

HARM REDUCTION STACK

INSTRUCTIONS & INGREDIENTS

MDMA is fun in a recreational context and valuable in therapeutic contexts, but it's also hard on your body, which is why so many people feel awful for days or weeks after taking it. Fortunately, through the power of science and targeted supplementation, gnarly MDMA hangovers are now largely preventable!

Taking the supplements in the advanced MDMA harm reduction stacks detailed below can help you to party like a rockstar or go deep into a therapeutic journey without feeling as shitty and sad as you normally would in the days afterwards.

That said, there is no complete solution for MDMA hangover prevention and these supplements will not prevent all MDMA-related damage, so be aware it's going to be a stressor for your body no matter what. That said, once you experience what it's like to roll with these supplements, we suspect you'll never go back.

What follows is a lot of information about using supplements to mitigate the multifarious damage caused by MDMA, lovingly assembled for your edification.

Further down in this doc, you'll find a comprehensive list of each supplement you can take to reduce your hangover, the correct dose of each to take, and when to take them.

For your convenience, we've also created a separate shopping list doc which includes Amazon links to reputable vendors for each supplement if you'd like to assemble your own kits.

(It can cost up to \$400 to buy one bottle of each of the basic supplements, so if that's a bit spendy for you, we recommend getting some friends to go in on buying the full set, OR buying a few bottles at a time each time you roll, taking whichever ones you have, and building your collection over time.)

If the science behind all this is uninteresting to you, just read the section below to get a basic understanding of what these stacks are about, check the contraindications at the very end, and hop over to the shopping list doc to buy your supplements.

If you're a nerd and science is super-fascinating to you, we've also included a separate bibliography doc with citations for the various studies that were drawn upon to assemble this guide.

A BRIEF GUIDE TO MDMA SAFETY

Pure MDMA is *relatively* safe as long as you stay hydrated AND consume electrolytes (hyponatremia is real; look it up); take reasonably-sized oral doses (125 mg or less for most people); measure with a scale instead of fingerdipping like an idiot from the 90's; redose only once at a low dosage (50 mg or less for most people) or not at all; and avoid overheating from endless dancing or having sweaty sex for hours in the vain hope of having an orgasm.

Even when you follow these best practices, the real issue is that MDMA is hella neurotoxic, causing oxidative stress that damages your body at the cellular level. MDMA is also excitotoxic, which means it releases an overabundance of stimulating neurotransmitters which can damage or even kill off neurons in your brain entirely.

In addition, you've probably heard that MDMA depletes your body's serotonin reserves, which makes it difficult for your body to restore its natural serotonin balance in the weeks and months afterwards.

This combination of factors - made worse by the hyperthermic temperature elevation effect - creates the infamous hangover many people experience after taking MDMA.

Dammit. So what can I do to feel human after I roll?

Take these targeted stacks of advanced harm reduction supplements, bruh!

People who take these stacks as directed generally experience a significant reduction in MDMA-induced hangover symptoms and are able to enjoy the afterglow of their experience without feeling like death.

Here's the caveat: These supplements will make you feel way better after a night of *reasonable* MDMA use. They will not save your ass from feeling cracked out if you decide to take over 250mg of MDMA in a night, get no sleep, eat only Clif bars for days, or pile a bunch of other drugs on top of your MDMA.

Our deep dive into the research literature on this topic has also shown that overheating during your roll cooks your brain a bit and makes your hangover worse. The supplements in these stacks do their thing in part because many of them have the side effect of lowering your body temperature, but your behavior matters a lot around this too. If you dance for hours, are sweating profusely, and don't take breaks, these supplements won't work as well, so please remember to pause and cool down at regular intervals during your roll.

These supplements also won't change the reality that your serotonin system needs about 3-4 months to recover from a *single* night of taking MDMA. Yes, we know that sucks, but your body has limits and you gotta respect your meat puppet.

Ah, but are these supplements safe?

The safety and efficacy of every supplement in this stack has been researched in depth by drug nerds, cross-checked with studies on PubMed and other medical databases, and personally tested by aforementioned nerds to ensure that they work as they're supposed to. As it turns out, they do!

Here's the tricky part: Under US law, supplement manufacturers are not required to prove that their products are pure, safe, or even contain the compounds advertised. As a result there's a lot of bullshit on the supplement market, some of which is just a waste of money and some of which can be dangerous in edge cases.

