

Schizophrenia

Disease Report

REPORT CATEGORY —



MENTAL HEALTH

Sample Client

Report date: 15 January 2026

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DISCLAIMER

This report does not diagnose this or any other health conditions. Please talk to a healthcare professional if this condition runs in your family, you think you might have this condition, or you have any concerns about your results.

Personal information

NAME

Sample Client

SEX AT BIRTH

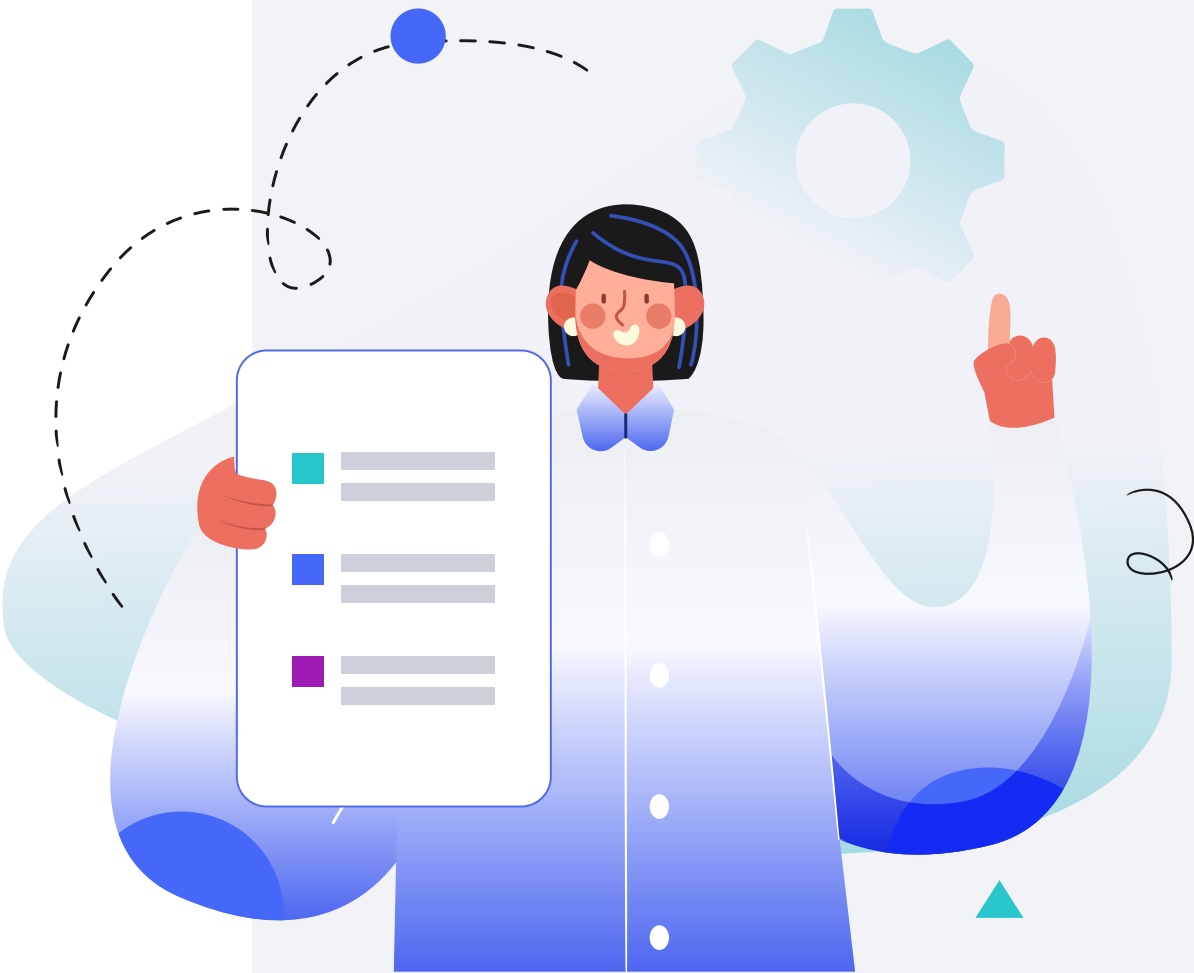
Male

HEIGHT

5ft 5" 165cm

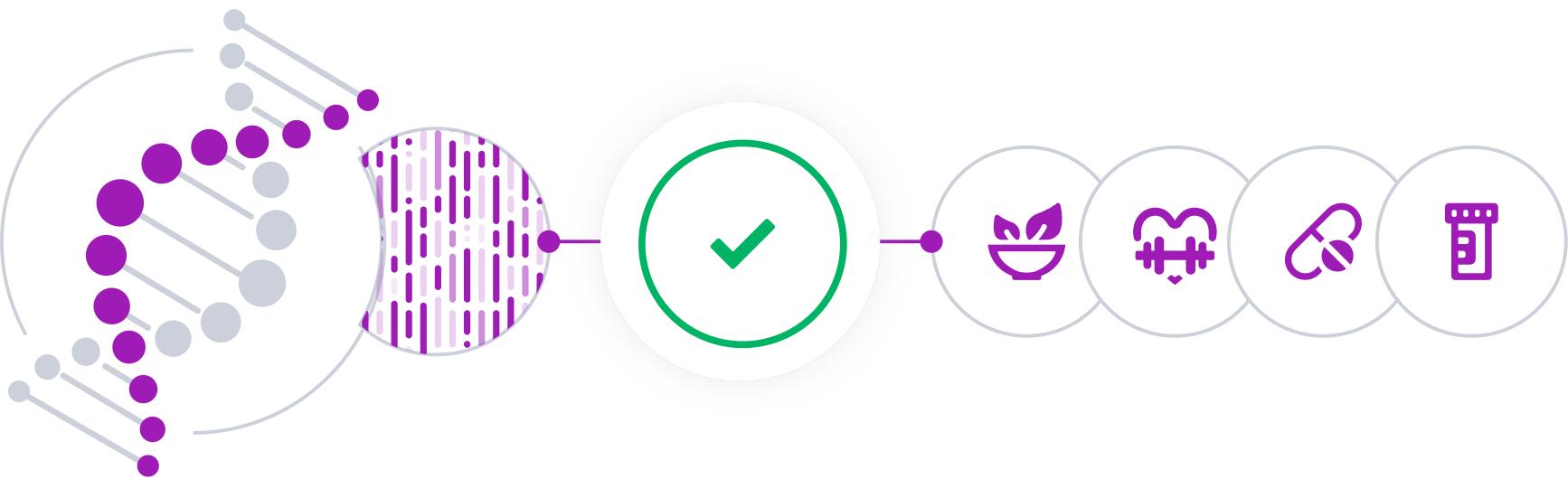
WEIGHT

137lb 62kg



How this works

Our Wellness Reports analyze how your DNA influences your health.
We then use this analysis to give you personalized risk estimates and recommendations.

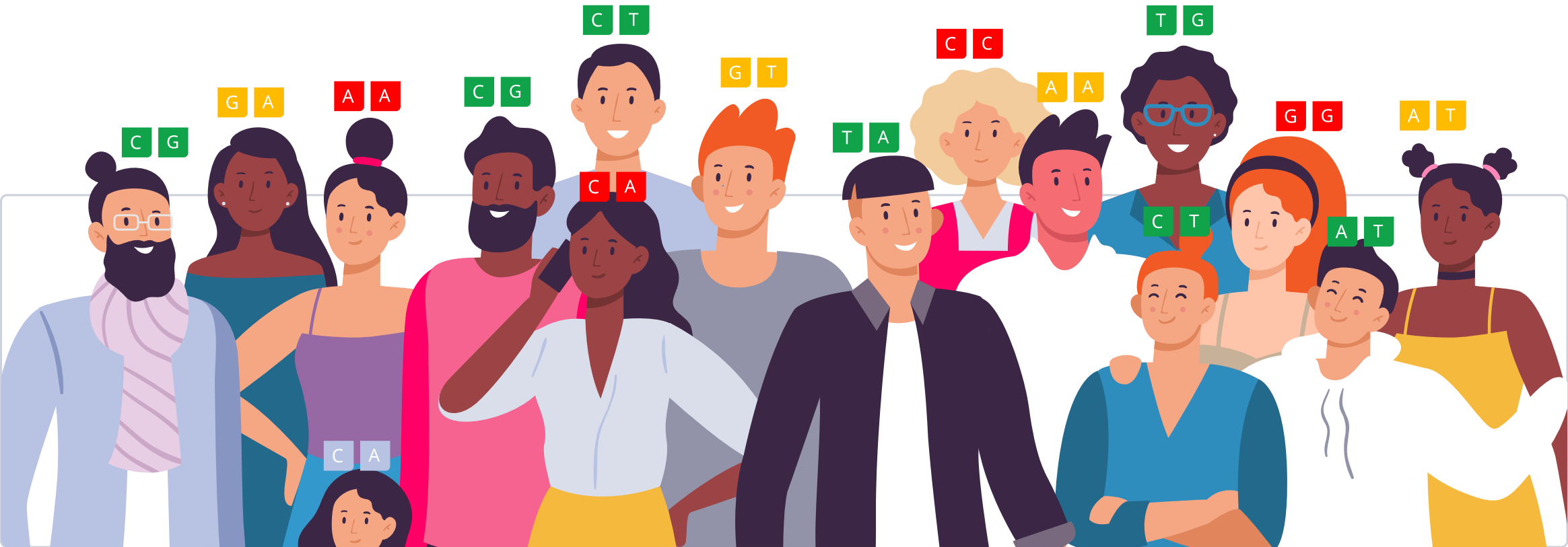


Similarly, our Trait Reports look at how your DNA influences your traits.



