SelfDecode™

Parkinson's Disease

Disease Report

REPORT CATEGORIES

MENTAL HEALTH

NERVE HEALTH

Sample Client

Report date: 29 July 2025

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Personal information

NAME

Sample Client

SEX AT BIRTH

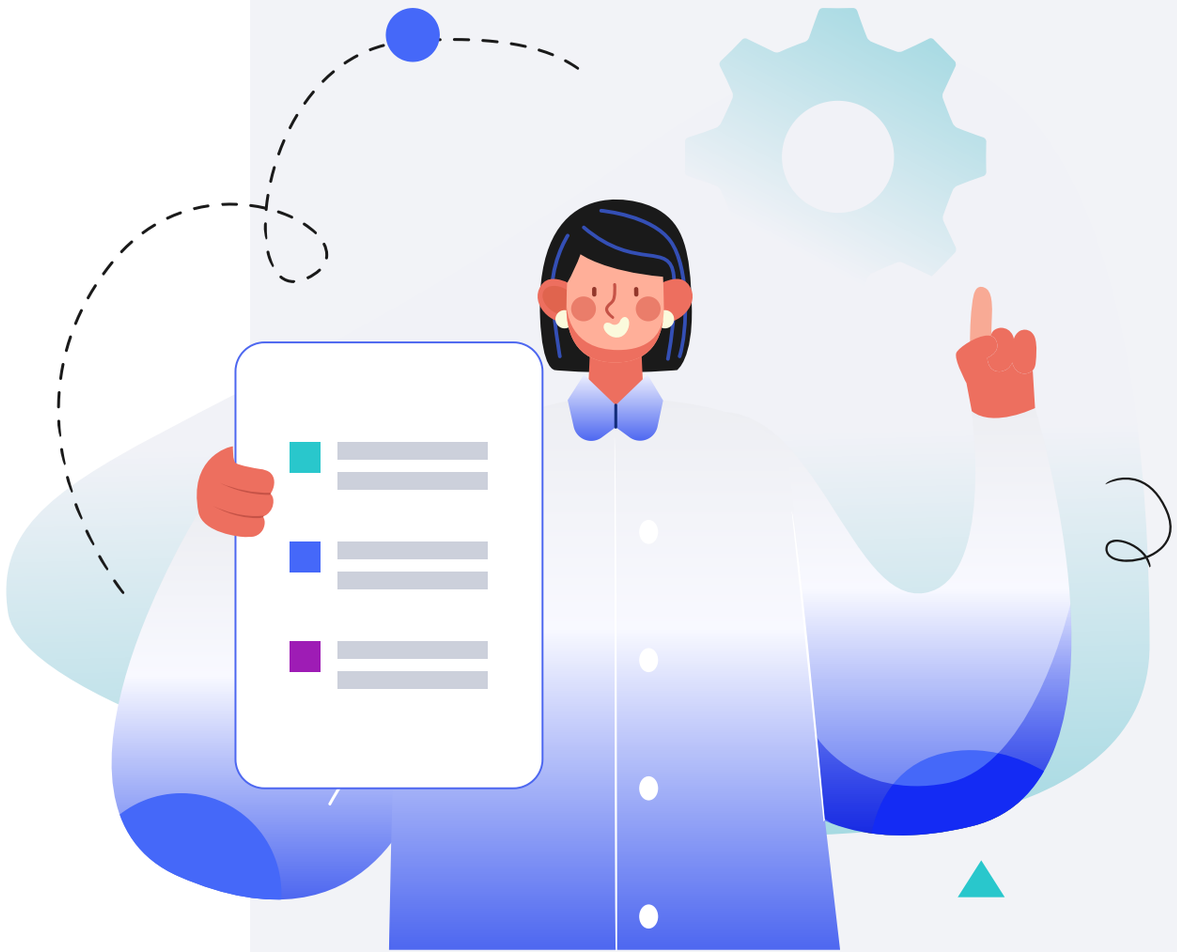
Male

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

Parkinson's disease is a progressive disorder that damages the nerves. This affects a person's ability to control movement, mood, and other brain functions. About **1 million people in the US** have the disease, with 90,000 diagnosed with it each year [R, R].

