# Doing What Matters…improving diet and nutrition in older people to change the trajectory of frailty

## When you are over 65 losing weight is bad for your health!

*This article is the fourth of a series on frailty, prepared by Dr Chris Bollen of BMP Healthcare Consulting for the Gold Coast Primary Health Network frailty early intervention program.*

Between 30-40% of older people living in the community, and even more living in residential aged care, are experiencing malnutrition. Malnutrition represents "a state of deficient energy or protein intake or absorption, characterised by weight loss and changes in body composition".

The recent Royal Commission into Aged Care Quality and Safety made many references to nutrition issues for all older people.

## Malnutrition is often missed in the overweight person.

A common issue is only worrying about malnutrition in people who have a BMI less than 20. An increasing trend in Australia is for people over 65 to have obesity coexisting with malnutrition.

One myth is 'they can live off their fat for weeks' and often, if an overweight older person loses 5kg no one worries about it. Society has been conditioned to applaud weight loss at any age due to the discussed risks of obesity, and body image.

Excess body weight can place undue strain on the heart, joints and spine; increase the risk of high blood pressure, diabetes, respiratory diseases, osteoarthritis and other conditions; and exacerbate these conditions where they already exist. This advice however, needs to be changed for people over 70. A focus should be on building muscle and increasing the quality of the food being eaten.

Obese people can have a very poor micronutrient intake, where they may consume sufficient energy, but the poor quality will be reflected in inadequate protein, low levels of many vitamins and minerals. This in turn can lead to (or exacerbate) anaemia and other nutrient deficiencies, which will worsen their function and also their other long term health conditions.

Many issues, often referred as the nine "Ds" all impact an older person's weight: poor **d**entition, **d**ysgeusia (loss of taste), **d**ysphagia, **d**iarrhea, **d**epression, **d**isease, **d**ementia, **d**ysfunction, and **d**rugs.

Poor nutritional status often presents as unintentional weight loss. When an older person loses weight, they experience a doubling in their risk of death, even if they are overweight[1].

[1]Morley JE. (2010). Nutrition and the aging male. Clinics Geriatric Medicine, 26(2):287-99.

## What are the barriers to better nutrition?

The following concerns may impact on a person's risk of poor nutrition:

- Financial problems
- Poor budgeting skills
- Mobility issues
- Lack of cooking skills
- Inability to shop
- Access to appropriate foods
- Social isolation- mealtimes are often a social outlet, eating alone is rarely an enjoyable experience.
- Inability to feed oneself
- Mental health
- Communication issues with language and comprehension

## How to assess for risk of malnutrition?

The Mini-Nutritional Assessment (MNA®) is a validated nutrition screening and assessment tool that can identify older people age 65+ who are malnourished or at risk of malnutrition.

The MNA assesses a person against recognised risk factors for undernutrition such as mobility issues, cognitive impairment, psychological distress and loneliness.

## Why is the response to older people's nutrition deficits different from usual care?

The Australian Guide to Healthy Eating is an excellent dietary guide for well people. It is applicable to elderly people who are living a healthy active life with no significant health problems and who are not living with or at risk of frailty. However, it is not designed for all older people.

When working with an older person living with frailty it is important to look at the person's goals and remember 4 Ms for better care of older people [2]: What **M**atters, **M**obility, **M**edicines and **M**entation.

## How is nutrition linked to the 4Ms for better care of older people?

As people age, they need adequate food with the right nutrition for energy, resistance to infection, improving wound healing, good bowel function and importantly to support any exercise program aiming to build muscle and improve mobility and independence.

Older people have a reduced ability to use protein and need more protein not less!
Calculate 1 to 1.2g/kg/day or more, if acute or chronic disease is present.
For example, if a patient is lying in bed due to an injury or an infection, the stress of the concurrent issue will cause the gut to reduce protein absorption. This in turn increases skeletal muscle protein catabolism, accelerating loss of muscle mass, strength and a decline in **M**obility.

So in summary, all older people should aim for 25 to 30g of protein per meal.

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2 John A. Hartford Foundation
3 PROT-AGE study from 2013

## What should be done if someone screens positive for undernutrition or malnutrition?

Ideally, the patient would be referred to a dietician to assist with improving the diet. However, it's clear that this is not always possible across the Gold Coast regions. If access to a dietician is difficult, patients should be encouraged to adopt a high-protein, high-energy diet.

