



The LDN 2014 AIC Conference Review

On November 7-8, 2014, attendees and exhibitors joined together in Las Vegas, Nevada and worldwide via Live Stream for the LDN 2014 AIC Conference. They were privileged to hear from expert speakers about the benefits of Low Dose Naltrexone (LDN).

What others are saying about LDN:

"LDN benefits are due to the temporary inhibition of brain endorphins (a natural pain-killer, produced in the brain). This results in an increase in the production of endorphins, resulting in the reduction of painful symptoms and an increased sense of well-being." [what is LDN?](#)

Dr. Joseph Mercola: Low-Dose Naltrexone (LDN): One of the RARE Drugs that Actually Helps Your Body to Heal Itself

Dr. Ronald Hoffman: My experience with LDN has been very positive, especially in patients with MS and Crohn's disease.

Dr. David Gluck: LDN "tricks the body" by forcing the immune system to function correctly. – www.autoimmunemom.com, 11/2014

"LDN is **Dr. Klimas'** first-line treatment for the pain associated with fibromyalgia and chronic fatigue syndrome. She has found the drug to be effective and safe." [link](#) 11/2014

"According to **Dr. De Meirleir**, the doses in ME/CFS may be as low as 0.5 mgs and up to 5 mgs or more. The 4-6 hours or so the drug remains in your system is sufficient to boost endogenous opioid levels for 18-24 hours." [link](#) 11/2014

"Dr. Neil Beck reported "I have been treating people with Naltrexone for 18 years, first with High Dose 10 to 80mg for heroin blocking and Alcoholism, then with Micro Dose 3/4mg for heroin withdrawals and LDN 1.5 to 6mg for the usual disorders and addictions." – [link](#) 11/2014

"Most conventional doctors do not know about Low Dose Naltrexone for autoimmune diseases, and those that have heard of LDN aren't interested in learning more about how it can help their patients. Luckily, tens of thousands of patients have found it for themselves and are advocating for it all over the world. Thanks to LDN patient advocates, it is relatively easy for patients to find doctors who will prescribe it and compounding pharmacists who compound it correctly." – [Link](#) 11/2014

And thankfully, **LDN Research Trust** hosted this outstanding conference to gather the experts together in order to help clinicians worldwide realize the scientific and clinical research behind LDN.

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Conference Presentation Highlights



Dr. Michael Arata with OC Regenerative Medicine in California presented on Small Intestinal Bacteria Overgrowth (SIBO). Dr. Arata explains that “bacteria may be species normally encountered in gut however presence and amount are not normal for small intestines.”

Associated conditions of SIBO include IBS, IBD, Celiac, Liver Disease, Fibromyalgia, Parkinson’s, Muscular Dystrophy, Dysautonomia, RA, Scleroderma, and Lyme. One of the predisposing factors for SIBO is “long term antibiotic use” as seen in “Lyme treatment.”

Symptoms for SIBO may include “bloating, cramps, constipation/diarrhea, malabsorption, leaky gut, weight loss, fatigue, joint pain, rashes, mood disorders, cognition, headaches, and *sensitivities*.”

Dr. Arata has seen improvement in SIBO when LDN was used. In his conclusion:

- LDN has interactions with immune system, permeability, secretion and bacterial translocation which may also play a role in treatment of SIBO
- Randomized trials with LDN and SIBO would be helpful
- Patient awareness of SIBO may further interest into support of these studies
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Paul Battle, PA-C from Grossman Wellness Center in Colorado gave an outstanding presentation on LDN as a treatment for Crohn’s Disease. He began by explaining what Crohn’s Disease is and that it should not be confused with Ulcerative Colitis. The statistics are 1.3 million people have Crohn’s Disease in the United States

and 50,000 are children.

The symptoms with Crohn’s Disease are “tender abdominal pain, fever, weight loss, childhood stunting of growth, diarrhea, and fatigue.” Laboratory findings include “anemia low Hgb/Hct (blood loss), low protein due to poor absorption, high C-reactive protein, high Sedimentation Rate, positive hemoccult (blood in stool), and upper and lower endoscopy changes.

One reason for the development of Crohn’s Disease stands out – low endorphins. “Beta endorphins downregulate IL6,

IL12,” according to Dr. Gironi in Milan. LDN increases endorphins 2-3 fold in AIDS patients, according to Dr. Bihari’s research (1999).

