

Preterm Labor

DNA Health Report

REPORT CATEGORY —



REPRODUCTIVE
HEALTH

Sample Client

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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

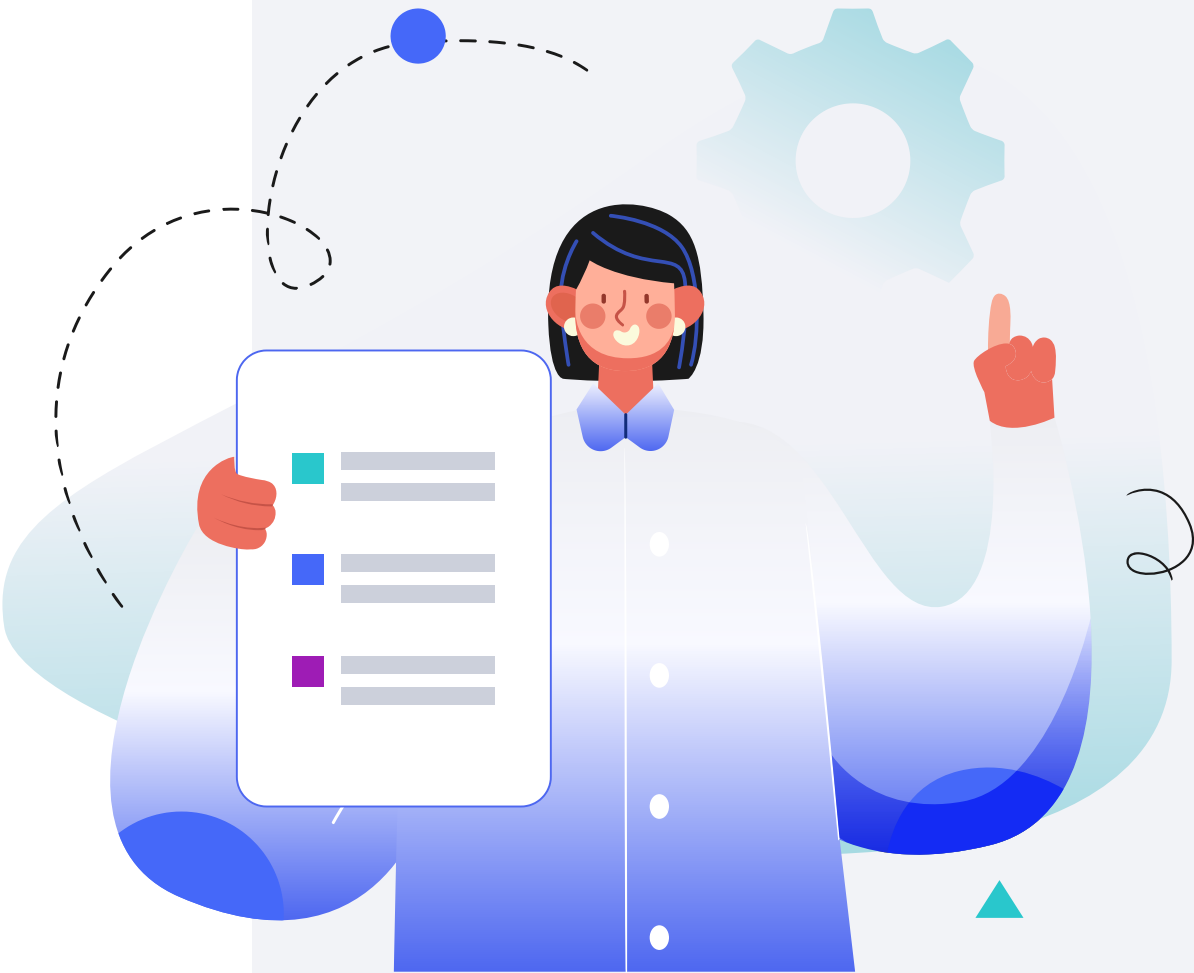
Male