A high protein, high energy diet is used for a person who is otherwise eating minimal amounts. The aim is to meet normal protein requirements with a small amount of food. This does not mean an excess of either protein or energy, however ensuring that all foods consumed provide valuable protein and energy, so that every mouthful counts. Encourage small, frequent meals, a grazing approach, bread-and-butter plate sized meals and save dessert for later.

## How do I recommend protein?

Recommending an increase in protein requires a basic understanding of what foods contain protein and how much protein per serve can be consumed. Here are some examples of what makes a 10g protein serve:

- 40g cheese (two big slices)
- 1 cup milk
- ¼ cup milk powder
- 1 tub yoghurt (170g size)
- 1.5 eggs
- 30g steak
- 40g chicken
- 50g fish
- 2/3 cup baked beans
- 50g nuts
- 2 large slices of grain bread
- 2.5 weetbix (before the milk is added

## How can patients fortify food?

Discuss options to fortify food firstly prior to considering supplements. The following foods can be added to normal meals to add:

- **protein**- grated cheese, milk powder and eggs (cheap and easy to add to meals and digest).
- **energy** - cream, butter, margarine, oils and sour cream

**Fortify milk** by adding 1 cup milk powder (either skim milk powder – higher in protein or full cream milk powder can be used) into 1 litre full fat milk and use wherever you would use ordinary milk for example:

- On cereal
- In custard
- As a base for milk drinks
- In white sauces
- In mousse
- Soups, casseroles, mashed potato,
- In tea and coffee

**Flavoured milkshakes** are very enjoyable and nourishing, providing protein and energy!

The recipe below provides 9.4g and 730 kJ energy for every 150mls. Milkshakes have very similar protein and energy to commercial supplements and most people say they taste better!

This would have:

- 1 litre full cream milk,
- 1 cup milk powder,

- 350 mls ice cream (5-6 scoops), and
- 40mls flavoured topping.

## Frailty and nutrition

Primary care clinicians can better manage older patients by considering the following questions:

- Which nutrition screen are you using? Use a validated tool to assess nutrition (e.g. MNA)
- How often has the patient's weight been recorded in the previous 12 months? What was the trend? What action had occurred if weight loss was noted?
- How was mobility assessed? What objective assessment occurred such as 4m walking test?
- How was muscle health assessed? What objective assessment occurred (e.g. grip strength or five timed sit-to-stands?

## Make sure you formally assess for frailty

Remember that the simple questions for the FRAIL scale from Professor John Morley (Geriatrician, St Louis, Missouri) require only a yes/no response:

| | | |
|---|---|---|
| F | Fatigue - Are you feeling tired or fatigued? | Yes = 1 |
| R | Resistance - Do you have difficulty walking a flight of stairs? (overcoming the resistance of body weight against gravity) | Yes = 1 |
| A | Ambulation - Do you have difficulty walking around the block? | Yes = 1 |
| I | Illnesses - Do you have 5 or more chronic conditions? | Yes = 1 |
| L | Has there been loss of weight of 5% or more over the past 12 months? | Yes = 1 |

If the older person scores 2, they are pre-frail, and 3+ indicates they are frail. Both pre-frail and frail patients will benefit from immediate discussion of:

1. their goals in life, and the barrier(s) to achieving them!
2. their mood, assessing for any medical cause of fatigue (e.g. anaemia, heart failure, or chronic kidney disease).
3. encourage resistance muscle exercises such as sit-to-stands at home.
4. increasing intake of protein (aim for at least 1.2g/kg bodyweight) - eggs for breakfast!
5. the appropriateness of their medications - a GP, pharmacist or geriatrician can review using this excellent guide to deprescribing.
6. vitamin D to assist in retention of muscle strength.

Finally, ensure that reversible medical conditions are addressed and consider referral to geriatric medicine specialist where frailty is associated with significant complexity, diagnostic uncertainty or challenging symptom control.

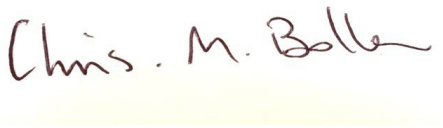
## What to do when a person is resisting assistance when it is clear it is needed.

This is not an uncommon situation.

A great article discussing how to navigate this can be found online: "What to do when your elderly patient refuses care (5 simple steps)"

Please forward any questions to chris.bollen@bmpconsulting.com

Yours sincerely,



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