Battle cited studies by Jill Smith that showed much improvement and high rate of remission. In his summary, “Crohn’s has significant disability and suffering that can affect anywhere in the GI tract; Many therapies: steroids, 6MP, azathioprine, ASA, biologics but have inherent risks and can be costly; LDN may be just as effective but \$40/mo, no serious side effects; May be considered primary or after initial failure.



Dr. Phil Boyle from Dublin presented on LDN use in Fertility. He states that a fertility care physician can predict couples at risk for infertility, miscarriages, and abnormal pregnancy outcomes, and the fertility care chart can let us know if the plan is effective...or not.

Dr. Boyle began prescribing LDN in 2004. In his clinical experience, he has used LDN to treat Clinical Endorphin Deficiency, about 50% of his fertility patients and finds it safe during pregnancy and during breast feeding.

Boyle gave a clear overview of Clinical Endorphin Deficiency and the mild side effects of LDN in his practice, which included “dry mouth, headache, nausea, sleep disturbance and vivid dreams.” He also was able to speak about drug interactions and was quick to point out reasons doctors use to not prescribe LDN – “unlicensed for autoimmune disorders, experimental treatment, not ‘evidence-based’ medicine, doctors not covered by medical insurance, and too risky!”

Dr. Boyle claims “over 200 pregnancies with Naltrexone.”

Endometriosis - LDN gave a 27 year old female her life back. She no longer has brown bleeding, pain, depression, fatigue, joint pain, anxiety, etc. The transformation was physical, mental and emotional.

Bipolar – LDN gave a 28 year old female the opportunity to conceive and deliver a baby. After Lithium for over 10 years, she was able to wean off the drug and LDN being part of her therapy, she is now a mother.

Pre-Treatment – Dr. Boyle was able to solve an infertility problem even before it “officially existed.” A woman presented with PMS, abnormal bleeding, and low energy. She was making wedding plans – in a nutshell, LDN and NaProTechnology paved the way for a honeymoon baby!

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Dr. Boyle, in closing, states that LDN is safe and doctors need to consider the mounting clinical and published evidence in favor of LDN.

Dr. Pradeep Chopra, Assistant Clinical Professor at Brown Medical School, offered a slide presentation on Mechanism of Action of Low Dose

Naltrexone (LDN).

“Naltrexone is a reversible competitive antagonist at μ and κ receptors; δ receptor antagonist to a lesser extent; its active metabolite 6- β – naltrexol is also reversible competitive antagonist at the μ and κ receptors.”

LDN increases levels of endogenous opioid peptides, which:

- Promote healing
- Inhibit cell growth
- Reduce inflammation

The slides included information on Opioid Growth Factor (OGF), which is also known as Metkephalin (Met5), Glia cells, Toll Like Receptors (TLR), LDN and cell growth, LDN and immunity, cytokines, T & B Lymphocyte production, and more.

His LDN summary included:

“Reversible antagonism of the opioid receptors results in an increased production of endogenous opioids; upregulates the OGF-OGFr axis, blocks TLR signaling which decreases glia cell activation, decreases cytokines, decreases neuroinflammation; modulates T & B lymphocyte production; blocks release of pro-inflammatory cytokines including Interleukins (IL6 and IL12), TNF α , NF- κ B (nuclear factor kappa light chain) enhancer of activated B cells); and regulates cell proliferation through the p16 and p21 cyclin dependent inhibitory kinases.”



Claudia Christian, a television and film actress, described Naltrexone as a “life-saving treatment of higher dose” for the treatment of “Alcohol Use

Disorder (AUD).” This use of a higher dose of Naltrexone is better known as the *Sinclair Method*. In her documentary, *One Little Pill*, scientific evidence is provided to show the effectiveness of Naltrexone and offers that 22% who have little results is due to non-compliance (forgetting to take their Naltrexone). Claudia’s organization, CThree Foundation.org, strives to remove the stigma that addicts bear, to make treatment readily available, and to, as in South America and other countries, have Naltrexone available as an over-the-counter remedy.

Ms. Christian shared her addiction journey – in her 20’s she described herself as a “light drinker” and in her 30’s, she was a “social drinker.” It was in her late 30’s that she became an addict of alcohol and suffered with AUD. She

tried various, costly traditional treatments, all to no avail. She explained that one person dies from AUD every 10 seconds and while only 10% seek treatment, there is a 90-95% relapse rate in the first four years with traditional therapies. In 120 world clinics, the statistics show that Naltrexone safely works in the treatment of addiction – chronic treatment for a chronic medical condition.