To counteract this issue, every supplement in this stack has been sourced from manufacturers that do extensive lab testing and/or follow NSF International's Good Manufacturing Practices for dietary supplements. All dosages have been set at the upper end of safe ranges for maximum benefit.

CAUTION: It's critical to check for bad interactions (also known as contraindications) for any drugs or supplements you put in your body. Please read the incomplete list of medications and health conditions in the

back of this pamphlet to see if you might have anything else in your system that could react poorly with these supplements. If you take other supplements or medications of any kind, we encourage you to do your own research to see if there are any other bad drug/supplement interactions you should know about. Failing to do this puts you at higher risk of inadvertently putting yourself in a bad situation.

I hate taking lots of pills!

There are a lot of pills in these stacks, a little over a dozen at bare minimum.

Unfortunately, there's no way we've found around this one. If taking hella pills is either physically or psychologically challenging for you, this hack might not be the right fit for you. That said, taking some of these supplements is better than taking none at all

But boy, is it worth it if you can take them all.

Some people get nausea when taking these pills on an empty stomach, so it's worth checking out anti-nausea drugs like Dramamine or Nauzene if your stomach is having trouble with all this - or if your gut is having a hard time even just taking the MDMA orally.

TWO LEVELS OF INTENSITY & COMMITMENT

There are so many supplements in these kits that it gets a little dizzying to build them all if you're trying to be perfect about it.

Thus, we've created two levels of stacks:

- ❖ **Level One:** Basic stack vibes. Easier and cheaper to assemble, a little over a dozen pills, allows you to get *most* of the possible benefit
- ❖ **Level Two:** Doing-It-Perfectly vibes. More time-consuming and expensive to assemble, close to two dozen pills plus extra credit options, *maximum* possible benefit for you and your brain.

LEVEL ONE: Ingredients

L1 PreStack (Take 1 hour before dosing your MDMA)

The PreStack provides comprehensive protection against neurotoxicity and excitotoxicity during the peak of your experience.

❖ **Na-R-ALA: 250mg**

- *Potent antioxidant. Na-R-ALA is used because it lasts longer and is more potent than regular racemic ALA.*

❖ **Magnesium Glycinate: 1600mg (280 mg elemental magnesium)**

- *Prevents excitotoxicity. Magnesium also relaxes muscle tissue, which helps to prevent jaw clenching. Your dentist will thank you later.*

❖ **Vitamin C w/ Citrus Flavonoids: 2000mg**

- *Another potent antioxidant which prevents neurotoxicity.*

❖ **N-Acetyl Cysteine: 600 mg**

- *Forms a powerful one-two punch with Vitamin C to reduce neurotoxicity.*

❖ **Calcium Carbonate or TUMS – 2000mg**

- *Vitamin C increases your stomach's acidity, which makes it hard for your body to absorb MDMA efficiently. TUMS lowers this acidity to preserve efficient absorption.*

*NOTE: TUMS are large circular tablets meant to be chewed **before** swallowing; everything else in these stacks should be swallowed whole.*

❖ **Grape Seed Extract: 120mg**

➤ *High in Vitamin E and flavonoids, which mitigate neurotoxicity by protecting against lipid oxidation.*

❖ **ALCAR (Acetyl-L-Carnitine HCL): 500mg**

➤ *Antioxidant which has been shown to work synergistically with ALA to prevent neurotoxicity.*

❖ **EGCG (Green Tea Extract - Decaffeinated): 670mg**

➤ *Potent antioxidant. EGCG is also a diuretic and helps you pee normally while you're rolling.*

❖ **CoQ10: 100mg**

Prevents excitotoxicity by helping your neurons maintain a healthy chemical balance.

L1 MidStack (Take 2 hours after dosing your MDMA, or whenever you redose. It's not recommended that you redose more than once, but we know some people do it and thus suggest that you take a MidStack every time you do.)

The MidStack replenishes key PreStack antioxidants as they're metabolized for ongoing neuroprotection during the peak of your experience. Extra credit: if you're having a longer experience consider taking this every two hours for the duration of your squish times.

- ❖ Na-R-ALA: 250mg
- ❖ Grapeseed Extract: 120mg
- ❖ Acetyl-L-Carnitine HCL: 500mg

L1 AfterStack (Take right before bed, after comedown)

The AfterStack is designed to help you sleep and provide a boost of antioxidant support through the night so you feel reasonably human the next morning.

