

Lyme Disease and Moringa Oleifera

By

Dr. Howard W. Fisher

‘Lyme Disease Is Spreading Nationwide: Misdiagnosis Is More Common Than You Think’

When I see headlines like the one above it merely reinforces just how far off the path of health we have truly wandered. The state of disease has not become far more common than the state of health. Statistics bear it out. Food has not been an effective form of nutrition since before the great depression of the 1930s. When we consider Lyme Disease, something by the way the bulk of the population has never heard of, the incidence of this disease is staggering. Lyme disease is four times more common than HIV infection in the United States, and often misdiagnosed.¹

Lyme disease, also known as borreliosis, is an often times persistent infectious disease most likely caused by at least three species of bacteria belonging to the genus *Borrelia*. Of these bacteria, *Borrelia burgdorferi* sensu lato is the main cause of Lyme disease in North America and *Borrelia afzelii* and *garinii* cause most European cases. The disease was determined to be one that was a tick-borne disease however many other sources now suspect a number of other vectors. Intermittently, symptoms such as arthritic inflammatory conditions persist after the infection has been eliminated by antibiotics, prompting suggestions that *Borrelia* may cause an autoimmune response, to the extent that it may be considered to be a pathogen induced autoimmune disease²

Early symptoms may include fever, chills, headache, fatigue, depression, swollen lymph nodes and a characteristic circular skin rash called erythema migrans but the extent of symptoms may extend to a diversity involving the joints, heart, and CNS (central nervous system).³ Everyone may be affected differently depending upon the existing health status as a number of the signs and symptoms of Lyme disease are the end result of the immune response to the presence spirochete in those tissues.⁴ The persistent presence of electromagnetic radiation causing immune system deficiencies^{5 6 7 8} may be an indicator as to why Lyme disease has

¹ Osterfeld R. “Ecological Drivers of Tickborne Diseases in North America.” 8th International Conference on Emerging Infectious Diseases. Atlanta, Ga. March 13, 2012.

² Singh S K, Girshik H J. Lyme borreliosis: from infection to autoimmunity. *Clin Microbiol Infect.* 2004;10(7):p.598-614.

³ Cairns V, Godwin J. Post-Lyme borreliosis syndrome: a meta-analysis of reported symptoms. *Int J Epidemiol.* 2005;34(6):p.1340-1345.

⁴ Auwaerter P G, Aucott J, Dumler J S. Lyme borreliosis: molecular and cellular pathobiology and prospects for prevention, diagnosis and treatment. *Expert Rev Mol Med.* 2004;6(2):p.1-22.

⁵ Beale I L, Booth R J, Pearce N E. Chronic health problems in adults living near high-voltage transmission lines: Evidence for a dose-response relationship with magnetic field exposure; presented at the Second World Conference on Electricity and Magnetism in Biology and Medicine, Bologna, Italy. June 1997.

⁶ Lyle D B, Ayotte R D, Sheppard A R, Adey W R. Suppression of t-lymphocyte cytotoxicity following exposure to 60-Hz sinusoidal electric fields. *Bioelectromagnetics.* 1988; 9(3):p303-313.

commonly been misdiagnosed as multiple sclerosis (MS), rheumatoid arthritis, fibromyalgia, chronic fatigue syndrome (CFS), Ménière's syndrome, Guillian-Barré syndrome, lupus, or other autoimmune and neurodegenerative diseases such as amyotrophic lateral sclerosis (ALS) or Parkinson's and has often been called the "great imitator"^{9 10 11 12 13} The persistent complaints at the lack of relief from the vast diversity of treatment leads to a potential further diagnosis of a psychiatric disorder.

