

Clinical Guidelines for Stroke Management

Summary – Dietetics

This summary is a quick reference to the recommendations in the Clinical Guidelines for Stroke Management most relevant to dietitians.

Dietitians hold a qualification in nutrition and dietetics, recognised by national authority[s]. They apply the science of nutrition to the feeding and education of people and individuals in health and disease. Dehydration and malnutrition are common in patients with stroke in hospital and this is associated with poor outcomes. Dietitians make recommendations on hydration and nutrition, recognising that patients at risk of malnutrition or who require tube feeding or dietary modifications are involved in assessment, advice and monitoring. Dietitians also cover the role of nutrition in the secondary prevention of stroke, recognising that long-term adherence to cardioprotective diets, when combined with other lifestyle modifications, may reduce stroke recurrence.

While this summary focuses on specific recommendations, stroke care is the most effective when all members of an interdisciplinary team are involved. For the comprehensive set of recommendations that covers the whole continuum of stroke care, please refer to further information on InformMe

https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management.

The Stroke Foundation in partnership with Cochrane Australia is testing a model of continually reviewing and updating recommendations for the Clinical Guidelines for Stroke Management in response to new evidence on a monthly basis. For changes to recommendations based on new research evidence, please refer to further information on InformMe https://informme.org.au/Guidelines/Living-guidelines-for-stroke-management

The Clinical Guidelines uses an internationally recognised guideline development approach called GRADE (Grading of Recommendations Assessment, Development and Evaluation) and an innovative guidelines development and publishing platform known as MAGICapp (MAking Grade the Irresistible Choice). GRADE ensures a systematic process in developing recommendation, which are based on the balance of benefits and harms, quality of evidence, patient values, and resource considerations. MAGICapp enables transparent display of this process and access to additional practical information for recommendation implementation.



Recommendations

Each recommendation is given a strength based on GRADE. GRADE methodology includes four factors to guide the development of a recommendation and determine the strength of that recommendation.

- The balance between desirable and undesirable consequences
- Confidence in the estimates of effect (quality of evidence)
- Confidence in values and preferences and their variability (clinical and consumer preferences)
- Resource use (cost and implementation considerations).

The GRADE process uses only two categories for the strength of recommendation, based on how confidence the guideline developers are in that the "desirable effects of an intervention outweigh undesirable effect [...] across the range of patients for whom the recommendation is intended" (GRADE Handbook):

- Strong recommendations: where guideline developers are certain that the evidence supports a clear balance towards either desirable or undesirable effects; or
- Weak recommendations: where guideline developers are not as certain about the balance between desirable and undesirable effects as the evidence base isn't as robust.

These strong or weak recommendations can either be for or against an intervention. If the recommendation is AGAINST an intervention this means it is recommended NOT to do that intervention.

Consensus-based recommendations: statements have been developed based on consensus and expert opinion (guided by any underlying or indirect evidence) for topics where there is either a lack of evidence or insufficient quality of evidence on which to base a recommendation but it was felt that advice should be made.

Practice points: for questions outside the search strategy (i.e. where no systematic literature search was conducted), additional considerations are provided.

Recommendations are presented as at June 2025 with a note if it has changed in the last two years and are also presented in Chapter order for easier reference to the relevant section of the full Clinical Guidelines.

For the full list of references, please refer to the individual MAGICapp chapters through InformMe <u>https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management</u>.



Chapter 2 of 8: Early assessment and diagnosis

Transient ischaemic attack

Practice statement

Consensus-based recommendations

- All patients and their family/carers should receive information about TIA, screening for diabetes, tailored advice on lifestyle modification strategies (smoking cessation, exercise, diabetes optimisation if relevant – see <u>Secondary prevention</u>), return to driving (see <u>Driving</u> in <u>Community participation and long-term care</u>) and the recognition of signs of stroke and when to seek emergency care.
- All health services should develop and use a local TIA pathway covering primary care, emergency and stroke specialist teams to ensure patients with suspected TIA are managed as rapidly and comprehensively as possible within locally available resources.

Chapter 3 of 8: Acute medical and surgical management

Dysphagia

Strong recommendation

For stroke survivors with swallowing difficulties, behavioural approaches such as swallowing exercises, environmental modifications, safe swallowing advice, and appropriate dietary modifications should be used early. (Geeganage et al. 2012)

Practice statement

Consensus-based recommendations

- Until a safe swallowing method is established for oral intake, patients with dysphagia should have their nutrition and hydration assessed and managed with early consideration of alternative non-oral routes.
- Patients with dysphagia on texture-modified diets and/or fluids should have their intake and tolerance to the modified diet monitored regularly due to the increased risk of malnutrition and dehydration.
- Patients with dysphagia should be offered regular therapy that includes skill and strength training in direct therapy (with food/fluids) and indirect motor therapy which capitalises on the principles of neural plasticity to improve swallowing skills.
- Patients with persistent weight loss, dehydration and/or recurrent chest infections should be urgently reviewed.
- All staff and carers involved in feeding patients should receive appropriate training in feeding and swallowing techniques.



