. Smoking kills an estimated 431 000 people in the community each year,¹ and reducing smoking is the only way this target is likely to be achieved. Yet countering the £7.3m* spent on the cancer programme is £900m spent in 1991 to subsidise the production of tobacco.² This subsidy has built up over the past two decades, during which time the European common agricultural policy has operated a complex system of subsidies for growing, processing, and exporting tobacco leaf. In their paper in November's *British Journal of Addiction*, Joossens and Raw describe its main features, effects, and implications—a system of "labyrinthic complexity, uncontrollably expensive and worse than ineffective."²

The tobacco is grown mainly in Italy, Greece, Spain, and France and, to a limited extent, in Portugal, Germany, and Belgium. Support systems were set up to establish a common

policy throughout the region, to expand production in disadvantaged areas, to maintain a reasonable income for farmers, and to adapt production to the varieties of tobacco in greater demand.³ Tobacco is a relatively profitable crop, very labour intensive, and by far the most highly subsidised crop per hectare in the community. Some 26 different varieties are grown by 215 000 growers, mostly on plots of about a hectare, as their main or only source of livelihood.³ The growers cure the tobacco and sell it to processors (about 200 units in the community), who prepare it to the manufacturers' specification and bale it. Traditional production is of dark, mainly air or sun cured, high tar tobaccos, but demand for these is low and falling. Most in demand are the flue cured Virginian tobaccos, which make up only one fifth of the community's production.³ Consequently, the European Community is the world's largest importer of tobacco, buying in over half its requirements.

Subsidies take the form mainly of premiums (£650m in 1989)² set for each variety and paid as rebates to processors as

*A conversion rate of £1 to 1.5 European currency units (ecus) has been used throughout.

an incentive to buy tobacco produced in the community. About £70m was spent in 1989 on directly buying surplus tobacco (intervention) and some £40m in subsidies for exporting.

The policy may have succeeded in supporting farm incomes, but it has led to escalating production and subsidy. The unwanted as well as the desired varieties receive generous premiums and intervention prices. Insufficient differentials in premium between varieties and long lags on price setting have slowed the intended adjustments and led to much of the increased production being of tobacco varieties in low demand.³ Imports of Virginian tobacco remain high, while most of the tobacco grown in the community is surplus to requirements and either is added to mounting stocks or receives export grants to be dumped in developing markets, typically in eastern Europe and north Africa. For example, in 1990 processors in Italy, which accounts for half the exports, exported about 100 000 tonnes of tobacco. The tobacco was sold at less than 23p/kg, having been subsidised by more than £2/kg.² A system of quotas has been introduced to regulate supply by variety and area, but the penalties for exceeding quotas are so low that quotas have been exceeded by as much as 1000%.

The whole system was severely criticised by the European Court of Auditors in 1987³ and again by a special inquiry in 1990 (A Lachaux, unpublished report) both for the policies and for the irregularities. Instances were reported of premiums being set above the recommended price to be paid to growers. In effect, therefore, processors received tobacco free, with a rebate on top, and were paid again when they sold or exported it. The United Nations Food and Agricultural Organisation has described the tobacco surpluses as a constant problem in Europe since the introduction of the common agricultural policy.⁴

Joossens and Raw believe that fine tuning the mechanism is irrelevant.² They recommend that export refunds and intervention buying should be stopped and that the total subsidy should be phased out within 10 years. The money saved (almost £1bn a year) could be spent on direct income support and research and support for reconverting land to alternative

uses. The issues are complex and include economic, political, and legal considerations as well as those of health.

In some aspects of tobacco policy the European Community has been a radical policy maker. It has set maximum tar limits and improved health warnings, and its directive against television advertising of tobacco is now in force. It has proposed minimum tax levels, which should raise average cigarette prices in the community.

The community's policy on raw tobacco does not waste financial resources alone. The main tobacco growers within the community are countries with relatively low cigarette prices and rising cigarette consumption.⁴ The highly subsidised tobacco that is sold within Europe is likely to encourage smoking in direct conflict with targets to reduce cancer and coronary heart disease. Most of the rest is sold to eastern Europe, north Africa, and the Near East—promoting tobacco consumption in these areas and at concentrations of tar unacceptable in the European Community. Medical associations⁵ and cancer societies⁶ in the United States are campaigning against American trade policy on tobacco with its double standards and its prodigious impact on the health of the developing world.⁷ The European Community's policy on tobacco subsidy deserves similar urgent attention.

JOY TOWNSEND

Scientific Staff
Medical Research Council Epidemiology and Medical Care Unit,
Northwick Park Hospital,
Harrow,
Middlesex HA1 3UJ

1 European Bureau for Action on Smoking Prevention. *Newsletter* 13 1991;p 10.

2 Joossens L, Raw M. Tobacco and the European common agricultural policy. *Br J Addict* 1991;86:(in press).

3 Court of Auditors. Special report 3/87 on the common organisation of the market in raw tobacco accompanied by the commission's replies. *Official Journal of the European Communities* 1987;30:1-13.

4 Food and Agricultural Organisation of the United Nations. *Tobacco: supply, demand and trade projections, 1995 and 2000*. Rome: Food and Agricultural Organisation of the United Nations, 1990. (Economic and Social Development paper 86.)

5 Hendee W, Kellie SE. Impact of US tobacco exports on the worldwide smoking epidemic. In: Durston B, Jamroik K, eds. *Proceedings of the seventh world conference on tobacco and health*. Perth, Western Australia: Organising Committee of the Seventh World Conference on Tobacco and Health, 1990:873-6.

6 Tipping W. Trade for life. In: Durston B, Jamroik K, eds. *Proceedings of the seventh world conference on tobacco and health*. Perth, Western Australia: Organising Committee of the Seventh World Conference on Tobacco and Health, 1990:153-4.

7 Berry M. The influence of the US tobacco industry on the health, economy and environment of developing countries. *N Engl J Med* 1991;324:917-20.

Privatisation on parade

Trusts occupy a no man's land that neither "public" nor "private" adequately describes

Is privatisation really part of the government's hidden agenda for the NHS? More subtly, perhaps, will the current reforms lead to increasing interdependence between the NHS and the private sector, making it easier to expand provision within the private sector still further? And will financial constraints on health services through the 1990s lead to a growth in private finance and provision whichever party is in power?

Given the intense political debate on the topic, distinguishing fact from fiction has become increasingly difficult. Nevertheless, an examination of the government's record during the 1980s holds some important pointers to the future. Mrs Thatcher's government twice conducted fundamental reviews of the NHS. Both rejected moving to private insurance or social insurance despite the enthusiasm of some sections of the Conservative party and various right wing think tanks for more radical reform. Instead, the government decided to concentrate on strengthening the management of the NHS and introducing an internal market.

If private finance found little favour under Mrs Thatcher no reason exists for believing that it will hold greater appeal for John Major. He and his senior colleagues have emphasised the importance of delivering high quality public services that are responsive to the needs and demands of the community. For the NHS this means a service so good that people will not want to use the private sector. The announcement at the Conservative party conference that the patient's charter will contain a commitment to the continued provision of health services free at the point of use is a further signal that the government is concerned to show its support for the founding principles of the NHS.

The 1980s nevertheless witnessed a substantial increase in private financing and provision, most evident in the growth in subscribers to private insurance and the increase in the provision of private hospitals, especially those operating for profit. It was also apparent in the policy of competitive tendering, the use of private hospitals to help reduce NHS