Symptoms of Parkinson's disease include [R]:

- **Tremors (usually shaking hands)**
- Impaired movement
- A lack of facial expression
- Speech and swallowing difficulties
- Cognitive impairment
- Dementia

There is currently no cure for Parkinson's disease, but medications and other therapies can help manage symptoms and improve quality of life [R].

Longevity Screener

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

8x higher risk

Your odds of developing Parkinson's Disease are 8 times higher than someone with Normal risk.

Your lifetime risk is High

Your 10-year risk is Normal

Summary or results

Your results are indicating a High risk of developing Parkinson's Disease in your lifetime but a Normal risk 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

Key Takeaways:

- About **20-40%** of the differences in people's chances to develop Parkinson's disease may be due to genetics.
- Other risk factors include age (over 60), being male, and toxin exposure.
- PD is an underdiagnosed disease, with about **90,000** diagnosed each year in the U.S.
- PD has no cure, but is managed better the earlier it is diagnosed.
- If you are at high genetic risk be aware of symptoms and talk to your doctor immediately if you notice any.

The causes of Parkinson's disease are not fully understood, but it likely involves a combination of **genetic and environmental factors**. These factors reduce the brain's ability to produce certain chemicals, mainly **dopamine** [R].

About **20-40%** of the differences in people's chances of developing Parkinson's disease may be due to **genetics**. Approximately **15%** of cases have a **family history** of the condition [R, R, R].

Genetically high betaine and choline levels may be causally associated with Parkinson's disease, while genetically high levels of DHA may be causally associated with a lower risk [R, R].

Beyond genetics, other risk factors for Parkinson's include [R]:

- Age: typically over 60
- Sex: men are at a higher risk
- Exposure to toxins like pesticides

MORE LIKELY

More likely to get Parkinson's disease based on 1,031,982 genetic variants we looked at

Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
MAPT	rs17649553	CC
LINGO2	rs10812774	TC
STK39	rs1474055	TT
HLA-DQA2	rs9275326	CC
MCCC1	rs12637471	GG
SNCA	rs356182	AG
TMEM175	rs34311866	TC
FYN	rs943437	AA
TMEM229B	rs1555399	TT
COQ8A	rs4653767	TT
MED13	rs6416935	GG
LRRK2	rs76904798	TC
NDUFAF2	rs2694528	AC
NUCKS1	rs823118	TC
TMEM163	rs6430538	CT
VPS37B	rs11060180	AG
RIT2	rs12456492	AG
ZDHHC2	rs591323	GA
GPNMB	rs199347	AG
GCH1	rs11158026	TC

GENE	SNP	GENOTYPE
IGSF9B	rs329648	TC
FAM47E	rs6812193	TC
SH3GL2	rs13294100	GT
GALC	rs8005172	CT
LSM7	rs62120679	TC
BCKDK	rs14235	AG
DLG2	rs3793947	GA
DRD1	rs686	GA
ADAM15	rs35749011	GG
LINGO2	rs7033345	TT
BAG3	rs117896735	GG
ITIH1	rs143918452	GG
CAMK2D	rs78738012	TT
SIPA1L2	rs10797576	CC
BST1	rs11724635	AA
ZSCAN31	rs9468199	GG
ZSCAN31	rs17767294	AA
TBC1D5	rs4073221	TT
C2CD4A	rs2414739	GG
TOX3	rs4784227	CC
FDFT1	rs2740594	GG
GBF1	rs2296887	TT
MAP4K4	rs34043159	TT

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
1	Dance	30 minutes
2	Strength Training	1 hour
3	Aquatic Exercise	1 hour
4	Aquatic Therapy	30 minutes
5	Physical Therapy	30 minutes
6	Yoga	30 minutes
7	Avoid Pesticide Exposure	
8	Balance And Mobility Training	30 minutes
9	Occupational Therapy	45 minutes
10	Repetitive Transcranial Magnetic Stimulation	
11	Coffee	
12	Dietary Vitamin E	
13	Nerve Stimulation	30 minutes
14	Caffeine	100 mg
15	Tea	

1

Dance

IMPACT 4 / 5

EVIDENCE 5 / 5

How to implement

Engage in dance activities for at least 30 minutes, three times per week. You can choose any form of dance you enjoy, such as ballroom, hip hop, or salsa, and you can dance at home, in a studio, or in a group class setting.