HEIGHT

5ft 5" 165cm

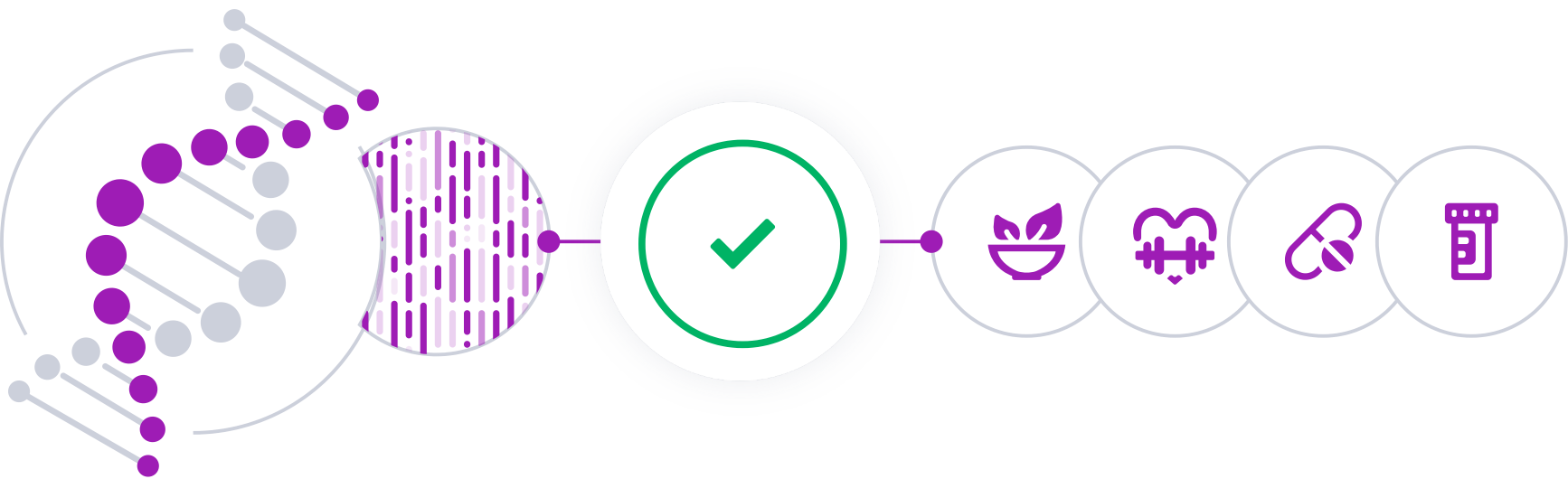
WEIGHT

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.

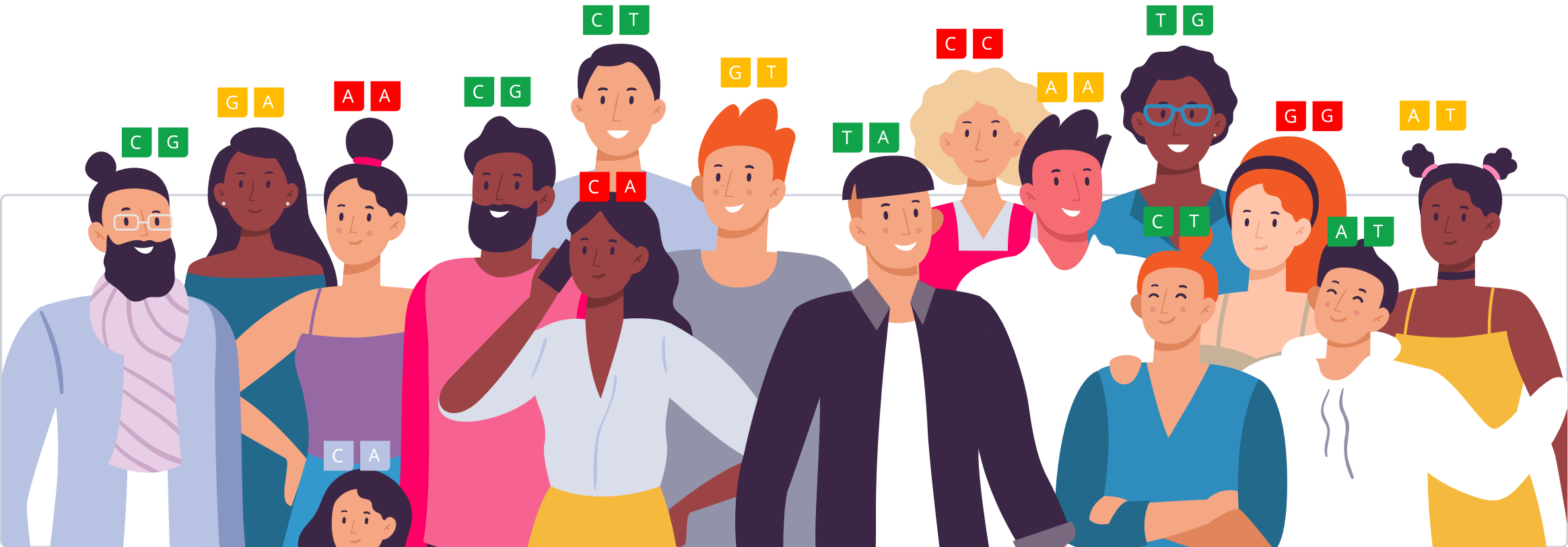


Similarly, our Trait Reports look at how your DNA influences your traits.



