

Triglycerides

DNA Health Report

REPORT CATEGORY —



Sample Client

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Personal information

NAME

Sample Client

SEX AT BIRTH

Male

HEIGHT

5ft 5" 165cm

WEIGHT

137lb 62kg

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.



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

Triglycerides are the most common type of fat in the body [\[R\]](#).

Sources of triglycerides include butter, oils, and other high-fat foods. Once digested, triglycerides can be stored in fat cells or used by the body as a source of energy [\[R, R, R, R, R\]](#).

The liver is also able to make and store triglycerides. It does so when you eat more calories than your body needs [\[R, R, R\]](#).

Some triglycerides are needed for the body to function. However, high levels can lead to health problems like [\[R, R, R, R\]](#):

- Artery hardening
- Stroke
- Heart disease
- Pancreas inflammation (*pancreatitis*)

High Triglycerides

Triglycerides are the most common type of fat in the body. Some triglycerides are needed for the body to function. However, high levels can lead to health problems like artery hardening, stroke, heart disease, and pancreas inflammation [R, R, R, R, R].

About 1 in 3 adults in the US may have high triglycerides. This estimate is slightly higher in older adults. Over 4 in 10 people over 60 may be affected [R].

Many health conditions can lead to high triglycerides. These include [R, R]:

- Overweight or obesity
- Low thyroid hormones (*hypothyroidism*)
- Metabolic syndrome
- Diabetes
- Chronic kidney disease
- Autoimmune diseases like lupus
- HIV infection

To help lower triglycerides, doctors may recommend [R, R]:

- Diet changes
- Avoiding alcohol
- Exercise
- Weight loss
- Omega-3s
- Medication

Genetically higher triglyceride levels are likely causally associated with:

- Heart health [R, R, R, R]
- High blood pressure [R]
- Heart attack [R]
- Low mood [R, R]
- Gout [R]
- Kidney Health [R, R, R]
- Parkinson’s (lower risk) [R]
- Bone health [R]
- Pancreas inflammation [R, R]
- Fatty liver [R]
- Age-related macular degeneration (lower risk) [R, R]



TYPICAL LEVELS

Predisposed to typical triglyceride levels based on 17,845 genetic variants we looked at



Your top variants that most likely impact your genetic predisposition:

GENE	SNP	GENOTYPE
APOC3	rs147210663	GG
CETP	rs5882	AG
ACACB	rs149793040	AA
ANGPTL4	rs116843064	GG
APOA4	rs12721043	CC
PAFAH1B2	rs186808413	CC
LPL	rs75218485	CC
LPL	rs17091905	GG
LPL	rs117604010	GG
MAU2	rs58542926	CC
MLXIPL	rs113296769	AA
APOB	rs533617	TT
DNAJC30	rs13242693	CC
WSB2	rs7973260	AG
MLXIPL	rs71556711	CT
LPL	rs17489373	GA
CLPTM1	rs483082	TG
SIDT2	rs964184	CC
PCSK7	rs662799	AA
NLRC5	rs1800775	AA
/	rs201079485	GG
/	rs149808404	GG
/	rs118204057	GG
PCSK7	rs5128	CC

- Joint pain [\[R\]](#)
- Psoriasis [\[R\]](#)

Up to 45% of differences in people’s triglyceride levels may be attributed to genetics. Genes involved in high triglycerides may influence fat metabolism. They include [\[R\]](#), [\[R\]](#):

- [BUD13](#)
- [APOC3](#)
- [APOA5](#)
- [GCKR](#)
- [LPL](#)
- [ZPR1](#)

Genetically higher fasting insulin may be causally associated with high triglycerides [\[R\]](#).

GENE	SNP	GENOTYPE
FADS2	rs174546	CC
LPL	rs268	AA
APOA5	rs3135506	GG
PLA2G12A	rs41278045	AA
APOA4	rs12721041	CC
BACE1	rs116987336	GG
LPL	rs1801177	GG
MAP1A	rs55707100	CC
LPL	rs186868868	CC
BUD13	rs117794084	GG
APOE	rs141622900	GG
A1CF	rs41274050	CC
APOE	rs7412	CC
EIF3J	rs151291132	AA
APOE	rs7254892	GG
SOST	rs76868109	AA
SLC30A3	rs116170113	GG
GTF3C2	rs149117895	CC
BUD13	rs114594921	TT
NECTIN2	rs138607350	TT
APOE	rs429358	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		DOSAGE	
1	Avoid Sugary Foods & Drinks	2	Limit Calorie Intake
3	Exercise At Least One Hour a Day1 hour	4	Omega-3 (Fish Oil)500 mg
5	Tomato	6	Aerobic Exercise (Cardio)1 hour
7	Choose Healthy Fats	8	Eat Fiber-Rich Foods
9	Cinnamon500 mg	10	Krill Oil1 g
11	Pistachios	12	Cranberry
13	Glucomannan3 g	14	Sea Buckthorn
15	Whole-Grain Rice	16	Dietary Omega-3 Fatty Acids
17	Taurine500 mg	18	Berberine500 mg
19	Soy	20	Melatonin500 mcg
21	Saffron20 mg	22	Matrimony Vine
23	Aquatic Exercise1 hour	24	Chokeberry
25	Barberry500 mg	26	Tai Chi1 hour
27	DASH Diet	28	Green Coffee Extract400 mg
29	Pantethine600 mg	30	Low-Carbohydrate Diet
31	Quinoa	32	Blueberries

33	DHA (Omega-3)	200 mg	34	Niacin Supplements	20 mg
35	Goji Berries		36	Fish	
37	Strength Training	1 hour	38	Fiber Supplement	5 g
39	Barley Supplement	4 g	40	African Mango Seed Extract	300 mg
41	Limit Coffee Intake		42	Flaxseed	2 tbsp
43	Garlic		44	Avocado	
45	Yoga	30 minutes	46	Berries	
47	Grape Seed Extract	100 mg	48	Gymnema	200 mg
49	Inulin	5 g	50	Cocoa	
51	Garlic Supplement	200 mg	52	Amla	
53	Artichoke Leaf Extract	500 mg	54	Red Yeast Rice	500 mg
55	Psyllium	5 g	56	Synbiotics	
57	Mediterranean Diet		58	Zinc	10 mg
59	Spirulina	500 mg	60	Evening Primrose Oil	
61	Hibiscus	250 mg	62	Monounsaturated Fatty Acids (MUFAs)	
63	Limit Trans Fats		64	Limit Saturated Fat	
65	Running		66	Soy Isoflavones	40 mg
67	Alpha-Lipoic Acid	100 mg	68	Maintain Optimal Vitamin D Levels	1000 iu
69	Avoid Air Pollution		70	Cumin	500 mg
71	EPA (Omega-3)	500 mg	72	Resveratrol	150 mg

73	Black Seed (Black Cumin)	1000 mg	74	Milk Thistle (Silymarin)	300 mg
75	Curcumin	500 mg	76	Soy Protein	20 g
77	Whey Protein	25 g	78	Chromium	200 mcg
79	Canola Oil		80	Vitamin C	500 mg
81	Probiotics	10 billion	82	Cardamom	500 mg
83	Avoid Refined Sugar		84	Blackcurrants	
85	Salmon		86	Cold Exposure	1 minutesute
87	Mulberry		88	Ginger	500 mg
89	Sunflower Seeds		90	Whole Grains	
91	Magnesium	250 mg	92	Acupuncture	1 hour
93	Myo-inositol	4 g	94	Almonds	
95	Green Tea	400 mg	96	Fasting Mimicking Diet	
97	Green Tea Extract	250 mg	98	Nordic Walking	30 minutes
99	Fenugreek	500 mg	100	Apple Cider Vinegar	
101	Pecans		102	Low-Intensity Exercise	1 hour
103	Tocotrienols	100 mg	104	Red Clover	40 mg
105	Keto Diet		106	Magnesium Chloride	200 mg
107	Jujube	250 mg	108	Extra Virgin Olive Oil (EVOO)	
109	Astaxanthin	12 mg	110	Quercetin	200 mg
111	Inositol	2 g	112	Whole-Body Cryotherapy	2 minutes