 All staff should be appropriately trained in the maintenance of oral hygiene, including daily brushing of teeth and/or dentures and care of gums.

Please also refer to the topic Early Nutrition in Managing Complications.

Chapter 4 of 8: Secondary prevention

Lifestyle modifications

Info box

Practice point

All patients with stroke or TIA (except those receiving palliative care) should be assessed and informed of their risk factors for recurrent stroke and strategies to modify identified risk factors. This should occur as soon as possible and prior to discharge from hospital.

Weak recommendation

Interventions addressing secondary stroke risk factors may be used for all people with stroke and TIA. Such interventions should include multiple components including individual (support and counselling) and organisational approaches (regular reviews by relevant health care professionals) and include exercise training as a component. (Bridgwood et al. 2020; Liljehult et al. 2020; Wang et al. 2019; Deijle et al. 2017)

Diet

Practice statement

Consensus-based recommendations

All patients with stroke or TIA should be supported to follow a Mediterranean or similar style diet (high intake of plant-based foods such as fruit, vegetables, whole grain cereals, legumes and nuts, moderate intake of low fat dairy products, and low intake of processed and red meat and sugary foods, as well as olive oil as the main added dietary fat) to reduce the risk of recurrent stroke. (English et al. 2021; Sebastian et al. 2024)

Info box

Practice points

• All patients with stroke should be referred to an Accredited Practising Dietitian who can provide individualised dietary advice.



Obesity

Info box

Practice points

Patients with stroke or TIA who are overweight or obese should be offered advice and support to aid weight loss.

Chapter 5 of 8: Rehabilitation

Goal setting

Strong recommendation

- Health professionals should initiate the process of setting goals, and involve stroke survivors and their families and carers throughout the process. Goals for recovery should be client-centred, clearly communicated and documented so that both the stroke survivor (and their families/carers) and other members of the rehabilitation team are aware of goals set. (Sugavanam et al. 2013; Taylor et al. 2012)
- Goals should be set in collaboration with the stroke survivor and their family/carer (unless they choose not to participate) and should be well-defined, specific and challenging. They should be reviewed and updated regularly. (Sugavanam et al. 2013; Taylor et al. 2012)

Telehealth in rehabilitation

Weak recommendation

Telehealth services may be used as an alternative approach to delivering rehabilitation, especially for patients who cannot access specialist rehabilitation in the community. It may also be used as an adjunct to in-person therapy. Delivering of specific interventions via telehealth should only be considered for those that have demonstrated benefits. (Laver et al. 2020)

Chapter 6 of 8: Managing complications

Nutrition and hydration

Early hydration

Strong recommendation

- All stroke patients should have their hydration status assessed, monitored, and managed throughout their hospital admission.
- Where fluid support is required, crystalloid solution should be used in preference to colloid solutions as the first option to treat or prevent dehydration. (Visvanathan et al. 2015)



Early feeding

Strong recommendation

All patients with stroke should be screened for malnutrition at admission and on an ongoing basis (at least weekly) while in hospital. (Dennis et al. 2005)

Strong recommendation

For patients with stroke whose nutrition status is poor or deteriorating, nutrition supplementation should be offered. (Geeganage et al. 2012; Dennis et al. 2005)

Weak recommendation

- For patients with stroke who do not recover a functional swallow, nasogastric tube feeding is the preferred method of feeding in the short term. (Geeganage et al. 2012; Gomes et al. 2015; Dennis et al. 2005)
- For patients with stroke, there is no preference with regard to continuous pump (meaning using a pump for greater than or equal to 16hrs out of 24hrs for less than or equal to 80ml/hr) feeding versus intermittent bolus feeding (meaning 250-400mls/hr for 4-5times/day) therefore practical issues, cost and patient preferences should guide practice. (Lee et al. 2010)

Weak recommendation AGAINST

For patients with stroke who are adequately nourished, routine oral nutrition supplements are not recommended. (Geeganage et al. 2012; Dennis et al. 2005)

Info box

Practice points

- For patients with acute stroke food and fluid intake should be monitored.
- patients with stroke who are at risk of malnutrition, including those with dysphagia, should be referred to an Accredited Practising Dietitian for assessment and ongoing management.

Chapter 7 of 8: Discharge planning and transfer of care

Information and education

Strong recommendation

- All stroke survivors and their families/carers should be offered information tailored to meet their individual needs using relevant language and communication formats. (Crocker et al. 2021)
- Information should be provided at different stages in the recovery process. (Crocker et al. 2021)



• An approach of active engagement with stroke survivors and their families/carers should be used allowing for the provision of material, opportunities for follow-up, clarification, and reinforcement. (Crocker et al. 2021)

Info box

Practice points

- Stroke survivors and their families/carers should be educated in the FAST stroke recognition message to maximise early presentation to hospital in case of recurrent stroke.
- The need for education, information and behaviour change to address long-term secondary stroke prevention should be emphasized (refer to <u>Secondary Prevention</u>).