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

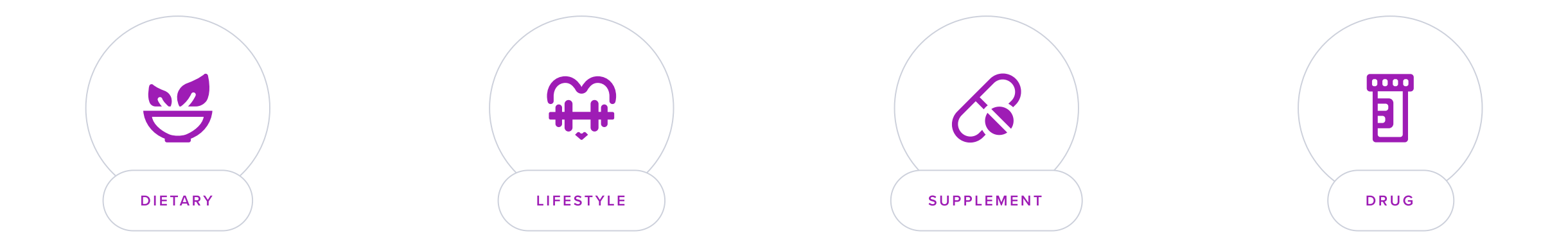
You have 2 risk alleles

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

Preterm labor is defined as the delivery of a baby before 37 completed weeks of gestation, which is earlier than the full-term pregnancy of 40 weeks. Preterm birth is a significant health concern and can contribute to a range of long-term neurological and physical disabilities.

Signs that could indicate a risk or onset of preterm labor include [\[R\]](#):

- Regular contractions leading to changes in the cervix before 37 weeks of pregnancy.
- Increase in vaginal discharge, watery fluid, or vaginal bleeding.
- Feeling that the baby is pushing down.
- A constant back ache that may be different from the usual pains experienced during pregnancy.
- Abdominal cramps with or without diarrhea.

Risk Factors and Management

The exact causes of preterm labor can be difficult to pinpoint, but several factors are known to increase the risk [\[R\]](#):

- Multiple pregnancies: Twins, triplets, or higher-order multiples are more likely to be born prematurely.
- Previous preterm birth
- Maternal health issues such as diabetes, high blood pressure, infections, and chronic conditions like heart and kidney disease
- Pregnancy complications: like preeclampsia, placental problems (e.g., placenta previa), or intrauterine growth restriction
- Smoking, alcohol use, and illicit drug use during pregnancy.
- Age: Teenagers and women over the age of 35 are at increased risk.
- Lack of proper prenatal care
- High stress, long working hours, physical labor, and lack of social support
- Genetics

About **15-35%** of the differences in premature labor may be due to genetics [\[R\]](#).

The following treatments may help prevent preterm labor in women at high risk:

- Progesterone supplements
- Cervical cerclage: A surgical procedure that can be used to close the cervix temporarily
- Reducing physical stress, quitting smoking, and avoiding other harmful substances.
- Effective control of conditions like diabetes and high blood pressure.
- In some cases, admission to the hospital might be necessary to manage preterm labor.
- Medications such as tocolytics may delay delivery long enough for steroids or other treatments to improve the baby's health outcomes.

Regular prenatal visits are crucial to monitor the health of both mother and baby and to implement strategies to reduce the risk of preterm birth. Early intervention and



LESS LIKELY

Less likely to give birth to a preterm baby based on 1,017,185 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
TRIB2	rs13401913	CC
TGFB1	rs11466328	GG
BOD1L1	rs13151645	CC
CDC42	rs3820282	CT
EEFSEC	rs4241495	TC
HLA-DRB1	rs9271673	GC
KCNAB1	rs1488425	AG
HAND2	rs11732983	CT
PMP22	rs7217780	CT
/	rs2963463	CC
DMAC1	rs148983777	GG
SOX5	rs17408900	TT
AKR1C3	rs7098485	GG
LRP5	rs312777	CC

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

careful management of any underlying risk factors are vital in preventing preterm labor or ensuring that the baby is as healthy as possible if they are born prematurely [\[R\]](#).

Consumer Summary

- Preterm labor happens when a baby is born before 37 weeks of pregnancy. Babies born prematurely are at risk for long-term health challenges.
- Signs of preterm labor include frequent contractions, increased vaginal discharge or bleeding, pressure in the pelvis, constant back pain, and abdominal cramps. Recognizing these early signs is essential.
- Risk factors for preterm labor include carrying multiples (e.g., twins), past preterm births, pregnancy complications, health issues like diabetes or infections, lifestyle factors, and genetics.
- Preventive treatments may include progesterone supplements, cervical cerclage (a procedure to close the cervix), and managing chronic conditions. It’s important to avoid harmful substances and reduce physical stress.
- If preterm labor begins, a doctor may recommend medications to delay delivery, allowing time for treatments that can improve the baby's health.

