Avicel (MicroCrystalline Cellulose/MCC) is fine for some and docs and pharmacists seem to love it, but I have seen enough users react to it that I suggest avoiding it. The most common reactions seem to be headaches or GI issues. Avicel is derived from wood pulp from pine trees.

Some LDN users point out that they take other meds and supplements that have MCC without a problem. And yet some of these folks found they did better when they switched to another filler. Maybe(?) MCC interferes with the efficiency of certain meds like LDN and thyroid meds and not others?

Things sometimes come up when starting LDN and if we can eliminate possible trouble from the filler then it's like eliminating the "easy suspect."

Why Do We Need Fillers in Supplements?... <a href="https://nestednaturals.com/blogs/blog/why-do-we-need-fillers-in-supplements">https://nestednaturals.com/blogs/blog/why-do-we-need-fillers-in-supplements</a>

Here's another general article on fillers, but other info in this document takes precedence in terms of guidance... <a href="http://www.lowdosenaltrexone.org/gazorpa/LDNFillers.html">http://www.lowdosenaltrexone.org/gazorpa/LDNFillers.html</a>
Regarding the question of why they need to use fillers. A typical capsule used will hold 195mg. Our usual dose of say 3mg would only fill a tiny bit of the capsule. But the main reason is that very few pharmacies have the expensive scales that would be needed to weigh a tiny amount like that. So they bulk up the product with filler first. This proportion is another possible reason MCC is a problem with LDN and certain meds but not others.

Sue's remarkable and shocking story about cellulose as a filler in our thyroid meds... <a href="https://stopthethyroidmadness.com/2010/08/04/sues-remarkable-and-shocking-story-about-cellulose/">https://stopthethyroidmadness.com/2010/08/04/sues-remarkable-and-shocking-story-about-cellulose/</a>

DANGERS OF MICROCRYSTALLINE CELLULOSE, FILLER IN PHARMACEUTICALS... <a href="https://www.integrativeholistichealth.org/information/dangers-of-microcrystalline-cellulose-filler-in-pharmaceuticals/">https://www.integrativeholistichealth.org/information/dangers-of-microcrystalline-cellulose-filler-in-pharmaceuticals/</a>

What are Microcrystalline Cellulose Side Effects...

https://medlabgear.com/blogs/articles/what-are-microcrystalline-cellulose-side-effects

LYME SCI: Are hidden ingredients in pills making you sicker?... https://www.lymedisease.org/pills-hidden-ingredients/

MICROCRYSTALLINE CELLULOSE SIDE

EFFECTS...https://www.foodsweeteners.com/microcrystalline-cellulose-side-effects/

Mast Cell Activation Syndrome and Excipients...

https://hoffmancentre.com/mast-cell-activation-syndrome-and-excipients/

Recognition and Management of Medication Excipient Reactivity in Patients With Mast Cell Activation Syndrome...

https://www.mastcellaction.org/assets/ /2021/09/13/29fd2269-847a-4ab3-9295-d6432316233a/recognition-and-management-of-excipient-reactivity-in-mast-cell-activation-syndrome.pdf?v=1

Is Cellulose the real problem in desiccated thyroid meds for many?..... <a href="http://www.stopthethyroidmadness.com/2009/11/11/is-cellulose-the-real-problem">http://www.stopthethyroidmadness.com/2009/11/11/is-cellulose-the-real-problem</a>

But:

Why to not use acidophilus...... <a href="https://thecompounder.com/acidophilus-as-Idn-filler-no/">https://thecompounder.com/acidophilus-as-Idn-filler-no/</a>

Report from a member (I'm hoping for more info about this):