113	Paleo Diet		114	Biotin	30 mcg
115	Legumes		116	Selenium Supplements	50 mcg
117	Avoid Low-Fat High-Carb Diets		118	Avoid Alanine Supplements	
119	Walking	30 minutes	120	L-Carnitine	500 mg
121	Honey		122	Avoid MCT Oil	
123	Grapes		124	Plant Sterols & Stanols	300 mg
125	Olive Leaf Extract	500 mg	126	Avoid Lead Exposure	
127	Extra Virgin Olive Oil (EVOO) With Thyme		128	Intermittent Fasting	
129	Clostridium Butyricum	300 mg	130	Rutin	
131	Celery Seed	600 mg	132	Shilajit	500 mg
133	Sage Extract	300 mg	134	Biotin And Chromium Picolinate	
135	Hatha Yoga	1 hour	136	Guava	
137	Brewer's Yeast		138	Banaba	32 mg
139	Mangiferin	150 mg	140	Chlorella	3 g
141	Nattokinase and Red Yeast Rice		142	Rooibos	3 g
143	Fucoxanthin And Pomegranate Seed Oil	200 mg	144	Okra	
145	Buckwheat		146	Colocynth	
147	Capsaicin		148	Avoid Mercury Exposure	
149	Nicotinamide Riboside (NR)	250 mg	150	B. Lactis Bi-07 and L. Acidophilus NCFM	10 billion CFU
151	Bilberry		152	Gamma-Linolenic Acid (GLA)	200 mg

153	Coriander		154	Coriander And Garlic	500 mg
155	Coconut		156	Carnosine	1000 mg
157	Colostrum	20 g	158	White Kidney Bean Extract	500 mg
159	Perilla Oil	600 mg	160	Fucoidan	300 mg
161	Hazelnuts		162	Chinese Rhubarb	500 mg
163	Glycine And Tryptophan	3 g	164	Chamomile	300 mg
165	Shiitake Mushroom	500 mg	166	Avoid Exposure to Heavy Metals	
167	Broccoli Sprouts	2 tbsp	168	Diatomaceous Earth	
169	Salvia Miltiorrhiza		170	Fucoxanthin	3 mg
171	Pilates	30 minutes	172	Kiwifruit	
173	Jiaogulan (Gynostemma Pentaphyllum)	1350 mg	174	Ergothioneine	5 mg
175	Cucumber Seed Extract		176	Tart Cherries	
177	Alpha-Linolenic Acid (ALA)		178	Bitter Melon Supplement	500 mg
179	Passion Fruit Peel Extract	150 mg	180	Pranayama (Yoga Breathing)	15 minutes
181	Indian Gooseberry	500 mg	182	Baicalin	50 mg
183	Boron	3 mg	184	Bergamot	
185	Hydroxytyrosol	5 mg	186	Brazil Nuts	
187	Nattokinase		188	Glycine	3 g

1



Avoid Sugary Foods & Drinks

IMPACT

5 / 5

EVIDENCE

5 / 5

How to implement

To avoid sugary foods, eliminate or significantly reduce consumption of foods and beverages high in added sugars such as sodas, candies, baked goods, and sugary cereals from your diet. Instead, opt for natural sugar sources like fruits. Aim to do this daily for ongoing health benefits.

Description

High-sugar foods like baked goods, sweets, and sugary drinks, can spike your blood sugar levels. Consuming a lot of these types of foods can contribute to health issues like diabetes, obesity, insomnia, and heart disease.

High-sugar foods and refined carbs have a high glycemic index (GI). This means they tend to spike your blood sugar levels. They include [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Sugary drinks
- Baked goods
- Sweets
- White bread
- White rice
- Pasta

Eating a lot of sugary foods can contribute to:

- Diabetes [\[R\]](#), [\[R\]](#), [\[R\]](#)
- Weight gain and obesity [\[R\]](#), [\[R\]](#)
- Insomnia [\[R\]](#)
- Heart disease [\[R\]](#)

You may also want to avoid processed sugars and sugary drinks. They may have a role in increasing IL-1B [\[R\]](#), [\[R\]](#).

How it helps

People who eat more sugary foods tend to have higher triglycerides [\[R\]](#), [\[R\]](#).

Experts recommend replacing these foods with whole grains, healthy fats, fresh fruits and vegetables [\[R\]](#).

A low-carb diet may lower blood triglycerides more than a low-fat diet. Following a very-low-carb diet may produce even better results [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

However, some studies did not find low-carb diets to be better than balanced, calorie-restricted diets [\[R\]](#).

Limiting sugary foods can help by decreasing the amount of calories you eat. Extra calories that the body doesn't burn get converted into triglycerides [\[R\]](#).

 PERSONALIZED TO YOUR GENES

A low-carb diet may reduce triglycerides more in people with your [UCP3](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
UCP3	rs1800849	GG	

Limit Calorie Intake

5 / 5

5 / 5

How to implement

Consume fewer calories than your body needs for maintenance. Calculate your daily caloric needs using an online calculator based on your sex, age, weight, height, and activity level, then reduce that number by 500-1000 calories per day to safely lose 1-2 pounds per week. Adjust the caloric intake as needed based on your progress.

Description

People often limit their calorie intake to help them lose weight [R, R].
However, moderate calorie restriction may also help you stay healthier and age better [R, R, R, R, R].

There are different ways to take in fewer calories. You can:

- **Eat low-calorie foods**, such as those rich in proteins, fiber, and water. Avoid fatty and sugary foods, which tend to be high in calories [R].
- Try **intermittent fasting**, which involves changing how often you eat [R].

If you are restricting your calories, make sure your diet remains healthy and balanced. Experts also recommend being physically active, to prevent the loss of muscle and bone mass.

How it helps

Limiting calorie intake may help lower triglycerides. Strategies that may help include [R, R, R, R]:

- Intermittent fasting
- Eating low-calorie foods

Intermittent fasting strategies that may help include [[R](#), [R](#)]:

- Time-restricted eating (e.g., eating during an 8-hour period)
- Periodic fasting (fasting 1 or 2 days per week)

Limiting calorie intake helps decrease triglyceride production. That's because any extra calories that our bodies don't use get converted into triglycerides [R, R, R].

Please note: Limiting calorie intake too much or fasting for too long can cause malnutrition, anemia, eating disorders, and other health problems. Children, pregnant women, and people with certain chronic conditions or substance abuse disorders shouldn't do intermittent fasting. Talk to your doctor before implementing any drastic calorie restriction [R].

PERSONALIZED TO YOUR GENES

A low-calorie diet may reduce triglycerides more in people with your *FABP2* gene variant [R]

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
FABP2	rs1799883	CC	

3

Exercise At Least One Hour a Day

IMPACT

4 / 5

EVIDENCE

5 / 5

How to implement

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

TYPICAL STARTING DOSE

1 hour

Description

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

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

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

How it helps

Inactive people tend to have higher triglycerides [\[R, R, R\]](#).

Regular exercise is one of the best ways to decrease triglycerides. It helps burn calories and helps your body break down triglycerides. **Experts recommend at least 30 minutes of physical activity a day, on all or most days of the week** [\[R, R, R\]](#).

Types of exercise that may help include:

- **Cardio** (at least 150 min/week) [\[R, R, R, R, R, R\]](#)
- **Resistance training** [\[R, R, R\]](#)
- **Yoga** [\[R, R, R, R, R, R\]](#)
- **Tai chi** [\[R, R\]](#)

Vigorous cardio may work better than moderate cardio. For example, running may help more than brisk walking [\[R, R, R\]](#).

Combining exercise with diet changes may produce even better results [\[R, R\]](#).

PERSONALIZED TO YOUR GENES

Cardio may reduce triglycerides more in people with your [LPL](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
LPL	rs283	CC	

4



Omega-3 (Fish Oil)

IMPACT

4 / 5

EVIDENCE

4 / 5

How to implement

Take 1-2 g of omega-3 (fish oil) supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

500 mg

Description

Omega-3 fatty acids are essential fats found in fatty fish like salmon, flaxseeds, and walnuts. They are known for their potential cardiovascular and brain health benefits, including reducing the risk of heart disease and supporting cognitive function.

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

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

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

- Salmon
- Tuna
- Herring
- Sardines

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

How it helps

Omega-3 fatty acids may help lower triglycerides levels. They may help both healthy people and those with chronic health conditions. Helpful omega-3 sources include [\[R, R, R, R, R, R, R, R, R\]](#):

- Fish oil
- Krill oil
- Algal oil

Omega-3 supplements may also help when combined with other supplements, such as vitamin D [\[R, R, R\]](#).