TYPICAL STARTING DOSE

30 minutes

Description

Dancing involves moving your body to music. Many people take dance classes to learn various styles of dance and improve their skills. Examples include:

- 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

Regular exercise is linked to a **25%** lower risk of Parkinson's disease. The risk may be **40%** lower in those who practice intense exercise [R, R].

Dance (1 hour, 2x/week for at least 12 weeks) is one of the best options for people with Parkinson's disease. It may improve [R, R, R, R, R, R, R, R, R]:

- Motor symptoms
- Balance and gait
- Movement
- Cognition and mood

2

Strength Training

IMPACT 4 / 5

EVIDENCE 5 / 5

How to implement

Engage in strength training exercises, such as weight lifting or bodyweight exercises, for 60 minutes per session, 2 to 3 times per week. Ensure you work all major muscle groups and rest each muscle group for at least 48 hours before exercising it again.

TYPICAL STARTING DOSE

1 hour

Description

Strength training, also called resistance or *anaerobic* training, contracts the muscles against an external resistance for short periods of time. This helps gain muscle strength, tone, and mass. This can include activities like weight lifting, pushups, and crunches.

Strength training, also known as resistance training, is a type of physical exercise that uses resistance to build strength, anaerobic endurance, and size [R]. Some of the most common strength training methods include [R]:

- Weight lifting
- Bodyweight exercises like push-ups, pull-ups, squats, and lunges.
- Resistance bands
- Plyometrics or explosive force exercises

The benefits of strength training are numerous, and include [R]:

- Increased muscle strength
- Improved bone health
- Reduced risk of injury
- Improved balance and coordination
- Enhanced mood
- Boost metabolism

Consult with a doctor before starting any new exercise program, especially if you have any health conditions.

How it helps

Regular exercise is linked to a **25%** lower risk of Parkinson’s disease. The risk may be **40%** lower in those who practice intense exercise [R, R].

Strength training is one of the best options for people with Parkinson’s disease. It may improve [R, R, R, R, R, R]:

- Motor symptoms and balance
- Fitness, muscle strength, and flexibility
- Participation in daily activities
- Sleep quality and cognition
- Mental health and quality of life

Programs with sessions of **60-90 minutes, 4 times a week, for 12 weeks** may be most effective [R].

Specific **core exercises** may be particularly helpful for improving balance and posture [R].

3

Aquatic Exercise

IMPACT 4 / 5

EVIDENCE 4 / 5

How to implement

Participate in aquatic exercise sessions, such as swimming or water aerobics, for 60 minutes, 3 to 5 times per week. Ensure the exercise intensity is moderate, allowing you to talk but not sing during the activity. Consistency over time is key, so aim to incorporate this into your weekly routine for at least 3 to 6 months to observe benefits.

TYPICAL STARTING DOSE

1 hour

Description

Aquatic exercise involves physical activity performed in water, such as swimming, water aerobics, or aquatic therapy. It is gentle on the joints, making it suitable for individuals with mobility issues, and can help improve cardiovascular fitness and muscle strength.

Aquatic exercise is any type of low-impact physical activity performed in a pool. In this type of cardio exercise, water helps the body float, which reduces gravity and makes the practice more comfortable and tolerable [R, R].

Compared to land-based exercise, aquatic exercise may be better by [R]:

- Reducing the stress and impact on joints
- Lowering fracture risk

Hence, it is usually **recommended for the elderly**. Aquatic exercise is also suitable for people who don't know how to swim [R].

How it helps

Regular exercise is linked to a **25%** lower risk of Parkinson’s disease. The risk may be **40%** lower in those who practice intense exercise [R, R].

Aquatic exercise may reduce motor symptoms of Parkinson’s disease. According to some studies, it may even be more effective than land-based exercise at improving [R, R, R]:

- Balance and movement
- Fear of falling
- Quality of life

4

Aquatic Therapy

IMPACT 4 / 5

EVIDENCE 4 / 5

How to implement

Participate in aquatic therapy sessions 2-3 times a week for at least 30 minutes. These sessions should be guided by a professional therapist who specializes in aquatic therapy, and the program should be tailored to your specific health condition and physical capabilities.