I get compound thyroid and Idn and CAN NOT tolerate AVICEL even in the tiniest dose. I was so sick, had my pharmacists stumped and couldn't figure out what was doing it... Finally, after [taking] the AVICEL out of my scripts, I got stable. Symptoms for me. horrible lower GI pain - similar to eating gluten (I'm celiac) horrible headaches, grinding my teeth at night and extremely tired. I was on a high dose of t3 compound and now that I'm off the AVICEL I'm on half the dose and stable. I tried every filler there is and find the only one that works for me is Loxoral. [Note – we have seen reports that Loxoral contains Avicel]. My pharmacy will send the filler only in caps to see how I do before compounding it for me... Trust me. AVICEL is horrible!!! And you don't even realize it until you're off of it....I didn't have any symptoms with AVICEL for a year and then all of a sudden they crept in. So, you may be fine in the beginning, but if you're sensitive you very well could develop problems with continued exposure.. My Dr and pharmacists are SOOOO wonderful and worked so closely together to figure out what was going on because I had been on the same meds and dose. The pain is horrible!.... They finally found the answer by calling a world renowned Dr in Chicago that said \*AVICEL apparently stays in the gi longer than other fillers and can cause absorption issues and the body thinks it's gluten since it's so slow to metabolise.. This Dr said he went to a seminar and heard that AVICEL can cause issues with people who have thyroid and gluten problems but he never heard of a case until me... And he went to that seminar 2 years ago... So there is evidence of this....I showed gluten antibodies even though I don't eat gluten!

The above is from this thread in the LDN Hashi group: https://www.facebook.com/groups/LDN4Hashi/permalink/712025585659337/

And from the Low dose Naltrexone (LDN) for chronic illness & infections group: "My pharmacist said he refuses to use Avicel because of its effects on the thyroid and thyroid medications, therefore he won't use it at all in his pharmacy.... Personally I wanted to make sure mine didn't use Avicel as other fibro patients have mentioned that filler caused issues. So when I asked my pharmacist about all of it, the above was what he told me."

https://www.facebook.com/groups/108424385861883/permalink/1692848970752742/

Those wanting to avoid Avicel may also want to avoid capsules made from cellulose. One can empty the contents into water and take that way to avoid the capsule. Related article:

https://vitakem.com/gelatin-vs-cellulose-which-capsule-is-right-for-your-brand/

<u>Comment from a member</u>, "The American gastroenterologist who specializes in SIBO (small intestinal bacterial overgrowth) complicated by MCAS (Mast Cell Activation Disorder) advises that those who are sensitive to pine trees avoid medications with methyl cellulose.

I find that I react to the smell of burning pine trees and develop skin reactions when I consume pine nuts. I do seem to do better after limiting methyl cellulose. Not as easy task as it's in nearly every medication and supplement influenced I guess by the vegan movement. I now search for gelatin capsule versions over vegan capsules....I did hear Dr Leonard Weinstock the Gastroenterologist say this very clearly on a SIBO-SOS podcast but I can't find any journal articles of him stating this clearly on Google scholar.

Methylcellulose Side Effects...

https://www.drugs.com/sfx/methylcellulose-side-effects.html#:~:text=Signs%20of%20an%20allergic%20reaction,Throwing%20up

#### Other fillers:

Personally I prefer food based fillers. AgelessRx uses sucrose as their default filler. See the Featured section in our group for a discount.

Generally sucrose seems to create the fewest problems. Dextrose, Lactose (if not allergic), Rice bran/flour and LoxOral may be OK. While sucrose should generally be avoided we're talking about less than 1/20 tsp. so probably not a problem for most. LDN doctor Sarah Zieldorf cautions that some might have an issue with sucrose "if a patient has neuro issues and can't tolerate sugar at all, other severe gut issues or history of problems with Sucrose."

More on Loxoral... <a href="https://www.pccarx.com/Products/ProductCatalog?search=loxoral">https://www.pccarx.com/Products/ProductCatalog?search=loxoral</a>
PCCA LoxOral Ingredients:Isomalt NF, Glyceryl Behenate NF, Poloxamer 407 NF, Sodium Stearyl Fumarate NF

Haven't seen many complaints. One of our Admins Tori Murrill Connolly has been happy with it.

