Diet

Maintaining good nutrition is a challenge for people with MND and their carers.

MND NSW 2007

If muscle weakness affects eating and swallowing, meals may take longer than normal. Using energy dense foods can reduce the time it takes the person with MND to eat.

The texture of meals needs to be appropriate for the person with MND, while maintaining flavour and variety.

Adequate fluid intake is needed to aid regular bowel function and to decrease the risk of urinary tract infection.

A dietitian can:

- assess the nutritional needs of the person with MND, and is able to give practical advice on the best food choices for maintaining or improving nutritional status, minimising weight loss and maintaining fluid intake
- assist with the decision about the best time to have a PEG, if appropriate

Healthy eating includes a variety of foods that provide an adequate intake of calories, vitamins and minerals and a balance of proteins, carbohydrates and fats.

**Healthy eating**

Foods from the following groups should be eaten every day:

- breads, cereals, rice, pasta, noodles
- vegetables, legumes
- fruit
- milk, yoghurt, cheese
- meat, fish, poultry, eggs, nuts, legumes

Try to eat:

- plenty of plant foods - fruit and vegetables, cereal and grains
- moderate amounts of animal foods - meat, chicken, fish and dairy foods
- small amounts of extra foods - unless extra calories are need to maintain your weight

Choose a variety of foods from within each group.

Drink plenty of fluids, especially water.

**Tips to help the person with motor neurone disease eat well**

Eat frequent meals and snacks
• aim to eat six small meals/snacks a day
• have ‘ready to eat’ high energy snacks handy
• ensure food is the right texture. If swallowing becomes more difficult, soft moist foods are easier to manage
• drink 6-8 cups of fluid every day
• thickened fluids make swallowing safer for people with swallowing difficulties. Offer fluids which are naturally thicker like nectar, thick shakes and smoothies
• choose foods and drinks that are energy-rich rather than filling up on cups of tea, coffee or diet drinks
• enrich the food the person with MND usually eats by adding oil, margarine or butter, skim milk powder, cream, cheese, honey or glucose
• include soups, juices and milk drinks, as well as yoghurt, custard and jellies
• make meals an enjoyable time together
• vary flavours and pay attention to presentation

**Nutritional supplements**

Nutritional supplements are special food products or powders that can be used as part of, or in addition to food intake. They are useful for people who have:

• lost weight
• difficulty maintaining weight
• a poor appetite
• difficulty eating enough food

A dietitian can advise about which type is most suitable for the needs of the person with MND:

• liquids - Sustagen™, Ensure Plus™, Enlive™, Resource Plus™, Resource™ fruit beverage
• powders - Sustagen™ Hospital Formula, Ensure™, Nutridrink™, Resource™ powder
• protein powders - Proform™, Promod™
• glucose powders - Polyjoule™, Polycose™
• there may be others available.

**Enriching the diet with protein and energy**

**Breakfast cereal**

• use high protein milk or Sustagen™
• make porridge with full cream milk or Sustagen™ rather than water
• add sugar or honey

**Toast, bread, muffins, crumpets**

• spread margarine or butter thickly
• top with peanut butter, marmalade, jam or honey
• use avocado or mayonnaise

Sandwiches
• spread margarine or butter thickly
• add an extra slice of meat or cheese
• add mayonnaise, relish, cream cheese or avocado

Vegetables
• add margarine, butter, oil, cheese, sour cream, or white/cheese sauce
• add milk powder or cream to mashed vegetables
• fry or bake vegetables in oil

Fruit
• add custard, ice cream, gelato, cream, yoghurt
• add sugar, glucose syrup or honey
• add to milk drinks to make smoothies

Soups and sauces
• add milk powder, cream, sour cream, eggs or grated cheese
• use cream soups instead of broths and consommés
• make soup with milk rather than water
• include meat, chicken or legumes/lentils in vegetables soups - blend if necessary

Savoury dishes
• add grated cheese, milk powder, margarine, butter, oil, cream, eggs, mayonnaise or salad dressing

Milk puddings and desserts
• add extra milk powder, eggs or sugar
• add cream, ice cream, custard or yoghurt
• add flavoured toppings, honey or glucose syrup

Drinks
• encourage milk and juice based drinks in preference to water, tea or coffee
• use high protein milk for milk drinks
• add honey, malt, glucose syrup or flavoured toppings
• add cocoa, flavoured drink powder, ice-cream or fruit
• use commercial supplements

Miller and others 2009a

Ultimately, a percutaneous endoscopic gastrostomy (PEG) or equivalent device (e.g., radiologically inserted device [RIG]) may be needed as an alternative route for delivering nutrition.