



Feed Or Ordinary Diet

**A Multicentre Trial
to Evaluate Various
Feeding Policies in
Patients Admitted
to Hospital with a
Recent Stroke**

Protocol

October 1998

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INTRODUCTION

Patient feeding policies, following recent stroke, vary between individual hospitals and between clinicians at the same hospital. More specifically, there is often variation in the timing and method of feeding patients with stroke and this reflects the lack of reliable evidence on what is the optimal feeding strategy. We have identified a number of important issues:

- Given the frequency of poor nutrition amongst patients who suffer a stroke and their subsequent feeding problems, should patients who can take adequate fluids orally receive routine nutritional supplements orally to improve their outcome?
- If patients are unable to take adequate fluid and/or food orally immediately after the stroke, should we start tube feeding early or wait for a few days to allow their swallowing to improve?
- If tube feeding is required at any stage after the stroke, is feeding via a percutaneous endoscopic gastrostomy (PEG) superior to that via the traditional nasogastric tube (NG)?
- Are there subgroups of patients (e.g. elderly or malnourished) who particularly benefit from one of these feeding policies?

These questions can only be answered reliably by comparing the outcomes of patients fed using different feeding policies in large randomised trials. The aim is to perform a 'family' of three closely related, simple randomised trials which will address *all* of these questions. The main advantages of performing a "family" of trials are that they:

- Will rapidly answer several questions at the same time.
- Can share common randomisation, data collection and follow up systems.
- Should be more efficient (i.e. less effort and money for each patient randomised) than performing completely separate trials to answer each question.
- Allow us to formally examine any interactions between the different feeding policies.

BACKGROUND

Poor nutrition is a common and under-recognised problem in patients admitted to hospital as well as in those who remain in hospital for prolonged periods (Albiin et al 1982, Sandstrom et al 1985, Cederholm & Hellstrom 1992). It is particularly frequent amongst elderly patients. It has been associated with reduced muscle strength, reduced resistance to infection and impaired wound healing (Fiatarone & Evans 1993, Potter et al 1995). Among patients with stroke, most of whom are elderly, muscle weakness and infections are very common (Davenport et al 1996). It is conceivable that malnutrition could increase the frequency of these problems and result in poorer outcomes. It is not surprising, therefore, that several workers have investigated the nutritional status of patients with recent stroke. The reported frequency of malnutrition has varied between 8% and 40% although much of this variation may be due to differences in case mix, the definitions of malnutrition, and the methods of assessment (Axelsson et al 1988, Smithard et al 1993, Unosson et al 1994, Davalos et al 1996). Furthermore, any acute illness may be responsible for a negative energy balance and greater nutritional demands and patients with stroke may be less able to meet these increased demands (Klipstein-Grobusch et al 1995). To compound the general problem of malnutrition, it has been estimated that up to 45% of hospitalised patients with stroke are unable to swallow safely, although again the reported frequency depends on the selection of cases, the timing of assessments, the sensitivity of the method used to detect swallowing problems (Gordon et al 1987, Barer 1989). Of course, even patients who are capable of swallowing liquids and food may have a poor appetite because of the effects of intercurrent illness or medication. Patients may eat more slowly because of facial weakness, lack of dentures or poor arm function. All these factors may contribute to the worsening in nutritional status which has been observed by several groups during hospital admission for stroke (Axelsson et al 1989, Smithard et al 1993, Unosson et al 1994, Davalos et al 1996).

Therefore, there seems to be good evidence that a significant proportion of patients admitted to hospital with recent stroke are malnourished and that their nutritional status may further deteriorate during the admission. However, it is less clear whether this worsens patient outcomes. There is little doubt that the outcome of patients undergoing emergency surgery, and of those with other serious illness, depend on their nutritional status and nowadays careful attention is paid to their nutrition. Few studies have investigated the influence of nutrition on outcome but malnutrition has been associated with an increased risk of death after stroke (Davalos et al 1996).

If nutrition is an important determinant of outcome in the physically ill, and in particular those with stroke, the next question is whether, by improving patients' nutrition, one might improve their outcome. There have been a large number of randomised trials, in a variety of settings, testing the effects of improving nutritional status. Most of these studies have been individually too small to demonstrate an effect but a recent systematic review of all of the available randomised trials suggests that oral or enteral (i.e. via a feeding tube) nutritional supplementation improves nutritional indicators and reduces the odds of death by 34% (95% CI 9% - 52%) (Potter et al 1996). However, this review included trials of differing methodological quality which tested various interventions in different types of patients. It also included relatively few small negative trials which may reflect a degree of publication bias and so be responsible for an over-optimistic estimate of treatment effect. None of these studies were specifically in patients with stroke and few patients with stroke were included in them. One non-randomised trial suggested that early enteral nutrition after stroke reduced length of stay in hospital but methodological limitations make this conclusion unreliable (Nyswonger & Helmchen 1992).

Even if it were shown that improving nutritional status after stroke would improve outcome, there still remain questions about when to start any supplementary feeding regime and the best way to deliver it. This applies particularly to the important minority of patients who cannot swallow safely. Indeed, increasing emphasis has been placed on detecting those patients with swallowing difficulty so their risk of aspiration pneumonia can be reduced. This is usually done by restricting oral intake and providing fluids, and sometimes food, by alternative routes. Swallowing usually recovers over the first few days or weeks which allows patients to safely take fluids and food, if necessary with a modified consistency (Gordon et al 1987, Barer 1989). However, even during this recovery phase, patients' fluid and food intake may be inadequate and some supplementation by an alternative route may be helpful.

Supplementation might be achieved by intravenous feeding but in practice this is rarely used or justified in patients with stroke who generally have a gastrointestinal tract which is well able to absorb nutrients. NG tubes are often inserted to allow fluid and food to be given to patients. However, in patients who are unable to swallow, they are not always easy to insert and perhaps because they are uncomfortable they are often pulled out by patients and have to be replaced. This adds to patient distress and interrupts any feeding regime. Furthermore, NG tubes may become displaced and cause aspiration, as well as ulceration of the nostril if use is prolonged. Some workers therefore advocate the increased use of PEG (O'Mahony & McIntyre 1995) which can be performed with little or no sedation and provides an effective and quite acceptable method of enteral feeding. However, PEG is more invasive than NG and has its own complications including aspiration, peritonitis, wound infection and haemorrhage. Indeed there is a low (about 1%), but not insignificant, risk of death related to the procedure (Larson et al 1987, Miller et al 1989, Finucane et al 1991, Pender et al 1993). The published complication rates are low but may not reflect the rates in less specialised centres which do not publish their results (Wanklyn et al 1995). Two randomised comparisons of NG and PEG tube feeding have suggested that the latter provides more effective nutritional support with less interruption of feeding (Park et al 1992, Norton et al 1996). One trial was in patients with severe stroke and showed that those fed by PEG had an implausibly large (70% relative) reduction in case fatality compared with those fed via NG tube (Norton et al 1996). However, this trial only included 30 patients and little data were provided to allow any assessment of the effectiveness of randomisation. It seems most likely that some imbalance in baseline factors accounted for much of the observed difference in outcome. However, despite its limitations, this trial raises important issues about the best way to feed patients with stroke who cannot swallow safely.

Difficulties in feeding patients with stroke who cannot swallow safely mean that feeding is sometimes delayed for perhaps a week or two and only parenteral (intravenous (IV) or subcutaneous (SC)) fluids are given. During this time many patients will improve enough to be able to take at least some food and therefore avoid or reduce the need for tube feeding. On the other hand, some clinicians prefer to introduce tube feeding very soon after the stroke although many would reserve PEG feeding for those who seem likely to require prolonged tube feeding. However, as PEG feeding becomes more widely available, it is being used earlier. The pros and cons of NG and PEG feeding after stroke have recently been reviewed but with no definite conclusions (O'Mahony & McIntyre 1995).