Your DNA is like an instruction manual — it contains a lot of information.
You can think of it as a blueprint for your body.

Genetic variants are parts of DNA that differ from person to person. Some can make you more vulnerable to certain health issues, while others may influence traits such as eye color.



We use artificial intelligence and machine learning to analyze all this information.
We then summarize your results as a risk score or display it on a gauge.

In total, we analyze up to 83 million genetic variants.

When we give a risk score, the risk icon tells you if you are at a higher or lower risk compared to other people:



Genotype color info:

AA

You don't have any risk alleles

AA

You have 1 risk allele

AA

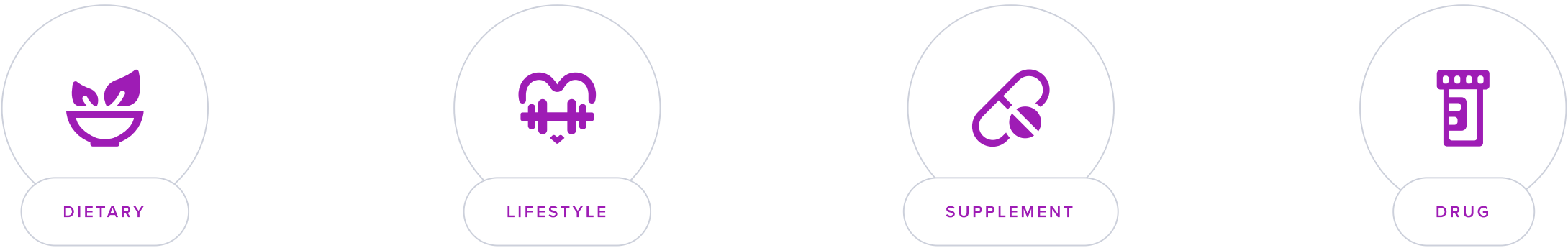
You have 2 risk alleles

Your risk is also displayed as a percentile. This will tell you how your risks compare to our sample population. The lower your percentile number, the lower your risk. The "50th percentile" would be an average risk.

Similarly, the gauge tells you your relative risk score compared to our sample population, or it indicates a specific trait or haplotype you are more likely to have based on your genetic variants.

When applicable, we also list top evidence-based recommendations that may help lower your risk. The focus is on recommendations that may be of benefit to you, based on your genetics.

Our recommendations come in four categories: lifestyle, diet, supplements and drugs.
The following icons tell you which category a recommendation falls into:



Our team of scientists also ranks each recommendation.
We rank based on impact and the strength of evidence in the medical literature.

Impact shows how strongly a recommendation will affect your health in a certain area.
Evidence is how much scientific support there is for the recommendation. Rankings are from 1 to 5 (low to high):



Impact

Impact scores range from 1-5. These scores reflect how much of an effect each recommendation can have. An impact score of 5 predicts the biggest effect.

When a recommendation affects something we can measure, we use those measurements to assign the impact score. For example, a recommendation that decreases cholesterol by 20% will have a higher impact score than one that decreases it by 5%.

Some recommendations affect things that we cannot directly measure, like stress or mood. For these, the impact score is based on how well they work relative to other recommendations and standard treatments. The best ones get the highest scores.

If there is a lot of research that shows a recommendation works especially well for your genotype, the impact score gets increased.

Recommendation Evidence

5 / 5

Recommendations that are considered effective and generally recommended by experts and medical bodies.

4 / 5

Recommendations that are considered likely effective and that have multiple independent meta-analyses and a great many studies supporting them.

3 / 5

Recommendations that are considered possibly effective and have many studies supporting them

2 / 5

Recommendations that have insufficient evidence, with two or several clinical trials supporting them, or many studies but with ambiguous results.

1 / 5

Recommendations that have insufficient evidence, with a single clinical trial, or with many studies most of which didn't find support for the recommendation.

0 / 5

No evidence in humans.

Genotype-specific Evidence

High-quality

Direct evidence that a recommendation helps more in people with your gene variant (many clinical trials, a few large clinical trials, or a meta-analysis).

Medium-quality

Direct evidence that a recommendation helps more in people with your gene variant (a few clinical trials or one large clinical trial).

Low-quality

Direct evidence that a recommendation helps more in people with your gene variant (a single clinical trial or more trials with inconsistent results).

Indirect

A recommendation may help more in people with your gene variant because it targets a specific gene or protein affected by your variant (e.g., MTHFR, dopamine).

In theory

A recommendation may help more in people with your gene variant because it targets a specific mechanism affected by your variant (e.g., inflammation, oxidative stress).

Some things to keep in mind:

- Genetics doesn’t play a considerable role in a condition or a trait.
- There is not enough research available to estimate a genetic predisposition.
- There are technical limitations to estimating or presenting a genetic predisposition.
- The topic is sensitive, and a genetic predisposition should only be estimated and presented by a healthcare professional.

Introduction

Schizophrenia is a severe mental disorder affecting how a person thinks, feels, and behaves. Individuals with schizophrenia may seem like they have lost touch with reality, which can manifest as psychosis in the form of hallucinations, delusions, and disordered thinking and behavior.

Common symptoms associated with schizophrenia are grouped into three categories:

Positive symptoms (psychotic symptoms):

- Hallucinations: sensing things that aren't there, most commonly hearing voices
- Delusions: strongly held beliefs not based on reality
- Disorganized thinking: Incoherent thoughts or speech

Negative symptoms:

- Reduced feelings of pleasure
- Difficulty beginning and sustaining activities
- Reduced speaking: speaking little even when forced to interact

Cognitive symptoms:

- Poor executive functioning
- Trouble focusing
- Memory issues

Longevity Screener

Longevity Screener analyzes your DNA and biometric data to holistically determine your risk of developing serious medical conditions.

 Your lifetime risk is **Normal**

 Your 10-year risk is **Normal**

Summary or results

Your results are indicating a Normal risk of developing Schizophrenia in your lifetime and within the next decade.

Monitor your risk by regularly checking your related labs and implementing the recommendations provided.

What to do if you get a High risk

Analyze your labs

Analyze your lab results to establish a baseline and track any changes or improvements in your health markers over time.

Find out your out-of-optimal labs

We will pinpoint any values that fall outside the optimal range, allowing you to focus on what matters most.

Optimize labs

Aim to bring all your lab results to optimal levels through lifestyle changes, treatments, and ongoing monitoring for the best health outcomes.

Disclaimer

The Longevity Screener feature is designed to provide insights based on genetic predispositions and basic health data to help you understand factors that may influence your longevity. This tool is for informational purposes only and does not constitute medical advice, diagnosis, or treatment. Always consult with a qualified healthcare provider before making any decisions related to your health, lifestyle, or medical treatments. The information provided by the Longevity Screener is based on current scientific research and should be used as a supplementary tool in conjunction with professional medical advice.

Risk Factors and Genetics

About **70-80%** of differences in people’s schizophrenia rates may be due to **genetics**! Individuals with a close family member, like a parent or sibling with the disorder, are more likely to develop schizophrenia than those without a family history.

Genetically high fasting insulin and alpha-linolenic acid levels may be causally associated with schizophrenia. In contrast, genetically high levels of omega-3s may be causally associated with a lower risk [\[R, R, R, R\]](#).

Several genes are associated with an increased risk of schizophrenia, but no single gene causes the disorder by itself. It's believed that a complex interplay of genetics and one's environment contributes to the development of the disorder.

Factors that might increase the risk of developing schizophrenia include:

- Increased immune system activation, such as from inflammation or infections.
- Complications during birth.
- Psychosocial stresses during early adulthood.
- Psychoactive drug use during adolescence.
- Some pregnancy and birth complications, like malnutrition or exposure to viruses.

Please note: This report accounts for only a fraction of schizophrenia’s genetic component. Even if your risk is higher, it doesn’t mean you are likely to have or develop the condition.