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	Maintain Optimal Vitamin D Levels	1000 iu	2	Avoid Organochlorine Pesticide Exposure	
3	Vitamin B12	100 mcg	4	Avoid Mycotoxin	
5	Avoid Air Pollution		6	Avoid Phthalate Exposure	
7	Avoid Pesticide Exposure		8	Methylfolate	400 mcg
9	Avoid Lead Exposure		10	Avoid PFAS Exposure	
11	Magnesium Chloride	200 mg	12	Lactoferrin	100 mg
13	Magnesium Sulfate	200 mg	14	Good Oral Hygiene	2 minutes
15	Dietary Omega-3 Fatty Acids		16	Probiotics	30 billion CFU
17	Avoid Secondhand Smoke		18	Avoid Substance Abuse	
19	Vitamin D and Calcium		20	DHA (Omega-3)	200 mg
21	Dietary Calcium		22	Magnesium	350 mg
23	Stress Management Therapy	1 hour	24	Avoid Illicit Drugs	

1



Maintain Optimal Vitamin D Levels

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Check your vitamin D levels, they should ideally be in the 30-66 ng/mL range. If your levels are lower than that, take a vitamin D supplement, 1000-4000 IU daily, to reach an optimal range.

TYPICAL STARTING DOSE

1000 iu

Description

Vitamin D, often referred to as the "sunshine vitamin," can be synthesized by the skin when exposed to sunlight, as well as being found in fish, eggs, and fortified milk. It helps regulate calcium absorption, promoting strong bones and a healthy immune system. Vitamin D deficiency can lead to conditions like rickets in children and osteoporosis in adults.

Your body needs [vitamin D](#) for strong bones. Vitamin D also plays a role in [\[R\]](#):

- Mood
- Immunity
- Heart health
- Blood sugar control

[Sunlight](#) is our main source of vitamin D. Experts recommend getting at least **5-15 minutes of midday sun, 2-3 times per week**. People with darker skin and those living at high latitudes may need longer periods of sun exposure [\[R\]](#), [\[R\]](#).

Foods like fish, eggs, and fortified milk provide small amounts of vitamin D. **People lacking vitamin D should consider taking a supplement** [\[R\]](#).

How it helps

Vitamin D deficiency during the second (but not first or third) trimester of pregnancy may increase the risk of low birth weight by 25-29%. Supplementation may reduce the risk, but only in women with levels below 75 nmol/L [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

In premature babies, supplementation with vitamin D (800-1000 IU/day) may improve vitamin D levels, development, and immune function [\[R\]](#), [\[R\]](#).

2



Avoid Organochlorine Pesticide Exposure

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Minimize exposure by choosing organic fruits and vegetables, thoroughly washing produce before consumption, and avoiding areas where organochlorine pesticides are applied. Consider using air purifiers in homes close to agricultural areas to reduce indoor pesticide levels.

Description

Reducing organochlorine pesticide exposure involves minimizing contact with pesticides like DDT, which can accumulate in the body and potentially lead to adverse health effects, including disruption of hormonal functions and carcinogenicity.

How it helps

A study analyzed data from 7,990 European women and found that higher levels of PCB-153 in cord blood were associated with a 150-g decrease in birth weight. However, exposure to p,p'-DDE did not show a significant effect on birth weight [\[R\]](#).

Another study of 102 subjects linked mecarbam and β -HCH exposure to lower birth weight, with β -HCH affecting it globally [\[R\]](#).

A meta-analysis of 21 studies found a potential 10-fold increase in pesticide exposure associated with a higher risk of preterm birth and shorter gestational age [\[R\]](#).

3



Vitamin B12

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 50 mcg vitamin B12 supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

100 mcg

Description

Vitamin B12 is a water-soluble vitamin primarily found in animal-based foods like meat, fish, and dairy products. It plays a crucial role in maintaining healthy nerve cells, DNA synthesis, and red blood cell formation. Vitamin B12 deficiency can lead to anemia, neurological issues, and fatigue.

[Vitamin B12](#) is important for [\[R\]](#), [\[R\]](#):

- Building DNA
- Nervous system function
- Energy production

You can get vitamin B12 from [\[R\]](#):

- Animal products (meat, fish, eggs, and dairy)
- Fortified foods
- Supplements

Adults should be getting **2.4 micrograms** of vitamin B12 every day [\[R\]](#).

