

Anxiety

DNA Health Report

REPORT CATEGORY —



Sample Client

Report date: 03 September 2025

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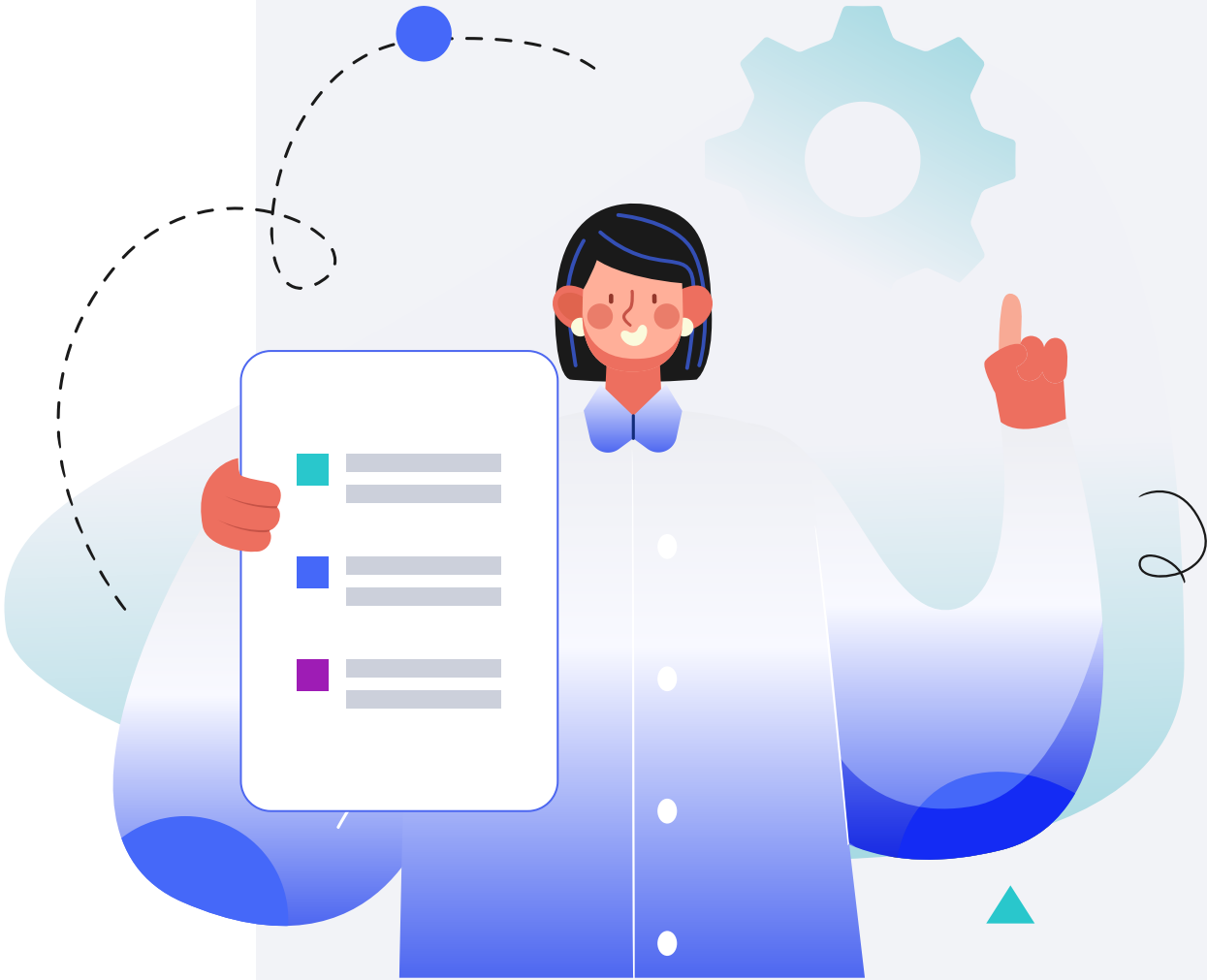
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Personal information

NAME	
Sample Client	
SEX AT BIRTH	
Male	
HEIGHT	
5ft 9"	175.0cm
WEIGHT	
165lb	75.0kg

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.