Prescription omega-3s are recommended for people with very high triglyceride levels [\[R, R, R\]](#).

Omega-3s may support healthy triglyceride levels by helping the body break them down [\[R, R\]](#).

Please note: *Prescription and supplement omega-3s differ in their content and quality. Accordingly, outcomes may differ significantly between the two. Fish oil can interact with blood thinners (like aspirin, Plavix, Coumadin). Consult your doctor before taking fish oil* [\[R, R\]](#).



PERSONALIZED TO YOUR GENES

People with your [ACLY](#) gene variant may see a greater reduction in triglycerides after fish oil supplementation [\[R\]](#).

Fish oil may lower fasting triglyceride levels more in people with your [CD36](#) gene variant [\[R\]](#), [\[R\]](#).

Supplementation with omega-3 fatty acids may lower blood triglyceride levels more in people with your [IQCJ-SCHIP](#) gene variant [\[R\]](#).

Supplementation with omega-3 fatty acids may lower blood triglyceride levels more in people with your [JADE1](#) gene variant [\[R\]](#).

Supplementation with omega-3 fatty acids may lower blood triglyceride levels more in people with your [MYB](#) gene variant [\[R\]](#).

Supplementation with omega-3 fatty acids may lower blood triglyceride levels more in people with your [NELL1](#) gene variant [\[R\]](#).

Fish oil may reduce triglycerides more in people with your [LTA](#) gene variant [\[R\]](#).

Omega-3s may reduce triglycerides more in people with your [NOS3](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
NT5C3B	rs8071753	GG	
CD36	rs1761667	AG	
IQCJ	rs1449009	AG	
JADE1	rs931681	GA	
ALDH8A1	rs6920829	CT	
NELL1	rs752088	AG	
DDX39B	rs909253	AA	
NOS3	rs1799983	TT	

5



Tomato

IMPACT

4 / 5

EVIDENCE

3 / 5

How to implement

Incorporate fresh or cooked tomatoes into your daily diet. This can be achieved by adding them to salads, sandwiches, pastas, and sauces or simply eating them on their own. Aim for at least one serving (approximately 1 medium-sized tomato or 1/2 cup of chopped or cooked tomatoes) per day.

Description

Tomatoes are a fruit grown widely in numerous varieties, and are rich in vitamins C and K, as well as the antioxidant lycopene, which may contribute to heart health and protect against certain chronic diseases when incorporated into a balanced diet.

Tomato (*Solanum lycopersicum*) is a fruit originally from the Andes in South America. It is usually consumed as a vegetable in juices, sauces, or fresh. Tomato is an important source of [R]:

- [Vitamin C](#)
- Potassium
- Antioxidants (e.g., [lycopene](#))
- Vitamin B9 ([folate](#))

Tomato is traditionally used for [R, R]:

- High cholesterol
- High blood pressure

How it helps

Tomatoes are high in lycopene and fiber, which can help lower your triglyceride levels. They also improve heart health by reducing the oxidation of bad cholesterol, directly reducing triglyceride levels in your body.

A [meta-analysis of 37 guidelines, 108 systematic reviews, and 20 trials](#) identified tomatoes among the foods causing **small LDL-C reductions** [R].

In line with this, a [meta-analysis of 21 studies](#) found that interventions supplementing with tomato **reduce LDL-C (by 0.22 mmol/L) and IL-6** [R].

Another [meta-analysis \(6 studies\)](#) found that tomato consumption **lowers TC (by 4.39 mg/dL), triglycerides (by 3.94 mg/dL), and LDL-C (by 2.09 mg/dL), especially in younger participants** [R].

Lycopene (at least 25 mg/day) lowers total cholesterol (by 7.55 mg/dL) and LDL-C (by 10.35 mg/dL) according to a [meta-analysis of 12 studies](#) [R].

However, a [meta-analysis of 7 trials and 465 participants](#) found that tomatoes **lower TNF-alpha but not IL-6 or CRP levels** [R].

A [meta-analysis of 34 studies](#) found **no significant effects of tomato or lycopene on cardiovascular risk factors such as LDL-C, triglycerides, IL-6, TNF-alpha, or CRP** [R].

6



Aerobic Exercise (Cardio)

IMPACT3 / 5

EVIDENCE4 / 5

How to implement

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

TYPICAL STARTING DOSE
1 hour

Description

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

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

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

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

How it helps

Inactive people tend to have higher triglycerides [\[R, R, R\]](#).

Regular exercise is one of the best ways to decrease triglycerides. It helps burn calories and helps your body break down triglycerides. **Experts recommend at least 30 minutes of physical activity a day, on all or most days of the week** [\[R, R, R\]](#).

Aerobic exercise (at least 150 min/week) may lower triglycerides by 4-13 mg/dL in normal-weight people and by 7-16 mg/dL in overweight and obese subjects [\[R, R, R, R, R, R\]](#).

Vigorous cardio may work better than moderate cardio. For example, running may help more than brisk walking [\[R, R, R\]](#).

Combining exercise with diet changes may produce even better results [\[R, R\]](#).

7



Choose Healthy Fats

IMPACT

3 / 5

EVIDENCE

4 / 5

How to implement

Incorporate sources of unsaturated fats such as olive oil, avocados, nuts, seeds, and fatty fish into your daily diet. Aim for at least two servings of fatty fish per week and use olive oil for cooking and salad dressings. Replace saturated fats found in red meat, butter, and processed foods with these healthier options whenever possible.

Description

Choosing healthy fats, such as those found in avocados, nuts, and fatty fish, can support cardiovascular health, reduce inflammation, and promote overall well-being. A diet balanced in healthy fats can help manage cholesterol levels and reduce the risk of heart disease.

Based on their structure, the fats in our diet can be broadly divided into *saturated* and *unsaturated* fat. Trans fat is a type of unsaturated fat [\[R, R, R\]](#).

In large amounts, trans fat and saturated fat may have a negative impact on your heart and reproductive health. Processed foods and animal products like red meat and dairy are rich in these fats [\[R, R, R, R, R\]](#).

Some types of unsaturated fat can protect your heart and support fertility. **Experts say you should add more unsaturated fats to your diet.** Some good sources include [\[R, R, R\]](#):

- Nuts
- Seeds
- Fish

Unsaturated fats include polyunsaturated fats or PUFAs (omega-3 and omega-6) and monounsaturated fats or MUFAs [\[R, R\]](#).

How it helps

Reducing total fat intake alone may not lower triglycerides, since foods high in fat may be replaced with foods that aren't healthier, such as refined carbs [\[R, R\]](#).

Instead, **experts recommend avoiding trans fats and limiting saturated fat to help lower triglycerides.** They advise replacing these fats with healthier unsaturated fats [\[R, R\]](#).

Plant-based MUFAs, like olive oil and canola oil, may decrease triglycerides. However, not all studies found this benefit [\[R, R, R, R, R, R\]](#).

PUFAs—such as omega-3 fatty acids found in fish, flaxseed, and walnuts—may be more effective. Some experts suggest eating at least 2 servings of fish per week to help reduce triglycerides [\[R, R, R, R, R\]](#).

8



Eat Fiber-Rich Foods

IMPACT

3 / 5

EVIDENCE

4 / 5

How to implement

Incorporate foods high in fiber, such as fruits, vegetables, whole grains, and legumes, into your daily meals. Aim for a total dietary fiber intake of 25 to 30 grams per day, spread out over all meals.

Description

Fiber is a type of carb that your body can’t digest which supports digestion, heart health, and blood sugar control. You can get fiber by eating things like whole grains, fruits, nuts, seeds, and leafy greens.

Fiber is a type of carb that your body can’t digest. It supports digestion, heart health, blood sugar control, and more [\[R, R\]](#).

Adults should get 28 g of fiber every day. Most people in the US don’t get enough fiber [\[R, R\]](#).

You can get more fiber by eating [\[R, R\]](#):

- Whole grains
- Fruits
- Leafy greens
- Nuts and seeds
- Beans
- Broccoli

Fiber supplements, such as [psyllium husk](#), are available for people who don’t get enough fiber from their diets [\[R, R\]](#).

How it helps

Some experts recommend eating foods high in fiber to reduce triglycerides. They advise replacing refined grains (such as white bread, white rice, and pasta) with fiber-rich foods [\[R\]](#).

Adding fiber-rich foods to the diet may reduce triglycerides. However, not all studies showed this effect [\[R, R, R, R\]](#).