How it helps

A meta-analysis of 18 studies and 11,216 participants found no linear link between maternal B12 levels and birth weight. However, B12 deficiency (<148 pmol/L) increased the risk of low birth weight by 15%. There was a linear association between higher maternal B12 levels and a decreased risk of preterm birth, while B12 deficiency raised the risk of preterm birth by 21% [\[R\]](#).

4



Avoid Mycotoxin

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

To avoid mycotoxins, store grains and nuts in a dry, cool place, check for mold on foods before eating, and avoid consuming products with visible mold. Prefer buying whole foods over processed ones, and if possible, opt for foods tested for mycotoxin contamination. Discard any food that smells musty or shows signs of spoilage.

Description

Avoiding mycotoxin exposure, which can occur in contaminated foods, is crucial to prevent potential health risks such as liver damage and cancer. Being cautious about food quality and storage conditions can help minimize the risk of mycotoxin ingestion.

How it helps

Exposure to mycotoxins during pregnancy may increase the risk of preterm labor and late-term miscarriage. When analyzed by toxin type, *Aspergillus* mycotoxins (e.g., aflatoxins) may reduce fetal growth while *Fusarium* mycotoxins (e.g., fumonisin) may increase the risk of preeclampsia and neural tube defects [\[R\]](#).

5



Avoid Air Pollution

IMPACT2 / 5

EVIDENCE2 / 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

A meta-analysis of 60 studies found that exposure to various air pollutants during pregnancy was linked to preterm labor. Specifically, PM2.5, PM10, O3, and NO2 were associated with preterm birth while NOx showed no significant association and CO and SO2 showed mixed results [\[R\]](#).

A systematic review and meta-analysis found a conclusive link between PM2.5 exposure and preterm labor [\[R\]](#).

A meta-analysis of 10 studies (48,556 cases, 548,495 controls) found that exposure to air pollutants like PM10, CO, and PM2.5 during pregnancy, as well as NO2 in the first trimester and NO2/SO2 in the third trimester, correlated with preterm births [\[R\]](#).

6



Avoid Phthalate Exposure

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

To avoid phthalate exposure, check product labels and choose phthalate-free options for personal care items, plastics (look for recycling codes 3 and 7 or the letters 'V' or 'PVC'), and household products. Additionally, reduce the use of plastic containers for food storage, especially those not marked as 'phthalate-free', and avoid microwaving food in plastic containers. Aim to make these changes consistently in your daily life for long-term health benefits.

Description

Avoiding phthalate exposure involves choosing phthalate-free products, such as personal care items and plastics, to minimize potential endocrine-disrupting effects and protect reproductive and hormonal health.

How it helps

A systematic review found moderate evidence linking phthalate exposure, particularly DEHP, DBP, and DEP, to an increased risk of preterm birth [\[R\]](#).

7



Avoid Pesticide Exposure

IMPACT2 / 5

EVIDENCE2 / 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

A study revealed that pesticide exposure in tea garden workers reduces acetylcholinesterase activity and affects placental structure, potentially leading to low birth weight due to placental insufficiency and increased hypoxia-inducible factor (HIF)-1α expression [\[R\]](#).

A meta-analysis found moderate evidence linking increased pesticide levels with higher preterm birth risk and reduced gestational age [\[R\]](#).

Another meta-analysis of 12 studies showed that pesticide exposure in farmers significantly increases the risk of spontaneous abortion, premature birth, and fetal death, but not with stillbirth, birth defects, low birth weight, neonatal death, or delayed conception [\[R\]](#).

8



Methylfolate

IMPACT

2 / 5

EVIDENCE

2 / 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

Recent observational studies suggest a slight reduction in preterm births with folic acid supplementation during pregnancy [\[R\]](#).

Folic acid supplementation is associated with a significant reduction in preterm delivery risk when started after pregnancy but not before conception. It may also protect against small-for-gestational-age births [\[R\]](#).

A review of 5 trials found that folic acid supplementation showed no significant difference in preventing preterm births before 37 weeks but remained crucial for preventing neural tube defects [\[R\]](#).

9

Avoid Lead Exposure

IMPACT

1 / 5

EVIDENCE

2 / 5

How to implement

Prevent lead exposure by using cold water for drinking and cooking, regularly cleaning dust from windowsills and floors, and ensuring that your home's paint is not chipping if it was built before 1978. For occupations involving potential lead exposure, use protective gear and follow safety protocols. Test your home for lead if it's old or you're concerned about contamination.

Description

Lead is a heavy metal. It is naturally found in the environment in small amounts [\[R, R\]](#).

Exposure to lead can cause it to build up in the body. A buildup of lead can contribute to oxidative stress and cell damage. This is called **lead poisoning** [\[R, R\]](#).

Lead is no longer used in the manufacturing of some products like gasoline and paint. However, it can still be found in some pipes, batteries, and the wall paint of older homes [\[R, R, R\]](#).