A recent survey of clinical practice in the UK demonstrated wide variation in the timing and method of feeding in dysphagic patients with stroke which probably reflects the lack of firm evidence that any one policy is superior (Hussein et al 1995). These authors concluded that there was a need for randomised trials to establish the place of tube feeding after stroke. Against this background, we are undertaking a "family" of large randomised trials to determine the optimum feeding policies for patients with stroke.

Research Questions:

These trials will address three important questions about the feeding policy for patients with stroke:

- In patients who can take adequate oral fluids, does routine oral nutritional supplementation increase the proportion of patients with stroke surviving without disability?
- In patients who are unable to take an adequate diet orally, does early initiation of tube feeding (NG or PEG) increase the proportion of patients with stroke surviving without severe disability?
- In patients who need tube feeding, is a PEG tube, instead of the traditional NG tube, associated with improved outcomes after stroke ?

Secondary Questions:

- Does any observed advantage from nutritional supplementation apply to all patients with stroke or only to certain subgroups e.g. the elderly or malnourished?
- If a particular feeding policy reduces the case fatality, does it also increase the proportion of patients surviving with severe disability?
- Does the feeding policy have any major effect on the utilisation of hospital facilities and the final placement of patients?

TRIAL DESIGN

FOOD comprises three large, simple, multicentre, randomised trials.

Trial 1 addresses the question *For those who can take adequate fluids orally should we routinely supplement the normal hospital diet?*

This question is relevant to the majority of patients who can swallow on admission and also to those who survive to regain a safe swallow after a period of swallowing difficulty. Both groups may benefit from nutritional supplementation since even when patients can swallow they may not eat enough for a variety of reasons. We plan to randomise patients in the first month of admission between:

Normal hospital diet vs. Normal hospital diet plus oral supplements until hospital discharge.

Normal diet is that which is normally provided to patients and may be of altered consistency (e.g. for those with swallowing difficulties) or composition (e.g. for patients with special needs e.g. diabetics). Patients randomised to a normal hospital diet should not have nutritional supplements prescribed on their drug chart, although, if supplementation is the norm in a hospital, this might be continued as long as patients allocated normal hospital diet plus nutritional supplementation receive the prescribed supplement in addition to those routinely given.

Oral supplements comprise 120ml of a supplement containing 1.5kcal/ml three times a day prescribed on the drug chart. We have shown in our pilot studies that this approach is practical (Reilly et al 1995), provides patients with an extra 540kcal per day and the use of drug charts allows us to monitor compliance.

Trial 2 addresses the question *Does early initiation of tube feeding benefit patients?*

This is relevant to 30 to 40% of stroke patients admitted to hospital who cannot safely take adequate diet and fluids orally. We plan to randomise patients within the first week of their admission between:

Immediate tube feeding vs. Delay tube feeding for at least a week and hydrate using parenteral fluids.

If randomised to immediate tube feeding, the clinician may choose the type of tube or alternatively co-enrol the patient into Trial 3 (NG vs PEG). The tube feeding should be started as soon as possible and certainly within three days of randomisation. The liquid feed would be that normally used at that institution and given in consultation with a dietitian.

Patients randomised to delayed tube feeding should not have tube feeding started for at least a week and should be hydrated using parenteral fluids (IV or SC) given according to local protocols. The randomising clinician decides if and when tube feeding should start after the week has elapsed.

Inevitably, some patients may be taking some oral fluids or food whilst still being fed predominantly via a tube or whilst receiving parenteral hydration. Patients do not have to remain 'nil by mouth'.

Trial 3 addresses the question *Is tube feeding via a PEG better than that via an NG tube?*

This is relevant to all stroke patients who cannot safely take adequate diet or fluids orally. We plan to randomise patients within the first month of the hospital admission between:

PEG vs. NG tube feeding.

NG tubes may be wide or small bore. Percutaneous tubes may be inserted endoscopically or radiologically, into the stomach or jejunum according to local practice. The tube feeding should be started as soon as possible and certainly within three days of randomisation. The liquid feed would be that normally used at that institution and given in consultation with a dietitian.

Duration of Feeding Regimen

The oral supplements (Trial 1) should normally be continued until hospital discharge. However, the responsible clinician may choose to stop supplements earlier if, for example, the patient is gaining excessive weight. Tube feeding should continue until the responsible clinician decides that the patient is taking adequate diet orally or that further tube feeding is futile. The reason for stopping the feeding regime should be recorded on the Hospital Discharge Form (Appendix C). This form should be completed on discharge from hospital, death or transfer out of the randomising centre, although the allocated feeding policy can be continued after discharge or transfer, if appropriate. Details of **all** types of feeding given since randomisation should be recorded on the Hospital Discharge Form (Appendix C), including those feeding regimens not randomly allocated.

If the patient has been randomised to one feeding policy but this subsequently becomes impractical or the clinician becomes certain that an alternative is better then the clinician may change the method of feeding, although our analyses will be based on intention-to-treat. Data on how often, and why, feeding policies are changed will inform our final analyses.

Inclusion Criteria

Any patient admitted to hospital with a stroke (excluding those with subarachnoid haemorrhage) within a week of onset, in whom the randomising clinician is substantially uncertain about the best feeding policy.

Patients can be randomised into Trial 2 (Immediate tube vs. Delay) within the first week of admission (or a stroke or recurrent stroke which occurs during hospital admission). For Trials 1 (Normal hospital diet vs. Oral supplements) and 3 (NG vs. PEG), patients can be randomised within a month (30 days) of hospital admission (or a stroke or recurrent stroke which occurs during hospital admission).

Exclusion Criteria

Patients who, in the opinion of the responsible clinician, are unlikely to benefit from nutritional supplementation or from PEG or NG feeding.

These might include:

- Patients with TIA or trivial stroke who are likely to remain in hospital for only a few days.
- Patients who can swallow but in whom nutritional supplementation may be contra-indicated (e.g. morbidly obese patients).
- Those in coma (i.e. unresponsive to pain) or who are very unlikely to survive more than a few days because of some severe non-stroke illness.
- Patients who have already been entered into the FOOD Trial in the previous six months.

Consent

UK Multicentre Research Ethical Committee (MREC) approval has been granted. Each collaborating centre will need to confirm local ethics committee approval.