TYPICAL STARTING DOSE

30 minutes

Description

Aquatic therapy involves performing exercises and rehabilitation activities in a water environment. It is particularly beneficial for individuals recovering from injuries, surgeries, or certain medical conditions, as the buoyancy of water reduces the impact on joints, eases pain, and improves mobility and muscle strength.

How it helps

Aquatic physiotherapy (hydrotherapy) improves motor performance, quality of life, balance, and gait in Parkinson’s patients as effectively as land-based exercises according to 3 meta-analyses (the largest one with 19 studies) [R, R, R].

Similarly, 2 meta-analyses (the largest one with 15 trials) found water-based exercise effective at improving balance, mobility, and quality of life in people with Parkinson's disease [R, R].

5

Physical Therapy

IMPACT 4 / 5

EVIDENCE 4 / 5

How to implement

Attend physical therapy sessions 2-3 times per week for a duration of 4-6 weeks, depending on your specific condition and the advice of your healthcare provider. Each session typically lasts about 30-60 minutes, where a licensed therapist will guide you through targeted exercises, stretches, and possibly other treatments like electrical stimulation or ultrasound therapy.

TYPICAL STARTING DOSE

30 minutes

Description

Physical therapy is a therapeutic practice focused on optimizing physical function and mobility through specialized exercises, manual techniques, and therapeutic modalities. It helps individuals recover from injuries, manage chronic conditions, and improve overall physical well-being by enhancing strength, flexibility, and pain management.

Physical therapy (**physiotherapy**) helps people regain or maintain their ability to move [R].

Physical therapy can involve [R]:

- Joint or muscle exercises
- Corrective movements
- Massage
- Education and advice

People mainly use physical therapy to help with [R, R]:

- Pain and injury
- Stroke recovery
- Chronic health conditions
- Headaches

Mirror therapy uses a mirror placed between the arms or legs. The image of a moving arm or leg gives the illusion of normal movement in the affected one. This therapy stimulates different brain regions and aims to improve mobility [R].

Constraint-induced movement therapy is another type of physical therapy. It consists of restraining the healthy leg or arm to increase the use of the affected one [R].

How it helps

Most health experts say that people with Parkinson’s disease may benefit from physical therapy. It may help improve [R, R, R, R, R, R, R]:

- Motor symptoms
- Balance and gait
- Participation in daily activities
- Mental health and quality of life

Helpful options include:

- Massage [R, R]
- Exercise therapy [R]
- Alexander Technique [R, R, R, R]
- Aquatic physical therapy (hydrotherapy) [R, R, R]

6

Yoga

IMPACT 4 / 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

Regular exercise is linked to a **25%** lower risk of Parkinson's disease [R].

Yoga is a great exercise type for people with Parkinson's disease. It may help them improve [R, R, R, R, R]:

- Motor symptoms
- Flexibility and balance
- Anxiety and depression
- Quality of life

Yoga may be at least as effective as other types of exercise [R, R].

7

Avoid Pesticide Exposure

IMPACT 4 / 5

EVIDENCE 4 / 5

How to implement

Purchase organic produce when possible, wash fruits and vegetables thoroughly under running water, and peel them if not organic. Use natural pest control methods instead of chemical pesticides at home and garden. Limit the use of non-organic lawn and garden chemicals.

Description

Pesticides include all chemicals used to kill weeds, insects, fungi, and microbes. Reducing pesticide exposure involves choosing organic or pesticide-free foods and using natural pest control methods to limit contact with potentially harmful chemical residues. It supports overall health by reducing the risk of pesticide-related health issues.

Pesticides include all chemicals used to kill weeds, insects, fungi, and microbes. They are widely used in agriculture to improve crop yields. Common groups of pesticides include:

- Organophosphates (glyphosate, parathion, malathion, chlorpyrifos, diazinon, phosmet)
- Neonicotinoids (imidacloprid, acetamiprid, thiacloprid, clothianidin)
- Pyrethroids (permethrin, alpha-cypermethrin)

Chronic exposure to pesticides has been linked to:

- Fertility problems [R]
- Cognitive problems [R]
- Alzheimer’s and Parkinson’s disease [R, R]
- Thyroid problems [R]
- Obesity [R]
- DNA damage and cancer [R, R, R]

How it helps

Health experts mention pesticide exposure among risk factors for Parkinson’s disease [R, R].