Lyme disease is rapidly spreading throughout North America from coast to coast and making awareness mandatory. There are a lot of problems with both the diagnosis and treatment of this disorder. One of the reasons for the rapid spread arises because the carrier vector, the deer tick, is difficult to see and the bulk of the population is simply unaware of both the disease and tick bites. Many people never know they have been bitten and another problem in the diagnosis is that quite often those infected with Lyme have no recollection of a tick bite or a rash. If the diagnosis is incorrect, then the *Borrelia* infection is never properly treated and the symptoms continue. As many as thirty-three percent (33%) of properly diagnosed Lyme disease sufferers continue to have symptoms of severe fatigue, sleep disturbance, and cognitive difficulties post antibiotic therapy, casting aspersions that there may be other factors affecting this disease.^{14 15} The CDC recommends a short course of antibiotic therapy which based on the above noted statistics is rather ineffective. The active form of the *Borrelia* is a spirochete, This pathogen is able to morph into up to thirty different forms but in the spirochete form it is able to grow and reproduce but it is also susceptible to antibiotic therapy.¹⁶ In these other forms, *Borrelia* demonstrates a virtual invulnerability to antibiotics.¹⁷

Perhaps we are being affected by this new plague because of our current immune system status. "Do you know that most of us today are suffering from certain dangerous diet deficiencies which cannot be remedied until the depleted soils from which our foods come are brought into proper mineral balance?"¹⁸ Our immune systems require a number of nutrients for optimal function. *Moringa oleifera* is capable of delivering what the body needs and these

⁷ Reiter R, Robinson J. Melatonin: Your Body's Natural Wonder Drug. Bantam Books. New York. 1995.

⁸ Beale I L, Pearce N E, Booth R J, Heriot S A. Association of health problems with 50 Hz magnetic fields in human adults living near power transmission lines. *J Australian Coll Nutr & Envir Med*. 2001; 20:p9-12,15,30.

⁹ Pachner A R. Neurologic manifestations of Lyme disease, the new "great imitator". *Rev Infect Dis*. 1989;11 Suppl 6:pS1482-1486.

¹⁰ Burch J B, Reif J S, Pitrat C A, Keefe T J, Yost M G. Cellular telephone use and excretion of a urinary melatonin metabolite. In: Annual review of Research in Biological Effects of electric and magnetic fields from the generation, delivery and use of electricity. San Diego. 1997; Nov. 9-13: p.52.

¹¹ Reiter R J, Tan D X, Pappolla M A. Melatonin relieves the neural oxidative burden that contributes to dementias. *Ann N Y Acad Sci*. 2004; 1035:p179-196.

¹² Havas M, Stetzer D. Graham/Stetzer Filters Improve Power Quality in Homes and Schools and Reduce Blood Sugar Levels in Diabetics, Multiple Sclerosis Symptoms, and Headaches. International Scientific Conference on Childhood Leukemia. 6th-10th September, London. 2004.

¹³ Freiburger Appeal. Umwelt.medizin.gesellschaft. 2003;p.35-36. http://www.igumed.de/images/fa_1_03.pdf

¹⁴ Cairns V, Godwin J. Post-Lyme borreliosis syndrome: a meta-analysis of reported symptoms. *Int J Epidemiol*. 2005;34(6):p.1340-1345.

¹⁵ Halperin J J. Prolonged Lyme disease treatment: Enough is enough. *Neurology*. 2008;70(13):p.986-987.

¹⁶ Sapi E. Evaluation of in-vitro antibiotic susceptibility of different morphological forms of *Borrelia burgdorferi*. *Infection and Drug Resistance*. May 2011.4(1);p.97-113.

¹⁷ *ibid*

¹⁸ Beach, R. Modern Miracle Men. US Senate Document 264. 1936.

enzymatically active amino acid sequences may simply not exist in the food chain anywhere else, and that is just the tip of the nutritional iceberg when it comes to *Moringa oleifera*.^{19 20 21} *Moringa oleifera* is an anti-pyretic,^{22 23 24} anti-inflammatory,^{25 26} and possesses a broad spectrum of anti-bacterial, anti-fungal, anti-viral and antibiotic abilities, which will certainly lighten the load on the immune system.^{27 28 29 30 31 32 33 34} A *Moringa oleifera* dietary protocol makes perfect sense to combat the ravages of Lyme disease. Renowned Moringa researcher, Lowell Fuglie, outlines the ability of Moringa to reduce swelling, reduce joint pain, arthritic pain, and a host of anti-bacterial, antibiotic functions that would vault this miracle tree into the category of a virtual panacea, especially where Lyme disease is concerned.³⁵ This disorder is of particular interest to me because a very close personal friend had been ravaged by Lyme Disease for almost a decade and through the nutrition of *Moringa oleifera*, her body has fought off this spirochete and she is on the road to total recovery in only a few months.

