**Bolt on: Older Adults**

Background for facilitators

The population of older adults are increasing and are expected to continue to rise as people are live longer. It is important to support healthy aging to enhance the quality of life as people get older and increase the number of year people live in health.

Unfortunately there is gap between life expectancy from the most and least deprived areas, with those living in the least deprived areas living around 11 years longer.

As age increases, the number of people affected by long term conditions (LTC) increase, for example 50% of adults over 75 years have at least one LTC. Conditions that commonly affect older adults are detailed below and the links between the condition and diet are explained with any recommendations.

**Impact on aging and nourishment**

Undernourishment is common in older adults due to functional changes in aging that can lead to a poor diet and nutrient intake.

**Physical changes**

A gradual decline in physical capabilities can change food choices and eating habits:

- A gradual decline in movement and mobility can impact accessibility to food such as the food shopping and meal preparation.
- Changes in how the body functions.
- Sensory changes such as sense of smell and taste decline making it harder to taste flavours and eating may become less enjoyable and motivation to eat may reduce. High levels of salt and sugar are often eaten to enhance the flavour and taste. Impairments in eye sight can also impact the ability to shop and prepare food.
- Loss of teeth and reduced saliva affects the ability to chew and shallow. This can lead to avoiding certain foods that are hard to chew or over cooking food to make eating easier, however this can reduce the nutritional content.
- Physiological changes affect the Gastro-intestinal system that can reduce appétit and affect satiety. This means older adults eat smaller meals, fewer snacks and eat slower. Changes to the GI function means constipation and discomfort is common that can also reduce appetite.

All of the above are exacerbated by lifestyle factors such as smoking and diet and medications.
Cognitive changes

For most people, occasional lapses in memory are a normal part of the aging process.

Considerations for the programme delivery

Recipe selection:

- Choose recipes that contain foods that are suitable for older adults. Some older adults will have difficulties chewing and swallowing and some foods might be more difficult to eat with dentures and loss of teeth.
- Use week one to shape the recipe selection in following weeks. Some older adults may prefer traditional recipes.

Cooking for one:

- The majority of older adults will be cooking for themselves and therefore the emphasis should be on cooking for one and also spend time emphasising the cooking in bulk and storing additional portions sections from the programme. This will also support cooking on a budget.
- Eating and/or cooking for others provide a social interaction for older adults that might be more isolated.
- An older adult may have experienced a loss of partner or are caring for a partner who may have previously been the person doing all the food purchasing and cooking.
- There may be a reliance on readymade meals and convenience food that provide one portion meals. These tend to be higher in fat and salt and are costly.

Food shopping

Consider how the older adults shop for food. Are they physically able and have access to shop independently, transport to shops, type of shops available.

Portion sizes

Maintaining a healthy diet is important to help maintain a healthy weight and support recovery from illness. Many older adults are susceptible to being underweight and this can lead to undernourishment. This can be for a variety of reasons such as loss of appetite, difficulties chewing and swallowing, medications and forgetting to eat. Older adults might prefer to eat smaller amounts more regularly.

Salt intake may be high due to salt being added either through habit and/or loss of taste to improve the favours. Ready meal and processed foods are higher in salt and increasing the risk of high blood pressure (see high blood pressure)
Medical conditions which may affect older adults

Dementia
The number of people in Scotland with Dementia is rises as the older population is increasing and is estimated to double in the next 25 years. Dementia is a term used for a number of conditions, the most common being Alzheimers Disease that cause symptoms associated with dementia, mainly being memory loss. Dementia can impact older adults diets by forgetting to eat.

Diabetes (also see Diabetes Bolt on session)
This occurs when the pancreas in the body doesn’t produce enough insulin or the cells in the body become desensitised to the insulin, 90% of the over 40’s who develop diabetes develop type 2.

The diet of a diabetic is no different from a normal healthy diet. First line treatment for diabetes is weight control, physical activity and healthy eating.

Some patients may need to be on Metformin which is a diabetic medication which needs to be taken in the presence of food. Metformin works by making the insulin work more efficiently in the body.

Sulphonylureas like Gliclazide stimulate the pancreas to produce more insulin for these patients they need to make sure that they don’t skip meals, have CHO at each meal and if needed have a bed time snack.

Clients who take insulin the advice depends on the regimen but is similar to the advice for the Sulphonylureas.

COPD (Chronic Obstructive Airway Disease)
This is a term used for conditions including Bronchitis, emphysema these conditions both damage the Lungs and cause the airways to narrow overtime.

It is usually caused by smoking (90%), exposure to dust, fumes, and chemicals in the work place. Symptoms include breathlessness, recurrent chest infections, weight loss and tiredness.

If one of the clients has this type of condition they may need advice on adding extra calories to their diet.

High Blood Pressure
The risk of developing this increase with age, and it is estimated that half the population that are over >75 years will have high blood pressure.

