# Worksheet 11: Alzheimer's disease

#### Cause:

Not known. Alzheimer's disease is the most common cause of dementia, representing approximately 62% of people with dementia in the UK. Alzheimer's disease is named after Alois Alzheimer who published his research about the disease process in 1906.

### How it affects the brain:

Alzheimer's disease causes brain cells to die. A type of protein called Amyloid accumulates as plaques (similar to the sticky substance you get on your teeth) in and around the brain cells of a person with Alzheimer's disease. Another protein, Tau, is produced which makes brain cells clump into tangles and prevents them from performing their job properly.

These 'plaques' and 'tangles' are classic features of Alzheimer's disease. They disrupt the structure and communication systems within the brain.

Alzheimer's disease begins in the temporal lobes of the brain which affects the ability to store new memories. It spreads to other areas of the brain causing widespread damage.

### **Risk factors:**

Though we do not know what causes Alzheimer's disease, we know that there are certain things that increase our risk of developing it:

- Old age Alzheimer's disease is not caused by old age but the longer we live, the more at risk we are of developing it
- Genetic predisposition
- High blood pressure
- High cholesterol
- Heart disease
- Stroke
- Being female
- Changes to nerve cells and DNA
- Down's Syndrome

## Likely signs and symptoms:

- Difficulty in storing new memories
- Difficulty in learning new things
- Speech and language difficulties
- Problems with: reasoning, judgment, orientation (knowing where you are in time and place)
- Problems with perception (recognising faces and objects, awareness of things around you)

## What can be done to help?

Sadly there is no cure for Alzheimer's disease yet. There are several medications available to help treat the symptoms of Alzheimer's disease.

Maintaining good general health is beneficial. Cognitive Stimulation Therapy is used to help people with Alzheimer's disease to maintain their memory, orientation, problem solving skills and so on for as long as possible. Adapting the environment helps people to find their way and stay independent and safe, Meaningful activity is important – helping the person to do all the things they enjoy or need to do.