Introduction

Have you ever been afraid to ride the bus? Go to the grocery store? Make an important phone call? If so, then you know what anxiety feels like.

It’s normal to feel fear in response to a real threat. In fact, fear helps you react quickly to keep yourself safe [\[R\]](#).

It’s also completely normal to feel anxious about things from time to time. Occasional anxiety can help us solve problems and make better life decisions [\[R\]](#).

However, people with *anxiety disorders* often worry about normal activities. This anxiety is frequent and intense enough to impact their daily life [\[R\]](#), [\[R\]](#).

Anxiety disorders are more common than any other mental health condition. Over 250 million people around the world are struggling with anxiety [\[R\]](#), [\[R\]](#).

Fortunately, **there are many strategies that can help calm a nervous mind.**

This report focuses on the genetics of anxiety. Read more to find out:

- **How your genetics play a role in anxiety**
- **Your genetic risk score based on over 800,000 genetic variants**
- **Personalized recommendations based on your genetics**

About Anxiety

Key Takeaways:

- Up to **65%** of the differences in people's risk of getting anxiety may be due to genetics.
- Other risk factors include traumatic and stressful events, thyroid problems, heart problems, and substance use problems.
- If your genetic risk is high, managing stress and substance use may help reduce overall risk.
- Anxiety can cause issues with sleep, fatigue, the gut, stress, focus, and mood.
- Click the **Recommendations** tab for potential dietary and lifestyle changes and **next steps** for relevant labs.

It's completely normal to feel anxious about things from time to time. Occasional anxiety can help us solve problems and make better life decisions. However, people with *anxiety disorders* often worry about normal activities, which impacts their daily life [R, R].

Two parts of your brain process threats [R, R, R]:

- The *amygdala* helps activate the "fight or flight" response
- Frontal areas of your brain override the amygdala and help you respond logically

People experience anxiety when they have too much activity in their amygdala or too little in frontal brain areas [R, R].

If you're anxious, you may experience [R]:

- Restlessness
- Fatigue
- Problems concentrating
- Short temper
- Muscle tension
- Heavy sweating
- Trembling



TYPICAL LIKELIHOOD

Typical likelihood of anxiety based on 807,582 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
ATP8B4	rs2413998	AA
/	rs16838980	GG
DNAH8	rs4714177	AA
NUP107	rs11177321	GG
FKBP4	rs2302729	CC
PREPL	rs1067327	CC
RNF180	rs6295	GG
IL20RB	rs17374749	GG
PID1	rs10498237	GG
/	rs10092548	AA
C6ORF118	rs9295300	AA
NOX4	rs17221829	CC
NOX4	rs10830352	GG
GABRG2	rs211037	TT
MARCHF4	rs955816	GG
IRX6	rs2397376	TT
HTR2A	rs12584920	GG
COMT	rs4680	AG
ERCC6L2	rs7867155	CC
COMT	rs4633	TC

- Gut problems
- Heart rate changes
- Sleep problems

People are more likely to have these symptoms if they experience [\[R\]](#):

- Traumatic or stressful events
- Thyroid problems
- Heart problems
- Substance use problems

Another important risk factor for anxiety is genetics.

About 30-65% of the differences in people's chances of getting anxiety can be attributed to genetics. Genes linked to anxiety may influence the levels and activity of different brain chemicals, such as [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- [Serotonin](#) and [dopamine](#), which make you feel happy ([SLC6A4](#), [HTR1A](#), [TPH2](#), [MAOA](#))
- [GABA](#), which calms the mind ([GABRG2](#))
- Stress hormones such as [cortisol](#) ([MC4R](#), [MAOA](#))
- Substances that promote new brain cell growth ([BDNF](#), [NGF](#))