Lifestyle changes are the first line of treatment for this which would involve watching the salt in their diet, reducing weight if they are overweight, reducing the processed foods in their diet, watching the fat content. Also stopping smoking and drinking sensibly would be recommended.

**Osteoporosis**

This is a condition which affects the bones causing them to weaken making the bones more prone to fracture. Most common sights for fracture are the wrist, hip and spine. In Scotland there are around 6000 hip fracture patients each year and 19 out of 20 hip fractures are a result of falls in those that have osteoporosis.

To reduce the risk of Osteoporosis it is important to emphasis the importance of an adequate calcium intake at all ages.

**Arthritis and Osteoarthritis**

This can be cause by a reduction in cartilage between the bones causing the bone to rub on bone which causes pain. Fluid can also gather around the joint causing swelling. The joints then become stiff and sore to move, arthritis is found more commonly in the knees, hips, spine and hands.

If the arthritis is in the hands this may cause difficulty with cooking, and if in the knees and hips this may also affect how long they stand to cook.

**Stroke**

A stroke is caused when the blood supply to your brain is cut off or reduced. As a result, brain cells are deprived of oxygen and other nutrients in the blood and this quickly causes damage or death to cells in parts of the brain.

**There are two types of stroke**

**Ischemic stroke:** this is caused when a blood clot blocks a main artery in your brain. Around 17 out of 20 strokes are of this type.

**Haemorrhagic stroke:** this is caused when a weakened artery in your brain bursts. This allows blood to seep out and press on your brain. It also prevents blood and oxygen reaching other parts of the brain.

The effects of a stroke depend on:
• how long your brain is deprived of oxygen
• whereabouts in your brain the artery becomes blocked
• The functions of the affected part of the brain.

A ‘**mini’ stroke** or to use its medical term - **transient ischemic attack (TIA)** has similar symptoms to a stroke but they may last only a few minutes or hours and disappear completely within 24 hours. However don’t ignore this, as it may be a warning sign of a more serious stroke to come.

**Coronary Heart Disease**

Coronary heart disease develops due to a build up of fatty substances on the walls of the coronary arteries - the arteries that supply the heart with blood. Over time, this build up makes your arteries narrower and restricts the amount of oxygen-rich blood getting through to your heart.

The dietary advice to reduce the chances of a stroke and coronary heart disease are the same.

- Lower intake of saturated fats, hidden fat in foods, processed foods, fat on and in meat, cream, butter and cheese. (This age group may still use butter if they are not willing to reduce this then it is advising them to use less)
- Replacing butter with polyunsaturated or mono unsaturated margarines like Flora or Bertoilli
- Increase in fibre
- Increase in Fruits and vegetables
- Lower Salt
- 1-2 portions of oily fish
- Maintaining a Healthy weight
- Drinking sensibly

**Physical Changes that occur with Age**

Changes in the gastrointestinal tract

- A reduction in the number of taste buds, so they may find that they are using more salt and are attracted to foods that are sweeter as a result
- A reduction in muscle tone in the intestine, which may cause issues like constipation
- These issues can have an affect on peoples appetite

Well Older adults should adopt the general healthy eating message that the rest of the population should work towards.

Other considerations of the elderly population should be:
• Are they physically able to get shopping in, who does the shopping is it them or family? Do they have control over what is bought?
• Do they have transport or are they relying on a small local shop for food?
• What is their budget for food? Do they have much to spend?
• Personal choice do they stick to older traditional foods?

**General Nutritional Considerations for the Elderly Population**

**Energy**

• Loss of appetite can be a consequence that comes with age, so it is important to maintain a satisfactory body weight
• For those who are overweight or obese wt loss should be encourage

**Calcium and Vitamin D**

• Important consideration to help prevent osteoporosis, fractures resulting from this are a major cause of mortality and morbidity
• Recommended that they take around 700mg of Calcium daily which you would get from 3 portions of dairy i.e. 200ml of milk, 1oz of cheese and a yoghurt
• Vitamin D we get as a reaction of sun light on our skin and for those elderly people who are less likely to go outside a supplement of 10mcg of Vitamin D would be recommended.


**Iron**

• The absorption of this may reduce with age
• Iron is mainly found in red meat, beans, lentils, green leafy vegetables
• Iron inhibits the absorption of Iron and Vitamin C helps with absorption

**Fluid and Hydration**

• The risk of dehydration maybe high in the elderly due to:
  o Their skin being thinner, and therefore more water being lost via this route
  o Kidney function reduces with age, they cant concentrate urine as efficiently
  o The thirst mechanism may reduce with age
• The recommendation for fluid is around 6-8 cups of fluid daily which is around 1.5 litres but this is also dependant on the person’s size, the bigger they are the more fluid they will need.
Further reading

http://www.nhs.uk/livewell/women60-plus/Pages/Women-60-plus.aspx
www.alzheimers.org.uk
http://www.alzscot.org
http://www.ageuk.org.uk
http://www.diabetes.org.uk