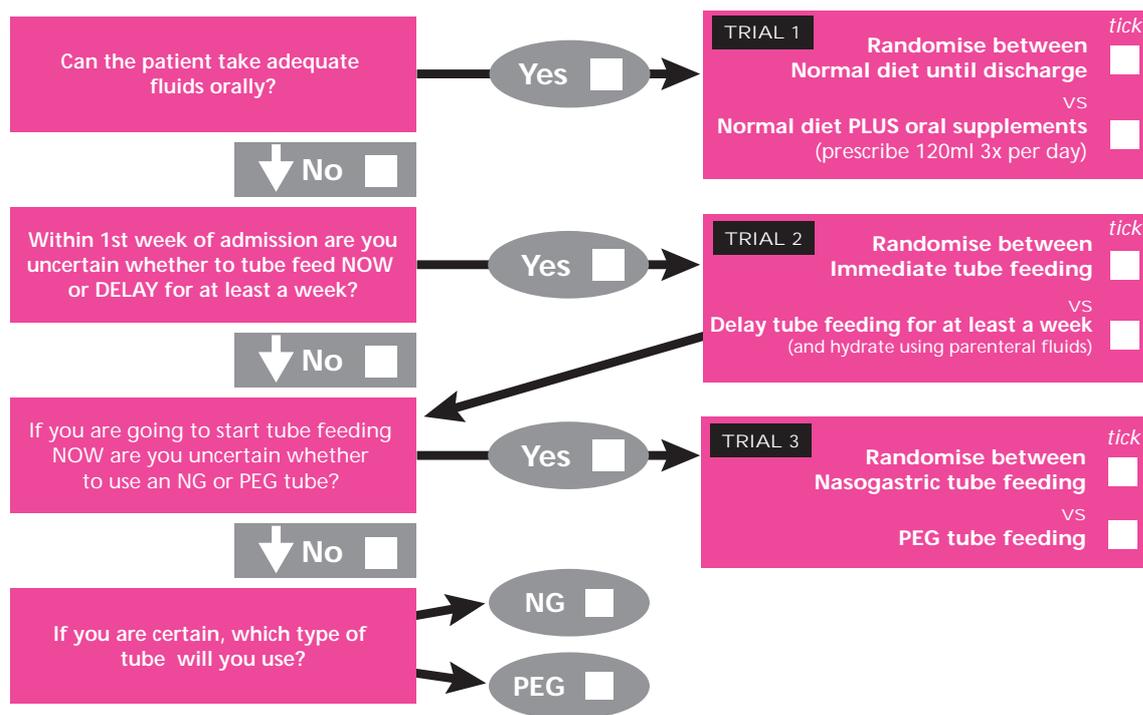
Patients (or their carers) will be given a Patient Information Booklet (Appendix F) which describes the aims of the trial and the potential risks and benefits of a variety of feeding policies. The patients (or their carers) will be given enough time to consider the trial fully and ask any questions they may have about the implications of the trial.

Consent procedures will vary from centre to centre but they will have to be approved by the local Ethics Committee. It is generally recommended that informed consent should be obtained from the patients if they are able to understand and communicate effectively. Alternatively, a close relative may give approval/agreement to participate in the trial. If the patient is unable to express his/her wishes and there are no close relatives, an independent clinician can be sought to provide approval/agreement.

Randomisation Procedure

Data, collected at baseline, will include centre identifiers, patient identifiers and information which will provide a prediction of outcome (e.g. is the patient able to lift both arms off the bed?). Data required to allow minimisation (see below) and to calculate the delay from stroke onset to hospital admission and randomisation will also be collected. A swallowing assessment, carried out by the randomising clinician or a member of his/her team, will determine which trial(s) the patient can be entered into. The swallowing assessment should be performed in line with local guidelines, but as a minimum should comprise a bedside assessment.

To randomise, the clinician completes the randomisation form (Appendix A) by answering questions relating to the patient's ability to take adequate fluids orally and their uncertainty about the best feeding policy. We have adopted a randomisation algorithm (see below) to ensure that patients enter the trial (or trials) which best addresses the responsible clinicians' uncertainties. The clinician then telephones the 24 hour randomisation service using a freephone number. At the end of the call, the operator (or system) will inform the clinician of the allocated treatment regimen which the clinician should note on the randomisation form and then ensure that the allocation is given. The randomisation form should then be faxed immediately to the FOOD Trial Co-ordinating Centre.



Minimisation

Minimisation is a widely accepted technique used to ensure that treatment groups are balanced for major prognostic factors (Pocock 1983). In this trial the following variables will be used for minimisation:

- Country
- Age (<75, > 75 years)
- Sex
- Estimated prognosis (calculated automatically, based on baseline variables).
- An assessment of the patient's nutritional status. This should be in accordance with local practices, but, as a minimum it should include an informal assessment of whether the patient is undernourished, normal or overweight.

Co-enrolment - Randomising a patient into more than one of these three trials.

We encourage clinicians to co-enrol their patients into more than one of the trials since this will:

- Maximise recruitment since patients are not ineligible because they have been previously been randomised into another of our three trials.
- Allow patients to contribute to more than one question.
- Allow us to formally investigate any interactions between the various feeding policies.

Thus patients may be co-enrolled:

- at the same time in Trial 2 (Immediate tube vs. Delay) & Trial 3 (NG vs. PEG) if the randomising clinician is unsure both about the timing and type of tube feeding. Obviously, in this case all treatment options must be available to the randomising clinician.
- sequentially in Trial 2 (Immediate tube vs. Delay) then Trial 3 (NG vs. PEG) if the patients swallowing does not recover.
- sequentially in Trial 2 (Immediate tube vs. Delay) then Trial 1 (Normal hospital diet vs. Oral Supplements) if the patients swallowing improves.
- sequentially in Trial 3 (NG vs. PEG) then Trial 1 (Normal hospital diet vs. Oral Supplements) if the patients swallowing improves.
- a patient could even enter Trial 2 (Immediate tube vs. Delay) in the first week, Trial 3 (NG vs. PEG) if they are persistently dysphagic and then Trial 1 (Normal hospital diet vs. Oral Supplements) when their swallowing improves, if the clinician was uncertain about all three questions.

Of course, patients cannot be randomised twice in the same trial during the course of their hospital admission. To enter a patient into another of the three trials later in the admission, the randomising clinician would simply complete another randomisation form (Appendix A) and telephone the randomisation service again.

FOLLOW-UP

Reporting Major Adverse Events

If a patient suffers a major complication of a particular feeding regime the randomising clinician should inform the FOOD Trial Co-ordinating Centre of this by completing an Adverse Event Card (Appendix B).

Hospital Discharge Form

At discharge, transfer from the randomising centre or death, the randomising clinician, or the trial support staff in that centre will review the case notes and drug charts, complete a Hospital Discharge Form (Appendix C) and return it to the FOOD Trial Co-ordinating Centre in Edinburgh.

Clinicians who routinely transfer their patients with stroke to another ward/unit/hospital very soon after admission will need to reach an agreement with that ward/unit/hospital such that the allocated feeding regimen will be continued and that the Hospital Discharge Form will be completed on discharge, death or transfer from that ward/unit/hospital.

The data collected will be used to:

- Determine what nutritional support the patient actually received during hospital admission.
- Provide contact data to allow six month follow-up to be organised centrally.
- Provide data concerning early outcome and use of hospital facilities.
- Provide data relating to any adverse events and complications of the feeding regime.

These data should be available from the medical or nursing notes.

If a Hospital Discharge Form has not been received by the Food Trial Co-ordinating Centre before the six months follow-up is due, the FOOD Trial Co-ordinating Centre in Edinburgh will contact the randomising clinician to confirm the patient's whereabouts. If the patient is still in hospital, a hospital version of the Follow-up Form (Appendix E) will be sent to the clinician for completion. The Hospital Discharge Form should then be completed on eventual discharge, transfer from the randomising centre or death.

Six Month Follow-up Form

If the patient is still in hospital when the six month follow-up is due, the randomising clinician will be sent a hospital version of the six month follow-up form which should be completed with the patient (Appendix E).

For those patients who have been discharged, outcome will be assessed blindly via a postal (or telephone if post not possible) questionnaire (Appendix D). This will be sent to the patient directly from the FOOD Trial Co-ordinating Centre or via the National Co-ordinators (for non-UK centres). The questionnaire will establish their:

- Type of residence (own home, with relatives, residential or nursing home)[as a guide to resource use]
- Functional status - degree of functional impairment on the Modified Rankin Scale,
- 'Simple questions', and Health Related Quality of Life (HRQoL) measured using EUROQoL.
- Feeding status - whether they are now feeding normally or still have a feeding tube in place.