- ❖ Melatonin – 300mcg
 - *Melatonin controls sleep/wake cycles and is also a potent antioxidant. Melatonin is made from serotonin and will be depleted after you roll, so taking it before bed will help you sleep better.*

- ❖ Vitamin C w/ Citrus Flavonoids – 1000mg
 - *Taking Vitamin C before bed raises urinary acidity, allowing you to excrete much of the MDMA in your system through your urine before it metabolizes to more harmful substances.*

Okay, that's the version most people are willing to do. Works great!

LEVEL TWO: INGREDIENTS

...now, because we're nerds and we know there are other nerds out there who hate feeling like shit after rolling and *really* wanna do it as well as possible, here's the intense version.

(To save space, we're not going to rehash how the supplements already detailed in Level One work; feel free to refer back to that one for a refresh on those deets.)

L2: Pre-PreStacking

To make sure your body's levels of all these supplements are topped up to the absolute max, you can take a full PreStack daily for a couple days leading up to your planned roll to build up their levels in your brain.

L2 PreStack (Same ingredients and timing as the PreStack in Level One: Take 1 hour before dosing your MDMA)

L2 MidStack (Why, it's our good old friend the PreStack, taken in its entirety 2 hours after you dose your MDMA and whenever you redose! If you're gonna redose more than once and you really want to mitigate that damage, take the full set of PreStack supplements every time you do. This gets to be a lot of pills fast, but hey: glory ain't cheap.)

L2 AfterStack (Same as the AfterStack in Level 1. Take right before bed,

after comedown)

MDMA Night-After Stack (Take before bed the *night after* you roll)

NERD ALERT: This optional stack contains 5-HTP, which requires some explanation. Many people have heard that taking 5-HTP will replenish your serotonin reserves after rolling, but as we've discovered, that's not necessarily the case.

Here's the deal:

MDMA severely depletes your body's serotonin reserves. Normally, these reserves are replenished when your body turns tryptophan in your food into the intermediate metabolite 5-HTP, which it then converts into serotonin.

MDMA knocks out the enzyme that converts tryptophan to 5-HTP for several weeks after you roll, so the idea behind supplementing with 5-HTP is that it gives your body the ability to still make serotonin while this enzyme is coming back online.

Here's the tricky part: The scientific evidence on 5-HTP isn't *really* there. Rat studies done in 1994 and 2007 with ridiculously high doses of both 5-HTP and MDMA have shown that supplementing 5-HTP raises rat serotonin levels after MDMA administration, but this has never been proven in humans.

Given the extremely high doses involved, differences in how rat neurotransmitters react to MDMA relative to ours, and the fact that the rats in these studies were killed a couple hours after 5-HTP administration to analyze their brain tissue, there are just too many variables at play to determine whether the relatively small amounts of 5-HTP a human can safely take have any effect on MDMA-induced serotonin depletion.

That in itself isn't necessarily a problem, but what is a problem is that taking 5-HTP can lead to negative consequences most folks don't know or think about.

Though rare, there are anecdotal reports of people taking too much 5-HTP along with MDMA and getting very sick with a potentially fatal condition called serotonin syndrome, which can grind your fun to a halt instantly, fuck you up for days, and leave you with a hangover that makes regular post-MDMA sads look like the best day of your life.

5-HTP also makes many people tired during the day for a day or two after taking it, which is maybe not the safest state if you're, say, out partying all night at an event, then wake up sleep-deprived and hung over the next day and do a long drive home.

Furthermore, there's also concern that telling people MDMA-induced serotonin depletion can be reversed by something other than time leads to

people taking MDMA too often, which is no bueno.

So given all this, why did we include 5-HTP in this stack at all? Well, there's also no evidence that it *doesn't* work in humans, many people have used it, and many of those people feel it makes them feel better after MDMA use. Some folks just won't buy kits of MDMA harm reduction supplements that *don't* include the one supplement they've heard about for this purpose, so it's also here in the name of getting the conversation started.

Please spread the word. 5-HTP is the one MDMA harm reduction supplement most party people know about and its efficacy is taken as gospel all over the place, so it's up to you to tell your friends that it's not the panacea folks think it is.