Studies have linked pesticide exposure to a **25-150% higher risk** of Parkinson’s disease [R, R, R, R, R, R].

Paraquat and **maneb** are among the pesticides with a strong link to this condition [R, R, R].

Pesticides may damage the nerves and cause mutations in genes involved in Parkinson’s disease [R, R, R].

Ways to reduce your pesticide exposure include [R, R]:

- Eating a variety of fruits and vegetables to avoid high exposure to one pesticide
- Buying organic food when possible
- Thoroughly washing and drying your food, even if it’s labeled organic
- Scrubbing or peeling fruits and vegetables when possible
- Discarding the outer layer of leafy vegetables

PERSONALIZED TO YOUR GENES

Exposure to pesticides may cause greater DNA damage in people with your *GSTP1* gene variant [R].
Exposure to pesticides may cause greater DNA damage in people with your *XRCC1* gene variant [R].
Exposure to pesticides may cause greater DNA damage in people with your *PON1* gene variant [R].
Exposure to pesticides may increase the risk of Parkinson's disease more in people with your *PPARGC1A* gene variant [R].
Exposure to pesticides may increase the risk of Parkinson's disease more in people with your *PPARGC1A* gene variant [R].
Exposure to pesticides may cause greater DNA damage in people with your *SOD2* gene variant [R].
Your *ERCC6L2* gene variant may be linked to Parkinson's disease in people exposed to pesticides [R].
The link between pesticide exposure and Parkinson's disease may be stronger in people with your *NOS1* gene variant [R].

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
GSTP1	**rs1695**	AA	●●●○○
XRCC1	**rs25487**	CC	●●●○○
PON1	**rs662**	TT	●●●○○
PPARGC1A	**rs6821591**	TC	●●●○○
PPARGC1A	**rs8192678**	TC	●●●○○
SOD2	**rs4880**	GG	●●●○○
ERCC6L2	**rs591486**	AA	●●●○○
FBXO21	**rs12829185**	CC	●●●○○

8

Balance And Mobility Training

IMPACT 4 / 5

EVIDENCE 3 / 5

How to implement

Incorporate balance and mobility exercises into your routine three to four times per week. Each session should last approximately 30 minutes and include activities such as standing on one foot, walking heel to toe, and tai chi or yoga. Start with simple exercises and gradually increase difficulty as your balance improves.

TYPICAL STARTING DOSE

30 minutes

Description

Balance and mobility training exercises, such as yoga or tai chi, can improve stability and reduce the risk of falls, particularly among older adults. These exercises enhance overall physical function.

How it helps

A meta-analysis of 22 studies and 901 patients with Parkinson's disease found balance training, especially if based on virtual reality, effective at improving balance and mobility [R].

Balance and mobility training can reduce the risk of falls by improving steadiness in individuals with Parkinson's.

9

Occupational Therapy

IMPACT 3 / 5

EVIDENCE 4 / 5

How to implement

Participate in occupational therapy sessions 1-2 times per week for a duration of 45-60 minutes each session. These sessions should be guided by a licensed occupational therapist who will tailor activities to your specific needs. Continue therapy for as long as recommended by your healthcare provider to achieve the best outcomes.

TYPICAL STARTING DOSE

45 minutes

Description

Occupational therapy is a healthcare profession focused on helping individuals of all ages develop or regain skills for everyday activities, improve physical and mental well-being, and enhance overall quality of life.

Occupational therapy helps people do everyday activities. A therapist teaches them new ways and methods to perform the activities. This therapy helps people adapt to issues like chronic pain. It also helps them learn to use assistive devices [R, R].

Occupational therapy aims to help people with injury or illness. It may help with things like [R]:

- Eating without help from others
- Taking part in leisure activities
- Doing office or school work
- Bathing and getting dressed
- Doing laundry or house cleaning

How it helps

Occupational therapy help people with Parkinson’s disease by improving [R, R, R]:

- Participation in daily activities
- Mobility and movement control
- Quality of life

In line with this, some health experts recommend occupational therapy for people with this condition [R, R].

10

Repetitive Transcranial Magnetic Stimulation

IMPACT 3 / 5

EVIDENCE 4 / 5

How to implement

Attend sessions at a certified medical facility, where a healthcare professional will use a coil placed near your head to generate brief magnetic pulses. Typically, sessions occur 5 days a week for 4-6 weeks.