Ginger is an interesting choice that might be good for many people. Available from: <a href="https://www.cfspharmacy.pharmacy/human-medicine/low-dose-naltrexone">https://www.cfspharmacy.pharmacy/human-medicine/low-dose-naltrexone</a>

Vitamin C may be OK but I have heard mixed comments -- it may be too active whereas fillers should be inert. Rice bran/flour sounds OK.

I would not use Prosolve (PROSOLV® SMCC, silicified microcrystalline cellulose, is a unique combination of microcrystalline cellulose (MCC) and colloidal silicon dioxide (CSD).)

Comment from a member about Inulin, "I checked with my compounding pharmacy about the filler they use for LDN and it's Inulin. Side effects are stomach related - bloating, diarrhea, cramps, flatulence etc.

Inulin is a starchy substance found in a wide variety of fruits, vegetables, and herbs, including wheat, onions, bananas, leeks, artichokes, and asparagus. The inulin that is used for medicine is most commonly obtained by soaking chicory roots in hot water." The liquid version with no additives is another nice option and makes it easy to fine tune your dose but is more expensive and keeps only about 30 days. Some issues have come up with some of the additives and preservatives in the liquid formulations from some pharmacies. Some liquid versions have been found to contain sodium benzoate and ascorbic acid which is a potentially dangerous combination if it happens to get heated. Added ingredients may not be any problem for you but sometimes it's hard to know if someone is reacting to the LDN or something mixed with it. So you may want to get the version made with pure Naltrexone powder (NOT crushed tablets) and distilled water with nothing else (Skip's has this). This will eliminate any possible filler reaction. Check with your pharmacist about the life in the fridge. Since this version doesn't have preservatives it may only be good for 30 days (but check). If you want to have preservatives for safety and longer life of the product perhaps ask if you can have an alternative to sodium benzoate with ascorbic acid.

We have a member in another LDN group that had quite a strong reaction to a compounded liquid LDN version but did better with the plain liquid. Liquid versions may have many ingredients so ask your pharmacist. Sublingual formulas may be "cleaner."

Dosing is pretty individual. Some users might stay at a given dose for several months before increasing. I usually suggest waiting for a minimum of two weeks to let things settle down. The best write-up on dosing I've see is Elaine Cuthbert's towards the end of the File "Side Effects and Dosing. Also see the Files for help finding a doctor and a compounding pharmacy. PM me if you can't find these.

I Pharmacy is one of the few sources for no-filler capsules. The capsules can be made to contain ONLY pure Naltrexone powder with no fillers. This is a good option for those that are very sensitive. The cost is roughly \$1./dose. They ship to all states. <a href="http://www.ipharmacylivonia.com/">http://www.ipharmacylivonia.com/</a>

If you are not getting the results you think you should you may want to try a refill from one of the better known pharmacies. There can be problems at some pharmacies as per...

https://www.lowdosenaltrexone.org/comp\_pharm.html

Here are some comments from members of the LDN group
Low dose Naltrexone (LDN) for chronic illness & infection
<a href="https://www.facebook.com/groups/108424385861883/permalink/2514760098561621/">https://www.facebook.com/groups/108424385861883/permalink/2514760098561621/</a>
You will need to be in that group....group link is
<a href="https://www.facebook.com/groups/108424385861883/">https://www.facebook.com/groups/108424385861883/</a>

Video regarding herbs and fillers from LDNRT (mentions methyl cellulose)... <a href="https://www.youtube.com/watch?v=5PoC2van1eg">https://www.youtube.com/watch?v=5PoC2van1eg</a>

The attached article by Dr. Bruce Hoffman at the very end lists Avicel and Hypromellose excipients as being problematic...

https://www.hoffmancentre.com/post/mast-cell-activation-syndrome-and-excipients

Information collected by Brian Haviland Low dose Naltrexone (LDN) for chronic illness & infections.... https://www.facebook.com/groups/108424385861883