Prior to the six month follow-up, their family doctor will be contacted by post or phone to establish the patient's:

- Current address (to allow follow-up).
- Date of death (if applicable).

ANALYSES

All analyses will be based on intention-to-treat.

Primary Outcomes

The primary outcome for Trial 1 will be the proportion of patients who are surviving free of dependency (defined as a Modified Rankin <3) six months after first randomisation.

The primary outcome for Trials 2 and 3 will be the proportion of patients surviving free of severe disability (defined as a Modified Rankin <4) six months after first randomisation.

Secondary Outcomes

- Proportion of patients who are dead at one and six months.
- HRQoL amongst survivors.
- Time to hospital discharge.
- Length of stay in hospital which will provide a surrogate outcome for analysis of cost.
- Number of days of tube feeding.
- Adverse effects of feeding regimes.
- Premature cessation of feeding regimes and reasons.

Sample Size

Trial 1 (Normal hospital diet vs. Oral Supplements).

We plan to randomise at least 6000 patients divided equally between the two groups which will provide us with at least 80% power to detect an increase in the proportion of patients surviving free of dependency (Modified Rankin <3) from 52% to 56% when the null hypothesis is rejected at p-values of 0.05 and below (i.e. $\alpha = 0.05$, $\beta = 0.2$).

Trial 2 (Immediate tube vs. Delay).

We plan to randomise at least 2000 patients divided equally between the two groups which will provide us with at least 80% power to detect an increase in the proportion of patients surviving free of severe disability (Modified Rankin <4) from 30% to 36% when the null hypothesis is rejected at p-values of 0.05 and below (i.e. $\alpha = 0.05$, $\beta = 0.2$).

Trial 3 (NG vs. PEG).

We plan to randomise at least 1000 patients divided equally between the two groups which will provide us with at least 80% power to detect an increase in the proportion of patients surviving free of severe disability (Modified Rankin <4) from 30% to 39% when the null hypothesis is rejected at p-values of 0.05 and below (i.e. $\alpha = 0.05$, $\beta = 0.2$).

We plan to continue to randomise patients into each of the three trials until we have achieved these minimum sample sizes in all three trials. Thus it is likely that we will exceed these sample size estimations in two of the trials to allow us to detect more modest treatment effects. Our Data Monitoring Committee may advise us to stop or prolong randomisation in any one of the three trials depending on the results of their confidential interim analyses.

Pre-specified Sub-group Analyses

We plan to explore other questions within The FOOD Trial, accepting that we may have insufficient power to come to definite conclusions at least without combining our data with those from other trials in a meta-analysis. We will address the following hypotheses:

- That the benefit of any feeding regime will depend on the patients' nutritional status at randomisation. Thus we plan to examine the effects of different feeding regimes in those classified as undernourished, normal and overweight at randomisation.
- That any benefit from a specific feeding regime will be influenced by the severity of the patients' stroke. We will therefore examine the effect of treatment in patients with mild, moderate and severe strokes as defined by their predicted prognosis at randomisation.
- That any benefits of oral supplements may be influenced by the nutritional support patients have received prior to randomisation. We will therefore examine separately the effect of oral supplements in patients randomised in Trial 1 initially or after having been first randomised in Trial 2 or 3.
- That the balance of risk and benefit of early initiation of tube feeding will depend on the type of tube feeding. We will therefore examine the difference in outcome between:
 1. Those randomised between immediate feeding via an NG tube vs. Delayed tube feeding for at least a week and hydration using parenteral fluids.
 2. Those randomised between immediate feeding via a PEG tube vs. Delayed tube feeding for at least a week and hydration using parenteral fluids.
- That feeding via an NG tube may be more appropriate than PEG for early tube feeding but that later feeding via a PEG tube will have advantages over that via an NG tube. Thus we will compare the outcomes of patients randomised between NG and PEG within the first week of admission and those randomised later.
- That a delay in starting feeding may lead to a worsening nutritional status which is impossible to compensate for later. Therefore we plan to examine the effectiveness of our various feeding regimes in patients randomised within a week of their stroke with those randomised after a week, allowing for pre-randomisation feeding and nutritional status.

TRIAL ORGANISATION

FOOD Trial Co-ordinating Centre Personnel

Principal Investigator:	Dr. Martin Dennis
Trial Co-ordinator:	Gina Cranswick
Trial Statistician:	Dave Signorini
Trial Programmer:	Vera Soosay

Steering Committee

The trial will be managed and co-ordinated by a combined scientific and administrative Steering Committee.

The scientific advisory group, with a particular interest in nutritional problems, will comprise: Campbell Chalmers, Martin Dennis (Chair), John Forbes, Subrata Ghosh, Peter Langhorne, Carole Ann McAteer, Jean McIntyre, Paul O'Neill, Jan Potter and Margaret Roberts.

The administrative, data management and trial development group will comprise: Gina Cranswick, Martin Dennis, Barbara Farrell, Anne Leigh Brown, Dave Signorini, Vera Soosay and Charles Warlow (Chair).

Data Monitoring Committee

The Data Monitoring Committee comprises: Professor C Bulpitt (London), Professor A Grant (Aberdeen, Chair), Professor G Murray (Edinburgh) and Dr P Sandercock (Edinburgh).

During the period of recruitment into the trial, interim analyses of the proportion of patients surviving free of dependency/severe disability as well as data available on other major outcome events will be supplied, in strictest confidence, to the chairman of the Data Monitoring Committee, along with any other analyses that the Committee may request. In the light of these analyses, the Data Monitoring Committee will advise the chairman of the Steering Committee if, in their view, the randomised comparisons have provided both (i) 'proof beyond reasonable doubt' that for all, or some, the intervention is clearly indicated or clearly contra-indicated and (ii) evidence that might reasonably be expected to materially influence patient management in normal practice. Appropriate criteria of proof beyond reasonable doubt cannot be specified precisely, but some members of the committee have expressed sympathy with the view that a difference of at least 3 standard deviations in an interim analysis of a major outcome event

may be needed to justify halting, or modifying, such a study prematurely. If this criterion were to be adopted, it would have the practical advantage that the exact number of interim analyses would be of little importance, and so no fixed schedule is proposed. The Steering Committee can decide whether to modify intake to the trial (or seek extra data). Unless this happens, however, the Steering Committee, the collaborators and central administrative staff will remain ignorant of the interim results.

Publication of the Trial Results

All publications relating to the main trial will be published in the name of the International Stroke Trials (IST) Collaboration - FOOD.

Abstracts relating to the main study will be submitted as the International Stroke Trials (IST) Collaboration - FOOD along with the presenter's name.

Papers and abstracts relating to 'Add-on' studies will be in the name of those collaborators who took part or the group's name, but recognise the input of the entire Collaboration by putting 'part', 'member' or 'on behalf of' the International Stroke Trials (IST) Collaboration - FOOD.

Anyone wishing to use the data generated from this trial for higher degrees, PhDs etc. must first seek the permission of the Steering Committee. All papers must be approved by the Steering Committee prior to submission for publication. Anyone wishing to use the data in this way, will be asked to sign a confidentiality agreement which will prevent them from publishing the data until the results of the main trial have been published.

No group of collaborators should publish the results of any sub-study which splits patients by treatment allocation without the agreement of the Steering Committee, on behalf of the other members of the Collaboration. Studies which report any of the process or outcome data collected as part of the main study must acknowledge the collaboration as an author e.g. Smith on behalf of the International Stroke Trials (IST) Collaboration - FOOD.