GENE	SNP	GENOTYPE
SLC6A2	rs3785151	CG
CES1	rs1566652	GT
GAD1	rs3828275	TC
GAD1	rs701492	CT
GAD1	rs769407	GC
GAD1	rs3791878	GT
IL18R1	rs2058622	AG
GAD1	rs3791851	TC
ZPLD1	rs1709393	TC
DMD	rs921896	C
CAMTA1	rs11120917	CT
OR5P3	rs7112002	AC
SRBD1	rs2344662	AC
ADRB1	rs1034258	GA
SSH2	rs6354	TT
ESR1	rs9340799	GA
ESR1	rs2234693	CT
AKAP6	rs17406568	GG
OSCP1	rs906228	AC
AGPAT4	rs3798943	CC
CCNY	rs2086153	CT
COX7B2	rs6447514	TT
DDT	rs755622	GG
TULP1	rs3800373	AA
RGS2	rs10801153	GG
RNF220	rs12138940	AG
MC4R	rs10871777	AA
TBL1X	rs5934574	T
TACR1	rs3771841	AG
DSCAM	rs1040315	AG

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	Psychotherapy	1 hour	2	Cognitive-Behavioral Therapy (CBT)	
3	Progressive Muscle Relaxation	10 minutes	4	Acceptance and Commitment Therapy (ACT)	
5	Meditation	30 minutes	6	Music Therapy	30 minutes
7	Mindfulness Meditation	30 minutes	8	Kava	200 mg
9	Galphimia	350 mg	10	Tryptophan	500 mg
11	Dietary Tryptophan		12	Dietary Zinc	
13	Laughter Therapy	30 minutes	14	Mindfulness	30 minutes
15	Cognitive Bias Modification	15 minutes			

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Psychotherapy

IMPACT

5 / 5

EVIDENCE

5 / 5

How to implement

Schedule and attend regular sessions with a licensed psychotherapist, typically once a week for 50-60 minutes, over a period of several months to years depending on your individual needs and progress. Consistency is key, and the duration can vary widely based on personal goals and the type of psychotherapy being practiced.

TYPICAL STARTING DOSE

1 hour

Description

Psychotherapy is a broad term for therapeutic approaches that address mental and emotional health issues through talking and counseling. It can be used to treat a wide range of psychological and emotional challenges.

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

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

- Depression
- Anxiety disorders
- PTSD
- OCD
- Weight problems
- Eating disorders

Cognitive-behavioral therapy (CBT) is a type of psychotherapy. 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

Cognitive-behavioral therapy (CBT) is the best type of psychotherapy for anxiety. Health experts worldwide recommend CBT as the “gold standard” treatment for anxiety [\[R, R, R\]](#).

CBT can soothe anxiety by helping you [\[R, R, R\]](#):

- Cope with stress
- Control negative thoughts and emotions
- Improve social skills
- Build stronger relationships

Other types of psychotherapy that may help with anxiety include:

- **Cognitive bias modification:** teaches you not to focus on negative information [\[R, R\]](#)
- **Art therapy:** helps you manage and express your feelings through art [\[R, R, R\]](#)
- **Animal-assisted therapy:** involves human-animal interaction to foster emotional healing [\[R, R\]](#)



PERSONALIZED TO YOUR GENES

People with anxiety may benefit more from CBT if they carry your [CNR1](#) gene variant [\[R\]](#). Ask your doctor about CBT.

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
CNR1	rs806365	CC	

2



Cognitive-Behavioral Therapy (CBT)

IMPACT

5 / 5

EVIDENCE

5 / 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 (8-20h of sessions) is the best type of psychotherapy for anxiety. Health experts worldwide recommend CBT as the “gold standard” treatment for anxiety [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

CBT can soothe anxiety by helping you [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Cope with stress
- Control negative thoughts and emotions
- Improve social skills
- Build stronger relationships

Studied forms of CBT include [\[R\]](#), [\[R\]](#):

- In-person
- Internet-based
- Self-guided

Progressive Muscle Relaxation

IMPACT

4 / 5

EVIDENCE

4 / 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 a non-placebo-controlled trial of nursing students, practicing progressive muscle relaxation, both alone and combined with listening to nature sounds, reduced anxiety and pulse rates [R].

In a non-placebo-controlled trial of 162 patients with a primary diagnosis of anxiety disorder or major depressive disorder, both progressive muscle relaxation and auricular acupuncture were equally effective at improving tension, anxiety, and anger/aggression. Progressive muscle relaxation failed to improve memory performance but did reduce state anxiety in a non-placebo-controlled trial of 15 elderly adults performing a memory task [R, R].

