



Key Fact Sheet for Stroke

Every year approximately 150,000 people in the UK have a stroke (Townsend et al 2012). It is one of the top three causes of death in the UK and a leading cause of adult disability in England (National Audit Office 2010). Stroke costs England approximately £8 billion/year on direct healthcare, productivity losses and informal care (ibid). Prevalence of malnutrition following a stroke is between 6-62% (Unosson et al 1994, Gariballa et al 1998, Foley et al 2009) with the incidence of malnutrition increasing within the first few weeks after a stroke (Yoo et al 2008).

Approximately 30% of stroke survivors have malnutrition, poor dietary intake and dehydration (Martineau 2005). These conditions can lead to a higher incidence of death, disability, chest infection and longer hospital stay (Martino 2005). These risks are reflected in the recommendations made in the National Clinical Guidelines for Stroke (Gomes, Hookway and Weekes 2014) which state that acute stroke patients unable to take adequate nutrition and fluids orally should be referred to an appropriately trained healthcare professional for detailed nutritional assessment, individualised advice and monitoring.

Role of the Dietitian:

Dietitians are the only appropriately trained healthcare professionals who can assess a patient's energy, protein, micro and macro nutrient requirements and who can develop effective treatment plans in artificial feeding, modified consistency diets/fluids and food first approaches.

Dietitians are therefore an integral part of the stroke MDT and the management of the stroke patient.

We:

- Provide individual advice and group education in weight management, diabetes and primary and secondary prevention of stroke.
- Work with patients whose nutritional and fluid intake has been identified as inadequate.
- Train MDT members on nutritional screening, first line management of malnutrition as well as the whole nutrition pathway for the stroke patient to provide timely and appropriate interventions.
- Liaise with nurses and caterers to ensure that dietary restrictions and therapeutic diets (32% of stroke patients have renal dysfunction) (Rowat, Graham and Dennis 2013) are delivered, taking into account religious, cultural and lifestyle choices.
- Improve stroke care provision through contribution to national catering and texture modification guidelines as well as the British Dietetic Neurosciences Group, All Wales Stroke Dietitians Group and the Welsh Stroke Alliance.
- Provide expert advice into team discussions around the ethics of artificial nutrition, feeding at risk and end of life and palliative care treatment and decisions.

"Totally changed my diet. Everything is now made from scratch. Now I am more aware of what I am eating. Changed family's eating habits." *Comment provided by a young patient*



Fact 1:

Primary and Secondary Prevention and Education

Dietitians provide individual advice and group education in weight management, diabetes and primary and secondary prevention of stroke and are experts in using behaviour change techniques in these areas to encourage positive health changes.

The National Stroke Strategy estimates that 20,000 strokes a year could be avoided through preventative work (DoH 2007). Over five years, this could potentially save the NHS around £900 million (Youman et al 2003). Royal College of Physicians evidence-based guidelines for the secondary prevention of stroke (Hookway, Gomes and Weekes 2014) recommend that all patients who have had a stroke or transient ischaemic attack should receive dietary advice.

Fact 2:

Dietitians can reduce healthcare costs by:

Reducing expensive long-term dependence on artificial nutrition (42% of tube-feeding is due to neurological problems (NHS 2012) through effective management and rehabilitation of artificial and oral nutritional intake.

Primary care savings: A pilot study in Walsall in 2011 showed that when a dietitian was involved in the assessment, appropriate prescribing of ONS saved one surgery £20,454 annually (NICE 2011).

Secondary care savings: 38-55% of people who had been prescribed nutritional supplements had not received dietetic intervention and the prescription was inappropriate for 52-62% of these people (Chotai de Lima, Griffin and Shaw 2011).

Dietitians can provide savings of £28,472 per 100,000 people (NICE 2006).

Fact 3:

Improving Patient Outcomes

Dietitians work closely with speech and language therapists in the management of dysphagia. The national average daily cost for inpatient care for stroke was £292 (costs 2009/10) (Royal College of Speech and Language Therapists 2007).

Dietitians can reduce the length of stay in hospital by up to 5.5 days through collaborative working with SLTs to manage nutritional intake, potentially saving £1,600 per patient (ibid).

Case Study

Rachel, 82 was admitted with a stroke and following a nurse swallow assessment she was placed on a thick puree diet and syrup thick fluids. The dietitian assessed Rachel's nutritional and fluid requirements, supervised the implementation of an appropriate menu and asked for the prescription of appropriate nutritional supplements.

At an MDT, the nurses commented that Rachel was eating very little and the consultant suggested a referral for gastrostomy would be necessary. The dietitian was able to reassure the team and provide evidence through weight and biochemistry reviews that Rachel's oral intake, although seemingly small was of high nutritional content and providing adequate nutrition and hydration.

Rachel went on to be discharged home to her husband where the community dietitians and speech and language therapists continued to review her until she progressed to normal diet and fluids three months later.

Without dietetic input, Rachel would have likely had a gastrostomy placed, putting her through an unnecessary procedure as well as the associated higher risk of mortality and costs of the procedure, tube feeding and possible nursing home placement.

Written by the Catherine Jones and the All Wales Stroke Dietitians Group with collaboration from the BDA Neurosciences Specialist Group.

The British Dietetic Association, founded in 1936, is the professional association for dietitians in Great Britain and Northern Ireland. It is the nation's largest organisation of food and nutrition professionals with over 8,000 members. The BDA is also an active trade union. To find out more about other areas of work that dietitians are involved in please visit our website.

Try our:

Food Fact Sheets: for information on foods and about medical conditions - available on the website.

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