Dietitians & nurses: Preventing delirium through improved nutrition care

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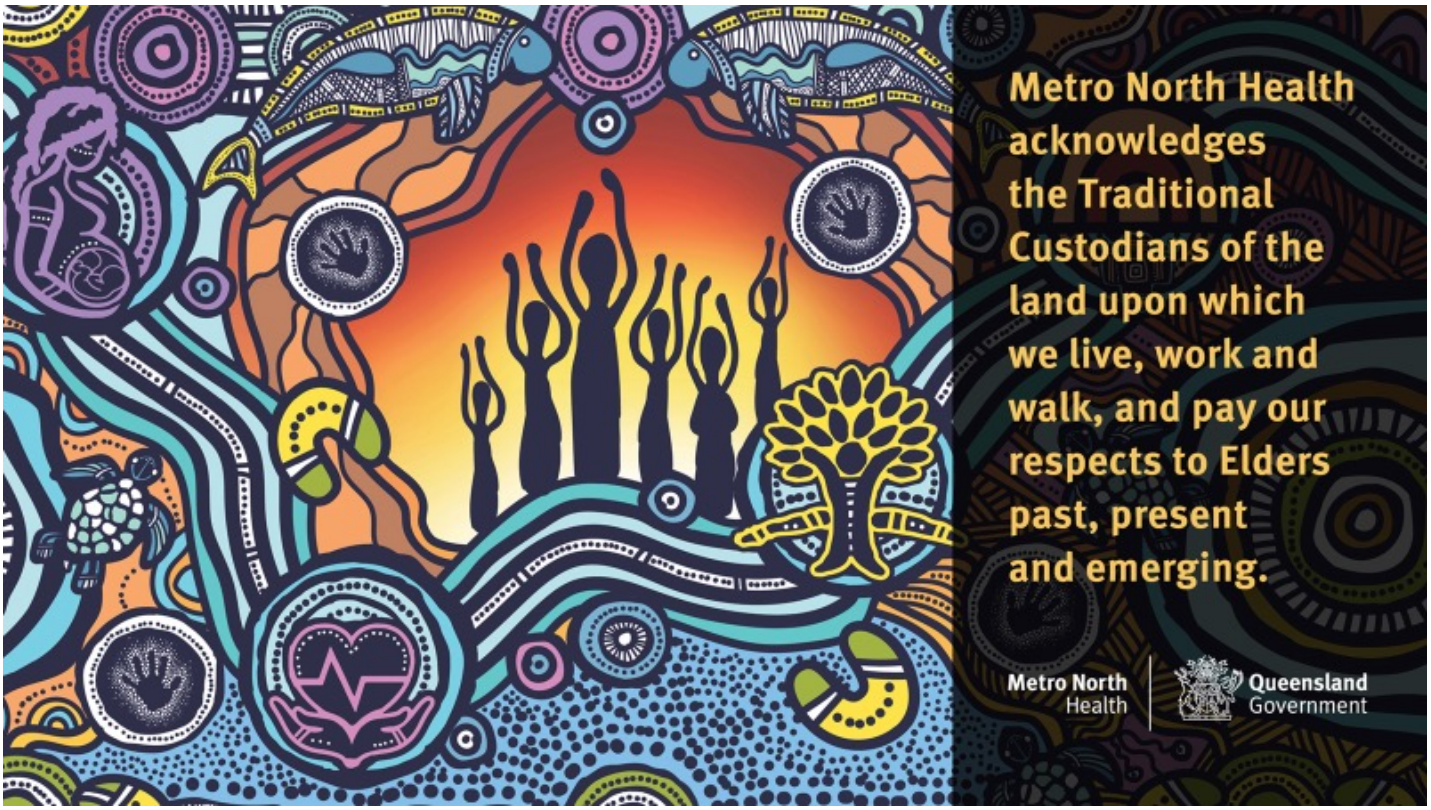


What we will cover:

