

Evidence that milk plays a role in initiation of multiple sclerosis

Details of this evidence are summarized on www.haltingms.com

1. My MS was first diagnosed shortly (about a year) after a major change in diet that quadrupled my intake of milk proteins.
2. Progression of my MS halted shortly (about a year) after I went completely milk free. I have had no MS progression (new demyelination) for 14 years.
3. The milk protein butyrophilin has been identified as an MS antigen. Butyrophilin has 46% protein sequence similarity to Myelin Oligodendrocyte Glycoprotein (a nerve sheath protein) over a 128 amino acid sequence. Sequence similarity is required for butyrophilin to function as an antigen. The probability of this match occurring on a random basis is 1 in 5×10^{75} . To put this into perspective, the number of atoms in the known universe is estimated at 1×10^{80} .
4. There is a direct correlation of the worldwide country by country per capita consumption of milk and MS prevalence. It has been suggested that this correlation results because Europeans have a higher incidence of MS than other ethnic groups and they consume more milk. About 200 MS genetic markers have been identified. No correlation between any combination of these genetic markers and MS has been identified. This would imply that the higher prevalence of MS in Europeans results from their consumption of milk rather than the other way around.
5. The worldwide prevalence of MS is increasing. The worldwide consumption of milk is increasing.
6. Historically, MS prevalence decreased as you approach the equator. Historically, milk consumption decreased as you approached the equator due to issues of spoilage.
7. Recently, MS prevalence has been increasing near the equator. Recently consumption of milk products has increased near the equator due to the advent of refrigeration and food processing (powdered milk, energy bars, etc.).
8. Other autoimmune diseases (celiac) are known to be diet induced. Milk (butyrophilin) and wheat (gluten – a cause of celiac) were introduced as major portions of the human diet at about the same time, with the advent of farming / herding.
9. Milk is known to contain other components (such as lactose) that cause adverse reactions in susceptible individuals.
10. Humans are the only species that consume the milk of another species as a major part of their diet. Milk contains components to support the immune system. These immune system proteins come from the same protein superfamilies as proteins of the myelin nerve sheath. In other words they have related genetic history resulting in structural similarities (i.e. protein sequence).

While one or two observations could be coincidental, the probability of coincidence drops rapidly as the number of observations supporting the same conclusion increases.