REFERENCES

- Albiin, N., Asplund, K. and Bjermer, L. (1982) Nutritional status of medical patients on emergency admission to hospital. *Acta Med Scand* 212:151-156
- Axelsson, K., Asplund, K., Norberg, A., Alafuzoff, I. (1988) Nutritional status in patients with acute stroke. *Acta med Scand* 224:217-224
- Axelsson, K., Asplund, K., Norberg, A., Eriksson, S. (1989) Eating problems and nutritional status during hospital stay of patients with severe stroke. *Journal of American Dietary Association*. 8:1092-6
- Barer, D.H. (1989) The natural history and functional consequences of dysphagia after hemispheric stroke. *Journal of Neurology, Neurosurgery and Psychiatry* 52:236-241
- Carver, A.D. (1996) Can nurses identify nutritionally depleted elderly patients? Abstract presented at Annual British Dietetic Association Conference, Stratford Upon Avon. Publication pending.
- Cederholm, T. and Hellstrom, K. (1992) Nutritional status in recently hospitalized and free-living elderly subjects. *Gerontology* 38:105-110
- Davalos, A., Ricart, W., Gonzalez-Huix, F., Soler, S., Marrugat, J., Molins, A., Suner, R., and Genis, D. (1996) Effect of malnutrition after acute stroke on clinical outcome. *Stroke* 27: 1028-1032
- Davenport, R.J., Dennis, M.S., Wellwood, I. and Warlow, C.P. (1996) Complications following acute stroke. *Stroke* 27: 415-420
- Fiatarone, M.A., Evans, W.J. (1993) The etiology and reversibility of muscle dysfunction in the aged. *The Journal of Gerontology* Vol. 48 (Special issue):77-83
- Finucane, P., Aslan, S.M. and Duncan, D. (1991) Percutaneous endoscopic gastrostomy in elderly patients. *Postgrad Med Journal* 67:371-373
- Gordon, C., Langton Hewer, R, and Wade, D.T. (1987) Dysphagia in acute stroke. *British Medical Journal* 295:411-414
- Hussain, A., Rodgers, H., Barer, D. (1995) Management of dysphagia in stroke patients: A postal survey. *British Geriatrics Society* 24 (Suppl 1): P5
- Klipstein-Grobusch, K., Reilly, J.J., Potter, J., Edwards, C.A., Roberts, M.A. (1995) Energy intake and expenditure in elderly patients admitted to hospital with acute illness. *British Journal of Nutrition* 73:323-334
- Larson, D.E., Burton, D.D., Schroeder, K.W., (1987) Percutaneous endoscopic gastrostomy. *Gastroenterology* 93:48-52
- Miller, R.E., Castlemain, B., Lacqua, F.J., Kotler, D.P. (1989) Percutaneous endoscopic gastrostomy. *Surgical Endoscopy* 3:186-90
- Norton, B., Homer-Ward M., Donnelly, M.T., Long, R.G., Holmes, G.K.T. (1996) A randomised prospective comparison of percutaneous endoscopic gastrostomy and nasogastric tube feeding after acute dysphagic stroke. *British Medical Journal* 312:13-16
- Nyswonger, G.D., and Helmchen, R.H. (1992) Early enteral nutrition and length of stay in stroke patients. *J Neurosci Nurs* 24:220-223
- O'Mahony, D., McIntyre, A.S. (1995) Artificial feeding for elderly patients after stroke. *Age & Ageing* 24:533-535
- Park, R.H., Allison, M.C., Lang, J., Spence, E., Morris, A.J., Danesh, B.J., Russell, R.I., Mills, P.R. (1992) Randomised comparison of percutaneous endoscopic gastrostomy and nasogastric tube feeding in patients with persisting neurological dysphagia. *British Medical Journal* 304 (689):1406-9
- Pender, S.M., Courtney, M.G., Rajan, E., McAdam, B. and Fielding, J.F. (1993) Percutaneous endoscopic gastrostomy - results of an Irish single unit series. *Ir J Med Sci* 162:452-455
- Peto, R., Pike, M.C. et al Design and analysis of randomised clinical trials requiring prolonged observation of each patient Part 1: Introduction and design. *Br J Cancer* 1976; 34: 585-612, and Part II: Analysis. *Br J Cancer* 1977; 35: 1-39
- Pocock, S.J., (1983) *Clinical Trials: A practical approach*, John Wiley and Sons, Chichester
- Potter, J., Langhorne, P. (1996) Nutritional supplementation in the elderly: A statistical overview. *Age & Ageing* 25 (Suppl 1): 42
- Potter, J., Klipstein, K., Reilly, J.J., Roberts, M. (1995) The nutritional status and clinical course of acute admissions to a geriatric unit. *Age & Ageing* 24:131-136
- Reilly, J.J., Mackintosh, M., Potter, J., and Roberts, M.A. (1995) An evaluation of the feasibility of sip-feed supplementation in undernourished, acutely sick, elderly patients. *Proc Nutr Soc* 54:135A
- Sandstrom, B., Alhaug, J., Einarsdottir, K., Simpura, E-M. and Isaksson, B. (1985) Nutritional status, energy and protein intake in general medical patients in three Nordic hospitals. *Hum Nutr: Appl Nutr* 39A:87-95
- Smithard, D.G., Renwick, D. and O'Neill, P.A. (1993) Change in nutritional status following acute stroke. (Abstract) *Age & Ageing* 22 (supp no 3):11
- Unosson, M., Ek, A.C., Bjurulf, P., von Schenck, H. and Larsson, J. (1994) Feeding dependence and nutritional status after acute stroke. *Stroke* 25:366-371
- Wanklyn, P., Niall, C., Belfield, P. (1995) Outcome in patients who require a gastrostomy after stroke. *Age & Ageing* 24: 510-514

APPENDICES: A TO G

APPENDIX A: Randomisation Form



The International Stroke Trials Collaboration (Feed Or Ordinary Diet)

RANDOMISATION FORM

Do NOT randomise unless you are uncertain about the best feeding policy for your patient

PLEASE BE READY TO PROVIDE THE FOLLOWING INFORMATION WHEN YOU MAKE THE RANDOMISATION TELEPHONE CALL ON

Has this patient been randomised into the FOOD trial before? No (KEY 0) Yes (KEY 1)

HOSPITAL DETAILS:

Country:
 Hospital Name:
 Name of responsible Consultant:
 Randomising doctor:

Country number:
 Hospital number:
 Consultant number:

Consent: Has consent been given? Yes (MUST be Yes) (KEY 1)

PATIENT DETAILS:

Family Name: Given Name/s:
 Date of Birth: day month year Sex? Male (KEY 1) Female (KEY 2)
 Date stroke symptoms first noticed: day month year Date of admission: day month year

ABOUT THE PATIENT: (the following questions will be asked by number)

- | | | | |
|---|--------------------------|--------------------------|--------------------------|
| | (KEY 1) | (KEY 0) | (KEY 9) |
| | Yes | No | Don't Know |
| 1 Did the patient live alone before admission? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 Was the patient independent in every day activities before this stroke? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

ABOUT THE STROKE: (the following questions will be asked by number)

- Is the patient:**
- | | | |
|---|--------------------------|--|
| | (KEY 1) | (KEY 0) |
| | Yes | No |
| 3 able to talk and orientated in time, place and person? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 able to lift both their arms off the bed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 able to walk without help from another person? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 able to swallow liquids safely? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 Do you think the patient is: (Tick one box only) | | |
| Under-nourished? <input type="checkbox"/> | (KEY 1) | Normal? <input type="checkbox"/> (KEY 2) |
| Overweight? <input type="checkbox"/> | | (KEY 3) |