TYPICAL LIKELIHOOD

Typical likelihood of schizophrenia based on 1,033,405 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
NRN1	rs4960155	CT
COMT	rs737865	AA
DPYD	rs1702294	CC
PILRB	rs41295924	CC
H4C13	rs140365013	GG
CBLN3	rs146732081	CC
EFCAB6	rs76365544	GG
EDEM3	rs78444298	GG
ELAPOR2	rs137881681	GG
OR4C12	rs139161789	GG
DLC1	rs143092720	GG
RD3	rs117251211	GG
ARSA	rs113706174	CC
SIX3	rs79028395	GG
ZFP69	rs150863806	GG
CCDC85A	rs74759822	TT
STAT6	rs61937595	CC
/	rs9456970	AA
TEF	rs143426938	GG
RBFOX1	rs79478621	TT
CCDC68	rs34751112	AA
LRRC46	rs11652374	TT
SFXN2	rs12571643	GG
SH3YL1	rs6548238	TC

GENE	SNP	GENOTYPE
CCDC68	rs12966547	GA
NAT16	rs1006507	CT
SP3	rs117073909	GG
SPATS2L	rs140001745	TT
RELN	rs62480723	CC
STAT6	rs34073963	GG
REX1BD	rs72999390	GG
ZNF365	rs11596514	TT
ARL5B	rs7893279	TT
TCF4	rs72934602	GG
FTCDNL1	rs76432012	TT
GRM3	rs35274762	TT
ATP5MC3	rs62184532	GG
ACVR2A	rs114664644	GG
FUT9	rs117178087	CC
THAP8	rs3810450	TT
RELN	rs7341475	GA
TDRD3	rs139971826	GC
EPHX2	rs73229090	AC
ANKRD36	rs7575796	GA
COMT	rs4680	AG
NRN1	rs9379002	TT
NRN1	rs3763180	GG
NRN1	rs1475157	AA
GRIN3A	rs149729514	GG
KLF9	rs11142387	CC

The number of "risk" variants in this table doesn't necessarily reflect your overall result.

Your Recommendations

Your recommendations are prioritized according to the likelihood of it having an impact for you based on your genetics, along with the amount of scientific evidence supporting the recommendation.

You’ll likely find common healthy recommendations at the top of the list because they are often the most impactful and most researched.

DOSAGE		DOSAGE			
1	Methylfolate	400 mcg	2	Yoga	30 minutes
3	Aerobic Exercise (Cardio)	1 hour	4	Ginkgo	120 mg
5	Sarcosine	2 g	6	Huperzine A	50 mcg
7	Music Therapy	30 minutes	8	Glycine	3 g
9	D-Serine		10	N-acetylcysteine (NAC)	1200 mg
11	Berberine	1000 mg	12	Progressive Muscle Relaxation	10 minutes
13	Pet Therapy	30 minutes	14	Citicoline (CDP Choline)	250 mg
15	Pregnenolone	5 mg	16	Dance	30 minutes
17	Art Therapy	1 hour	18	L-Lysine	1000 mg
19	Mindfulness Meditation	30 minutes	20	Hatha Yoga	1 hour
21	Ashwagandha	120 mg	22	Resveratrol	150 mg
23	Avoid Air Pollution		24	Palmitoylethanolamide (PEA)	
25	Laughter Therapy	30 minutes	26	American Ginseng	200 mg
27	Alpha-Lipoic Acid	600 mg	28	Singing	20 minutes
29	Tryptophan	500 mg	30	Keto Diet	
31	Carnosine	1000 mg	32	Bergamot	

33	Alpha-Linolenic Acid (ALA)		34	Morning Sunlight Exposure	30 minutes
35	Gamma-Linolenic Acid (GLA)	200 mg	36	Exercise At Least One Hour a Day	1 hour
37	Dietary Omega-3 Fatty Acids		38	Social Activity	1 hour
39	Mindfulness-Based Stress Reduction (MBSR)	2 hours	40	Dietary Selenium	
41	Support Groups		42	Acceptance and Commitment Therapy (ACT)	
43	EPA (Omega-3)	500 mg	44	Cognitive-Behavioral Therapy (CBT)	

1



Methylfolate

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take an L-methyl folate supplement (400-800 micrograms daily), ideally with a meal, to improve absorption. This dosage is recommended for adults, including pregnant women, to support overall health, especially to reduce the risk of neural tube defects in developing fetuses. Continue daily use as part of your regular supplement routine.

TYPICAL STARTING DOSE

400 mcg

Description

Folate, a B-vitamin, is crucial for DNA synthesis, cell growth, and the formation of red blood cells. Adequate folate intake supports overall health and reduces the risk of neural tube defects during pregnancy.

Vitamin B9 (*folate*) plays an essential role in [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Making DNA
- Metabolism
- Energy production

SelfDecode recommends L-methylfolate as the preferred folate supplement for those who need one. It is superior to folic acid because it doesn't require activation, but the research is still ongoing [\[R\]](#), [\[R\]](#).

How it helps

Several meta-analyses investigated the link between serum folate levels and schizophrenia (SZ). One study found that SZ patients had lower serum folate levels, especially in Asian and European subgroups. Another meta-analysis confirmed lower folate levels in SZ patients, with lower levels observed in the Asian subgroup. Additionally, a meta-analysis revealed decreased serum folate levels in SZ patients overall. However, in one subgroup related to drug use, the association was not significant. Another meta-analysis involving folic acid treatments showed improvement in negative symptoms in SZ patients but no significant differences in other safety outcomes. Lastly, genetic analyses linked MTHFR A1298C and C677T polymorphisms to SZ risk, indicating a potential role in the pathogenesis of the disorder [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

In a review of 41 papers, 98 associations were examined, and only childhood adversities, cannabis use, obstetric complications history, adult stressful events, and low serum folate had robust evidence for a higher risk of schizophrenia spectrum disorders [\[R\]](#).

However, a systematic review found adjunctive folate may be effective and safe for MDD and bipolar manic episodes, but it was not effective in treating schizophrenia [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Supplementation with folate may improve schizophrenic symptoms more in people with your **MTHFR** gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MTHFR	rs1801133	AA	

2



Yoga

IMPACT

3 / 5

EVIDENCE

4 / 5

How to implement

Practice yoga for at least 20 to 30 minutes a day, most days of the week. Choose a style that matches your fitness level and goals, and consider attending a class or using online resources to guide your practice.

TYPICAL STARTING DOSE

30 minutes

Description

Yoga is a mind-body practice that combines physical postures, breathing exercises, and meditation. It enhances flexibility, strength, and mental well-being and is used for stress reduction, relaxation, and overall health improvement.

[Yoga](#) combines breathing, stretching, and relaxation techniques. Practicing yoga may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce [stress](#)
- Improve fitness
- Lower blood pressure and heart rate
- Manage pain

How it helps

In patients with schizophrenia, yoga may improve negative and positive symptoms, mental state, social functioning, and quality of life. According to some studies, it may be as effective as conventional treatments [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

3



Aerobic Exercise (Cardio)

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Engage in at least 150 minutes of moderate-intensity aerobic exercise or 75 minutes of vigorous-intensity activity each week. Distribute this time over at least 3 days per week, avoiding consecutive days of vigorous exercise to allow for recovery.

TYPICAL STARTING DOSE

1 hour

Description

Engaging in regular aerobic exercise, such as running, swimming, or cycling, offers numerous health benefits, including improved cardiovascular fitness, weight management, and mood enhancement. It supports overall physical and mental well-being while reducing the risk of chronic diseases.

Cardio, short for cardiovascular exercise, is any type of physical activity that temporarily increases your heart rate. Examples include **running, cycling, swimming, and brisk walking**.

Regular cardio exercise has many benefits for your overall health. It can help lower your risk of heart disease and diabetes, support weight loss, and improve your mood and energy levels. To get the most out of cardio, try to do it for at **least 30 minutes, 3-5 times a week**.

Interval training is a type of cardio that combines periods of high-intensity training with brief rest periods.

How it helps

Aerobic exercises benefit schizophrenia patients by improving global cognition, attention, working memory, and verbal learning. Group exercise sessions, professional supervision, at least 90 minutes per week, and durations of at least 12 weeks are particularly effective. These findings come from various studies, including meta-analyses of randomized controlled trials. Aerobic exercise guided by occupational therapists also enhances global cognition, especially verbal learning, memory, reasoning, and problem-solving. Physical exercise, particularly yoga, improves symptoms, quality of life, and functioning but has a limited impact on cognition. More standardized, long-term trials are needed for conclusive cognitive effects. Psychosocial interventions show promise for negative symptoms but lack high-quality evidence [\[R, R, R, R, R, R, R\]](#).

4



Ginkgo

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 120 mg of Ginkgo supplement daily, preferably with meals to aid absorption. This dosage is typically split into two 60 mg doses taken in the morning and evening for best results.

TYPICAL STARTING DOSE

120 mg

Description

[Ginkgo](#) (*Ginkgo biloba*) is an ancient tree used in traditional Chinese medicine [\[R\]](#), [\[R\]](#).

According to limited evidence, ginkgo leaf extract may help with [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Anxiety
- Dementia
- Eye problems
- Blood vessel problems
- Vitiligo

How it helps

Six studies (466 ginkgo, 362 placebo cases) used SANS, SAPS/BPRS to measure symptoms. Ginkgo as add-on therapy improved total and negative symptoms significantly (SMD=-0.50) in chronic schizophrenia.[\[R\]](#)

The study examined 46 interventions across 46 studies. Aripiprazole, fluoxetine, and sodium valproate were effective for psychosis symptoms, while memantine helped with negative symptoms. Some results were based on poor-quality studies. Certain antipsychotics, antidepressants, lithium, Ginkgo biloba, and electroconvulsive therapy showed potential. Antipsychotics had similar results in mixed treatment comparisons [\[R\]](#).