A meta-analysis of 12 trials and 1147 cancer patients found that progressive muscle relaxation improves anxiety and other health-related outcomes. Another meta-analysis (4 studies and 224 patients) found that progressive muscle relaxation improves anxiety in patients with COVID-19 [R, R].

Progressive muscle relaxation also reduced anxiety in multiple trials on 128 patients undergoing dental procedures, 126 pregnant women, 141 women undergoing in vitro fertilization, 142 caregivers, 106 patients with schizophrenia, 80 burn patients, 25 patients with atopic dermatitis, 90 women with ectopic pregnancy, 187 cancer patients, 54 parents of children with cancer, 155 patients with COPD and other breathing disorders, 152 patients with obstructive sleep apnea, 84 extremity surgery patients, 70 patients undergoing upper and lower gastrointestinal surgery, and 93 patients undergoing a knee arthroscopy [R, R, R, R, R, R, R, R, R, R, R, R, R, R, R, R, R, R, R, R].

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Acceptance and Commitment Therapy (ACT)

IMPACT4 / 5

EVIDENCE4 / 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

A meta-analysis of 48 trials found acceptance and commitment therapy effective at improving anxiety and depression. This therapy may also work when delivered online according to a meta-analysis of 39 trials [\[R\]](#), [\[R\]](#).

Acceptance and commitment therapy may be as effective as cognitive-behavioral therapy in people with anxiety disorders and OCD [\[R\]](#).

Acceptance and commitment therapy helps individuals accept their thoughts and feelings rather than fighting or feeling guilty for them. This can reduce stress and anxiety.

5

Meditation

IMPACT4 / 5

EVIDENCE4 / 5

How to implement

Set aside 10-20 minutes each day in a quiet space without distractions to practice meditation. Focus on your breath or perform guided meditation using an app or audio track.

TYPICAL STARTING DOSE

30 minutes

Description

Meditation is a mindfulness practice that can reduce stress, improve mental clarity, and promote relaxation. Regular meditation is associated with numerous mental and emotional health benefits, including reduced anxiety and enhanced emotional well-being.

Meditation is a relaxation technique that trains your mind to focus and redirect your thoughts. Some of the main types of meditation are [\[R\]](#):

- Mindfulness
- Focused
- Transcendental
- Mantra
- Moving

People use meditation to improve [\[R\]](#), [\[R\]](#):

- Stress and anxiety
- Mood
- Sleep disturbances
- Pain

How it helps

A meta-analysis of 14 trials and 862 participants concluded that meditation is a bit more effective than relaxation techniques at improving anxiety, both in the short term and at 12-month follow-up [\[R\]](#).

Interestingly, a review of 41 trials and 2,993 participants concluded that mindfulness is the only form of meditation that reliably improves anxiety [\[R\]](#).

Meditation may help by stimulating relaxation and enhancing emotional regulation.

How to implement

TYPICAL STARTING DOSE

30 minutes

Description

[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

[illegible]

Music therapy may help by stimulating the brain to produce feel-good chemicals like serotonin.

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Mindfulness Meditation

IMPACT

4 / 5

EVIDENCE

3 / 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 review of 41 trials and 2,993 participants concluded that mindfulness is the only form of meditation that reliably improves anxiety [\[R\]](#).

Mindfulness meditation may help by reducing rumination and promoting relaxation.

8



Kava

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Take a 200 mg kava supplement daily, ideally in the evening or as directed by healthcare provider, for periods of stress or anxiety. Do not exceed the recommended dosage without medical advice.

TYPICAL STARTING DOSE
200 mg

Description

Kava is a traditional Pacific Island beverage known for its calming effects. When consumed in moderation, kava may help reduce anxiety and promote relaxation.

[Kava](#) (*Piper methysticum*) is a tropical plant. An extract from the root of this plant is also simply called kava [\[R\]](#).

Kava root is an important part of South Pacific traditional medicine. **People there use it to relax an anxious mind** [\[R\]](#).