<p>8 Can the patient take adequate fluids orally?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Yes <input type="checkbox"/></p> <p>(For Yes — Key 1) (For No — Key 0)</p>	<p>TRIAL 1 Randomise between <i>tick</i></p> <p>Normal diet until discharge <input type="checkbox"/></p> <p>vs</p> <p>Normal diet PLUS oral supplements <input type="checkbox"/></p> <p>(prescribe 120ml 3x per day)</p>
<p>9 Within 1st week of admission are you uncertain whether to tube feed NOW or DELAY for at least a week?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Yes <input type="checkbox"/></p>	<p>TRIAL 2 Randomise between <i>tick</i></p> <p>Immediate tube feeding <input type="checkbox"/></p> <p>vs</p> <p>Delay tube feeding for at least a week <input type="checkbox"/></p> <p>(and hydrate using parenteral fluids)</p>
<p>10 If you are going to start tube feeding NOW are you uncertain whether to use an NG or PEG tube?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Yes <input type="checkbox"/></p>	<p>TRIAL 3 Randomise between <i>tick</i></p> <p>Nasogastric tube feeding <input type="checkbox"/></p> <p>vs</p> <p>PEG tube feeding <input type="checkbox"/></p>
<p>11 If you are certain, which type of tube will you use?</p>	<p>NG <input type="checkbox"/> (Key 3)</p> <p>PEG <input type="checkbox"/> (Key 4)</p>	

Thank You — Now please post or fax this form if you have used the automated randomisation service. Please keep the original for your records
 Fax: +44(0) 131 332 5150

FOOD/SE/1/998

NOTES

Using the automated service

Please note that you will not be able to make a reverse charge call to this service.

Remember to fax us the Randomisation Form every time the automated service is used. Our fax number is +44 (0) 131 332 5150.

If you would like to practice using this service, please call the number provided on the front of the FOOD manual.

If you experience any difficulties with this service please fax us the completed Randomisation Form and we will return it to you with the treatment allocation clearly marked.

About the Stroke

- These questions relate to the Glasgow Coma Scale (GCS) or the Medical Research Council (MRC) Scale
- Able to swallow - *This assessment should be performed in line with local guidelines but, as a minimum, should comprise a bedside assessment*
- Nourishment - *This assessment should be performed in line with local practice but, as a minimum, should include an informal assessment of nutritional status*

Co-enrolment

Remember you can randomise this patient into another trial if you are uncertain how best to feed them later in this admission (e.g. NG vs PEG, Normal diet vs Normal diet PLUS oral supplements).

FOOD/SER/1/998

APPENDIX B: Adverse Event Card



Please complete if any patient randomised into FOOD experiences a **major adverse event** (in particular any relating to the allocated feeding policy)

TO MAINTAIN CONFIDENTIALITY, PLEASE SEND US THIS CARD IN AN ENVELOPE

Hospital name: _____

Patient's family name: _____

Given names: _____

Date of birth: day _____/month_____/year_____

Date adverse event first experienced: day_____/month_____/year_____

Details: _____

for office use only

**Please return (in an envelope) to the FOOD Trial Co-ordinating Centre,
Neurosciences Trials Unit, Western General Hospital, Edinburgh, EH4 2XU**

THANK YOU

for office use only

FOOD/MAC/1/998



The International Stroke Trials Collaboration (Feed Or Ordinary Diet)

Hospital Discharge Form

PLEASE COMPLETE THIS FORM ON THE PATIENT'S DISCHARGE FROM HOSPITAL, TRANSFER FROM THE CENTRE OR DEATH (whichever occurs first) AS ACCURATELY AS POSSIBLE

Hospital Details:

Hospital Number:

or Hospital Name:

Patient Details:

Family Name:

Given Name/s:

Date of Birth: day month year

Sex: Male Female

Affix Patient Sticker Here

ABOUT THE STROKE:

Was stroke diagnosis confirmed in this patient?

YES NO

If **not** a stroke, please specify the diagnosis:

For office use

ABOUT THE PATIENT:

How was the nutritional status assessed before first randomisation (please tick (✓) one or more boxes)

- Informal assessment
- Weight
- Dietitian's assessment
- Anthropometry
- Blood tests
- Other: For office use

How was the swallowing assessed before the first randomisation (please tick (✓) one or more boxes)

- Bedside assessment (doctor or nurse)
- Bedside assessment (speech & language therapist)
- Videofluoroscopy
- Other: For office use

PRIOR to randomisation, did this patient receive:

Any enteral tube feeds? YES NO

SINCE randomisation, has this patient received: (please tick (✓) one box on each line)

- | | | | |
|---|------------------------------|-----------------------------|--|
| Any Parenteral Fluids | YES <input type="checkbox"/> | NO <input type="checkbox"/> | If YES complete PARTS 1, 5, 6 & 7 |
| Any feeding via an NG Tube | YES <input type="checkbox"/> | NO <input type="checkbox"/> | If YES complete PARTS 2, 5, 6 & 7 |
| Any feeding via another type of tube (e.g. PEG) | YES <input type="checkbox"/> | NO <input type="checkbox"/> | If YES complete PARTS 3, 5, 6 & 7 |
| Any normal hospital diet PLUS supplementary feed | YES <input type="checkbox"/> | NO <input type="checkbox"/> | If YES complete PARTS 4, 5, 6 & 7 |
| Normal hospital diet only | YES <input type="checkbox"/> | NO <input type="checkbox"/> | If YES complete PARTS 5, 6 & 7 |
| Other (e.g. total parenteral nutrition), please specify: <input type="text"/> | | | <input type="text"/> <input type="text"/> For office use |

If allocated feeding policy(ies) was(were) **not** followed please give reason(s) below:

For office use

PART 1 Parenteral Fluids Given SINCE Randomisation (Please enter 99/99/99 or 99 if unknown)

Route: (please tick (✓) one box)

Intravenous Subcutaneous Both

Date first parenteral fluids given after randomisation: day month year

Date last parenteral fluids given: day month year

Were fluids given between these dates? Continuously Intermittently

PART 2 Fed via a NG Tube SINCE Randomisation (Please enter 99/99/99 or 99 if unknown)

Date first NG tube inserted after randomisation: day month year

Number of tubes inserted SINCE randomisation:

Is the NG tube still in situ? YES NO

If **NO**, date last NG tube removed: day month year

Name(s) of feed given: _____

Did NG tube deliver satisfactory volumes of liquid feed? YES NO Uncertain

If **NG feeding stopped**, please indicate the primary reason below (please tick (✓) one box only)

- Patient taking adequate diet and fluids orally
- Patient discharged/died
- Difficulties encountered (please specify difficulties below)
- Other (e.g. feeding futile), please specify: _____

Were any difficulties experienced? (please tick (✓) one or more boxes)

- No**
- Difficulties with tube insertion
- Nasal ulceration
- Other, please specify: _____
- Patient pulled out the tube(s)
- Aspiration

PART 3 Fed via another type of tube (e.g. PEG) SINCE Randomisation (Please enter 99/99/99 or 99 if unknown)

Type of tube inserted Gastric Duodenal/jejunal

Method of insertion Endoscopic Radiological guidance

Date first tube inserted after randomisation: day month year

Number of tubes inserted SINCE randomisation:

Is the tube still in situ? YES NO

If **NO**, date last tube removed: day month year

Name(s) of feed given: _____

Did PEG tube deliver satisfactory volumes of liquid feed? YES NO Uncertain

If **PEG feeding stopped**, please indicate the primary reason below (please tick (✓) one box only)

- Patient taking adequate diet and fluids orally
- Patient discharged/died
- Difficulties encountered (please specify difficulties below)
- Other (e.g. feeding futile), please specify: _____

Were any difficulties experienced? (please tick (✓) one or more boxes)