How it helps

A review exploring prenatal lead exposure's impact on pregnancy outcomes found it may increase preterm delivery risk and reduce birth weight [\[R\]](#).

Similarly, a study examining how prenatal lead exposure affects gestational age and premature delivery risk linked higher lead levels during the first and second trimesters to shorter gestation and increased prematurity risk [\[R\]](#).

10

Avoid PFAS Exposure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To avoid PFAS exposure, choose products that are labeled PFAS-free, especially when selecting cookware, cosmetics, and clothing. Reduce the consumption of packaged and fast foods since the packaging often contains PFAS. Use a water filter that is certified to remove PFAS compounds for your drinking and cooking water.

Description

Avoiding per- and polyfluoroalkyl substances (PFAS) exposure means avoiding products and environments contaminated with these chemicals, which can help prevent potential health issues like hormonal disruption and adverse effects on liver and immune function.

How it helps

A meta-analysis of 21 studies associated prenatal exposure to PFOS with a 20% higher risk of preterm labor [\[R\]](#).

11



Magnesium Chloride

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 200-400 mg of magnesium chloride daily, ideally in divided doses with meals to reduce the risk of stomach upset. It can be taken indefinitely as part of a daily supplementation routine to support magnesium levels in the body.

TYPICAL STARTING DOSE

200 mg

Description

Magnesium chloride is a magnesium supplement that can be used to support magnesium levels in the body. It may help alleviate symptoms of magnesium deficiency, such as muscle cramps and fatigue.

How it helps

In a study of 47 patients in preterm labor, magnesium gluconate (Mg-g) and magnesium chloride (Mg-c) had similar effects on uterine activity and serum magnesium levels at equivalent dosages, with no significant differences in outcomes or costs [\[R\]](#).

In a trial involving 75 patients in preterm labor, enteric-coated magnesium chloride was as effective as ritodrine in prolonging pregnancy and caused fewer side effects. However, neither of them significantly prevented preterm delivery compared to observation alone [\[R\]](#).

However, magnesium chloride was ineffective in a placebo-controlled trial of 205 women with preterm labor [\[R\]](#).

12



Lactoferrin

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 100-200 mg of lactoferrin supplement per day, preferably on an empty stomach to enhance its absorption. Continue this regimen daily for 8 to 12 weeks to observe beneficial effects.

TYPICAL STARTING DOSE

100 mg

Description

Lactoferrin is a protein found in milk and other bodily fluids that has been studied for its potential health benefits, including immune system support and antimicrobial properties. It plays a role in promoting gut health.

Lactoferrin is a protein found in milk. It can bind to iron and travel all around the body [\[R\]](#).

Lactoferrin may help support [\[R\]](#), [\[R\]](#):

- Immunity
- Iron status

How it helps

A meta-analysis of 6 studies involving 333 pregnancies associated lactoferrin intake with a lower risk of preterm birth before 37 weeks of gestation. Additionally, women taking lactoferrin had a later gestational age at delivery. Other studies examined lactoferrin's impact on amniotic fluid inflammation during invasive tests but did not report its role in preventing preterm birth [\[R\]](#).

13



Magnesium Sulfate

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 200-400 mg of magnesium sulfate orally with water once daily, ideally in the evening or as directed by your healthcare provider. Continue this supplementation as recommended by your healthcare provider, often for several weeks to months for optimal benefits.

TYPICAL STARTING DOSE

200 mg

Description

Magnesium sulfate, also known as Epsom salt, is used in baths and topical applications to soothe sore muscles, alleviate stress, and promote relaxation. It is believed to be absorbed through the skin, providing a calming effect on muscles and the nervous system.

How it helps

In a non-placebo-controlled trial of 45 women at 22-34 weeks of gestation, magnesium sulfate infusion prolonged pregnancy for at least 48 hours in 90% of the participants. Its combination with ritodrine was more effective [\[R\]](#).

14



Good Oral Hygiene

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Brush your teeth at least twice a day for two minutes each time using fluoride toothpaste. Floss daily to remove plaque from places your toothbrush can't reach and consider using mouthwash. Visit your dentist at least twice a year for professional cleanings and checkups.

TYPICAL STARTING DOSE

2 minutes

Description

Good oral hygiene, which includes regular brushing, flossing, and dental check-ups, is crucial for preventing tooth decay, gum disease, and maintaining overall oral health. A healthy mouth contributes to overall well-being and can prevent dental issues that may impact systemic health.

Oral hygiene refers to practices that keep the mouth healthy. Good habits include [R](#), [R](#):

- Gently brushing the teeth and tongue for two minutes, at least twice a day
- Flossing daily
- Using a toothpaste with fluoride and a soft toothbrush
- Replacing a worn toothbrush at least every 3 months

To help maintain good oral hygiene, it is also important to regularly see dental professionals. They can help prevent and address issues with your teeth and gums.