Christian states that “we are all built with an eraser. With Naltrexone, we can unlearn this addiction.” Using the

Sinclair Method, there is a “78% long term success rate.” It’s cheap, safe and effective and finding Naltrexone put her back in the driver’s seat of her own life.



Dr. Pat Crowley, from Kilkenny, Ireland presented on cases where LDN was used as part of the therapy for Multiple Sclerosis (MS), Parkinson’s, Fibromyalgia, and Lupus.

In 2004, Dr. Crowley describes his meeting with world renowned neurologist, Dr. Bernard Bihari. In 1985, Dr. Bihari administered LDN to an AIDS patient suffering from non-Hodgkin’s lymphoma and was surprised to find that the patient achieved a complete remission. Meeting Dr. Bihari would formally introduce Dr. Crowley to the benefits of LDN.

Crowley began using LDN with his MS patients who were not doing well on traditional therapies. He learned that LDN worked in the treatment of autoimmune diseases because it increased the endorphins – Dr. Crowley described an autoimmune disease as a “deficiency in endorphins.” And he is saddened that only four clinicians in Ireland are aware of the benefits of LDN.

Crowley describes his case studies and in all, he has had much success. He combines LDN with other treatments as needed, and finds the greater improvement when gluten and dairy are removed from the patient’s diet.



Pharmacist Stephen Dickson from Scotland gave an outstanding presentation on the Pharmacokinetics, Pharmacodynamics, and Interactions & Cautions in Common Practice.

Dickson walked the attendees through the process of:

- Liberation of drugs from pharmaceutical formulation
- Absorption of the drug into the bloodstream
- Distribution of the drug in the body
- Metabolism of the drug
- Excretion of the drug from the body

We learned that the “most common formulation” of a drug is a tablet.

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Great considerations must be made in making a tablet for patients – how hard the tablet is, design for absorption, fillers and friability. He went on to explain liquid forms of drugs, creams, sublingual, and infusion.

This well-rounded presentation concluded with an explanation of receptors involved, biological outcomes, and common cautions.

Dr. Kent Holtorf introduced the attendees to the world of Chronic Fatigue Syndrome (CFS) and Fibromyalgia (FM). We learned that “LDN is potentially beneficial in CFS/ FM through increased tissue T3 levels.” From this presentation, we know that CFS and FM are real conditions, but grossly undiagnosed and treatment is often based on symptoms instead of underlying causes. He walked the clinicians through diagnosis, dysfunctions, and associated conditions. The studies reveals that the current standard treatments show low improvement rate.



Next, Dr. Holtorf spoke about thyroid conditions – Autoimmune Thyroiditis, Hashimoto’s, Antithyroglobulin, Anti-TPO AB, Grave’s disease, and Thyroid stimulating immunoglobulin.

Hashimoto’s is described as TH1 dominant and Grave’s is TH2 dominant. “LDN can potentially be useful for both.”

Holtorf elaborated more on LDN and Thyroid Disorders:

- *Hashimoto’s and Graves often associated with or initiated or driven by chronic infections or gut dysbiosis*
- *Modern diet plays a role with food allergies or sensitivities (gluten) or driven by ingestion of trans - fatty acids and/or GMO.*
- *Different intestinal bacteria can stimulate differing Th1/TH2 responses*
Streptococcus thermophilus, lactobacillus bulgaris and B. bifidum which are widely used in the making of commercial yogurt, stimulate Th2
- *Toxic metals*
- *Hormones*
Estrogen, progesterone and cortisol generally decrease TH1/TH2 ratio (conflicting data)
Testosterone generally increase Th1/TH2 ratio

Dr. Holtorf described the required steps for cellular thyroid activity and explained how to diagnose low thyroid, chronic non-thyroidal illness, and showed the attendees why the TSH is unreliable.

Studies revealed that all Fibromyalgia patients are

hypothyroid “despite the fact that standard thyroid function tests, including TSH, T4, and T3, were in the normal range.” Another “study published the *The Lancet* performed thyroid biopsies on patients with chronic fatigue and found that 40% of these patients had lymphocytic thyroiditis.” And yet another “study published in the *American Journal of Psychiatry*” investigating thyroid function in women with PMS found that “70% showed thyroid dysfunction despite having normal TSH levels.” LDN was beneficial in treating thyroid conditions. – Holtorf Medical Group

Dr. Akbar Khan, Medical Director of Medicor Cancer Centres, Inc. in Canada lectured on the use of LDN in the treatment of cancers.