- No**
- Difficulties with tube insertion
- Wound infection
- Haemorrhage from PEG site
- Other, please specify: _____
- Patient pulled out the tube(s)
- Aspiration
- Peritonitis

PART 4 Supplementary Feeds Given SINCE Randomisation (Please enter 99/99/99 or 99 if unknown)

Date supplementary feeding started since randomisation: day month year

Number of **missed** doses SINCE randomisation: (Should receive 3 doses per day)

Are supplementary feeds still being given? YES NO

If **No**, date last supplementary feed given: day month year

Name(s) of feed given: _____

If supplementary feeding stopped, please indicate the primary reason below (please tick (✓) **one box only**)

- Patient discharged/died
- Difficulties encountered (please specify difficulties below)
- Other (e.g. feeding no longer appropriate), please specify: _____ For office use

Were any difficulties experienced? (please tick (✓) **one or more boxes**)

- No**
- Unable to swallow Patient refused Unwanted weight gain
- Any other, please specify: _____ For office use

PART 5 This section should be completed for all patients (Please enter 99/99/99 or 99 if unknown)

SINCE this patient was first randomised have they experienced any of the following: No

- Recurrent stroke If so, first noted since randomisation day month year
- Neurological worsening (not clearly due to recurrence) If so, first noted since randomisation day month year
- Pneumonia If so, first noted since randomisation day month year
- Other infections **1** If so, first noted since randomisation day month year

Please specify: _____ For office use

2 If so, first noted since randomisation day month year

Please specify: _____ For office use

- Pulmonary Embolism If so, first noted since randomisation day month year
- Deep vein thrombosis If so, first noted since randomisation day month year
- Pressure sores If so, first noted since randomisation day month year
- Gastrointestinal haemorrhage If so, first noted since randomisation day month year
- Other medical complications **1** If so, first noted since randomisation day month year

Please specify: _____ For office use

2 If so, first noted since randomisation day month year

Please specify: _____ For office use

Did the patient survive to discharge from randomising centre?

YES NO If **YES**, go to Part 6

If **NO**, please complete the following

Date of death day month year

Primary cause of death (please tick (✓) **one box only**)

- Neurological damage from initial stroke (e.g. coning) Pneumonia Pulmonary embolism
- Recurrent stroke Coronary heart disease
- Other vascular, please specify: _____ For office use
- Non-vascular, please specify: _____ For office use

Do you think this patient died due to trial treatment? YES NO

If **YES**, please specify: _____ For office use

Cause of death confirmed by autopsy? YES NO

PART 6 FOLLOW-UP DETAILS

Has this patient been discharged to: (tick (✓) **one box only**)

<input type="checkbox"/> own home, alone	<input type="checkbox"/> at home, with partner or relative	<input type="checkbox"/> relative's home
<input type="checkbox"/> residential home	<input type="checkbox"/> nursing home	<input type="checkbox"/> other hospital
<input type="checkbox"/> other, please specify: _____		<input type="checkbox"/>

If so, **date of discharge** day month year

For office use

Patient details:

Patient's full postal address on discharge
 (please **PRINT** clearly or attach an address label)

Post Code	Telephone:

Family doctor details:

Name of family doctor on discharge

Family doctor's full postal address
 (please **PRINT** clearly)

Post Code	Telephone:

If this patient is NOT registered with a family doctor, please provide the name of a reliable contact below:

Contact Name

Relationship to patient

Full postal address
 (please **PRINT** clearly)

Post Code	Telephone:

Part 7 Additional Information

(Please use this space below for any additional information you may think relevant to the trial or to the patient's treatment)

For office use

Form completed by:

Date:

Thank you

Now please photocopy this form (for your own records) **and send the ORIGINAL to the FOOD Trial Co-ordinating Centre, Neurosciences Trials Unit, Western General Hospital, Edinburgh EH4 2XU SCOTLAND using the envelopes provided or Fax on +44 (0) 131 332 5150**



The International Stroke Trials Collaboration (Feed Or Ordinary Diet)

FOLLOW-UP QUESTIONNAIRE

CONFIDENTIAL

Dear

On:

you were admitted to:

under the care of:

and, we would like to know how you are now. We need to know what you are **actually managing** to do now, not what you used to do, or would like to do.

Please tick (✓) one box on each line

	YES	NO
Has the stroke left you with any problems?	<input type="checkbox"/>	<input type="checkbox"/>
Do you need help from anybody with everyday activities?	<input type="checkbox"/>	<input type="checkbox"/>

How do you live now? (please tick (✓) **ONE** box only)

On my own	<input type="checkbox"/>	<input type="checkbox"/>
With my partner or relatives	<input type="checkbox"/>	<input type="checkbox"/>

Where do you live now? (please tick (✓) **ONE** box only)

In my own home or my relative's home	<input type="checkbox"/>	<input type="checkbox"/>
In a residential home	<input type="checkbox"/>	<input type="checkbox"/>
In a nursing home	<input type="checkbox"/>	<input type="checkbox"/>

In the next section we would like you to read the following descriptions from people who have had similar medical problems to you and choose the one which best describes your present state.

Tick the **ONE** box next to the sentence which best describes your present state.

- I have no symptoms at all
- I have a few symptoms but these do not interfere with my everyday life
- I have symptoms which have caused some changes in my life but I am still able to look after myself
- I have symptoms which have significantly changed my life and I need some help in looking after myself
- I have quite severe symptoms which mean I need to have help from other people but I am not so bad as to need attention day and night
- I have major symptoms which severely handicap me and I need constant attention day and night

We would also like to know how you are **NOW** being fed

- I now consider that I can eat normally
- I am fed via a tube in my nose
- I am fed via a tube in my side

NOW PLEASE TURN OVER 

FOOD/FU/1/898

APPENDIX D: Follow-up Form — Reverse

HEALTH SURVEY

By placing a tick (✓) in ONE box in EACH group below, please indicate which statements best describe your own health state today.

Mobility

- I have no problems in walking about
- I have some problems in walking about
- I am confined to bed

Self-Care

- I have no problems with self care
- I have some problems with washing or dressing myself
- I am unable to wash or dress myself

Usual Activities

- I have no problems with performing my usual activities (eg work, study, housework, family or leisure activities)
- I have some problems performing my usual activities
- I am unable to perform my usual activities

Pain/discomfort

- I have no pain or discomfort
- I have moderate pain or discomfort
- I have extreme pain or discomfort

Anxiety/depression

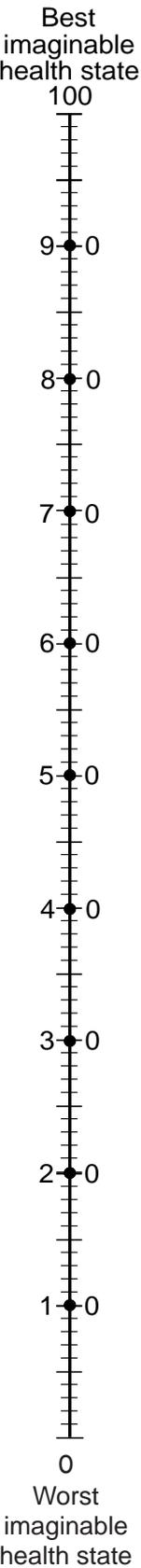
- I am not anxious or depressed
- I am moderately anxious or depressed
- I am extremely anxious or depressed

EXAMPLE

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked by '100' and the worst state you can imagine is marked by '0'

Following the example on the right we would like you to indicate on this scale how good or bad your health is today, in your opinion. Please do this by drawing a line from the box 'Your own health today' to whichever point on the scale indicates how good or bad your current state is.