A review of 8 studies involving 1033 patients found that Gb extract (EGb) as an adjuvant therapy to antipsychotics improved total and negative symptoms in chronic schizophrenia. Safety concerns and limited generalizability due to single-race trials were noted, calling for further research [\[R\]](#).

In a 12-week study involving 299 schizophrenia patients with tardive dyskinesia (TD), EGb (240 mg/day) showed significant improvement in TD severity (AIMS) and reduced adverse drug reactions (TESS) compared to the control group. No difference in PANSS total score or discontinuation rates was observed [\[R\]](#).

5



Sarcosine

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take sarcosine as an oral supplement, typically in powder form. The common dosage ranges from 2 grams to 3 grams per day, usually divided into two equal doses taken in the morning and evening. It is recommended to continue this regimen for at least 4 to 6 weeks to observe effects.

TYPICAL STARTING DOSE

2 g

Description

Sarcosine is a naturally occurring amino acid derivative that has been studied for its potential role in cognitive function and mental health.

How it helps

Four meta-analyses (the largest one with 40 trials and 4937 patients) concluded that supplementation with sarcosine may improve negative and total symptoms of schizophrenia, both alone and when used as an add-on to to non-clozapine antipsychotics [\[R, R, R, R\]](#).

6



Huperzine A

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a Huperzine A supplement daily, starting with a low dose of about 50 micrograms (mcg) in the morning, and gradually increase the dosage based on tolerance, not exceeding 200 mcg per day. It's recommended to cycle the supplement, taking it for a duration of 2-4 weeks followed by a break of 1 week to prevent tolerance build-up.

TYPICAL STARTING DOSE

50 mcg

Description

Huperzine A is a compound extracted from Chinese club moss and is sometimes used in supplements for its potential cognitive-enhancing properties. It is believed to support memory and cognitive function, though its effectiveness can vary among individuals.

Huperzine A is an alkaloid found in Chinese club moss (*Huperzia serrata*). Its cognitive-enhancing effects may be due to its involvement in inhibiting the breakdown of acetylcholine, a neurotransmitter that is important for memory and learning [\[R\]](#).

People take huperzine A supplements for a variety of purposes, including [\[R\]](#):

- Improving memory and cognitive function
- Reducing anxiety and depression

How it helps

A meta-analysis of 12 trials and 1117 participants concluded that huperzine A as an add-on to conventional treatments improves cognitive function in patients with schizophrenia [\[R\]](#).

7



Music Therapy

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Engage in music therapy sessions for at least 30 minutes a day, three times a week. These sessions can involve listening to music, playing an instrument, singing, or writing songs, facilitated by a certified music therapist if possible.

TYPICAL STARTING DOSE
30 minutes

Description

Music therapy is a therapeutic approach that uses music to address physical, emotional, cognitive, and social needs. It can improve mental health, enhance emotional expression, and support overall well-being.

[Music](#) therapy is a form of therapy that involves making, reflecting on, and/or listening to music. It can be applied individually or in groups and may not require the presence of a therapist [\[R\]](#).

Music therapy provides tools for body relaxation and positive imagery. It aims to improve communication, quality of life, and well-being [\[R\]](#), [\[R\]](#).

How it helps

Three meta-analyses (the largest one with 18 trials and 1215 participants) concluded that music therapy used as an add-on to conventional treatments improves total symptoms, mood symptoms, negative symptoms, positive symptoms, social functioning, and quality of life, especially in those with chronic schizophrenia [\[R\]](#), [\[R\]](#), [\[R\]](#).

Music therapy may help by stimulating the brain in a way that helps manage symptoms like hallucinations and muddled thoughts.

8



Glycine

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 3 to 5 grams of glycine supplement per day with water, preferably before bedtime for sleep improvement or spread throughout the day for general health benefits. Continue indefinitely as needed, but consult a healthcare provider for long-term use beyond three months.

TYPICAL STARTING DOSE

3 g

Description

Glycine is an amino acid that may have calming and anti-inflammatory effects, potentially benefiting sleep quality and joint health.

If you can't get enough glycine from food sources, glycine supplements are available. Daily doses of up to **6 g** have been safely used for up to **4 weeks**. Consult your doctor before supplementing.

How it helps

Multiple trials of 90 patients with schizophrenia found that supplementation with glycine (0.2-0.8 g/kg body weight/day) improves negative symptoms and cognitive deficit. Glycine further enhanced the effectiveness of risperidone and olanzapine in a trial of 17 patients. However, a placebo-controlled trial of 20 patients found glycine ineffective. Moreover, it reduced the effectiveness of clozapine in 2 placebo-controlled trials of 49 patients [[R](#), [R](#), [R](#), [R](#), [R](#), [R](#), [R](#), [R](#), [R](#)].

9



D-Serine

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take d-serine as a dietary supplement in doses ranging from 30 to 120 milligrams per kilogram of body weight per day. It is typically consumed in capsule or powder form mixed with water or another beverage. Start with the lower end of the dosage range and adjust based on tolerance and effectiveness, not exceeding the recommended maximum unless directed by a healthcare provider.

Description

D-serine is an amino acid that plays a role in brain function and may be used in supplemental form to support cognitive health.

Serine is a non-essential amino acid that we generally get from our diet through protein sources. It is key to the production of proteins, enzymes and muscle tissue. Serine is needed for the proper metabolism of fats and fatty acids. It also helps in the production of antibodies [\[R\]](#).

Serine is used as a natural moisturizing agent in some cosmetics and skin care products, as well as for certain psychiatric and neurological disorders [\[R\]](#), [\[R\]](#).

How it helps

Meta-analyses suggest that people with schizophrenia may have lower levels of D-serine in their blood. This reduction in D-serine may be related to the development of schizophrenia symptoms, but further research is needed [\[R\]](#), [\[R\]](#).

Research also suggests that D-serine, in combination with standard therapy, may improve schizophrenia symptoms, including negative and total symptoms. However, effects may vary based on the specific therapy used [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: *High doses of D-serine (120 mg/kg/day or about 8 g/day) may damage the kidneys. Make sure to consult your doctor before taking D-serine, especially if you have kidney disease [\[R\]](#).*

10



N-acetylcysteine (NAC)

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take 600 mg of N-Acetylcysteine (NAC) supplement daily with water. It can be taken at any time of the day, but try to take it at the same time each day for best results.

TYPICAL STARTING DOSE
1200 mg

Description

NAC is a supplement that contains a form of the amino acid cysteine, a protein building block that your body uses to make the antioxidant glutathione. It is used for its potential antioxidant properties and its ability to support lung, gut, and mental health.

[N-acetylcysteine](#) (NAC) is converted to cysteine in the body. Cysteine is a protein building block (amino acid) that helps make the antioxidant glutathione [\[R\]](#).

People take NAC to potentially support [\[R\]](#), [\[R\]](#):

- Mental health
- Ovarian health and pregnancy outcomes
- Lung health
- Gut health

How it helps

In a systematic review, seven studies (220 participants on N-acetylcysteine, 220 on placebo) found that after 24 weeks, N-acetylcysteine improved Positive and Negative Syndrome Scale scores and working memory [\[R\]](#).

In another review of six trials, N-acetylcysteine showed potential for reducing negative symptoms and total psychopathology ratings in schizophrenia but had small, possibly insignificant effects on working memory [\[R\]](#).

A systematic search of 56 trials found N-acetylcysteine most effective in psychosis symptom severity (ES: 1.00), particularly in early-phase schizophrenia. Other agents showed no significant effects [\[R\]](#).

Another meta-analysis of six trials found N-acetylcysteine improved psychopathology in schizophrenia but had limited effects in bipolar disorder and major depressive disorder. Adverse reactions and discontinuation rates were similar in NAC and control groups [\[R\]](#).

11



Berberine

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 500 mg of berberine two times a day before meals. Continue this regimen for up to three months, then evaluate its effects with your healthcare provider.

TYPICAL STARTING DOSE

1000 mg

Description

Berberine is a compound found in certain plants, known for its potential to support blood sugar control and heart health.

[Berberine](#) is an active compound of some plants used in traditional medicine, such as [\[R\]](#):

- European barberry
- Oregon grape
- Goldenseal
- Chinese goldthread
- Tree turmeric

Berberine is also available as a supplement. People use it to help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Diabetes
- High cholesterol
- High blood pressure
- PCOS

How it helps

In a series of studies involving schizophrenia patients, berberine demonstrated significant health benefits, including weight, BMI, and metabolic symptom reduction without exacerbating psychotic symptoms or causing serious side effects. It effectively lowered cholesterol, insulin levels, and insulin resistance, and improved negative symptoms potentially through anti-inflammatory effects. Additionally, berberine altered intestinal flora, reducing *Firmicutes* and increasing *Bacteroidetes*, in patients treated with olanzapine over 12 weeks [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

12



Progressive Muscle Relaxation

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Set aside at least 10-15 minutes daily in a quiet, comfortable spot where you won't be disturbed. Start by tensing the muscles in your feet for 5 seconds, then relax for 30 seconds, and progressively work your way up through the major muscle groups of your body, tensing then relaxing each for 5 and 30 seconds respectively.

TYPICAL STARTING DOSE

10 minutes

Description

Progressive Muscle Relaxation is a relaxation technique involving the systematic tensing and releasing of muscle groups to reduce muscle tension, stress, and anxiety. Regular practice can lead to improved physical and mental relaxation.