The first case presented was a breast cancer patient. In one month after LDN he introduced to her natural therapy, there were no new metastases and the tumor had shrunk. In one year, still no new metastases, circulating tumor cell count (CTC) equals zero (less than 10 live cancer cells per 1m of whole blood).

In another case, a cancer patient started and stopped LDN therapy. In this case, the CTCs rose and fell accordingly. Patient is now on LDN indefinitely.

In Dr. Kahn’s practice, the use of natural therapies are utilized in combination with LDN – almost as unheard of as a doctor prescribing LDN.

Dr. Andrey Lev-Weissberg a professor of medicine at the *University of Illinois College of Medicine* starts his presentation with “basic tenets of LDN.” These tents include: LDN increases natural endorphins from pituitary; likely increases dopamine; interaction between endorphins and dopamine are complex; it is likely that LDN modulates natural activity and produces ‘healthy’ levels; low-dose can have a ‘tonic’ influence, and cellular effects are produced by dopamine and endorphins.



“LDN is a successful approach.” LDN has a “low incidence of side effects, physiologic approach takes into account natural sleep wake cycle, restores the natural state of affairs, targets the mastergland.”

Dr Lev-Weissberg also spoke about Opiate Delta Receptor, Nociceptin Receptor: OLR-1, Kappa Receptor, and approved and non-FDA approved drugs for weight loss. The case studies offered were supportive of the choice to use LDN for weight loss – and the patients had other improvements in their health, as well.

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Dr. Tom O'Bryan gave one of the best lectures on dietary influences we have ever had the pleasure to hear. This was a no-nonsense, common sense well researched presentation on food sensitivities.

First off, "gluten affects the brain." He explained that even a small amount of gluten is harmful and compared it to like being a "little bit pregnant" – you either suffer from gluten or you are not ingesting gluten.

"Celiac is the most common life-long disorder in the United States."

The mechanism of action of LDN was fascinating. LDN increase endogenous enkephalin and endorphin, thereby enhancing the immune function; LDN inhibited proinflammatory cytokines and thereby improved inflammatory reaction; interaction of the nuclear opioid growth factor receptor which leads to promotion of DNA synthesis and thereby aids in healing of corneal ulcers; blockade of opiate in GI tract leads to effect on number of liquid bowel movements which leads to healing and repair of mucosal tissue which results in improvement in Crohn's disease activity; and regulation of TReg and production of IL-10 and TGF-B leads to down regulation of TH-17.

Another profound piece of information is referred to as gluten exorphins, these peptides have shown to have potent opioid-like properties and to have effect on hormonal balance, behavior and learning in animal models. Dr. O'Bryan points to a research article, *J Nutr Biochem*, 2014 Oct; 25(10):1011-8, and states "dietary interventions like gluten-free and casein-free diets have been reported to improve intestinal, autoimmune and neurological symptoms in patients with a variety of conditions – however, the underlying mechanism of benefit for such diets remains unclear."

"The inhibitory action of the exorphins in wheat has a specific opiate effect. This morphine-like psychoactive nature of the peptides results from the incomplete digestion of these dietary proteins binding to the opiate receptors in the brain, and offers a possible explanation for some of the reported psychiatric reactions to these gluten proteins, including the sense of 'brain fog' that often accompanies immune reactions to these foods and which may follow with panic attacks, depression, or other neurological complaints."

"Collectively Auto-immune Diseases have been identified in about 24 million people in the US, and only 1/3rd are diagnosed. That means about 72 million people have an AI Disease. It's not looked for. Our system waits until the signs and symptoms are severe enough with organ failure and

irreversible damage before we identify it." – *Jeffrey Bland, PhD*, Dr. O'Bryan quotes. He continues with information from *The Journal of Immunology*, 2005, 175: 4119-4126, "Autoimmune diseases are the third leading cause of morbidity and mortality in the industrialized world, surpassed only by cancer and heart disease.

Dr. O'Bryan had only just begun with the above. He continued on with gene expression, inflammation, CVD, antibodies, psychosis, pregnancy, insulin signaling, apoptosis, and so much more. He expertly tied food sensitivities together with conditions and pointed out triggers that may be inhibiting optimal function of LDN and other medications.



Dr. Armin Schwarzbach from Germany did a fabulous job on presenting Lyme disease to the attendees.

His slides explained how the infection is worldwide and that the various forms that this infection can take include biofilms and cyst.