Fiber supplements may also help lower triglycerides. Examples include [\[R, R, R, R\]](#):

- [Psyllium](#): 10-15 g/day for 8-20 weeks
- [Inulin](#): 10-20 g/day for 3-4 weeks
- [Glucomannan](#): 2-10 g/day for 3-8 weeks
- **Beta-glucans**: 5-10 g/day for 4-12 weeks

Increased fiber intake may help lower calorie intake and maintain a healthy weight. It may also decrease fat production [\[R, R\]](#).

 PERSONALIZED TO YOUR GENES

Psyllium supplementation may reduce triglycerides more in people with your [FABP2](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
FABP2	rs1799883	CC	

9



Cinnamon

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a 1 g cinnamon supplement once daily, ideally with a meal to aid absorption. This can be in the form of a capsule or tablet. Continue this regimen as long as it aligns with your health goals and under the guidance of a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Cinnamon is a popular spice that may have various health benefits, including improving blood sugar control, reducing inflammation, and providing antioxidants. It's commonly used in both culinary and herbal applications.

[Cinnamon](#) is a spice made from the bark of *Cinnamomum* trees. Cinnamon can [\[R\]](#):

- Decrease inflammation
- Fight [oxidative stress](#)
- Kill microbes

Cinnamon is mainly used in cooking and fragrances. **As a natural remedy, people use cinnamon to reduce blood sugar** [\[R\]](#).

There are two main types of cinnamon [\[R\]](#):

- Ceylon or ‘true’ cinnamon (*Cinnamomum verum*)
- Chinese or Cassia cinnamon (*Cinnamomum cassia*)

How it helps

Cinnamon (up to 6 g/day for up to 5 weeks) may help lower triglycerides. It may be especially helpful in people with high blood sugar [\[R, R\]](#).

Cinnamon may help the body clear triglycerides. It may also reduce their production by supporting healthy blood sugar levels [\[R, R\]](#).

Please note: *Cassia cinnamon is high in coumarin. This substance may harm the liver in large amounts. Consult your doctor before supplementing with high amounts of Cassia cinnamon* [\[R, R, R\]](#).

10



Krill Oil

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 1 to 3 grams of krill oil daily as a dietary supplement, preferably with a meal to enhance absorption. It's often available in soft gel form, making it easy to swallow. Continue this regimen consistently for best results, typically reviewing its effectiveness and any need for adjustments with a healthcare provider after a few months.

TYPICAL STARTING DOSE

1 g

Description

Krill oil is a source of omega-3 fatty acids, primarily in the form of phospholipids. It can promote cardiovascular health, joint comfort, and may have anti-inflammatory properties.

How it helps

Two meta-analyses (the largest one with 64 trials) concluded that supplementation with krill oil (0.5-3 g/day for 4-12 weeks) lowers triglycerides by 9.838-14.03 mg/dL. A novel krill oil formulation (4 g/day) lowered them by 26% in a placebo-controlled trial of 520 patients. Krill oil was most effective in patients taking statins or cholesterol absorption inhibitors or those with low baseline EPA and DHA levels [\[R\]](#), [\[R\]](#), [\[R\]](#).

Krill oil is high in omega-3 fatty acids, which can help lower triglyceride levels in your blood.

11



Pistachios

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate a handful of pistachios (about 1-2 ounces) into your daily diet. You can add them to your breakfast cereals, salads, or simply snack on them throughout the day. Do this regularly for ongoing heart health benefits and to aid in maintaining a balanced diet.

Description

Pistachios are a type of nut native to Asia but grown extensively in the Mediterranean. They are packed with healthy fats, fiber, protein, and various vitamins and minerals, like vitamins C, B6, and E, as well as potassium, copper, and iron. They are also rich in antioxidant and anti-inflammatory compounds, which can help lower cholesterol levels and support weight management.

The pistachio (*Pistacia vera L*), known as **the “green nut”**, is a nut native to Asia but widely cultivated in the Mediterranean. Pistachios have **low fat content** and high levels of [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Unsaturated fats
- Vitamins (C, B6, E, K, thiamin)
- Minerals (Potassium, copper, iron, and magnesium)

Pistachios also have a high **antioxidant and anti-inflammatory** effect [\[R\]](#).

How it helps

Consumption of pistachio nuts and a pistachio-enriched diet may lower blood triglycerides [\[R\]](#), [\[R\]](#).

12



Cranberry

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Consume one to two 8-ounce servings of unsweetened cranberry juice daily, or take 500 mg of cranberry supplements twice daily. Continue this practice consistently for at least several weeks to potentially observe benefits.

Description

Cranberries are known for their high antioxidant content and potential to promote urinary tract health by preventing bacterial adhesion. Consuming cranberries or cranberry products may help reduce the risk of urinary tract infections and provide antioxidant benefits.

Cranberries are fruits rich in vitamins, minerals, and antioxidants. They are available in different forms, including [\[R\]](#):

- Dried fruits
- Juice
- Powder
- Pills

How it helps

A meta-analysis of 10 trials concluded that cranberry consumption lowers triglycerides, especially when administered in juice form [\[R\]](#).

Cranberries are rich in antioxidants that can help lower triglyceride levels. They also contain fiber, which may prevent the absorption of certain fats.

13



Glucomannan

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 1 gram of glucomannan powder with 8 ounces of water, 15 minutes to 1 hour before each meal, three times daily. It's essential to drink plenty of water when taking glucomannan to ensure it reaches the stomach and expands, helping to promote a feeling of fullness.

TYPICAL STARTING DOSE

3 g

Description

Glucomannan is a dietary fiber derived from the root of the konjac plant and is often used as a weight loss supplement. It may promote feelings of fullness and support weight management when used in conjunction with a balanced diet.

How it helps

Research on over 531 people suggests that supplementation with glucomannan (2-5 g/day for 3-8 weeks) may lower triglycerides [\[R\]](#).

14



Sea Buckthorn

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 500mg of sea buckthorn oil capsules twice daily with meals for at least 3 months to see beneficial effects on skin hydration and elasticity.

Description

Sea buckthorn is a deciduous shrub native to Europe and Asia, and its fruits are rich in vitamins, particularly vitamin C, and antioxidants. It is used for its potential health benefits, including immune support and skin health.

How it helps

A meta-analysis of 15 studies concluded that supplementation with sea buckthorn reduces triglycerides and cholesterol in people with abnormal lipid metabolism [R].

Sea buckthorn oil has omega-7 fatty acids, which can reduce triglyceride levels by limiting their production in the liver.

15



Whole-Grain Rice

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate whole-grain rice into your meals, aiming for at least half of your grain intake to be whole grains. You can do this by replacing white rice with whole-grain varieties like brown rice, black rice, or wild rice in your dishes. Try to include whole-grain rice in at least one meal per day, whether it's as a side dish or part of a main course.

Description

Whole grain rice is rice that has retained its outer bran layer, germ, and endosperm, providing more nutrients and fiber compared to refined white rice. It contains vitamins, minerals, antioxidants, and dietary fiber, promoting better digestion, heart health, and blood sugar control. Consuming whole-grain rice regularly can contribute to a balanced diet and reduce the risk of chronic diseases such as diabetes, heart disease, and certain cancers.

How it helps

An analysis of 22 studies found that whole-grain rice (for 2 to 16 weeks) may lower blood triglycerides [R].

16



Dietary Omega-3 Fatty Acids

IMPACT3 / 5

EVIDENCE3 / 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

Experts suggest that omega-3 fatty acids may help lower triglycerides. However, they recommend doses around 4g/day of EPA and DHA, which are more likely achievable through supplements [\[R\]](#), [\[R\]](#).

Research shows that dietary omega-3s may lower triglycerides [\[R\]](#), [\[R\]](#).

17



Taurine

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 1-4 g of taurine supplement daily, divided into two or three doses with meals for optimal absorption. It can be taken continuously, with periodic evaluations of its effects and benefits.

TYPICAL STARTING DOSE

500 mg

Description

Taurine is an amino acid found in various foods and often used in energy drinks and supplements. It plays a role in neurological and cardiovascular health and can help support energy metabolism.

[Taurine](#) is the most abundant free amino acid in humans. It's not essential, which means we can produce it. We can also get it from protein-rich foods, such as [\[R\]](#):

- Seafood
- Meat
- Dairy

Taurine is a popular additive in energy drinks and can also be taken as a supplement [\[R\]](#).