Progressive muscle relaxation is a relaxation technique focused on releasing muscle tension. In this technique, you focus on tensing and relaxing different parts of your body, one after the other, to relieve stress [R](#), [R](#)].

It is common to start with the toes and slowly work your way up to the neck and head. Try to focus on a single muscle group at a time (for example, the calf muscles). Tense these muscles for 5-10 seconds, then relax for 20-30 seconds before moving on to the next muscle group [R](#), [R](#)].

How it helps

In 2 non-placebo-controlled trials of 98 patients with acute schizophrenia, receiving progressive muscle relaxation training alleviated anxiety. Similarly, receiving one or two sessions of progressive muscle relaxation session reduced acute feelings of stress and anxiety, while improving well-being, in 2 non-placebo-controlled trials of 172 patients with schizophrenia. The combination of progressive muscle relaxation and education improved quality of life, functional disability, and positive symptoms in a non-placebo-controlled trial of 64 patients [R](#), [R](#), [R](#), [R](#), [R](#)].

13



Pet Therapy

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Engage with a pet, such as a dog or cat, for at least 15-30 minutes a day. This can include activities like playing, petting, or simply sitting together. It's beneficial to do this regularly, aiming for daily interactions, to maximize the emotional and physical health benefits.

TYPICAL STARTING DOSE

30 minutes

Description

Pet therapy, also known as animal-assisted therapy, involves the interaction between trained animals and individuals to provide emotional and physical benefits. Spending time with therapy animals, typically dogs or cats, can reduce stress, improve mood, and enhance overall well-being by promoting relaxation and social interaction, making it particularly beneficial for people facing mental health challenges or chronic conditions.

Animal-assisted therapy, also known as **pet therapy**, involves human-animal interaction to foster physical and emotional healing and provide social support. This therapy may use different animals, such as [R](#), [R](#):

- Dogs
- Horses
- Dolphins

Animal-assisted therapy may involve touching, playing, grooming, and talking with the animal [R](#).

How it helps

In a non-placebo-controlled trial of 90 patients with schizophrenia, receiving animal-assisted therapy (60 min/week for 12 weeks) improved social functioning and quality of life [R](#).

Similarly, dog-assisted therapy (1x/week for 12 weeks) improved lower extremity strength and social skills, but not cognitive function, agility, or mobility, in a non-placebo-controlled trial of 40 patients with schizophrenia [R](#).

In a non-placebo-controlled trial of 10 elderly patients with schizophrenia and 10 matched controls, receiving animal-assisted therapy with cats and dogs for 12 months improved mobility, interpersonal contact, and communication, and reinforced activities of daily living, including personal hygiene and independent self-care [R](#).

Receiving animal-assisted therapy for 2 months improved all measures except for social support and negative psychiatric symptoms in a non-placebo-controlled trial of 30 inpatients with schizophrenia [R](#).

14



Citicoline (CDP Choline)

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 250 to 1000 mg of citicoline (CDP choline) daily, in the morning with or without food. For best results, continue this supplement regimen daily for at least 6 weeks to 3 months.

TYPICAL STARTING DOSE

250 mg

Description

Citicoline is a compound that may have cognitive-enhancing properties and is sometimes used as a dietary supplement to support brain function and memory. It's believed to promote neural health and cognitive performance.

CDP-choline is a molecule naturally produced by the body. It is important for cell structure and function. It also contributes to the production of the chemical messenger [acetylcholine](#) [R, R].

The supplement form of CDP-choline is called [citicoline](#). It may support brain and eye health. It may also help with drug addictions [R, R].

How it helps

Supplementation with citicoline (500-2000 mg/day) helped improve positive and negative symptoms in several trials on patients with schizophrenia. Citicoline worked better in combination with galantamine [R, R, R, R, R, R].

In a placebo-controlled trial of 66 patients, citicoline (2500 mg/day) as an add-on to risperidone further improved negative symptoms [R].

Citicoline may help by activating a specific receptor (alpha7 nicotinic acetylcholine receptor) in the brain.

15



Pregnenolone

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Consult your doctor about optimal dosage and precautions before taking pregnenolone.

TYPICAL STARTING DOSE

5 mg

Description

Pregnenolone is a steroid hormone produced by the body, often considered a precursor to other hormones like estrogen and testosterone. It may support cognitive function and mood.

How it helps

In a study involving patients with schizophrenia, pregnenolone treatment showed positive effects. Patients receiving pregnenolone demonstrated significant improvements in SANS scores compared to those receiving a placebo. However, there were no significant differences in cognitive scores between the two groups. Additionally, adjunctive pregnenolone reduced negative symptoms and improved patient outcomes, particularly in those not taking mood stabilizers. Another trial found that pregnenolone improved functional capacity in participants with schizophrenia, especially in communication skills. Overall, pregnenolone showed promise as a therapeutic option for schizophrenia, particularly in addressing negative symptoms and functional capacity [R, R, R, R].

Three studies explored the use of pregnenolone as an adjunctive treatment for schizophrenia and schizoaffective disorder. Pregnenolone showed promise in improving positive symptoms, reducing extrapyramidal side effects, enhancing attention, working memory, and visual attention deficits. Further research is needed to confirm its clinical benefits and broader applications in these disorders [R, R, R].

Please note: *Pregnenolone may interact with some medications such as benzodiazepine sedatives, especially when consumed for an extended time. Talk to your doctor before taking pregnenolone* [R].

How to implement

TYPICAL STARTING DOSE

30 minutes

Description

- Ballet
- Zumba
- Belly dancing
- Hip hop
- Salsa

Dancing is a fun, creative, and relaxing activity. It can also provide a range of health benefits, improving your heart health, brain health, fitness, and more.

How it helps

Quantitative data showed no clinical change with DMT, but qualitative findings suggest improved psychosocial functioning and symptom management for schizophrenia patients [R].

Participants in the DMT group showed significant symptom reduction in various areas, including overall symptoms, psychological discomfort, negative symptoms, and positive symptoms compared to the TAU group. Qualitative findings supported these results, but there were differing opinions on resistance [R].

17



Art Therapy

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Participate in art therapy sessions, which can include activities such as painting, sculpting, or drawing, for 1-2 hours per week. These sessions can be done either in group settings guided by a trained art therapist or individually, depending on your comfort level and goals. It is beneficial to engage in this practice consistently for several months to observe the therapeutic benefits.

TYPICAL STARTING DOSE

1 hour

Description

Art therapy is a type of therapy that encourages free self-expression and reflection through [\[R\]](#):

- Painting
- Drawing
- Clay modeling

It may be combined with mindfulness. Mindfulness is the practice of being aware of the present moment without any judgment [\[R\]](#).

Art therapy is used to improve [\[R\]](#):

- Self-esteem
- Self-awareness
- Emotional resilience
- Social skills

How it helps

Multiple systematic reviews and randomized controlled trials have explored the use of art therapy as a complementary treatment for schizophrenia. The evidence remains inconclusive, with very low certainty about its clinical effectiveness. Some studies suggest that art therapy when added to standard care, may improve therapy adherence and social functioning but does not consistently impact the quality of life. Therapists and clients generally view it as a beneficial intervention, though based on limited research. However, larger trials have shown that group art therapy does not lead to significant improvements in global functioning, mental health, or cost-effectiveness compared to standard care alone, regardless of the severity of symptoms or patient preferences [\[R, R, R, R, R, R\]](#).

18



L-Lysine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take an L-lysine supplement of 1,000 to 1,500 mg per day, divided into two or three doses, with meals to avoid stomach upset. This regimen can be ongoing for individuals looking to support general health or for specific conditions as advised by a healthcare provider.

TYPICAL STARTING DOSE

1000 mg

Description

A **lysine supplement** of 38 mg/kg/d can be taken to meet daily needs not achieved through diet. This typically is in the form of L-lysine and comes in tablets from 500-1000mg.

How it helps

Lysine may help reduce symptom severity in those with schizophrenia. It may help with positive symptoms, negative symptoms, and general psychopathology [\[R\]](#), [\[R\]](#)

19



Mindfulness Meditation

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice mindfulness meditation for 10-20 minutes daily. Find a quiet, comfortable place to sit or lie down, then focus on your breath, observing thoughts and sensations without judgment. Consistency is key, so try to incorporate it into your daily routine, perhaps in the morning or before bed.

TYPICAL STARTING DOSE

30 minutes

Description

Mindfulness meditation involves focused attention on the breath or a specific point of focus to cultivate mindfulness and reduce stress. Regular meditation practice is associated with improved mental clarity, emotional regulation, and overall well-being.

How it helps

A meta-analysis of 10 studies with 1094 participants found mindfulness-based interventions, alongside standard treatments, effectively improved schizophrenia symptoms. Improvements were noted in overall symptom intensity, positive and negative symptoms, functioning level, and illness awareness, showing these interventions as a viable treatment comparable to cognitive-behavioral therapy [\[R\]](#).

Practicing mindfulness can help reduce stress and improve focus, potentially alleviating some of the cognitive and affective symptoms of schizophrenia.