Your own health state today



Did you complete this form yourself (please tick (✓) one box)? Yes

No, it was completed by a relative or friend

Today's date: day month year

Thank you very much for taking the time to complete this form. Please return it using the pre-paid envelope provided

FOOD/FU/1/898



The International Stroke Trials Collaboration (Feed Or Ordinary Diet)

Doctors questionnaire – patient still in hospital at 6 months

FOLLOW-UP QUESTIONNAIRE

CONFIDENTIAL

Dear

Re:

On:

the above named patient was admitted to:

under your care. It is now time for the six month follow-up of _____ and we understand that

this patient is still in hospital. We need to know what _____ can **actually manage** to do now.

Please tick (✓) ONE box on each line

	YES	NO
Has the stroke left your patient with any problems?	<input type="checkbox"/>	<input type="checkbox"/>
Does your patient need help from anybody with everyday activities?	<input type="checkbox"/>	<input type="checkbox"/>

Does your patient (please tick (✓) **ONE** box only)

	YES	NO
Have an NG tube in situ	<input type="checkbox"/>	<input type="checkbox"/>
Have a PEG tube in situ	<input type="checkbox"/>	<input type="checkbox"/>

Where is the patient NOW?

Hospital:

Ward:

Who is responsible for their daily care (if this is NOT you)

Please complete this form by asking the following questions.

In the next section we would like your patient to read the following descriptions and choose the one which best describes their present state. If your patient cannot read or complete the questionnaire, please complete it on their behalf.

Tick the ONE box next to the sentence which best describes your present state.

- I have no symptoms at all
- I have a few symptoms but these do not interfere with my everyday life
- I have symptoms which have caused some changes in my life but I am still able to look after myself
- I have symptoms which have significantly changed my life and I need some help in looking after myself
- I have quite severe symptoms which mean I need to have help from other people but I am not so bad as to need attention day and night
- I have major symptoms which severely handicap me and I need constant attention day and night

NOW PLEASE TURN OVER

FOOD/FU6/1/898

APPENDIX E: Follow-up Form — Hospital Version – Reverse

HEALTH SURVEY

By placing a tick (✓) in ONE box in EACH group below, please indicate which statements best describe your own health state today.

Mobility

- I have no problems in walking about
- I have some problems in walking about
- I am confined to bed

Self-Care

- I have no problems with self care
- I have some problems with washing or dressing myself
- I am unable to wash or dress myself

Usual Activities

- I have no problems with performing my usual activities (eg work, study, housework, family or leisure activities)
- I have some problems performing my usual activities
- I am unable to perform my usual activities

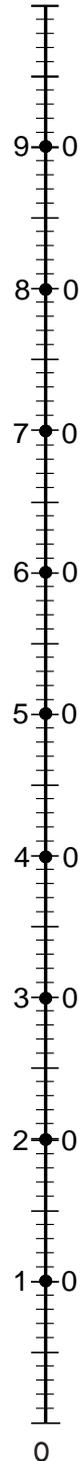
Pain/discomfort

- I have no pain or discomfort
- I have moderate pain or discomfort
- I have extreme pain or discomfort

Anxiety/depression

- I am not anxious or depressed
- I am moderately anxious or depressed
- I am extremely anxious or depressed

Best imaginable health state
100



0
Worst imaginable health state

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked by '100' and the worst state you can imagine is marked by '0'

EXAMPLE



Following the example on the right we would like you to indicate on this scale how good or bad your health is today, in your opinion. Please do this by drawing a line from the box 'Your own health today' to whichever point on the scale indicates how good or bad your current state is.

Your own health state today

Your own health state today

Are these responses?

The patients The doctors

Name of person completing the form:

Date:

(Please PRINT clearly)

day month year

**Thank you very much for taking the time to complete this form.
Please return it using the pre-paid envelope provided**

FOOD/FU6/1/898

FOOD trial Patient's Information Booklet

Introduction to the study

You very recently had a stroke, an interruption in the blood supply to part of the brain. In some people this causes problems with eating and drinking. We believe that your nutritional status (the food and drink you take in) will have an effect on your recovery. We want to find out, firstly, whether extra food, in addition to the ward diet, is beneficial and, secondly, if you have a swallowing problem, so that you cannot eat, which is the best method of giving you nourishment, how much and when we should start this. This is why we are asking for your help, even though we know that this is a very difficult time for you.

We are studying the best methods of giving nourishment to patients after stroke in many hospitals around the country. If you agree to take part you will receive one of five different types of treatment along with the standard care for patients with stroke. If your stroke has not affected your ability to swallow, you may receive either the standard ward diet or the standard ward diet plus an energy-rich drink. If your stroke has affected your ability to swallow, you may be asked to receive liquid food through a feeding tube.

How is the treatment given and monitored?

This depends on the way food is given. If you are able to swallow you may receive an energy-rich drink which will be given to you (three times a day) along with any drugs you have been prescribed. If you are having great difficulty with swallowing, you will receive a special liquid feed via a tube: either one which is inserted into your stomach via your nose (NG Tube) or one which is inserted through your stomach (PEG Tube). Fluids will be provided by a tube placed in a vein in your arm or just under the skin in your side if there is a delay in giving you a tube feed. This liquid feed will then run through the tube during the day and/or night. Whichever treatment you receive you will be carefully monitored throughout your hospital stay. You will leave hospital when your doctor thinks that you are well enough to go home and the timing of your discharge will not be influenced by taking part in the study. In a few months, we will either send

you a questionnaire to find out how you are doing or we may telephone you instead. A friend or relative may help you to complete the forms. In addition, we may telephone or write to your family doctor.

What are the risks and benefits?

Although we believe that the amount of nourishment may influence the long term problems after a stroke, some patients experience mild discomfort during tube insertion and some patients will occasionally experience serious complications related to the tube.

Who will be told about my illness?

Any information we collect about you will be confidential and used only for the purpose of this study. Information about you will only be available to research staff and the medical staff caring for you.

What happens now?

We would like you to think very carefully about whether or not to join the study. It is entirely voluntary and if you decide **not** to join, this will not influence your care in any way. You may also choose to stop taking the trial treatment at any time, although we would like to continue monitoring your progress.

And finally...

You must be happy about any decision you make and if we can give you any additional information to make the decision easier we will be happy to do so. Your family doctor will be informed about this study if you decide to join. Thank you for taking the time to read this leaflet.

If you would like to know more, please contact: _____
(or ask the nurse to contact)



The International Stroke Trials Collaboration (Feed Or Ordinary Diet)

Consent Form

I have been fully informed of the possible risks and benefits of taking part in this study. I agree to take part in the study and understand that I can withdraw from the treatment at any time, without having to give reasons and without it affecting my future medical care.

Patient Name: _____

Address: _____

Signature (Patient): _____ Date: ____ day / ____ month / ____ year

Independent Witness (e.g. Nurse): _____

Address: _____

If the patient gives verbal consent to take part in the trial but is unable to sign, the responsible doctor must sign here:

Responsible Doctor: _____
and the signature must be witnessed above

Assent by Another Person

I have been fully informed of the possible risks and benefits of participation in this study. I agree that _____ may take part in the study and understand that he/she can withdraw from the study at any time, without having to give reasons and without it affecting their future medical care

Signature: _____ Date: ____ day / ____ month / ____ year

Relationship with patient: _____

Address: _____

Independent Witness (e.g. Nurse): _____

Address: _____

Please file this form in the patient's notes. DO NOT return it to the FOOD Trial Co-ordinating Centre

FOOD/C/1/898



The FOOD Trial Co-ordinating Centre
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