Taurine plays an important role in [\[R\]](#), [\[R\]](#):

- Bile production
- Calcium metabolism

It is also well-known for its antioxidant and anti-inflammatory properties [\[R\]](#).

How it helps

Supplementation with taurine (1.5-6 g/day for 2-12 weeks) may lower blood triglycerides by reducing fat production and increasing fat breakdown [\[R\]](#).

18



Berberine

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

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

TYPICAL STARTING DOSE

500 mg

Description

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

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

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

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

- Diabetes
- High cholesterol
- High blood pressure
- PCOS

How it helps

Berberine (500-1,500 mg/day for 2-4 months) may help lower triglycerides [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Berberine may work better when combined with other supplements such as silymarin (milk thistle extract). These other compounds may help the body absorb berberine [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Barberry, a natural source of berberine, may also help. However, other berberine-rich herbs may not have the same effect [\[R\]](#), [\[R\]](#).

Berberine seems to help by [\[R\]](#), [\[R\]](#):

- Helping the body break down and remove fats
- Increasing “good” gut bacteria

 PERSONALIZED TO YOUR GENES

A supplement with berberine may reduce blood fats more in people with your **LDLR** gene variant [\[R\]](#).

YOUR GENETIC VARIANTS

GENE	SNP	GENOTYPE	EVIDENCE
SPC24	rs14158	GG	

19



Soy

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate soy-based products such as tofu, soy milk, and edamame into your daily diet. Aim for at least one serving per day, equivalent to about a cup of soy milk, a half-cup of cooked soybeans, or a 3-ounce piece of tofu.

Description

Soy is a legume native to East Asia, and its health benefits include being a source of plant-based protein, fiber, and various vitamins and minerals. It is known for its potential to support heart health, reduce cholesterol levels, and provide essential nutrients in vegetarian and vegan diets.

Soy is a common food in many cuisines around the world, especially Asian cuisines [\[R\]](#).

It’s a great source of [\[R\]](#), [\[R\]](#):

- Plant-based protein
- Fiber
- Omega-3 fats
- Antioxidants (isoflavones)

Soy-based foods include [\[R\]](#):

- Soy beverages
- Tofu
- Tempeh
- Edamame
- Miso
- Natto

Soy protein and soy isoflavones are also available as supplements.

How it helps

Soy protein (15-40 g/day for 5-16 weeks) lowers blood triglycerides [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

20



Melatonin

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 500 mcg of melatonin orally, about 30 minutes before bedtime, to help with sleep. It can be taken daily as needed.

TYPICAL STARTING DOSE
500 mcg

Description

Melatonin is a natural hormone produced by the pineal gland in the brain that helps regulate the sleep-wake cycle. It plays a crucial role in promoting sleep onset and maintaining a consistent sleep pattern, making it a commonly used supplement for managing sleep disorders and jet lag.

[Melatonin](#) is an important sleep hormone. Bright light at night may prevent your body from making enough melatonin [\[R, R, R\]](#).

Your body makes melatonin on its own. However, some people take melatonin supplements to help them sleep. It may help with jet lag in particular [\[R, R, R\]](#).

How it helps

Melatonin (at least 8 mg/day) may help lower blood triglycerides. It may help the body break down and clear triglycerides [\[R, R\]](#).

Please note: *Melatonin may interact with some medications. Consult your doctor before taking melatonin* [\[R\]](#).

21



Saffron

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 20 mg of saffron supplement daily. This can be taken at any time of the day, with or without food.

TYPICAL STARTING DOSE

20 mg

Description

Saffron is a spice derived from the stigma of the saffron crocus flower, and is native to the Mediterranean and Asia. Its main compounds include crocin, picrocrocin, and safranal, which may contribute to its antioxidant properties and potential mood-enhancing effects.

[Saffron](#) is a yellow spice praised for its color, taste, and potential health benefits [\[R\]](#).

Saffron is rich in antioxidants such as *crocin*. Researchers are looking into its potential benefits for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Gut conditions
- Heart health
- Mental health

How it helps

Supplementation with saffron (30-200 mg/day for 8-12 weeks) may lower triglyceride levels. Saffron may help by fighting oxidative stress and increasing triglyceride clearance by the liver [\[R\]](#).

22



Matrimony Vine

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take matrimony vine supplements at a dose of 250-500mg per day, before a meal. Continue this daily for at least 3 months to observe potential benefits.

Description

Matrimony vine, from which the nutrient-dense, vitamins and minerals-rich fruit, goji-berries come from, has leaves that are also made into a tea.

How it helps

A meta-analysis of 7 trials and 548 people concluded that supplementation with matrimony vine (120 mL juice, 13.7-30 g fruit, or 300 mg polysaccharides per day for 1-3 months) may reduce triglyceride levels [\[R\]](#).

23



Aquatic Exercise

IMPACT

3 / 5

EVIDENCE

3 / 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

A meta-analysis found that regular aquatic endurance exercise may improve lipid profiles, including reductions in LDL-C and total cholesterol, and improvements in HDL-C. The analysis also indicated improvements in triglyceride levels, especially in people with dyslipidemia [\[R\]](#).

Research comparing aquatic exercise with land-based exercise found that both modes of exercise similarly improve lipid profiles and triglyceride levels. This suggests that aquatic exercise may help those who may prefer or require low-impact activities [\[R\]](#).

24



Chokeberry

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Incorporate chokeberry (Aronia berries) into your diet by consuming 100-200 grams of fresh berries daily, or drinking 100 mL of chokeberry juice. This can be done daily for at least 8-12 weeks to potentially observe benefits in blood pressure and antioxidant status.

Description

Chokeberries are rich in antioxidants and may offer potential health benefits, including reducing oxidative stress and inflammation.

How it helps

Consuming chokeberry (at least 300 mg/day) may lower triglyceride levels [\[R\]](#).

25



Barberry

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a barberry supplement of 500-1000 mg daily, divided into two or three doses with meals for up to 12 weeks. Do not exceed the recommended dose without consulting a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

Barberry is an herbal remedy used in traditional medicine for its potential to support digestive health and reduce inflammation. It contains compounds that may have antimicrobial and antioxidant properties.

How it helps

A meta-analysis of 5 trials and 339 participants concluded that supplementation with barberry reduces total cholesterol (by 23.58 mg/dL), LDL cholesterol (by 13.75 mg/dL), and triglycerides (by 29.16 mg/dL) but has no effect on HDL cholesterol. Another meta-analysis found that the barberry species *Berberis vulgaris* and *Berberis aristata* lower total cholesterol (by 1.02- and 2.25-fold, respectively), LDL cholesterol (by 0.68- and 2.92-fold, respectively), and triglycerides (by 1.35- and 1.16-fold, respectively) while raising HDL cholesterol (by 0.71-fold in the *B. aristata* group) in patients with metabolic syndrome [\[R\]](#), [\[R\]](#).

The combination of barberry (*B. aristata*) and milk thistle lowers total cholesterol and LDL cholesterol but has no effect on HDL cholesterol or triglycerides according to a meta-analysis of 4 trials and 491 patients with dyslipidemia [\[R\]](#).

Barberry contains an active compound called berberine that has been shown to decrease triglyceride levels.

26



Tai Chi

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Practice Tai Chi for 30 to 60 minutes at least twice a week. Choose a quiet, spacious area and follow along with a qualified instructor, either in person at a class or through an online video tutorial, to ensure proper technique and maximum benefit.

TYPICAL STARTING DOSE

1 hour

Description

Tai Chi is a traditional Chinese mind-body practice involving slow, flowing movements and deep breathing. It is known for its potential to reduce stress, improve balance, and enhance overall physical and mental well-being.

Tai chi involves gentle movements and breathing to strengthen and relax the mind and body. Practicing tai chi may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Manage pain
- Improve fitness
- Increase well-being
- Improve sleep and mood

How it helps

Tai chi may lower blood triglycerides by increasing the body energy usage and fat breakdown [\[R\]](#), [\[R\]](#).

27



DASH Diet

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Adopt a dietary pattern that emphasizes fruits, vegetables, whole grains, lean proteins, and low-fat dairy, while reducing sodium, red meat, sweets, and sugary beverages. Aim for 4-5 servings of both fruits and vegetables per day, 6-8 servings of grains (with at least half being whole grains), and 2-3 servings of low-fat dairy. This diet should be followed daily to manage blood pressure effectively.