20



Hatha Yoga

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice Hatha Yoga for 60 minutes at least twice a week. Choose a quiet, comfortable space and consider guided sessions for beginners or those unfamiliar with the poses. Consistency over a period of months to years is beneficial for appreciating its full effects.

TYPICAL STARTING DOSE

1 hour

Description

Hatha yoga is a gentle and accessible form of yoga that combines physical postures, breathing exercises, and meditation. Practicing hatha yoga regularly can promote flexibility, stress reduction, and overall physical and mental well-being.

How it helps

A single-blinded, randomized controlled study in Japan assigned outpatients with schizophrenia or related psychotic disorders to either a yoga group receiving weekly Hatha yoga sessions for 8 weeks or a control group undergoing regular treatment. The study found no significant differences in resilience, symptoms, or stress markers between the two groups, possibly due to session duration, intensity, and chronic illness focus [R].

21



Ashwagandha

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 250-600 mg of ashwagandha supplement daily. It can be consumed with water or a meal, depending on your preference or as advised by a healthcare provider.

TYPICAL STARTING DOSE

120 mg

Description

[Ashwagandha](#) (*Withania somnifera*) is an herb used in traditional Indian medicine. This herb is known as an *adaptogen* because it helps people adapt to stress.

This herb is known as an *adaptogen* because it helps people adapt to stress [R, R].

How it helps

In a placebo-controlled trial of 66 patients with schizophrenia, supplementation with ashwagandha (1000 mg/day) for 12 weeks improved depression and anxiety [R].

The use of ashwagandha (1000 mg/day) as an add-on to antipsychotic medication for 12 weeks further improved negative, general, and total symptoms in a non-placebo-controlled trial of 66 patients with schizophrenia [R].

22



Resveratrol

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 150-500 mg of resveratrol as a supplement daily, preferably with meals to enhance absorption. This dosage range is based on studies for various health benefits, and it's advised to not exceed 500 mg per day without medical supervision.

TYPICAL STARTING DOSE

150 mg

Description

Resveratrol is a natural compound found in red grapes, red wine, and some berries. It is known for its potential antioxidant properties and its role in promoting heart health.

[Resveratrol](#) is an antioxidant found mainly in [\[R\]](#):

- Berries
- Red grapes
- Red wine
- Peanuts

It’s purported to have anti-inflammatory and antioxidant effects [\[R, R, R\]](#).

How it helps

In 2-placebo-controlled trials of 71 patients with schizophrenia, supplementation with resveratrol (200 mg/day) for 4-8 weeks improved negative symptoms and prevented lipid profile damage [\[R, R\]](#).

23



Avoid Air Pollution

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Stay indoors on days when air quality indexes (AQI) indicate high pollution levels, which are often reported by weather services or government environmental agencies. **Install air purifiers** in your home, especially in bedrooms, to reduce indoor pollutants. Limit outdoor exercise when air pollution warnings are issued, opting for indoor activities instead.

Description

Avoiding air pollution by reducing exposure to pollutants in the environment is essential for respiratory and overall health. It can help lower the risk of respiratory diseases, cardiovascular conditions, and other health issues associated with poor air quality.

While city life is convenient in a lot of ways, it comes with some health hazards. Cars, factories, and other sources increase air [pollution](#) [\[R\]](#).

Air pollution plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Lung disease
- Heart disease
- Diabetes
- Asthma
- Skin conditions

How it helps

Air pollution may increase the risk of schizophrenia relapses in people with certain gene variants.

 PERSONALIZED TO YOUR GENES

People with your [YWHAB](#) gene variant may be at increased risk of schizophrenia relapses, especially if they are exposed to air pollution [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
YWHAB	rs6031849	TG	

24



Palmitoylethanolamide (PEA)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

For managing pain and inflammation, take 300mg to 1,200mg of palmitoylethanolamide (PEA) in divided doses throughout the day, preferably with meals to enhance absorption. This regimen should be followed for at least 6 weeks to evaluate its effectiveness.

Description

Palmitoylethanolamide (PEA) is a naturally occurring fatty acid amide. It is a compound found in various tissues of animals, including humans. PEA has been a supplement for the past couple of decades, and is utilized for its potential anti-inflammatory and pain-relieving properties.

[Palmitoylethanolamide](#) (PEA) is a compound naturally made by the body to help combat inflammation [\[R\]](#).

It’s also made by plants and other animals. Good sources of PEA include [\[R\]](#):

- Soy lecithin
- Soybeans
- Egg yolk
- Peanuts

How it helps

In a placebo-controlled trial of 50 patients with schizophrenia, supplementation with PEA (600 mg/day, 2x/day) for 8 weeks as an add-on to risperidone improved negative symptoms [\[R\]](#).

25



Laughter Therapy

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Dedicate at least 15-30 minutes a day to watch, listen to, or participate in activities that make you laugh, such as watching a comedy show, attending a stand-up comedy event, or engaging in laughter yoga sessions. Consistently incorporate these laughter-inducing activities into your daily routine for an ongoing period to harness the health benefits of laughter.

TYPICAL STARTING DOSE

30 minutes

Description

Laughter therapy has been shown to improve cardiovascular health, reduce stress, and boost the immune system. It can also help to improve mood, relieve pain, and increase social bonding.

How it helps

In a non-placebo-controlled trial of 29 inpatients with schizophrenia, viewing humorous movies daily for 3 months improved morale, mood, and mental status [\[R\]](#).

Laughter therapy promotes the release of endorphins, which increase overall well-being and can help in reducing schizophrenia symptoms like anxiety or depression.

26



American Ginseng

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 200-400 mg of American ginseng extract daily, preferably with a meal to enhance absorption. This regimen can be followed continuously for up to 12 weeks, after which a break or reassessment of the need to continue should be considered.

TYPICAL STARTING DOSE

200 mg

Description

American ginseng is a perennial herb native to North America, particularly regions of the United States and Canada. It is valued for its potential health benefits, including immune system support, stress reduction, and enhanced cognitive function, with the primary active compounds being ginsenosides.

[Ginseng](#) is a plant people use to improve [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Sexual function
- Immunity
- Fatigue
- Attention

There are many different types of ginseng. The most common ones are [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Korean red ginseng, also called Asian ginseng (*Panax ginseng*)
- [American ginseng](#) (*Panax quinquefolius*)
- Chinese notoginseng, also called Sanchi (*Panax notoginseng*)

How it helps

An American Ginseng extract (HT1001) improves working memory and reduces extrapyramidal symptoms in individuals with schizophrenia, potentially improving functional outcomes in this population [\[R\]](#).

27



Alpha-Lipoic Acid

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 600-1800 mg of alpha-lipoic acid daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

600 mg

Description

[Alpha-lipoic acid](#) is a natural antioxidant found in almost every cell in your body. People use alpha-lipoic acid to help with issues like skin aging, weight loss, and high blood sugar [\[R, R, R\]](#).

People use alpha-lipoic acid to help with [\[R, R, R, R\]](#):

- Complications of high blood sugar
- Skin aging
- Weight loss
- Carpal tunnel syndrome

How it helps

A 16-week study using 100 mg/d doses of ALA in schizophrenia patients showed no significant improvement in various parameters compared to a placebo group. Notably, ALA treatment led to decreased blood cell counts, warranting further investigation [\[R\]](#).

In a pilot trial of patients with treatment-resistant schizophrenia (TRS), add-on alpha-lipoic acid (ALA) improved negative symptoms (SANS) and reduced oxidative stress, suggesting its potential as an adjunctive treatment for TRS [\[R\]](#).

28



Singing

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Dedicate at least 20 minutes to singing daily, choosing songs that you enjoy and that allow for a range of vocal expressions. This practice can be done alone, with a group, or during a dedicated singing class, with consistency being key for potential health benefits.

TYPICAL STARTING DOSE

20 minutes

Description

Singing is a form of expression where you use your voice to create music. It also exercises your lungs and heart by providing a kind of workout for your respiratory system. By doing so, it improves your cardiovascular performance and overall health, reducing stress and boosting your mood.

How it helps

In a non-placebo-controlled trial of 76 patients with schizophrenia, a 1-month course of music therapy including music listening and active singing diminished patients' negative symptoms, increased their ability to converse with others, reduced their social isolation, and increased their level of interest in external events [R].

29



Tryptophan

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of tryptophan supplement daily. This dosage can be taken all at once, preferably before bedtime to support sleep, or as directed by a healthcare professional.

TYPICAL STARTING DOSE

500 mg

Description

Tryptophan is an essential amino acid found in various protein-rich foods. It serves as a precursor for serotonin, a neurotransmitter that plays a role in mood regulation. Tryptophan is used in dietary supplements to potentially support mood and sleep disorders, although its effectiveness can vary among individuals.

[Tryptophan](#) is an amino acid. Your body uses it to make proteins and some hormones. **Humans can’t make tryptophan, so we need to get it from protein-rich foods** [\[R, R\]](#).

Your body uses tryptophan to make [serotonin](#) and [melatonin](#). **These brain chemicals are important for mood and sleep** [\[R, R\]](#).