How it helps

Maintaining good oral hygiene reduces the risk of periodontal infections, which have been linked to an increased risk of preterm birth. Regular brushing, flossing, and dental check-ups can help prevent these infections, supporting a healthier pregnancy.

15



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, particularly found in fish oil, have been shown to reduce the risk of preterm birth. These nutrients are important for the development of the fetal nervous system and may help to prolong pregnancy by reducing inflammation and enhancing the function of the placenta.

16



Probiotics

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take a probiotic supplement containing 10 billion or more live cultures once daily, preferably with a meal or as directed by the packaging or a healthcare provider.

TYPICAL STARTING DOSE

30 billion CFU

Description

Probiotics are live beneficial bacteria and yeasts that can support gut health and digestive function when consumed as supplements or found in fermented foods like yogurt and sauerkraut. They may be beneficial to gut health, immune function, blood sugar, and mood.

[Probiotic bacteria](#) are “good” bacteria found mainly in the large intestine. They support your body and mind by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Maintaining gut health
- Supporting a healthy immune system
- Improving your mood
- Helping to maintain healthy blood sugar

Prebiotics are certain types of fiber and other complex carbs that serve as food for gut bacteria. **They support gut health by helping boost the activity and growth of “good” bacteria** [\[R\]](#), [\[R\]](#).

Prebiotics are also added to foods and supplements. Common prebiotic ingredients are [\[R\]](#), [\[R\]](#):

- Oligo-fructose
- Oligo-galactose
- [Inulin](#)

Mixtures of probiotics and prebiotics are known as **synbiotics** [\[R\]](#).

How it helps

Probiotics can support a healthy balance of vaginal microbiota, which is important for reducing the risk of infections that could trigger preterm labor. They help maintain an optimal environment in the reproductive tract.

17



Avoid Secondhand Smoke

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Implementing a smoke-free lifestyle involves communicating your needs to family, friends, and coworkers, requesting they respect your choice by smoking away from you. At home, establish strict no-smoking policies indoors. When out, choose smoke-free venues and accommodations. Advocate for smoke-free environments in your community and support legislation that promotes public health by reducing exposure to secondhand smoke. Utilize air purifiers at home to reduce any residual particles.

Description

Avoiding secondhand smoke is crucial for maintaining good health. Exposure to secondhand smoke can lead to respiratory problems, cardiovascular disease, and an increased risk of lung cancer, even in non-smokers. Protecting oneself from secondhand smoke involves staying away from smoking areas, ensuring smoke-free environments at home and work, and advocating for smoke-free policies in public spaces.

How it helps

Exposure to cigarette smoke, including second-hand smoke, increases the risk of preterm labor by affecting the placenta and reducing fetal growth. Quitting smoking or avoiding environments with cigarette smoke can reduce these risks.

18



Avoid Substance Abuse

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Eliminate the use of illegal drugs, excessive alcohol, and tobacco from your daily routine. Seek professional help if needed to stop substance use and engage in support groups or counseling for sustained recovery. Implement this change permanently for long-term health benefits.

Description

Substance abuse is the excessive use of alcohol or drugs. It can lead to dependence on the substance. Abusing drugs or alcohol can have long-term health and social consequences.

Substance abuse is the excessive use of alcohol or drugs. It can lead to dependence on the substance [\[R\]](#).

Abusing drugs or alcohol can have long-term health and social consequences [\[R\]](#).

How it helps

Substance abuse, including tobacco, alcohol, and drugs, is linked to preterm labor. Avoiding these substances helps in maintaining a healthier pregnancy and reducing risks.

19



Vitamin D and Calcium

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 600 IU of vitamin D and 1000 mg of calcium daily. For adults over 70 years, the vitamin D intake should be increased to 800 IU daily. These supplements can be taken together or separately, usually with a meal to enhance absorption, and it is advisable to continue this regimen as part of your daily routine indefinitely unless advised otherwise by a healthcare provider.

Description

Vitamin D plus calcium supplements typically combine vitamin D, often sourced from sunlight exposure or dietary sources, with calcium, primarily found in dairy products and leafy greens. This combination is used to promote bone health, reduce the risk of osteoporosis, and support overall musculoskeletal well-being.

How it helps

Vitamin D and calcium have been shown to lower the risk of preterm birth. They play a crucial role in maintaining pregnancy health and ensuring proper fetal development.

20



DHA (Omega-3)

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take an omega-3 supplement containing DHA at a dosage of 200-500 mg daily, preferable with a meal to improve absorption. It's recommended to continue this supplementation as part of your daily regimen to support heart, brain, and joint health.