Description

The DASH (Dietary Approaches to Stop Hypertension) diet is a dietary plan designed to reduce high blood pressure. It emphasizes fruits, vegetables, lean proteins, and whole grains while limiting sodium intake.

Health experts developed the DASH diet to reduce blood pressure. This diet also helps support weight control while reducing inflammation and cholesterol [\[R\]](#).

It **limits salt, sweets, and saturated fat**, while promoting the intake of [\[R\]](#):

- Fruits (4-5 servings/day)
- Vegetables (4-5 servings/day)
- Whole grains (6-8 servings/day)
- Low-fat dairy (2-3 servings/day)
- Nuts, seeds, and legumes (4-5 servings/week)
- Fish and poultry (up to 6 ounces/day)

The DASH diet focuses on fresh, minimally processed food rich in nutrients. Magnesium, calcium, and potassium-rich foods are particularly important due to their beneficial effects on the heart and blood vessels [\[R\]](#).

Although similar to the [Mediterranean diet](#), DASH is lower in sodium (<2,300 mg a day) and omega-3 fatty acids. On the other hand, it’s higher in red meat and dairy [\[R\]](#).

How it helps

Following the DASH diet may help reduce triglyceride levels, especially in people with metabolic syndrome or PCOS. Additionally, variations of the diet, like the higher-fat DASH, may provide similar benefits with added advantages for LDL cholesterol management [\[R\]](#), [\[R\]](#).

28



Green Coffee Extract

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a 400 mg dose of green coffee extract supplement daily. This can be consumed in the morning or as directed on the supplement’s packaging.

TYPICAL STARTING DOSE
400 mg

Description

Green coffee extract is believed to support weight management due to its high content of chlorogenic acids, which may help regulate blood sugar levels and promote fat metabolism.

Green coffee is made from unroasted coffee beans. It’s rich in an anti-inflammatory and antioxidant compound called [chlorogenic acid](#) [R, R].

Green coffee may help lower [R]:

- Blood pressure
- Weight
- Blood sugar levels

How it helps

Consumption of green coffee extract (180-376 mg for 6-8 weeks) may lower blood triglycerides [R].

Please note: *Green coffee bean extract contains caffeine. Keep this in mind if you're trying to limit your caffeine intake. If you're pregnant, limit caffeine to 200 mg per day* [R].

Please note: *chlorogenic acid from green coffee beans may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using coffee bean extract and always consult with a healthcare provider before taking this supplement* [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.*

29



Pantethine

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 600-900 mg of pantethine supplement daily, divided into 2 or 3 doses with meals. Continue this regimen for at least 8 weeks to assess effectiveness in lowering cholesterol levels.

TYPICAL STARTING DOSE

600 mg

Description

Pantethine is a form of vitamin B5 that aids the body in breaking down fats and proteins necessary for energy production. Its key role is to help your body properly use these nutrients for maintaining a healthy metabolic function. This is crucial for overall health because having a well-functioning metabolism means our body can effectively utilize the food we eat, thereby sustaining all its necessary functions.

How it helps

Pantethine is a form of vitamin B5 that helps break down fats in the body. With consistent use, it can reduce the levels of triglycerides, excess of which can lead to heart disease.

In 2 placebo-controlled trials of 152 participants at risk of heart disease, supplementation with pantethine (600 mg/day from weeks 1 to 8 and 900 mg/day from weeks 9 to 16) **decreased total (by 6 mg/dL, 0.16 mmol/L, or 3%), LDL cholesterol (by 4 mg/dL, 0.10 mmol/L, or 4%), and apoB (by 4 mg/dL, 0.04 g/L, or 5%)** [\[R\]](#).

In a non-placebo-controlled trial of 216 participant with moderate dyslipidemia, supplementation with pantethine (600 U/day) for 4 weeks **reduced total cholesterol, non-HDL cholesterol, and triglycerides**. However, **coQ10 was more effective** [\[R\]](#).

The combination of pantethine (600 mg/day) and probucol (500 mg/day) taken for 8 weeks **lowered total cholesterol while increasing HDL cholesterol** in a non-placebo-controlled trial of 48 patients with moderate hypercholesterolemia [\[R\]](#).

In 2 placebo-controlled trials of 39 patients with different forms of hyperlipoproteinemia, supplementation with pantethine (900 mg/day) for 28 days **lowered total cholesterol (by 13.5%), LDL cholesterol (by 13.5%), and triglycerides (by 13-30%) while increasing HDL cholesterol (by 10%)** [\[R\]](#), [\[R\]](#).

Pantethine (600-1200 mg/day) taken for 7-24 months **lowered total cholesterol and triglycerides** in an uncontrolled trial of 31 CKD patients with dyslipidemia [\[R\]](#).

30

Low-Carbohydrate Diet

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Limit your daily intake of carbohydrates to less than 26% of your total daily calories. For a standard 2000-calorie diet, this means consuming no more than 130 grams of carbohydrates per day. Focus on including non-starchy vegetables, lean proteins, and healthy fats in your meals while minimizing the intake of sugars, bread, pasta, and other high-carb foods.

Description

Low-carbohydrate diets can promote weight loss, improve blood sugar control, and support heart health. They may also be beneficial for individuals with certain medical conditions, such as epilepsy or metabolic syndrome.

How it helps

A low-carbohydrate diet can help lower triglyceride levels, as excess carbohydrates can be converted into triglycerides when not used for energy. By limiting your carbohydrate intake, you can reduce the amount of triglycerides your body produces, promoting better heart health.

Experts suggest that very-low-carbohydrate and ketogenic diets may be associated with lower triglyceride levels [\[R\]](#).

Following a low-carbohydrate diet may lower triglyceride levels in overweight and obese people. However, some studies showed that low-carbohydrate diets may have no added benefits over balanced diets [\[R, R, R, R, R, R, R, R, R, R, R, R, R, R\]](#).

PERSONALIZED TO YOUR GENES

Eating a low-carbohydrate, low-calorie diet may lower blood triglycerides more in people with your [ADIPOQ](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
ST6GAL1	rs1501299	GG	

31



Quinoa

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate quinoa into your diet by replacing rice or pasta with it in meals. Aim for 1-2 servings, which is about 1/2 to 1 cup cooked, 2-3 times a week to benefit from its high protein, fiber, and mineral content.

Description

Quinoa is a nutrient-rich, gluten-free grain-like seed originating from South America. It is packed with protein, fiber, B-vitamins, vitamins A, C, and E, as well as minerals like calcium phosphorus, iron, and zinc, making it a valuable addition to diets for promoting muscle health, aiding digestion, and providing essential nutrients.

[Quinoa](#) (*Chenopodium quinoa Willd*) is a flowering plant native to The Andes in South America. There, it is a **food staple for indigenous cultures** [\[R\]](#), [\[R\]](#), [\[R\]](#).

Quinoa is famous for its seeds, which are **gluten-free and high in protein**. In comparison with many grains, quinoa seeds have a greater amount of many nutrients, including [\[R\]](#), [\[R\]](#):

- Fiber
- [Fatty acids](#) (e.g., linoleic and α-linolenic acid)
- Vitamins (e.g., B1, B2, B6, C, and E)
- Minerals (e.g., calcium, phosphorus, iron, and zinc)

Quinoa seeds can be used whole or ground to a fine powder and shaped into flakes before use [\[R\]](#).

How it helps

Supplementation with quinoa (20-25 g/day for 4-12 weeks) may lower triglycerides. Quinoa may help by reducing fat accumulation [\[R\]](#).

32



Blueberries

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate a half to one cup of fresh or frozen blueberries into your daily diet. You can add them to your breakfast cereal, smoothies, or enjoy them as a snack on their own.

Description

Blueberries are a nutritious fruit packed with antioxidants, vitamins, and fiber. They are known for their potential to support brain health, reduce the risk of chronic diseases, and promote overall well-being.

[Blueberries](#) are enjoyed all around the world for their sweet taste and nutritional benefits. They may support [\[R\]](#):

- Heart health
- Cognitive function
- Normal blood sugar levels

How it helps

A meta-analysis of 11 studies found that blueberries (typically, 22-50 g/day powder for 6-8 weeks) may lower blood triglycerides [\[R\]](#).

33



DHA (Omega-3)

IMPACT3 / 5

EVIDENCE3 / 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

According to experts, people with elevated triglycerides should take 4 grams of EPA + DHA per day, which requires supplementation to maintain a consistent dose [\[R\]](#).