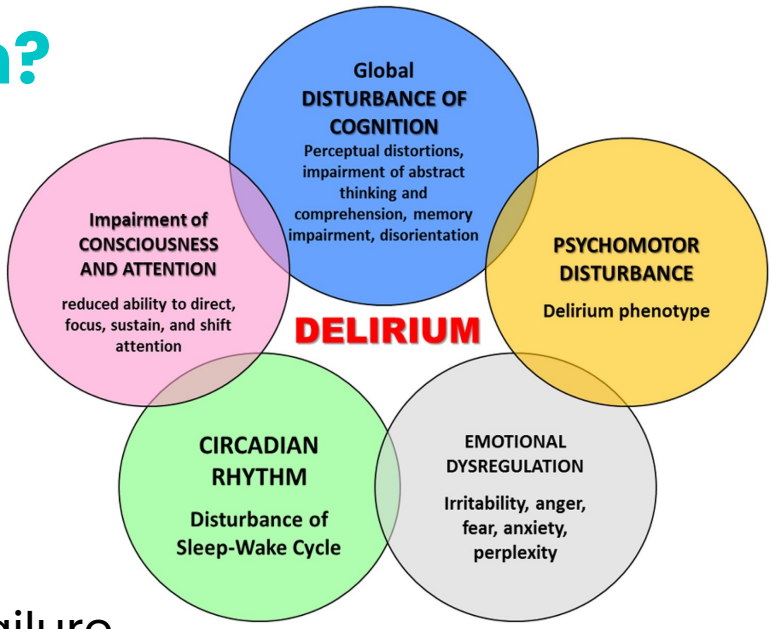
Dietitians are critical in identifying, preventing and managing delirium!

- Recognising delirium
- Nutrition is a key therapy
- Working together to provide person-centred nutrition and mealtime care

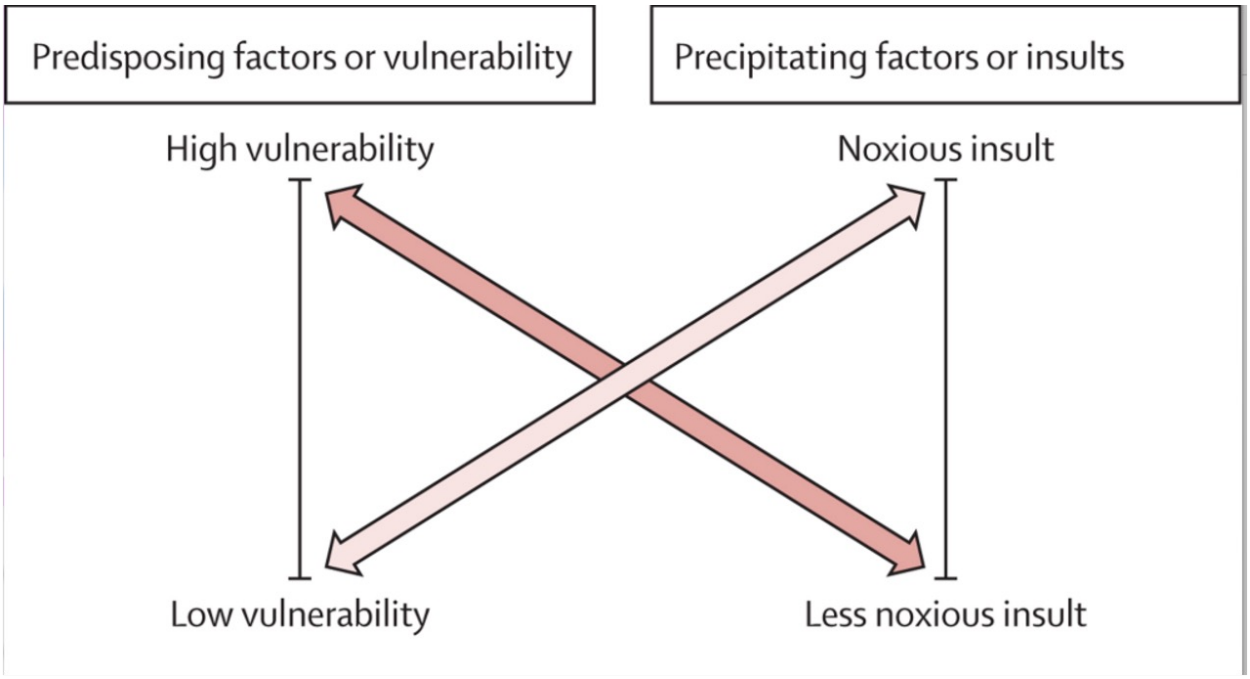
What is delirium?

Delirium is a neurobehavioral syndrome, caused by the transient disruption of normal neuronal activity, secondary to systemic disturbances.