Description

Repetitive transcranial magnetic stimulation (rTMS) is a noninvasive procedure that stimulates the brain to improve symptoms of [R, R]:

- Depression
- Muscle disease
- Parkinson's disease

rTMS delivers several magnetic pulses through an electromagnetic coil placed on the scalp. The pulses stimulate the region of the brain involved in mood and depression [R, R].

This technique is used in people who don’t respond to standard care. rTMS is generally painless and safe when performed by trained professionals [R, R].

How it helps

Multiple meta-analyses found beneficial effects of repetitive transcranial magnetic stimulation on motor symptoms, freezing of gait, cognitive dysfunction, and depression in patients with Parkinson's disease [R, R, R, R, R, R, R, R, R, R, R, R].

Repetitive transcranial magnetic stimulation may help by stimulating the underactive parts of the brain that control movement and cognition.

11

Coffee

IMPACT 3 / 5

EVIDENCE 3 / 5

How to implement

Drink 1 to 3 cups of black coffee daily, preferably in the morning to minimize potential sleep disturbances. Avoid adding sugar or cream to keep it healthy. Continue this habit daily for long-term benefits.

Description

Coffee is a drink extracted from the roasted seeds (beans) of the coffee plant. Coffee consumption, in moderation, has been associated with potential health benefits, including improved alertness, cognitive function, and reduced risk of certain chronic diseases like Parkinson's and type 2 diabetes.

People drink coffee for an energy and mood boost. Caffeine is the main ingredient responsible for these effects [R, R].

Drinking moderate amounts of coffee may also [R, R, R]:

- Improve heart health
- Improve mood
- Help reduce blood sugar

How it helps

Drinking coffee is linked to a lower risk of Parkinson’s disease [R, R, R].

Coffee is the main source of **caffeine**, which seems to protect against this condition. Regular caffeine intake is linked to a 20-30% lower risk of Parkinson’s disease [R, R, R].

Please note: *Too much caffeine (over 400 mg per day) may lead to sleep problems, high blood pressure and cholesterol, fast heart rate, and dependence. If you're pregnant, try to limit caffeine to 200 mg per day* [R, R].

Please note: *polyphenols and tannins from coffee may bind to iron and form insoluble complexes, which reduces iron absorption in the gut. If you have anemia, consult your healthcare provider before using coffee or coffee supplements.*

12

Dietary Vitamin E

IMPACT 3 / 5

EVIDENCE 3 / 5

How to implement

Incorporate foods high in Vitamin E into your daily diet. This includes almonds, hazelnuts, sunflower seeds, and green leafy vegetables such as spinach and broccoli. Aim for a daily intake of 15mg of Vitamin E from your diet, which is roughly a handful of almonds (about 23 almonds) or 2 tablespoons of sunflower seeds.

Description

Dietary vitamin E is a fat-soluble antioxidant vitamin found in nuts, seeds, and vegetable oils. It helps protect cells from oxidative damage and supports immune function.

Vitamin E is an antioxidant important for the immune system and for heart health [R].

Plant-based foods have the most vitamin E. These include [R]:

- Wheat germ
- Sunflower seeds
- Almonds
- Plant oils

Adults need about **15 mg** of vitamin E per day [R].

How it helps

People with high vitamin E levels may have a **30% lower risk** of Parkinson's disease [R].

Likewise, dietary vitamin E may protect against this condition. For every **5-mg increase** in daily vitamin E intake, the risk may be **20% lower**. Vitamin E may protect the nerves against oxidative stress [R, R, R].

Please note: *While dietary vitamin E is generally considered safe, vitamin E supplements have been linked to prostate cancer. They may also not be the best option for people who are pregnant or have heart disease, bleeding disorders, or other conditions. Consult your doctor before taking vitamin E supplements* [R].

13

Nerve Stimulation

IMPACT 3 / 5

EVIDENCE 3 / 5

How to implement

Nerve stimulation can be implemented by daily sessions of 15-30 minutes using a device specifically designed for this purpose. These devices often use electrical currents to stimulate nerves through the skin, which can be adjusted in intensity according to comfort. It's important to consult a healthcare provider for guidance on the specific type of nerve stimulation that may be most beneficial for your condition.