Supplementation with omega-3 fatty acids (typically, 3.25 g/day EPA and/or DHA for 6-24 weeks) may lower triglycerides [\[R, R, R, R\]](#).

DHA alone may also help. A meta-analysis of 21 studies found that both EPA and DHA reduce triglycerides, with DHA reducing them more than EPA [\[R\]](#).

Supplementation with DHA from algal oil (typically, 1.68 g/day) may also lower triglycerides according to a meta-analysis of 11 trials and 485 healthy people [\[R\]](#).

34



Niacin Supplements

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a 20 mg niacin supplement daily, preferably with a meal to aid in absorption and minimize potential stomach upset.

TYPICAL STARTING DOSE

20 mg

Description

Niacin is an essential B vitamin that plays a vital role in metabolism, supporting heart health, maintaining healthy cholesterol levels, and promoting overall cellular function when included in a balanced diet or as a supplement.

[Niacin](#) (vitamin B3) is found in many foods. It supports your nervous system, skin, gut, and more [\[R\]](#).

Adults should get **16 mg** of niacin a day, and most people get enough from their diets [\[R\]](#).

Experts recommend getting niacin from food rather than supplements [\[R\]](#), [\[R\]](#).

How it helps

Experts suggest that niacin, also known as nicotinic acid, may lower triglycerides and LDL “bad” cholesterol. However, its use should be discussed with a doctor due to potential interactions with other medications and notable side effects [\[R\]](#).

Niacin supplementation, particularly at doses of 1,500 mg/day or higher, may reduce triglyceride levels, especially in women [\[R\]](#), [\[R\]](#), [\[R\]](#).

Prescription niacin products, approved by the FDA for dyslipidemia, are typically available in doses of 500 mg or higher. In contrast, over-the-counter supplements, which contain 250 mg or less, may offer smaller effects [\[R\]](#).

Please note: *Niacin has been linked to liver damage and strokes. It may also cause flushing, bruises, and bleeding. Most doctors do not recommend taking niacin unless a person can’t take statins and has close medical supervision. Talk to your doctor before taking niacin* [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

35



Goji Berries

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate goji berries into your daily diet by adding a handful (about 1 ounce or 28 grams) to your morning cereal, yogurt, or smoothie. You can also snack on dried goji berries throughout the day. Aim to include them in your diet consistently for at least a month to observe potential health benefits.

Description

Goji berries are a nutritious fruit known for their high antioxidant content. They may support immune health, provide essential nutrients, and be incorporated into a healthy diet as a snack or ingredient.

How it helps

Goji berries are rich in fiber and healthy fats that help reduce high levels of triglycerides, a type of fat in your blood, thereby lessening the risk of heart disease. They also contain antioxidant properties which further assist in overall heart health.

A meta-analysis of 7 trials concluded that the daily consumption of goji berry polysaccharide lowers triglyceride, fasting glucose, and LDL cholesterol while increasing HDL cholesterol. Another meta-analysis (7 trials and 548 participants) concluded that goji berries lower fasting glucose (by 0.36 mmol/L) and marginally reduce the concentrations of total cholesterol (by 0.30 mmol/L) and triglycerides (by 0.20 mmol/L). The most recent meta-analysis (10 studies) found that consuming goji berries (especially if eaten whole) lowers triglycerides (by 0.14 mmol/L) and increases HDL cholesterol (by 0.06 mmol/L) [[R](#), [R](#), [R](#)].

36



Fish

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate two servings of fish into your diet each week, focusing on oily fish like salmon, mackerel, or sardines for their high omega-3 fatty acid content. Each serving should be about 3.5 ounces cooked, or about ¾ cup of flaked fish.

Description

Fish, particularly fatty fish like salmon and mackerel, is an excellent source of omega-3 fatty acids, which support cardiovascular health, brain function, and inflammation management. Regular consumption of fish can promote heart health and overall well-being.

Fish is a great source of [omega-3s](#), protein, and other essential nutrients. Omega-3s from fish (EPA and DHA) are some of the healthiest fats we can eat. They help reduce inflammation and **protect the heart, brain, and eyes** [\[R\]](#), [\[R\]](#), [\[R\]](#).

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

- Salmon
- Tuna
- Herring
- Sardines

For optimal protection, 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

Experts suggest trading saturated fat found in meats for healthier fat found in fish and plants, such as olive oil [\[R\]](#).

Replacing saturated fat with fish/seafood (at least 2 or more servings per week for a total of 8 or more ounces) may lower triglyceride levels. Experts recommend the following fatty fish to people with high triglyceride levels [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Salmon
- Rainbow trout
- Tuna

People with triglyceride levels of 500 to 999 mg/dL may need to limit their fat intake, in which case, lean fish or seafood (eg, cod, tilapia, haddock, flounder, and shrimp) are recommended [\[R\]](#).

Fish may help due to its omega-3 content. Consuming at least 4 g/day of omega-3 fatty acids from foods may reduce triglyceride levels [\[R\]](#).

37

Strength Training

IMPACT3 / 5

EVIDENCE3 / 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

Experts recommend strength training to reduce triglyceride levels [R].

Strength training may decrease triglycerides. However, some studies suggest that people with metabolic syndrome may benefit less from strength training and that regular aerobic training may offer a greater benefit [R, R, R, R, R, R].

38



Fiber Supplement

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a fiber supplement such as psyllium, methylcellulose, or inulin. Start with a low dose of 5 grams once daily. Gradually increase the amount based on your tolerance, aiming for 20-30 grams per day, divided into separate doses before or with meals. Drink at least 8 ounces of water with each dose to prevent constipation. Continue daily as part of your regular diet.

TYPICAL STARTING DOSE

5 g

Description

Fiber supplements, often derived from sources like psyllium husk or inulin, can help individuals meet their daily fiber needs when dietary intake falls short. Fiber supports digestive regularity, satiety, and overall digestive health.

Fiber is a type of carb that your body can’t digest. It supports gut health, heart health, blood sugar control, and more [\[R\]](#), [\[R\]](#).

Adults should get 28 g of fiber every day. Most people in the US don’t get enough fiber [\[R\]](#), [\[R\]](#).

You can get more fiber by eating [\[R\]](#), [\[R\]](#):

- Whole grains
- Fruits
- Leafy greens
- Nuts and seeds
- Beans
- Broccoli

Fiber supplements are available for people who don’t get enough fiber from their diets [\[R\]](#), [\[R\]](#).

How it helps

Fiber supplements may help reduce triglyceride levels. Some studied supplements include [\[R\]](#):

- Inulin (10-20 g/day for 21-28 days) [\[R\]](#).
- Barley (5-10 g/day beta-glucans for 4-12 weeks) [\[R\]](#).

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Barley Supplement

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a barley grass powder supplement by mixing 1-2 teaspoons (approximately 4-8 grams) with water, juice, or into a smoothie. Consume this once daily, preferably in the morning or as directed by the supplement packaging or a healthcare provider.

TYPICAL STARTING DOSE

4 g

Description

Barley is a whole grain rich in fiber, vitamins, and minerals. Incorporating barley into your diet can support digestive health, provide sustained energy, and contribute to overall nutritional wellness.

How it helps

Consumption of soluble fiber from barley (5-10 g/day beta-glucans for 4-12 weeks) may lower triglycerides [\[R\]](#).

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African Mango Seed Extract

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 150 mg of African mango seed extract twice daily, 30 minutes before meals with a glass of warm water. Continue this regimen for 10 weeks for optimal results.

TYPICAL STARTING DOSE

300 mg

Description

African mango (*Irvingia gabonensis*) is a tropical fruit native to West Africa. It is renowned for its potential health benefits, primarily attributed to its high fiber content and the presence of an extract known as Irvingia, which is believed to support weight management and improve metabolic health. African mango supplements are commonly used to aid in weight loss efforts and may help reduce cholesterol levels and improve blood sugar control.

[African mango](#) (*Irvingia gabonensis*), also known as wild mango, bush mango, dika, and ogbono, is a tree found in the rainforests of West Africa. African mango owes its name to its similarity to mangoes [\[R\]](#).

All parts of the African mango tree are used for a variety of purposes [\[R\]](#):

- The pulp is consumed as food or used to make jams, juice, and wine
- The seeds are eaten raw or used to prepare foods and supplements
- The roots, bark, leaves, and seeds are used to make traditional medicines

How it helps

Supplementation with African mango seed extract (300 mg/day for 8-10 weeks) may lower triglycerides and cholesterol [\[R\]](#).