Delirium = acute brain failure



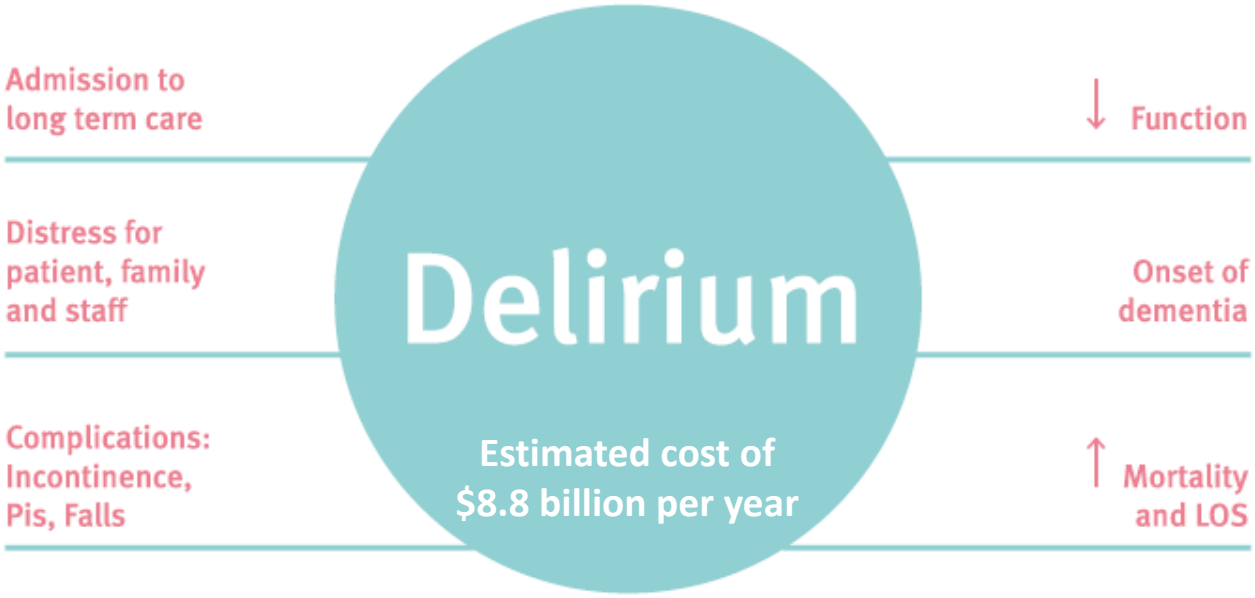
Maldanado et al. Delirium pathophysiology: An updated hypothesis of the etiology of acute brain failure. Int J Geri Psych 2018;33:1428.



Inouye SK, Westendorp RGJ, Saczynski J. Lancet 2014; 383:911-22..

Difference between DELIRIUM & DEMENTIA

Delirium	Dementia
ACUTE cognitive impairment	Progressive cognitive impairment
Change in ATTENTION and AWARENESS	Interferes with everyday function
Due to a medical illness or medication	NOT due to delirium or other mental illness
ACUTE MEDICAL EMERGENCY (Brain failure)	A progressive and incurable chronic disease
Rapid onset and can be fluctuating	Long onset, progressive yet stable over time



Pezzullo et al. Economic impact of delirium in Australia: a cost of illness study. BMJ Open 2019;9:e027514.

Health Roundtable - Australasian Benchmarked Data, Oct 2021 - Sept 2022

* Quartiles calculated within peer group.

Source: Australian National Standards Report OCt 2021 - Sept 2022, Health Roundtable. Published 22/12/2022.

Source: Hospital-Acquired Complications Report Oct 2021 - Sept 2022, Health Roundtable. Published 20/12/2022.