This is also a great moment to remind you that drug science is complex and nuanced in ways that take a lot of nerding out to understand.

Unless your friends are so geeky that they spend hours digging through medical databases to compile technical, jargon-heavy literature into accessible recommendations about harm reduction supplements, don't trust what your friends tell you. Do your own research - check out our bibliography if you wanna check our work - and even then, remember that the internet is full of bullshit you may not be trained to detect. It's better to be conservative or disappointed than totally fucked.

If you do decide to take this optional NightAfter Stack, we recommend taking it the night after you roll, as MDMA stays in your system for about 36 hours and you want it mostly gone before consuming serotonin precursors. 5-HTP at the dose we included probably isn't going to be harmful if you take it before bed the night after you roll as we recommend, but it isn't the panacea many think it is.

That said, this *optional* NightAfter Stack includes:

❖ **5-HTP: 100mg**

➤ *Intermediate metabolite between tryptophan and serotonin.*

❖ **EGCG (Decaffeinated): 670mg**

➤ *When you take 5-HTP, an enzyme in your stomach breaks a lot of it down before it can reach your brain. EGCG inhibits this enzyme, ensuring that all the 5-HTP you take is absorbed in your poor depleted noggin where it's needed.*

EXTRA CREDIT

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Bonus Supplements

If you're like most people, you've likely got some nutritional deficits which can make your brain more vulnerable to the special types of damage MDMA causes. You can either doublecheck that your daily diet actually

contains adequate amounts of all these compounds... or you hedge your bets by taking some extra pills, just in case, and figure the dietary parts out at your leisure.

- ❖ **Selenium - 200mcg per day**
- ❖ **Vitamin B3 - 15mg per day**
- ❖ **Vitamin E - 15mg per day**

Bonus Herbs

For additional neuroprotection, there are a few herbs you can take as well. We tried making them into tea and it tasted awful (both hot and iced), so extracts in tincture form put into a small amount of water and taken quickly as a shot is your best bet.

- ❖ *Ginger*
- ❖ *Garcinia kola*
- ❖ *Ginkgo biloba*
- ❖ *Lemon balm*

CONTRAINDICATIONS

Drug interactions are complex and Your Biology May Vary. What works fine for someone else might be a major issue for you due to your genetics, your physical health, medications you're on, or otherwise. If you see something that applies to you on this list, we recommend that you look it up and

assess the risk for yourself.

This list is by no means exhaustive, so if you take medications or have significant physical or mental health stuff going on, we recommend you do your own research about potential negative interactions anyways.

- ❖ **5-HTP** – DXM (Robotussin, DayQuil/NyQuil), SSRI antidepressants, Lodosyn, Demerol, Tramadol, chlorpheniramine (found in some antihistamines)
- ❖ **Acetyl-L-Carnitine**. Nothing major we could find, though rare cases of allergy are documented.
- ❖ **Calcium Carbonate**. May reduce full absorption of aspirin, Cymbalta, iron sulfate, and levothyroxine.
- ❖ **COQ-10** - Contraindicated with Warfarin
- ❖ **Decaffeinated EGCG** – Nothing major we could find at these dosages
- ❖ **Garcinia kola** - Nothing major.
- ❖ **Ginger** - Nothing major.
- ❖ **Ginkgo biloba** - Aspirin, ibuprofen, gabapentin
- ❖ **Grapeseed Extract** - blood thinners (ex. Warfarin)
- ❖ **Lemon balm** - Nothing major.
- ❖ **Magnesium Glycinate** - Kidney disease w/ reduced kidney function, certain antibiotics
- ❖ **Melatonin** – GHB, Ambien, benzodiazepines, birth control pills, immunosuppressants anticoagulants, anti-diabetes medications, fluvoxamine, verapamil

- ❖ **N-Acetylcysteine** - Nothing major.
- ❖ **Na-R-ALA** - Diabetes medications (decreases blood sugar levels)
- ❖ **Selenium** - Nothing major.
- ❖ **Vitamin B3 (Niacin)** - Colesevelam, colestipol, or cholestyramine; aspirin; blood pressure medications; blood thinners such as Warfarin.
- ❖ **Vitamin C** - Thalassemia, G6PD deficiency, sickle cell disease, hemochromatosis

That's all, folks. Roll safe and have fun!