TYPICAL STARTING DOSE

30 minutes

Description

Nerve stimulation techniques involve the use of electrical impulses, like transcutaneous electrical nerve stimulation (TENS) or other methods to activate nerves, potentially providing relief from chronic pain, improving muscle function, and aiding in physical therapy.

Health professionals can stimulate your nerves using different strategies [R].

Many strategies use magnetic fields or electric currents. Examples include [R, R, R]:

- Transcutaneous electrical nerve stimulation (TENS)
- Transcranial direct current stimulation (tDCS)
- Transcranial magnetic stimulation (TMS)
- Transcutaneous auricular vagus nerve stimulation (taVNS)

Nerve stimulation may improve [R, R, R, R, R, R, R, R]:

- Cognition
- Mood
- Pain
- Seizures
- Tinnitus

How it helps

In people with Parkinson’s disease, **repetitive transcranial magnetic stimulation (rTMS)** may improve [R, R, R, R, R, R, R, R, R, R]:

- Motor symptoms
- Cognition
- Depression

Increasing the number of pulses may cause larger effects [R, R, R, R, R, R].

Transcranial direct current stimulation (tDCS) may provide small, short-term improvements for people with Parkinson’s disease. However, some studies didn’t find any benefits [R, R, R].

Please note: *Nerve stimulation may not be safe for people that have metal implanted devices, have epilepsy, or are pregnant. Some types of nerve stimulation should also be avoided by people with bleeding disorders or heart disease. Do not use TENS on damaged or infected skin or on sensitive areas of the body. Consult your doctor before using nerve stimulation devices of any kind* [R, R, R].

14

Caffeine

IMPACT 3 / 5

EVIDENCE 3 / 5

How to implement

Consume 100 to 200 mg of caffeine supplement daily, ideally in the morning to avoid interference with sleep. This can be in the form of a pill or powder, taken with water. Avoid exceeding 400 mg per day to prevent side effects.

TYPICAL STARTING DOSE

100 mg

Description

Caffeine is a natural stimulant found in coffee, tea, and certain other beverages and foods. In moderate amounts, it can help increase alertness and concentration, potentially enhancing cognitive function and physical performance.

People drink coffee for an energy and mood boost. Caffeine is the main ingredient responsible for these effects [R, R].

Caffeine may also [R, R, R]:

- Support heart health
- Maintain healthy blood sugar

Caffeine is also found in some topical products for hair loss [R].

How it helps

Regular caffeine intake is linked to a **20-30% lower risk** of Parkinson's disease. Caffeine may help by protecting the nerves against oxidative stress and inflammation [R, R, R, R].

Please note: *Too much caffeine (over 400 mg per day) may lead to sleep problems, high blood pressure and cholesterol, fast heart rate, and dependence. If you're pregnant, try to limit caffeine to 200 mg per day* [R, R].

15

Tea

IMPACT 3 / 5

EVIDENCE 3 / 5

How to implement

Drink 1-3 cups of tea daily, choosing from green, black, or herbal varieties according to preference. It's beneficial to consume tea throughout the day, either hot or cold, for ongoing hydration and health benefits.

Description

Tea is a beverage made by steeping the leaves of the Camellia sinensis plant in hot water. It comes in various types, including black, green, white, and herbal teas, and is known for its diverse flavors and potential health benefits due to polyphenols and other bioactive compounds.

Green and black tea are made from the same plant (*Camellia sinensis*). This plant is processed in different ways to make each type of tea [R, R].

Tea contains many active compounds. These include antioxidants like EGCG and amino acids like L-theanine. Active components of tea help support [R, R, R, R, R, R, R]:

- Heart health
- Cognition
- Immunity
- Relaxation

How it helps

Drinking **2 cups of tea** per day is linked to a **25% lower risk** of Parkinson's disease [R, R, R].

Tea is a major source of **caffeine**, which seems to protect against this condition [R, R, R].

A meta-analysis of 8 studies and 5,669 participants concluded that drinking **tea reduces the risk of Parkinson's disease by ~15% and there wasn't a dose-response relationship** [R].

On the other hand, a meta-analysis of 13 studies and 901,764 participants did find a dose-response relationship and concluded **protection against Parkinson's disease reaches a maximum at 3 cups/day**]R].