According to limited research, kava may help with [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Sleep disorders
- Mood disorders
- Drug withdrawal

How it helps

Supplementation with kava extract (150-300 mg/day) improved anxiety, insomnia, depression, sleep quality, cognitive function, tension, and restlessness in 10 placebo-controlled trials of 582 people with generalized anxiety disorder and other anxiety issues [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Kava (100-200 mg/day) also reduced anxiety associated with menopause in 2 placebo-controlled trials of 108 women [\[R\]](#), [\[R\]](#).

Two meta-analyses found kava safe and effective at improving anxiety, especially in women and younger patients. However, the most recent meta-analysis found the evidence promising but insufficient to confirm the benefits of kava for generalized anxiety disorder [\[R\]](#), [\[R\]](#), [\[R\]](#).

Kava contains compounds called kavalactones that can promote relaxation and decrease anxiety by altering the activity of neurotransmitters in the brain.

Please note: kava is banned in Europe, the UK, and Canada due to its potential for abuse and association with liver damage. Always consult with your doctor before trying out kava - especially if you have any known liver problems [\[R\]](#), [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Supplementation with kava may reduce anxiety more in people with your [SLC6A1](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
SLC6A1	rs2601126	CT	

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Galphimia

IMPACT

4 / 5

EVIDENCE

2 / 5

How to implement

Take a galphimia glauca extract supplement, commonly in capsule or tablet form, at a dosage of 350 mg daily. This should be consumed with water, ideally in the morning for a period of up to 12 weeks to help alleviate symptoms of anxiety.

TYPICAL STARTING DOSE
350 mg

Description

Galphimia is an herbal remedy traditionally used to alleviate symptoms of allergies and promote respiratory health. Some studies suggest that it may have anti-inflammatory properties and could be beneficial for managing allergic reactions.

Galphimia (*Galphimia glauca*) is a plant used in traditional Mexican medicine [\[R\]](#).

Today, people use it to help relieve anxiety [\[R\]](#).

How it helps

Galphimia extract (0.4-0.7 mg/day for 4-12 weeks) may improve anxiety [\[R\]](#), [\[R\]](#), [\[R\]](#).

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Tryptophan

IMPACT

4 / 5

EVIDENCE

2 / 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

Tryptophan deficiency (induced by only drinking a tryptophan-free beverage or eating tryptophan-free amino acid tablets for 24 hours) was associated with increased anxiety levels in 3 placebo-controlled trials of 64 healthy people [\[R, R, R\]](#).

Similarly, it increased anxiety and frequency of panic attacks in a placebo-controlled trial of 39 patients with panic disorder. Tryptophan depletion also increased anxiety in a placebo-controlled trial of 14 people with social anxiety disorder but not in one of 12 people with generalized anxiety disorders [\[R, R, R\]](#).

Nevertheless, a meta-analysis of 21 studies found insufficient evidence that tryptophan depletion induces anxiety and warned about the high heterogeneity and low quality of the studies carried out so far [\[R\]](#).

High-tryptophan diets reduced anxiety in 3 non-placebo-controlled trials of 25 healthy people, 7 patients with social phobia, and 30 elderly people with depression [\[R, R, R\]](#).

Similarly, tryptophan supplementation (6 g/day or 50 mg/kg/day) for ~2 weeks reduced anxiety in 2 placebo-controlled trials of 37 women with severe PMS and 31 people on smoking-cessation therapy [\[R, R\]](#).

A meta-analysis of 11 trials concluded that increasing daily tryptophan intake by 0.14-3 g may improve anxiety and mood in healthy people [\[R\]](#).

Tryptophan is a precursor to serotonin, a neurotransmitter important for mood regulation.

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Dietary Tryptophan

IMPACT

4 / 5

EVIDENCE

2 / 5

How to implement

Increase your intake of tryptophan-rich foods in your daily diet. Examples include turkey, chicken, milk, cheese, yogurt, eggs, bananas, tofu, salmon, and nuts such as almonds and peanuts. Aim to incorporate these foods into at least one meal per day to meet the dietary recommendation for tryptophan.