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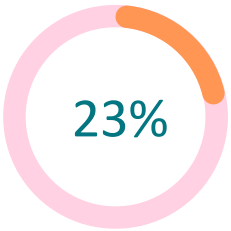
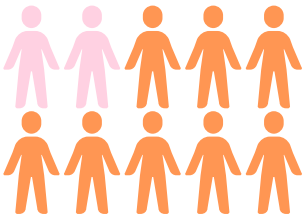
Adult inpatients

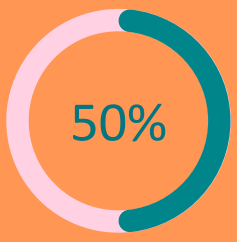


Medical inpatients
(all ages)

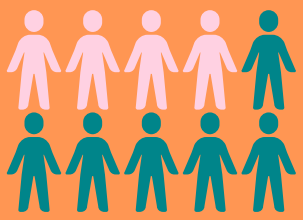


Up to 20% of surgical patients
(all ages)

Other populations



Critically ill children and adolescents



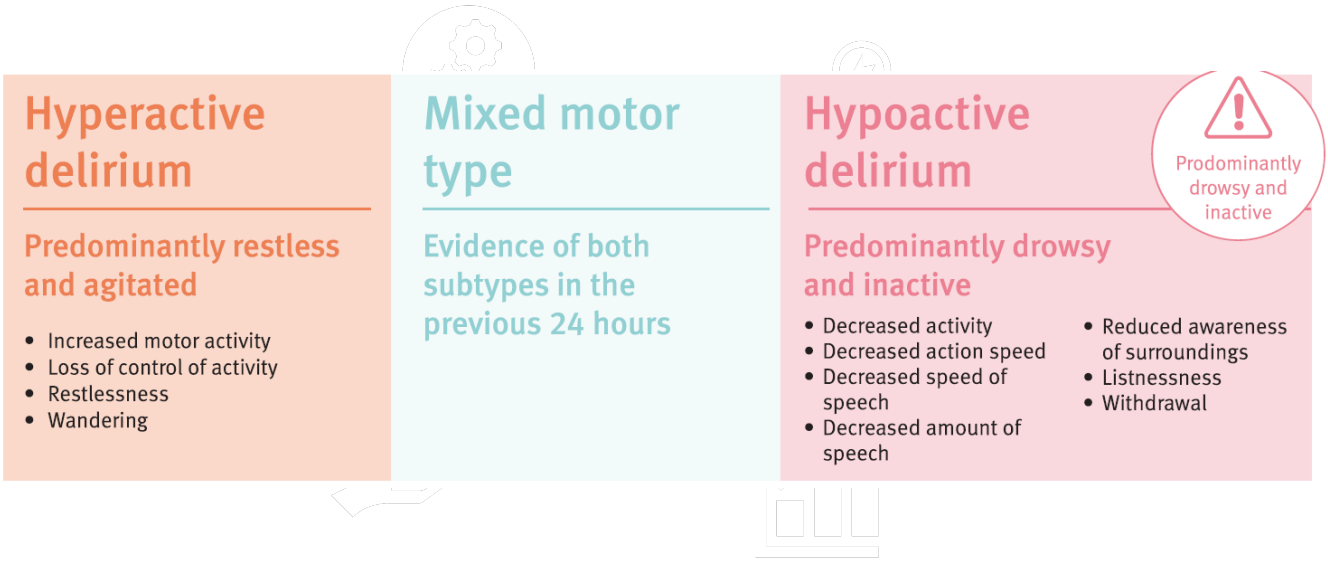
Nursing home residents

Who is at risk?	What causes delirium?
Older patients	Infections eg. urine/chest
Serious illness	Side effects of meds
Have dementia or depression	Suddenly stopping alcohol/drugs
Functional decline	Major surgery
Poor eyesight / hearing	Dehydration
Multiple medications	Poor food intake
Had delirium before	Pain
Malnourished	Constipation
	Any serious illness

PINCHES ME

- Pain
- Infection
- Nutrition
- Constipation
- Hydration
- Electrolytes
- Sleep
- Meds
- Environment

Types of delirium



Delirium is preventable

Multi-component non-pharmacological interventions significantly reduce hospital-acquired delirium

NO DRUG prevents delirium
NO DRUG treats delirium

47% reduction in delirium incidence

- EAT: Early and adequate nutrition and hydration
- WALK: Early and regular mobility
- ENGAGE: Cognitive engagement and reorientation
- (Sleep, pain management)

Queensland Government

Burton et al. Non-pharmacological interventions for preventing delirium in hospitalised non-ICU patients. Cochrane Database of Systematic Reviews 2021; Mudge et al. CHERISH. JAMA Int Med 2023. 182:27.

