

I was diagnosed with MS shortly (about a year) after a major change in diet that quadrupled my milk protein consumption. I started investigating the correlation of milk to MS. I discovered there was a geographical correlation. MS prevalence and milk consumption both decrease as you approach the equator. I hypothesized that for milk to play a role in MS initiation it would have to contain an MS antigen. MS is an autoimmune disease that occurs when the immune system attacks the myelin nerve sheath (nerve insulation). An MS antigen is a foreign protein in the body structurally similar to the myelin sheath that causes the immune system to attack the myelin sheath. I downloaded 24 milk and 3 myelin sheath protein sequences from www.uniprot.com and analyzed them for protein sequence similarity. I discovered that the milk protein butyrophilin had 46% protein sequence similarity over a 128 amino acid sequence to Myelin Oligodendrocyte Glycoprotein. The probability of this structural similarity occurring on a random basis is 1 in 5×10^{75} . To put this in perspective the estimated number of atoms in the known universe is 10^{80} . I subsequently discovered 3 articles indicating butyrophilin was an MS antigen. I hypothesized that if the milk protein butyrophilin is an MS antigen, completely removing milk proteins from my diet would halt my MS progression. Shortly (about a year) after removing all milk proteins from my diet I had no new demyelination (no MS progression) per magnetic resonance imaging (an analytical test used to follow MS progression). I have had no MS progression for 14 years since going milk free. I hypothesized that if my MS was caused by butyrophilin and if a geographic correlation exists it is likely that a direct correlation between milk consumption and MS prevalence must exist. Historically, data regarding MS prevalence has been poor because criteria for diagnosis and methods for collecting this data have varied. A study in 2020 tried to address some of the previous shortcomings of MS prevalence data collection. I used this data along with milk consumption data from Wikipedia to evaluate the worldwide correlation between per capita milk consumption and MS prevalence. I was shocked to find that despite differences that must exist in how this data was collected in different countries the correlation was excellent. I concluded that milk proteins **must play a major role** in initiation of MS. Unfortunately, this is not adequate evidence for the MS medical community to draw the same conclusion. It is possible that if a large number of people report that their MS progression has halted after going milk free that the MS medical community will start to investigate the correlation.