TYPICAL STARTING DOSE

200 mg

Description

DHA is an omega-3 fatty acid found in fatty fish and algae-based supplements. It is essential for brain health and has been associated with cognitive function, cardiovascular health, and reducing inflammation in the body.

An **EPA/DHA supplement** can be taken to help meet omega-3 fatty acid needs not achieved through diet. Supplement amounts are generally 250-500mg/d though there are no current official recommendations other than for ALA.

How it helps

DHA, a type of Omega-3 fatty acid, can help reduce the risk of preterm labor. It is believed to help by promoting anti-inflammatory pathways and supporting fetal brain and eye development.

21



Dietary Calcium

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Consume 1,000-1,200 mg of calcium daily through dietary sources such as dairy products (milk, yogurt, cheese), green leafy vegetables (kale, broccoli), and fortified foods (orange juice, plant-based milks). Adults under 50 need 1,000 mg per day, while those over 50 should aim for 1,200 mg per day.

Description

Dietary calcium is a mineral found in dairy products, leafy greens, and fortified foods. It is essential for bone health, muscle function, and nerve transmission.

[Calcium](#) is the most abundant mineral in the human body. It is vital for the bones, heart, muscles, and nervous system [\[R\]](#).

Your body gets calcium from food and needs vitamin D to help absorb it. Calcium can be found in a variety of foods, including [\[R\]](#):

- Dairy products
- Green, leafy vegetables
- Fish with edible soft bones (e.g., sardines)
- Calcium-fortified foods and beverages

How it helps

Calcium supplementation during pregnancy, especially for those with low dietary calcium intake, has been associated with reduced risks of preterm birth. Calcium is crucial for muscle contraction and the functioning of the nervous system, which may influence labor and delivery timing.

22



Magnesium

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take up to 350 mg of magnesium daily as a supplement, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

350 mg

Description

Magnesium is an essential mineral involved in various bodily functions, including muscle contractions, nerve signaling, and bone health. Maintaining adequate magnesium levels through diet or supplements can support overall well-being and reduce the risk of magnesium deficiency-related health issues.

[Magnesium](#) is an essential mineral. Your body needs it for [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Muscle, nerve, and bone function
- Blood sugar and blood pressure control
- DNA and protein production
- Strong immunity

Women need **310-320 mg** of magnesium per day, while men need **400-420 mg** [\[R\]](#).

Foods rich in magnesium include **nuts, seeds, and leafy greens**. Magnesium is also available as a supplement [\[R\]](#).

How it helps

Magnesium has been shown to reduce the incidence of preterm labor and improve neonatal outcomes. It helps by relaxing uterine muscles and reducing contractions, thereby decreasing the likelihood of early labor.

23



Stress Management Therapy

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Engage in stress management therapy sessions, such as cognitive-behavioral therapy (CBT), for at least 1 hour per week over a course of 8 to 12 weeks. Techniques can include mindfulness, deep breathing exercises, and identifying stressors to develop coping strategies.

TYPICAL STARTING DOSE

1 hour

Description

Stress management therapy refers to various techniques and approaches aimed at reducing and coping with stress. It can improve mental and physical well-being by helping individuals better manage the effects of stress on their health.

How it helps

Managing stress can lower cortisol levels, which may reduce the risk of preterm labor. High stress levels are linked to hormonal imbalances that can trigger early labor contractions.

24



Avoid Illicit Drugs

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Refrain from using any illegal substances, including but not limited to, narcotics, stimulants, hallucinogens, and cannabis where it's not legalized. This means not purchasing, possessing, or consuming these substances in any form or amount. Commit to this practice indefinitely for long-term health benefits.

Description

Avoiding the use of illicit drugs is essential for preserving physical and mental health, as these substances can lead to addiction, mental health disorders, and other physical health issues. Abstaining from their use supports a safer and healthier lifestyle.

Illicit drugs are highly addictive, illegal drugs. Examples include **marijuana, cocaine, meth, and MDMA (ecstasy)**. The term can also refer to a non-medical use of drugs that are legally available (e.g., medical marijuana in some countries and states) [\[R\]](#).

Illicit drug use can have a **devastating impact on all aspects of your health and wellbeing**. It can lead to [\[R\]](#):

- Dependence and addiction
- Injury and accidents
- Health and sleep problems
- Problems in family and social life

How it helps

The use of illicit drugs during pregnancy is strongly associated with an increased risk of preterm labor. These substances can interfere with normal fetal development and trigger labor prematurely.

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.

✓	Leukocyte Esterase	Negative Positive	9 Nov 2025
✓	Progesterone	0.22 ng/mL 0 1.4 ✓	9 Nov 2025