Dietitian's role

Prevent

Proactive nutrition support for those at risk e.g. HPHE diets for people aged 65+

Systems for monitoring food and fluid intake

Identify

Looking for changes from baseline cognition or behaviour

Screening e.g. the 4As test

- Alertness
- Orientation (Abbreviated Mental Test)
- Attention
- Acute change or fluctuating course

Manage

Proactive nutrition and mealtime care systems

Individualised person-centred care by the MDT

Not just Eat – Walk and Engage

Identifying barriers to eating

- Uncomfortable position
- Drowsiness/ fluctuating level of alertness
- Paranoid- thinking food is poisoned
- Nutrition impact symptoms - not managed or well understood
- Lack of dentures
- Lack of vision/hearing aids
- Poor environment
- Lack of normal routine or sensory cues

Strategies for people with/ at risk of delirium

Food access

Nutritious meals, snacks and drinks available regularly and on demand

Foods that the patient enjoys

Physical access to the food

Mealtimes

Encouragement, set-up and eating assistance

Comfortable eating position

Family involvement

Regular dietetics presence

Monitoring

Preferences and needs

Care needs met

Food and fluid intake

Nutritional decline

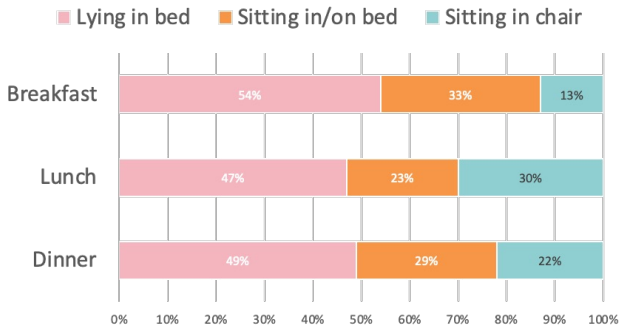
Delivery needs to individualised to the context and person.
This is where MDT care comes in.

Food access

- Food people can and want to eat (diet codes & textures)
- Prioritising HPHE elements of meal
- Assist with meal ordering
- Do not send too much food!
- Communicating food/drink preferences
- Food and drinks available outside of scheduled mealtimes
- Access to favourite/familiar foods

What do our mealtimes look like?

- Only 1 in 5 sitting in a chair when the meal is delivered
- 30% of patients need help with their meal
- Breakfast the poorest



EAT WALK ENGAGE

What can mealtimes look like?

Dawn, Bed 36, medical ward

- You are a dietitian completing your regular meal round when you notice an older patient asleep, who has not touched their meal.

Dawn, Bed 36, medical ward

Identify

Looking for changes from baseline cognition or behaviour

Screening e.g. the 4As test

- Alertness
- Orientation (Abbreviated Mental Test)
- Attention
- Acute change or fluctuating course

- Alertness – you try to wake her but she falls back asleep quite quickly
- Orientation – not able to say the year or where they are
- Attention – not able to hold conversation
- Acute change – medical record: patient bright and alert earlier in admission

Dawn, Bed 36, medical ward

Food access

Nutritious meals, snacks and drinks offered regularly and on demand

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Mealtimes

Maximise comfort:

- Take your patient to the **toilet** before the meal arrives
- Make sure **dentures** are in and well-fitting and good mouth cares
- Ensure adequate **lighting** and put **glasses/ hearing aids** on
- **Position upright**, ideally sitting in a chair, with a **clutter free** meal space
- Address any nutrition impact symptoms eg. **Pain relief or anti-nausea** medications before meals as required, and avoid sedative medications before meals
- Are they **avoiding specific foods**/ parts of the meal ie. Hard/dry foods, smaller portions?

Provide Cues:

- **Orientate** them: "Good morning! It's a lovely spring day today. Here is your breakfast"
- **Open packaging**
- Some people may need **cutlery** placed in their hands, or **food cut up** into small manageable pieces
- **Eating with others** (family or other patients) can help
- Families may be able to bring **favourite food** items in
- Offer food and drinks frequently

Tube Feeding

- Can improve outcomes and may be required if the patient develops dysphagia or continues to be too drowsy
- NGTs can be a form of physical restraint & distressing
- Choose bolus feeding over continuous feeding where possible

Recommendation 37

EN and PN and hydration shall be considered as medical treatments rather than as basic care, and therefore should only be used if there is a realistic chance of improvement or maintenance of the patient's condition and quality of life.

Grade of recommendation GPP – strong consensus (96% agreement)

Recommendation 38

Older patients should *not* receive pharmacological sedation or physical restraints to make EN or PN or hydration possible.