An average adult needs at least **250-425 mg** of tryptophan per day, which is the amount you can get from [\[R\]](#):

- A pound of turkey or chicken
- Two cups of milk
- An ounce of canned tuna
- Two cups of oatmeal

Other foods high in tryptophan include **cheddar cheese, peanuts, pumpkin seeds, and seafood**. Most people get enough tryptophan from their diets, but supplements are also available [\[R, R\]](#).

How it helps

Compared with placebo, l-tryptophan had a beneficial effect on memory functions but not on the patients' psychotic state or on the side effects of medications. [\[R\]](#)

30



Keto Diet

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Adopt a diet that consists of about 70-80% fat, 10-20% protein, and 5-10% carbohydrates. Eliminate or significantly reduce the intake of sugar and starches like bread, pasta, rice, and potatoes, focusing instead on high-fat foods like meats, fatty fish, eggs, butter, and healthy oils, as well as low-carb vegetables like leafy greens. This dietary pattern should be maintained consistently for a period of at least 3-4 weeks to achieve ketosis, after which it can be adjusted based on individual goals and responses.

Description

The keto diet is a high-fat, low-carbohydrate eating plan designed to induce a state of ketosis in the body, where it primarily burns fat for energy. It is often used for weight loss and managing certain medical conditions.

The ketogenic diet, or the ‘keto’ diet, is rich in fat and restricts carb intake [\[R\]](#), [\[R\]](#).

On the ketogenic diet, 50 g of carbs or less are consumed per day. Around 55-80% of the calories come from fat [\[R\]](#).

The ketogenic diet depletes the body of sugars like glucose. When people fast or eat very little carbs, the body makes less insulin. In response, the body starts using fat for energy.

When the body only uses fat for energy, molecules called ketones are formed. This state is called *ketosis*.

The ketogenic diet may help with:

- Seizures [\[R\]](#)
- Excess weight [\[R\]](#)
- Diabetes [\[R\]](#), [\[R\]](#)

How it helps

A 4-month pilot study involving 23 people with schizophrenia and bipolar disorder revealed notable improvements in both metabolic and psychiatric health after following a ketogenic diet. Those who followed the diet closely saw reductions in weight, waist circumference, and visceral fat. There were also decreases in insulin resistance and triglycerides. Psychiatric severity also improved along with life satisfaction and sleep quality [\[R\]](#).

31



Carnosine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500 mg of carnosine twice daily with meals. Continue this regimen for at least 2 to 4 weeks to start noticing benefits. It can be taken as a capsule or powder form mixed with water or juice.

TYPICAL STARTING DOSE

1000 mg

Description

Carnosine is a naturally occurring compound found in muscle tissues and certain foods. It is believed to have antioxidant properties and may support muscle function and overall cellular health.

[Carnosine](#) (β -alanine-l-[histidine](#)) is a compound naturally produced by the body. We also get it from eating meat and fish. Carnosine is abundant in our [\[R\]](#), [\[R\]](#):

- **Muscles**
- Heart
- Brain
- Nose

Carnosine has several important functions in the body, including [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Being an antioxidant
- Improving muscle function
- Removing toxic metals

During exercise, **carnosine may prevent muscle fatigue and boost athletic performance**. It may also help improve sugar metabolism [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

In a study with 63 patients with chronic schizophrenia on risperidone, L-carnosine (2g/day) for 8 weeks resulted in greater improvement in negative and total PANSS scores compared to placebo. It effectively reduced primary negative symptoms without differing in other measures or side effects [\[R\]](#).

In a 3-month study with 75 stable adults with schizophrenia, L-carnosine (2g/day) showed improved set-shifting speed and strategic efficiency but more adverse events compared to a placebo, indicating potential as an adjunctive treatment for executive dysfunction in schizophrenia [\[R\]](#).

In a study of 100 schizophrenia patients with predominant negative symptoms, L-Carnosine (400 mg initially, increased to 800 mg) showed significant improvement in attention scores at 24 weeks. However, there were no significant differences in negative symptoms, suggesting potential as an executive function enhancer in schizophrenia [\[R\]](#).

32



Bergamot

IMPACT

0 / 5

EVIDENCE

1 / 5

How to implement

Take 500-1000mg of bergamot extract supplements once daily, preferably in the morning with a meal for better absorption.

Description

Bergamot is a citrus fruit known for its aromatic peel, which is used to make essential oils and flavorings. It is sometimes used in aromatherapy and may have potential mood-enhancing effects when diffused or applied topically.

Bergamot (*Citrus bergamia*) is a bitter citrus fruit native to southern Italy. The fruit is inedible due to its sour taste. The peel is used to make essential oil, and the juice is used to make extracts. People use bergamot in food, supplements, and cosmetics [\[R\]](#).

How it helps

In [2 uncontrolled trials of 35 patients with schizophrenia on second-generation antipsychotics](#), supplementation with bergamot polyphenolic fraction (1000 mg/day) for 4-8 weeks **improved cognitive function (especially perseverative errors) and reduced body weight** [\[R\]](#), [\[R\]](#).

33



Alpha-Linolenic Acid (ALA)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate foods high in alpha-linolenic acid (ALA) into your daily diet. This means eating about a tablespoon (14 grams) of flaxseeds or chia seeds, a quarter cup (30 grams) of walnuts, or using one tablespoon of flaxseed oil every day.

Description

Alpha-linolenic acid (ALA) is a type of omega-3 fatty acid found in plant-based sources like flaxseeds, chia seeds, and walnuts. It is essential for maintaining heart and brain health and is considered a healthy dietary fat.

How it helps

Please note: *There is no evidence from controlled clinical trials to support this recommendation. It is included based on uncontrolled clinical trials, animal or cell studies, or non-scientific criteria. Please take this recommendation with a grain of salt until more research is available.*

Genetically predicted higher ALA levels may be associated with reduced risk of schizophrenia (MR study) [\[R\]](#):

A study found that higher levels of long-chain omega-3 and omega-6 fatty acids were linked to a reduced risk of schizophrenia (DHA OR: 0.83, 95% CI: 0.75-0.92), while short-chain fatty acids were associated with an increased risk (alpha-linolenic acid OR: 1.07, 95% CI: 0.98-1.18). These effects remained consistent in various analyses, and DHA's protective effect persisted even after considering other lipids (OR: 0.84, 95% CI: 0.71-1.01).

34



Morning Sunlight Exposure

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Expose yourself to natural sunlight for at least 20 to 30 minutes immediately after waking up. Try to do this consistently every day to help regulate your body's internal clock.

TYPICAL STARTING DOSE

30 minutes

Description

Exposure to natural morning light can help regulate circadian rhythms, improve mood, and enhance wakefulness, as it signals the body to produce serotonin, a hormone associated with well-being and alertness.

How it helps

Two meta-analyses compared schizophrenia and bipolar I disorder individuals to healthy controls. Schizophrenia individuals were more evening-oriented than controls but not different from bipolar I disorder individuals, unaffected by demographics or assessment scale [\[R\]](#).

35



Gamma-Linolenic Acid (GLA)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 200-300 mg of gamma-linolenic acid (GLA) daily as a supplement, usually available as capsules, for a period of 6 months to assess its effects on your condition. It is best absorbed when taken with food.

TYPICAL STARTING DOSE

200 mg

Description

GLA is an omega-6 fatty acid found in certain plant oils, such as evening primrose oil and borage oil. It may have anti-inflammatory properties and can potentially benefit skin health, hormonal balance, and overall well-being.

Your body naturally makes **gamma-linolenic acid (GLA)** to help control inflammation. It’s a polyunsaturated fatty acid (PUFA) found in plants like [R](#), [R](#):

- [Borage](#)
- Blackcurrant
- Evening primrose

People mainly use GLA for [R](#):

- Skin conditions
- Dry eyes
- Hair and nail care

How it helps

Please note: *There is no evidence from controlled clinical trials to support this recommendation. It is included based on uncontrolled clinical trials, animal or cell studies, or non-scientific criteria. Please take this recommendation with a grain of salt until more research is available.*

Genetically higher GLA may be causally associated with a reduced risk of schizophrenia. [R](#)

- The study found that lower consumption of arachidonic acid (AA) and ω-6 LCPUFAs is linked to higher schizophrenia incidence rates. Mendelian randomization suggests AA and gamma-linolenic acid (GLA) may be protective factors against schizophrenia. No significant associations were found with docosahexaenoic acid (DHA) or other ω-3 PUFAs. This suggests a potential role for dietary supplementation in schizophrenia prevention and treatment.

36



Exercise At Least One Hour a Day

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Dedicate a minimum of 60 minutes to moderate-intensity activities such as brisk walking, swimming, or cycling. Do this most days of the week, aiming for at least 5 days to optimize benefits.

TYPICAL STARTING DOSE

1 hour

Description

[Exercise](#) can do wonders for your health. It can help you lose weight, improve your heart health, boost your mood, and more [\[R\]](#).

There are many ways you can be active. You can walk, run, swim, dance, or play team sports. **Everything counts, and it's never too late to start!**

Try to get at least **60 minutes of moderate physical activity on most days**, including walking. **Getting a mix of cardio (min 150 min/day) and strength training (min 2 times a week) may be optimal.**

How it helps

Regular exercise can help improve mood, reduce stress, and enhance cognitive functions in people with schizophrenia. Physical activity is known to increase endorphins and reduce symptoms like depression and anxiety, which are often associated with schizophrenia.