¹⁹ Fahey J W. *Moringa oleifera*: a review of the medical evidence for its nutritional, therapeutic, and prophylactic properties. *Trees for Life Journal*. 2005;1(5) p. 1-13.

²⁰ Paliwal R, Sharma V, Pracheta V. A review on Horse Radiah Tree (*Moringa oleifera*): A Multipurpose Tree with High Economic and Commercial Importance. *Asian Journal of Biotechnology*. 2011;3(4):p.317-328.

²¹ Fisher H W. *Moringa Oleifera: Magic, Myth or Miracle*. Britannia Press. Toronto. 2011.

²² Hukkeri V I, Nagathan C V, Karadi R V, Patil B S. Antipyretic and wound healing activities of *Moringa oleifera* Lam. In rats. *Indian J Pharmaceutical Sciences*. 2006;68(1):p.124-126.

²³ Holst S. *Moringa: Nature's Medicine Cabinet*. Sierra Sunrise Publishing, Sherman Oaks, CA. 2000.128 pp.

²⁴ Singh K K, Kumar K. Ethnotherapeutics of some medicinal plants used as antipyretic agents among the tribals of India. *Journal of Economic and Taxonomic Botany*. 1999;23(1): p.135-141.

²⁵ Caceres A, Saravia A, Rizzo S, Zabala L, Leon E D, Nave F. Pharmacological properties of *Moringa oleifera*. 2: Screening for antispasmodic, anti-inflammatory and diuretic activity. *J Ethnopharmacol* 1992;36:p.233-7.

²⁶ Ezeamuzie I C, Ambakederemo A W, et al. Antiinflammatory effects of *Moringa oleifera* root extract. *Int J Pharmacognosy*. 1996;34(3):p.207-212.

²⁷ Kjaer A, Malver O, El-Menshawi B, Reisch J. Isothiocyanates in myrosinase-treated seed extracts of *Moringa peregrina*. *Phytochemistry* 1979;18:p.1485-1487.

²⁸ Kurup P A, Narasimha Rao P L. Antibiotic principle from *Moringa pterygosperma*. Part IV. The effect of addition of vitamins and amino acids on the anti-bacterial activity of pterygospermin. *Indian J Med Res*. 1954;42:p.101-107.

²⁹ Viera GH F, Mourão J A, Ângelo Â C, Costa R A, Viera R H. Antibacterial effect (in vitro) of *Moringa oleifera* and *Annona muricata* against Gram positive and Gram negative bacteria. *Rev Inst Med trop S Paulo*. 2010;May/June:

³⁰ Eilert U, Wolters B, Nahrstedt A. The antibiotic principle of seeds of *Moringa oleifera* and *Moringa stenopetala*. *Planta Medica* 1981;42: p.55-61.

³¹ Jahn S A, Musnad H A, Burgstaller H., Tree that purifies water: Cultivating multipurpose Moringaceae in the Sudan. *Unasylva* 1986;38(152):p.23-28.

³² Das B R, Kurup P A, Narasimha Rao P L, Ramaswamy A S. Antibiotic principle from *Moringa pterygosperma*. Part VIII. Some pharma-cological properties and in vivo action of pterygospermin and related compounds. *Indian J Med Res*. 1957;45:p.197-206.

³³ Bennett R N, Mellon F A, Foidl N, Pratt J H, DuPont M S, Perkins L, Kroon P A. Profiling glucosinolates and phenolics in vegetative and reproductive tissues of the multi-purpose trees *Moringa oleifera* L. (Horseradish tree) and *Moringa stenopetala* L. *J Agricultural and Food Chemistry*. 2003;51:p.3546-3553.

³⁴ Fahey J W, Zalcman A T, Talalay P. The chemical diversity and distribution of glucosinolates and isothiocyanates among plants. *Phytochemistry*. 2001;56(1):p.5-51.

³⁵ Fuglie L J. *The Miracle Tree: Moringa oleifera: Natural Nutrition for the Tropics*. Church World Service, Dakar. 1999:68pp.