Discharge care plans

Strong recommendation

Comprehensive discharge care plans that address the specific needs of the stroke survivor should be developed in conjunction with the stroke survivor and carer prior to discharge. (Johnston et al. 2010; Goncalves-Bradley et al. 2016)

Info box

Practice point

Discharge planning should commence as soon as possible after the stroke patient has been admitted to hospital.

Practice statement

Consensus-based recommendation

A discharge planner may be used to coordinate a comprehensive discharge program for stroke survivors.

Practice statement

Consensus-based recommendations

To ensure a safe discharge process occurs, hospital services should ensure the following steps are completed prior to discharge:

- Stroke survivors and families/carers have the opportunity to identify and discuss their postdischarge needs (physical, emotional, social, recreational, financial and community support) with relevant members of the multidisciplinary team.
- General practitioners, primary healthcare teams and community services are informed before or at the time of discharge.
- All medications, equipment and support services necessary for a safe discharge are organised.
- Any necessary continuing specialist treatment required has been organised.



 A documented post-discharge care plan is developed in collaboration with the stroke survivor and family and a copy provided to them. This discharge planning process may involve relevant community services, self-management strategies (i.e. information on medications and compliance advice, goals and therapy to continue at home), stroke support services, any further rehabilitation or outpatient appointments, and an appropriate contact number for any post-discharge queries

A locally developed protocol or standardised tool may assist in implementation of a safe and comprehensive discharge process. This tool should be aphasia and cognition friendly.

Patient and carer needs

Practice statement

Consensus-based recommendation

Hospital services should ensure that stroke survivors and their families/carers have the opportunity to identify and discuss their post-discharge needs (including physical, emotional, social, recreational, financial and community support) with relevant members of the interdisciplinary team.

Home assessments

Practice statement

Consensus-based recommendation

Prior to hospital discharge, all stroke survivors should be assessed to determine the need for a home visit, which may be carried out to ensure safety and provision of appropriate aids, support and community services.

Carer training

Weak recommendation

Relevant members of the interdisciplinary team should provide specific and tailored training for carers/family before the stroke survivor is discharged home. This training should include, as necessary, personal care techniques, communication strategies, physical handling techniques, information about ongoing prevention and other specific stroke-related problems, safe swallowing and appropriate dietary modifications, and management of behaviours and psychosocial issues. (Forster et al. 2013)



Chapter 8 of 8: Community participation and long-term care

Self-management

Strong recommendation New

Self-management interventions that are directed by the stroke survivor, should be offered within the first four months of discharge into community living. The strongest evidence base exists for the 'Take Charge After Stroke' intervention. (Fu et al. 2020)

Weak recommendation

- Stroke survivors who are cognitively able and their carers should be made aware of the availability of generic self-management programs before discharge from hospital and be supported to access such programs once they have returned to the community.
- Stroke-specific self-management programs may be provided for those who require more specialised programs.
- A collaboratively developed self-management care plan may be used to harness and optimise self-management skills.

(Fryer et al. 2016; Oh et al. 2022)

Support

Peer support

Weak recommendation

Stroke survivors and their families/carers should be given information about the availability and potential benefits of a local stroke support group and/or other sources of peer support before leaving hospital and when back in the community. (Kruithof et al. 2013)

Carer support

Strong recommendation

Carers of stroke survivors should be provided with tailored information and support during all stages of the recovery process. This support includes (but is not limited to) information provision and opportunities to talk with relevant health professionals about the stroke, stroke team members and their roles, test or assessment results, intervention plans, discharge planning, community services and appropriate contact details. Support and information provision for carers should occur prior to discharge from hospital and/or in the home and can be delivered face-to-face, via telephone or computer. (Legg et al. 2011; Eames et al. 2013)



Weak recommendation New

Carers should receive psychosocial support throughout the stroke recovery continuum to ensure carer wellbeing and the sustainability of the care arrangement. Carers should be supported to explore and develop problem solving strategies, coping strategies and stress management techniques. The care arrangement has a significant impact on the relationship between caregiver and stroke survivor so psychosocial support should also be targeted towards protecting relationships within the stroke survivors support network (Minshall et al. 2019; Chen et al. 2014).

Practice statement

Consensus-based recommendations

- Where it is the wish of the stroke survivor, carers should be actively involved in the recovery process by assisting with goal setting, therapy sessions, discharge planning, and long-term activities.
- Carers should be provided with information about the availability and potential benefits of local stroke support groups and services, at or before the person's return to the community.
- Assistance should be provided for families/carers to manage stroke survivors who have behavioural problems.

For access to the full Clinical Guidelines and further information refer to InformMe https://informme.org.au/Guidelines/Clinical-Guidelines-for-Stroke-Management.