37



Dietary Omega-3 Fatty Acids

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate foods high in omega-3 fatty acids into your diet daily. This includes eating fish such as salmon, mackerel, and sardines at least twice a week. Alternatively, include a tablespoon of flaxseed oil or chia seeds in your daily diet.

Description

[Omega-3 fatty acids](#) are some of the healthiest fats we can eat. They help lower inflammation and protect the heart, brain, and eyes. Our bodies produce less omega-3s than we need for optimal health, so it's important to get enough through food or supplements [\[R\]](#), [\[R\]](#), [\[R\]](#).

There are three major types of omega-3s: ALA, EPA, and DHA. **EPA and DHA are vital for mental and heart health** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Fatty fish are rich in EPA and DHA. They include [\[R\]](#):

- Salmon
- Tuna
- Herring
- Sardines

For optimal health, try to get at least **two servings of fatty fish per week**. Fish oil supplements are available for those who don't eat fish regularly [\[R\]](#).

How it helps

Omega-3 fatty acids may help to manage certain symptoms and improve overall brain health. They play a role in neurodevelopment and may have neuroprotective effects.

38



Social Activity

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Participate in group activities or gatherings with friends, family, or community members at least twice a week. This could include joining clubs, attending local events, or scheduling regular outings with friends. Aim for these social engagements to last at least an hour each time to foster meaningful connections and conversations.

TYPICAL STARTING DOSE

1 hour

Description

Engaging in social activities, such as spending time with friends and family or participating in group events, can have numerous mental and emotional health benefits. It helps reduce feelings of loneliness, enhances mood, and promotes a sense of belonging and well-being.

Social activities involve physical and mental activities with others that you enjoy and find meaningful. There are plenty of ways to stay socially active and maintain social well-being as you age.

Research has shown that a socially active lifestyle [\[R\]](#):

- Makes you less likely to develop certain chronic conditions.
- May promote a longer lifespan.
- Can improve mood and mental health.
- Can improve memory and other aspects of cognition.

How it helps

Engaging in structured social activities can improve social skills and reduce the feelings of isolation often experienced by individuals with schizophrenia.

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Mindfulness-Based Stress Reduction (MBSR)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Enroll in an 8-week MBSR course, which includes a weekly 2.5-hour class, one all-day class after the sixth week, and 45 minutes of daily home practice guided by assignments and instructional recordings.

TYPICAL STARTING DOSE

2 hours

Description

Mindfulness-Based Stress Reduction (MBSR) is a structured program that teaches mindfulness techniques to reduce stress and improve overall mental and emotional health. MBSR has been shown to help individuals cope with chronic pain, anxiety, and other stress-related conditions.

How it helps

MBSR helps reduce stress and improve well-being by teaching individuals how to focus on the present moment. This practice has been shown to reduce negative symptoms and improve overall mental health in people with schizophrenia.

40



Dietary Selenium

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Incorporate selenium-rich foods into your daily diet, such as Brazil nuts, seafood, and organ meats. Eating 1-2 Brazil nuts a day can meet the daily selenium requirement for most adults.

Description

Selenium is a trace mineral found in various foods, including nuts, seeds, and seafood. It is an essential nutrient that plays a crucial role in maintaining the body's antioxidant defenses and supporting thyroid function.

[Selenium](#) supports [\[R\]](#):

- Reproduction
- Thyroid function
- DNA production
- Immune response

Adults should be getting **55 micrograms** of selenium per day. Good sources of selenium include [\[R\]](#):

- Brazil nuts
- Fish
- Meat
- Eggs
- Rice
- Oatmeal

How it helps

Lower blood selenium levels are causally associated with an increased risk of schizophrenia in Europeans [\[R\]](#).

Please note: *There is no evidence from controlled clinical trials to support this recommendation. It is included based on uncontrolled clinical trials, animal or cell studies, or non-scientific criteria. Please take this recommendation with a grain of salt until more research is available.*

41



Support Groups

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Attend a support group meeting related to your condition at least once a week. These meetings can be found through local hospitals, online platforms, or health organizations specific to your condition. Participation can be in-person or virtual, depending on what is offered and your preference.

Description

Support groups are gatherings of individuals facing similar challenges, where they can share experiences, emotions, and coping strategies. They offer emotional support, camaraderie, and valuable insights for those dealing with various health conditions or life circumstances.

Support groups involve people with similar struggles helping each other. Support groups usually take place in a casual setting. During sessions, people share their [\[R\]](#):

- Knowledge
- Experiences
- Coping strategies
- Understanding of the recovery process

Support groups may help support recovery from addictions [\[R\]](#).

How it helps

Support groups provide social interaction and emotional support, which can improve mood, reduce feelings of isolation, and provide coping strategies from people experiencing similar challenges.

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Acceptance and Commitment Therapy (ACT)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Participate in Acceptance and Commitment Therapy (ACT) sessions with a licensed therapist weekly for a minimum of 8 to 12 weeks. During this period, engage in daily ACT exercises at home as recommended by your therapist, such as mindfulness practices and writing exercises that help you connect with your values and accept your thoughts without judgment.

Description

ACT is a type of psychotherapy that focuses on accepting one's thoughts and feelings while committing to actions that align with personal values. It is used to improve mental well-being and treat conditions like anxiety and depression.

How it helps

ACT is a form of psychotherapy that encourages patients to embrace their thoughts and feelings rather than fighting or feeling guilty for them. It can help improve psychological flexibility and reduce the impact of negative symptoms.

43



EPA (Omega-3)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take an EPA (Eicosapentaenoic acid) supplement in the form of fish oil or algae oil capsules, aiming for a dosage of 500-1000 mg per day. This should be taken with a meal to improve absorption, and continuous daily use is recommended for general heart health and to support mental well-being.

TYPICAL STARTING DOSE

500 mg

Description

EPA is an omega-3 fatty acid found in fish oil supplements and fatty fish like salmon. It is known for its anti-inflammatory properties and is associated with cardiovascular health, mood regulation, and cognitive function.

[Omega-3 fatty acids](#) are some of the healthiest fats we can eat. They help lower inflammation and protect the heart, brain, and eyes. Our bodies produce less omega-3s than we need for optimal health, so it's important to get enough through food or supplements [\[R, R, R\]](#).

There are three major types of omega-3s: ALA, EPA, and DHA. **EPA and DHA are vital for cognition and mental health** [\[R, R\]](#).

The body can produce eicosapentaenoic acid (EPA) from alpha-linolenic acid (ALA), another type of omega-3 fatty acid found in plants. We can also get EPA directly from food sources such as oily fish, shellfish, and algae. EPA helps make DHA. [\[R, R, R\]](#).

Please note: *Fish oil can interact with blood thinners (like aspirin, Plavix, Coumadin). Consult your doctor before taking fish oil* [\[R\]](#).

How it helps

EPA, an omega-3 fatty acid, can have anti-inflammatory effects that benefit brain function. It has been shown to improve some symptoms of schizophrenia.

44



Cognitive-Behavioral Therapy (CBT)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Schedule weekly sessions with a certified cognitive-behavioral therapist for a period of 5 to 20 weeks. Engage actively in exercises assigned by your therapist both during sessions and as homework to apply CBT strategies to daily life.

Description

Cognitive-behavioral therapy (CBT) is a psychotherapeutic approach that has been effective in treating various mental health conditions by helping individuals identify and change negative thought patterns and behaviors. It is widely used for conditions like depression, anxiety, and phobias.

Psychotherapy (talk therapy) involves talking about your health with a licensed therapist. It may improve the way you react to certain experiences [\[R\]](#).

Talk therapy is a great way to improve many conditions, including [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Depression
- Anxiety disorders
- PTSD
- OCD
- Substance use disorder
- Bipolar disorder

Cognitive-behavioral therapy (CBT) is a type of talk therapy. CBT aims to change the way you think about your life and yourself. Through CBT, a therapist can help you develop healthy coping mechanisms [\[R\]](#).

How it helps

CBT can assist in addressing the negative thought patterns associated with schizophrenia and improve coping strategies to manage symptoms.

Next Steps

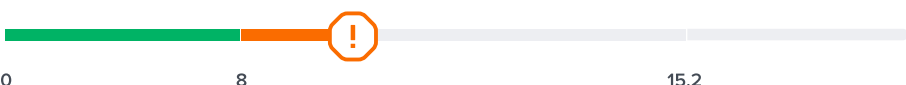
Remember, your genes only tell one important part of your health story!

Now that you've seen your DNA-based results for this health topic, let's take a look at other contributing factors.

Your lab results

Your lab results are impacted by the combined effect of your genes, environment and lifestyle.

Lab tests will give you the best picture of your current health status, while your genes provide insight into your health predispositions and which recommendations are best for you.

	SHBG	39.3 nmol/L		9 Nov 2025
	Prolactin	9.83 ng/mL		9 Nov 2025
	Vitamin D, 25-Hydroxy, Total	58.59 ng/mL		9 Nov 2025
	Insulin, Fasting	9.08 uU/mL		9 Nov 2025