Dr. Schwarzbach relayed that transmission of *Borrelia* can be up to 10 weeks before a bulls-eye rash may occur; 20% develop a "feverish reaction" or better known as a "summer flu," and only 30-40% of chronic Lyme patients remember a tick bite.

The Stage III symptom list was very helpful for those clinicians who have a patient presenting with yet unexplained reasons for their array of symptoms. The statistics on Lyme (the great imitator) was staggering. Autistic disorders in 20-30% of patients could be caused by *Borrelia* and 58% by *Mycoplasma*. Schwarzbach states that "90% of chronic fatigue patients are Lyme positive" and that "most fibromyalgia are Lyme positive." Interestingly, many patients are often misdiagnosed with Multiple Sclerosis, Lupus, etc.

Dr. Schwarzbach explained the "game changer" Elispot-LTT testing that has high sensitivity (84%) and specificity (82-100%).

The co-infections were listed and explained – babesia, Bartonella, ehrlichia/anaplasma, Chlamydia, rickettsia/coxiella, and mycoplasma viruses (EBV, CMV, HSV). The co-infection check list provided by Dr. Schwarzbach is an exceptional tool to have when dealing with suspected Lyme disease.

Therapies range from antibiotics (only with probiotics), minerals, and LDN for pain.

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Dr. Mark Shukhman with Associates in Psychiatric Wellness in Illinois presented an eye-opening lecture.

His overview of how LDN is used in psychiatry included:

Psycho-motor activity, fatigue
 Medical conditions with psychiatric overlay
 Fibromyalgia, etc
 Depression, anxiety, OCD, psychosis
 PTSD, Depersonalization Disorder
 autism, pervasive developmental disorders
 Addiction - substances: alcohol, opioids
 processes addictions: eating, sex, gambling, internet
 weight management
 sex drive; fertility
 LDN assisted modification of behavior
 (modified SinClair method)

Low endorphins or “endorphin deficiency” symptoms include:

- crying easily (TV commercials)
- avoiding dealing with painful issues
- hard to get over losses
- physical or emotional pain
- overly sensitive (“ physical or emotional pain really gets you”)
- craving pleasures, comfort, reward
- numbing from chocolate, wine, romance novels, marijuana, tobacco

Dr. Roth; moodcure.com

To boost endorphins, use LDN with:

- high-protein food
- vitamins: B, C, Omega-3 with vit D, E, Zinc;
- avoiding sugar, flour, coffee – (“exorphins”)
- exercise, massage, acupuncture, sunlight
- guided imagery, music, romance, nature

And avoid:

- stress
- pain
- sedentary lifestyle

Dr. Shukhman explained how inflammation leads to depression and provided expert advice for LDN prescribing physicians. And the chart of “reactions to illness” was priceless. We sometimes forget that patients with an illness may react differently to their pain and loss.

Article written by Sue Vogan PNM



The emcee, **Dr. Mark Mandel** owner of Mark Drugs in Illinois, did an exceptional job. He held that winning smile, kept everything running

smoothly and expertly handled questions for the Q & A panelists.



Linda Elsegood, Founder of the LDN Research Trust put together one of the finest conferences I have ever had the honor to attend. It was well thought out, executed with precision and the response has been amazing.

Well done to all and I would attend again.

Attendee Comments:

I so appreciate the LDN Research Trust’s efforts in bringing this information to the forefront in order for physicians to learn the science (clinical and laboratory) behind LDN so that they might better prescribe this amazing drug for their patients’ benefit. – CSV, Florida

BTW, great job on the conference. It was an formidable feat to not only make the CMEs available but also to roll it out as an online conference. It’s a lot of work and, I’m sure, has not gone unnoticed - CJ, US

Thank you for a wonderful conference, I have started using LDN in my patient population already. Too soon to see results yet but I am very excited and hopeful. Dr JP

The conference was amazing!! I took copious notes; thanks for the powerpoint slides!! Incredibly great job!!! LM

I’m lost for words the conference was full of very informative information, I was please to be a part of it and can’t wait to start prescribing it. Thank You! ML

The LDN Research Trust has done it again, well done in spreading the word and helping educate doctors. TC

I can’t wait to attend again next year, what an amazing conference. Fantastic job! MB

BIG CONGRATULATIONS for this fabulous

Don’t miss out! You can watch all the LDN 2014 conference presentations, download all the pdf’s and the conference brochure for just \$25 [click here](#) and receive 10 CME Credits.