Description

Tryptophan is an essential amino acid that plays a crucial role in serotonin production, contributing to mood regulation and sleep quality. Adequate tryptophan intake through diet supports emotional well-being and overall mental health.

[Tryptophan](#) is an amino acid, or a protein building block. **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 [\[R\]](#).

How it helps

Tryptophan deficiency is associated with increased anxiety. However, the evidence is mixed. Some studies didn’t find a link between tryptophan deficiency and anxiety [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Increasing tryptophan intake (by 140-6,000 mg/day) may help improve anxiety and mood. Studied options include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- High-tryptophan diets
- Tryptophan supplementation (6 g/day for 2 weeks)

12



Dietary Zinc

IMPACT

4 / 5

EVIDENCE

2 / 5

How to implement

Incorporate foods high in zinc, such as beef, poultry, seafood (especially oysters), beans, nuts, and whole grains, into your daily diet. Aim for the recommended dietary allowance of zinc, which is 11 mg per day for adult men and 8 mg per day for adult women.

Description

Dietary zinc is essential for the body. It helps our immune system fight off bacteria and viruses, plays a role in healing wounds, and is essential for our sense of taste and smell. Without enough zinc, these systems may not work as effectively as they should.

How it helps

Two studies of 2089 workers and 142 students associated low dietary intake of zinc with approximately 3 times higher risk of anxiety [R, R].

Similarly, a study of 297 elderly participants found that a high dietary intake of zinc halved the risk of anxiety [R].

13



Laughter Therapy

IMPACT

3 / 5

EVIDENCE

4 / 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

Two meta-analyses (the largest one with 29 studies and 2964 participants) concluded that laughter therapy decreases anxiety levels. Clown therapy improves anxiety scores, state anxiety, and pre-operative distress of hospitalized children and state anxiety of their parents according to 2 meta-analyses (the largest one with 19 studies) [R, R, R, R].

Laughter therapy may help by triggering the release of endorphins and improving blood flow while lowering stress hormones, and inflammation.

14

Mindfulness

IMPACT

3 / 5

EVIDENCE

4 / 5

How to implement

Set aside 5-10 minutes each day to practice mindfulness meditation. Find a quiet place, assume a comfortable seated position, close your eyes, focus on your breathing, and observe your thoughts and sensations without judgment.

TYPICAL STARTING DOSE

30 minutes

Description

Mindfulness involves paying focused and non-judgmental attention to the present moment. It can reduce stress, improve emotional regulation, and enhance overall mental clarity and well-being.

Mindfulness is the practice of being aware of the present moment. When practicing mindfulness, a person acknowledges their thoughts, feelings, and sensations without any judgment [R].

Mindfulness and other types of [meditation](#) may improve [R]:

- Weight and anxiety
- Low mood
- Sleep disturbances
- Pain
- High blood pressure

How it helps

Mindfulness (1-4 sessions/week for 2-6 months) may improve anxiety by [R, R, R, R]:

- Improving emotional control
- Increasing self-compassion
- Reducing intrusive thoughts

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Cognitive Bias Modification

IMPACT

3 / 5

EVIDENCE

4 / 5

How to implement

Engage in daily sessions of cognitive bias modification exercises for at least 15 minutes. These can involve computerized programs or mobile app-based tasks designed to alter negative thought patterns. Continue this practice for a minimum of 4 to 8 weeks to observe noticeable changes in thought processes.

TYPICAL STARTING DOSE
15 minutes

Description

Cognitive bias modification (CBM) is a psychological technique designed to change automatic cognitive biases or negative thinking patterns associated with mental health issues. It aims to promote more positive thought patterns and emotional well-being.

Cognitive bias modification (CBM), also known as Attentional Bias Training (ABT), is a computer-based therapy that teaches you not to focus on negative information [R, R].

Some people pay more attention to negative information or are more likely to interpret neutral information as threatening. This increases the production of stress hormones and chemical messengers, like [adrenaline](#) and [cortisol](#). CBM aims to “re-train” this attention and interpretation bias [R].

How it helps

Cognitive bias modification (1-8 sessions) may reduce anxiety. However, the benefits are likely small [R, R, R, R, R, R, R].