Grade of recommendation GPP – strong consensus (100% agreement)

Dave, Bed 11, surgical ward

- At the MDT meeting, the nurses mention that Dave has a hyperactive delirium and is extremely agitated and restless.
- He is a 25 yo male, admitted after MVA, multiple fractures, operations and sepsis. Semi-professional athlete.
- The ward dietetic assistant also tells you that Dave has been eating <50% of his meals.

Dave, Bed 11, surgical ward

Food access

Nutritious meals, snacks and drinks offered regularly and on demand

Foods that the patient enjoys

Physical access to the food

Mealtimes

Encouragement, set-up and eating assistance

Comfortable eating position

Family involvement

Regular dietetics presence

Monitoring

Preferences and needs

Care needs met

Food and fluid intake

Nutritional decline

Mealtimes

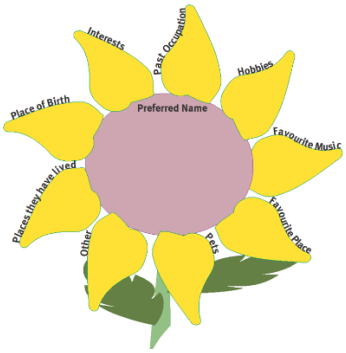
Maintain Focus:

- Minimise **distractions** (e.g. turn off the TV)
- Minimise unnecessary **interruptions** during the meal
- It may help to **serve one meal element at a time** to reduce confusion (e.g. just put the main meal on the tray)
- **Start with preferred** and/or high energy components for patients with fatigue or inattention…even if that means ice cream first!
- Provide verbal encouragement, reassurance and **frequent prompts**
- **Talk about familiar topics** to maximise alertness
- Maximise intake when most alert

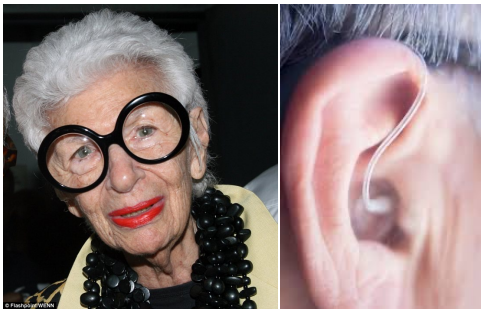
Maximise Independence:

- Assist **meal choices** if needed (e.g. ask family members about favourite foods and document on a Sunflower tool or similar)
- Help set up if required e.g. opening packets & demonstrate cutting meals
- Order **finger foods** if the patient has trouble using cutlery
- Allow plenty of time for the patient to finish their meal (ask to leave tray)

Communication



- Introduce yourself
- Help them with their glasses/hearing aids
- Use a soothing voice, face the patient when talking, get on their level, simple words
- Talk about events from the past/ their likes (use of biography tools)
- Turn the TV or radio off
- Keep the room calm, clear distractions
- If they are not making sense or agitated…
  - **V**alidate their reality
  - Recognise the **E**motion
  - **R**eassure
  - **A**ctivity (distract)



WALK

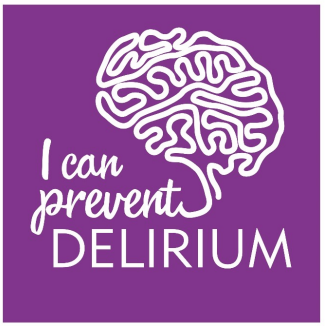
- Encourage mobility & sitting out
- Ensure comfortable chair by bed for meals
- Normal daily activity & ADL independence
- Multiple opportunities for physical activity

ENGAGE

- Regular re-orientation
- Meaningful cognitive activity (person centred)
- Personal items from home
- Family involvement
- Interaction with other patients - group MT/AT
- Resources and activities availability

EAT WALK ENGAGE

Key Messages



Dietitians are critical in identifying, preventing and managing delirium!

- Look for signs of delirium
- Proactive nutrition support to prevent delirium
- Systems to monitor food and fluid intake
- Create/advocate for flexible food service systems
- Work together to provide person-centred nutrition and mealtime care
- It takes a team!

Acknowledgements

- Prof Alison Mudge
- Elise Treleaven APD
- The entire Eat Walk Engage team (photo?!)

EAT WALK ENGAGE






Any questions?

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