MS symptoms range from mild to severe, from brief to persistent. Some symptoms, such as walking difficulties, are obvious to other people. Others, such as pain or fatigue, are not and are often referred to as hidden invisible or silent symptoms. Hidden symptoms may be more difficult for those unfamiliar with MS to understand.

Whether you are a sufferer of MS, or helping to care for someone with MS, seeking the help of experts and obtaining professional advice and support will make the process of coping with MS easier.

This leaflet was compiled using information from the Multiple Sclerosis Society.

For more information call their helpline on 0808 800 8000 or visit their website at www.mssociety.org.uk
What is MS?

Multiple Sclerosis (MS) is a condition of the central nervous system. It is the most common disabling neurological disease among young adults and affects around 85,000 people in the UK. MS is most often diagnosed in people between the ages of 20 and 40, and women are almost twice as likely to develop it as men.

Once diagnosed, MS stays with you for life, but treatments and specialists can help you manage many symptoms well. Although its cause is not known and a cure has yet to be identified, research continues into all aspects of the condition.

The central nervous system

To understand what happens in MS, you need to understand how the central nervous system works. Your central nervous system is made up of your brain and spinal cord. Your brain controls bodily activities, such as movement and thought, and your spinal cord is the central message pathway. Messages are sent from your brain to all parts of your body, controlling both conscious and unconscious actions.

Surrounding and protecting the nerve fibres of the central nervous system is an important substance called myelin, which helps messages travel quickly and smoothly between the brain and the rest of the body.

What happens in MS?

MS is an autoimmune condition. This means that your immune system, which normally helps to fight off infections, mistakes your body's own tissue for a foreign body, such as infectious bacteria, and attacks it. In MS, the immune system attacks myelin. This damages the myelin and strips it of the nerve fibres, either partially or completely, leaving scars known as lesions or plaques. This myelin damage disrupts messages travelling along nerve fibres – they can slow down, become distorted, pass from one nerve fibre to another (short circuiting), or not get through at all.

As well as myelin loss, there can also sometimes be damage to the actual nerve fibres. It is this nerve damage that causes the accumulation of disability that can occur over time.

As the central nervous system links all bodily activities, many different types of symptoms can appear in MS. The specific symptoms that appear depend upon which part of your central nervous system is affected and the job of the damaged nerve.

What causes MS?

The causes of MS are unknown. Research suggests that a combination of genetic and environmental factors may play a role in its development.

Genes and family history

MS is not directly inherited and, unlike some conditions, there is no single gene that causes it. It is possible that a combination of genes makes some people more susceptible to developing MS; however these genes are also common in the general population. So genes are only part of the story and other factors are also involved in MS.

Whilst MS can occur more than once in a family, it is more likely this will not happen. Indeed, there is only a two per cent chance of a child developing MS when a parent is affected.

Environmental factors

MS is more common in areas further away from the equator. It is virtually unheard of in places like Malaysia or Ecuador but relatively common in Britain, North America, Canada and Scandinavia. It is not clear why, but it is possible that something in the environment, perhaps bacteria or a virus, plays a role. No single virus has been identified as contributing to MS, but some researchers think that a common childhood virus may act as a trigger. This theory remains unproven and many people who do not have MS would have also been exposed to these viruses.