# MS Research News

by MARLENE WALLACE

## Researchers Hunting for MS Clues

At the present time, the exact cause of MS is unknown, and there is also no known cure. The severity, progression and long term prognosis of MS can be extremely unpredictable, but researchers are continually learning more. Below is some of the latest MS research news:

### A Foodborne Toxin May Trigger the Disease

A recent research study suggests that a specific toxin, produced by Clostridium perfringens, seems to attack the identical cells that MS targets. This particular bacterium is commonly found on raw poultry and meats. It is responsible for close to one million instances of food poisoning yearly. At this point, research is far too preliminary to propose that multiple sclerosis results from foodborne illness. However, experts believed that these findings suggest that the bacteria could potentially be involved in the activation of the disease.

### Vitamin D Could Slow the Progression of MS

Harvard University research scientists have discovered that possessing high levels of Vitamin D, in the early stages of MS, tends to decrease the overall activity and progression of the disease.

Still other studies suggest that healthy levels of Vitamin D might lower the risks of developing MS and assist in reducing symptom frequency and/or severity.

Recommended daily intake of Vitamin D is 600 IUs for adults up to 70 years of age and 800 IUs for those 71 years old and above.

### Training May Improve Memory

According to the National Multiple Sclerosis Society, more than 50% of MS patients experience some degree of cognitive change. However, a recent clinical trial revealed that a certain kind of memory rehabilitation actually helped improve learning in individuals with MS for a minimum of six months following the end of the training period.

In addition, a small pilot study suggests that taking part in an aerobic type of exercise may improve memory. Current MS treatments include drugs and strategies to manage symptoms, treat relapses and slow down progression of the disease. Many other medications and procedures are currently being studied including potential vaccinations and transplants of stem cells.

### Dimethyl Fumarate

In the spring of 2013, an oral disease modifying drug, known as dimethyl fumarate (Tecfidera) came on the market. Previously called BG-12, this drug keeps the immune system from attacking itself. Available in capsule format, it may have a protective effect on the body, acting in a similar way as antioxidants.

Administered twice a day, dimethyl fumarate is designed for relapsing-remitting MS patients. This is a form of MS where a patient will go into remission for a while. Then, he or she will exhibit an exacerbation of multiple sclerosis symptoms.

**Myelin Peptides:**

As mentioned earlier, myelin is irreversibly damaged in MS patients. Preliminary testing of a new type of therapy actually shows a great deal of potential. A small group of study participants were given myelin peptides (i.e. protein fragments) while other study subjects were administered a placebo. Over the course of one year, this was accomplished by way of a skin patch.

According to a report, published in the July 2013 *JAMA Neurology*, those who were given treatments of myelin peptide infusions experienced considerably less numbers of lesions and relapses.