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Limit Coffee Intake

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Reduce your coffee consumption to no more than 2-3 cups (approximately 200-300 mg of caffeine) per day. Try to avoid drinking coffee after 2 PM to minimize potential impacts on sleep.

Description

Limiting coffee consumption can help prevent potential side effects like jitteriness, insomnia, and increased heart rate, while allowing for better sleep quality and overall energy regulation. Moderation in coffee intake supports overall well-being without overstimulation.

People often drink coffee for an energy and mood boost [\[R, R\]](#).

However, **coffee also comes with some drawbacks**. Drinking a lot of coffee can increase blood pressure and anxiety. It may also cause headaches [\[R, R, R\]](#).

How it helps

Consuming coffee (4-8 cups/day for 28-70 days) may increase blood triglycerides [\[R, R\]](#).

42



Flaxseed

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Consume 2 tablespoons of ground flaxseed daily. You can add it to your breakfast cereal, smoothies, or salads.

TYPICAL STARTING DOSE

2 tbsp

Description

Flaxseed is a nutrient-dense food that's high in fiber and omega-3 fatty acids. It may contribute to heart health, promote digestive regularity, and help manage cholesterol levels when included in a balanced diet.

[Flaxseed](#) is a common ingredient in bakery products. Some people also use it as a health food to support digestion [\[R\]](#).

Flaxseed is rich in many compounds, including [\[R\]](#):

- Vitamins and minerals
- Protein
- Fiber
- Omega-3 fatty acids ([ALA](#))

How it helps

Research on over 3,000 people concluded that flaxseed supplementation (30-60 g/day ground seed or equivalent to 2.5-8 g/day of alpha-linolenic acid for 6-27 weeks) may reduce blood triglycerides [\[R\]](#).

43



Garlic

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate 1-2 cloves of raw garlic into your meals daily. This can be achieved by finely chopping or crushing the garlic and letting it sit for a few minutes before adding it to your dishes to maximize its health benefits.

Description

Garlic is a popular herb known for its potential cardiovascular benefits, including lowering blood pressure and cholesterol levels. It also possesses antimicrobial properties and may support immune function.

[Garlic](#) is a vegetable often used to flavor food. It’s been a part of traditional medicine for thousands of years [\[R\]](#).

Today, people take garlic to help control their blood pressure and cholesterol [\[R\]](#).

How it helps

Garlic powder (600-900 g/day for 8-24 weeks) may lower triglyceride levels. Garlic may help by [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reducing fat absorption in the gut
- Decreasing fat production in the liver

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Avocado

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Incorporate half to one whole avocado into your daily diet. You can add it to salads, sandwiches, or use it as a healthy fat substitute for spreads or dressings.

Description

Avocado is a nutrient-dense fruit known for its creamy texture and healthy monounsaturated fats. It is packed with vitamins, minerals, and dietary fiber, and may support heart health, skin health, and overall nutrition.

[Avocado](#) is a fruit first cultivated in Mexico in 500 BCE [\[R\]](#), [\[R\]](#).

You can eat it raw in salads, sandwiches, and dips. Avocado oil has recently become popular, but it’s much less nutritious than the whole fruit.

Avocado is rich in antioxidants, vitamins, minerals, and fiber. It may support [\[R\]](#):

- Heart health
- Healthy weight
- Healthy aging

How it helps

Avocados are rich in healthy monounsaturated fats that can help lower bad cholesterol and raise the level of good cholesterol, leading to a reduction in triglyceride levels. Furthermore, avocados are high in fiber which is beneficial for overall heart health.

A [meta-analysis of 10 studies and 229 participants](#) concluded that consuming avocados **lowers LDL-C (by 16.50 mg/dL) and triglycerides (by 27.20 mg/dL)** [\[R\]](#).

45



Yoga

IMPACT

3 / 5

EVIDENCE

3 / 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

Inactive people tend to have higher triglycerides [\[R, R, R\]](#).

Regular exercise is one of the best ways to decrease triglycerides. It helps burn calories and helps your body break down triglycerides. **Experts recommend at least 30 minutes of physical activity a day, on all or most days of the week** [\[R, R, R\]](#).

Types of exercise that may help include yoga. It may lower triglycerides in healthy people, as well as in those with prediabetes or type 2 diabetes [\[R, R, R, R, R, R\]](#).

46



Berries

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate a variety of berries such as strawberries, blueberries, raspberries, and blackberries into your daily diet. Aim for at least one cup of fresh or frozen berries every day, either as a snack, part of your breakfast (such as in oatmeal or yogurt), or as a dessert.

Description

Berries, such as strawberries, blueberries, and raspberries, are packed with antioxidants, vitamins, and fiber. Regular consumption of berries may support heart health, improve cognitive function, and contribute to overall well-being.

How it helps

Consumption of berry bioactive compounds, including whole fruits, juices, and extracts, has been shown to lower triglyceride levels, among other lipid parameters, particularly in people with elevated blood lipids or conditions like type 2 diabetes or metabolic syndrome [\[R\]](#), [\[R\]](#).

The triglyceride-lowering effects of berries may be due to their rich content of antioxidants, especially anthocyanins. These compounds may improve lipid metabolism and reduce absorption of fats, contributing to lower blood triglyceride levels [\[R\]](#).

47



Grape Seed Extract

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 100-300 mg of grape seed extract daily, preferably with a meal to enhance absorption. This can be done either through a single dose or split into multiple doses throughout the day. Continue this regimen for at least 3 months to observe potential benefits.

TYPICAL STARTING DOSE
100 mg

Description

Grape seed extract is rich in antioxidants called polyphenols, which may help protect against oxidative stress and support cardiovascular health. It's also believed to have potential benefits for skin health and overall well-being.

[Grape seed extract](#) is made from the seeds of wine grapes. It contains antioxidant compounds that may help support [\[R\]](#), [\[R\]](#):

- Blood circulation
- Heart health
- Blood sugar control
- Healthy weight

How it helps

Supplementation with grape seed extract (100-300 mg/day for 4-8 weeks) may lower blood triglycerides. Grape seed extract may help by reducing triglyceride production [\[R\]](#), [\[R\]](#).

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Gymnema

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a gymnema supplement containing 200 to 400 mg of gymnemic acids daily, ideally with a meal to potentially aid in reducing sugar absorption in the intestines. The duration can vary, but many users incorporate it into their daily routine for several months to assess its effects on blood sugar levels and cravings for sweets.

TYPICAL STARTING DOSE

200 mg

Description

Gymnema is an herb used in traditional medicine for its potential to support blood sugar control. Some studies suggest it may have benefits for individuals with diabetes, but it's important to consult with a healthcare provider before using it as a supplement.

[Gymnema](#) (*Gymnema silvestris*), also known as cowplant, gurmarmar, or periploca of the woods, is a plant originally from India. In Ayurvedic medicine, it is known as meshashringi or “the destroyer of sugar” because it temporarily **reduces the taste of sugar** on the tongue [\[R\]](#), [\[R\]](#).

It is traditionally used for [\[R\]](#), [\[R\]](#):

- Diabetes
- Weight loss
- High cholesterol

How it helps

Two separate meta-analyses (the largest one with 16 studies and 419 patients with type 2 diabetes) suggest that *Gymnema sylvestre* supplementation can lower triglycerides. However, there were concerns about study heterogeneity, low quality, and limited participant diversity in these findings [\[R\]](#), [\[R\]](#).

Gymnema may help by reducing sugar absorption in your intestines and improving your body's ability to break down fats.

49



Inulin

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 5 grams of inulin supplement daily, mixing it with water, other beverages, or food. It can be taken all at once or divided into smaller doses throughout the day. Start with a lower dose to assess your tolerance and gradually increase. Continue taking inulin daily for at least 4-8 weeks to assess its benefits on gut health.

TYPICAL STARTING DOSE

5 g

Description

Inulin is a type of dietary fiber found in certain plants. It can support digestive health by promoting the growth of beneficial gut bacteria and aiding regular bowel movements.

How it helps

Inulin (10-20 g/day for 21-28 days) may lower triglycerides by reducing their production [\[R\]](#).

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Cocoa

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate 30-60 grams of high-quality dark chocolate (with at least 70% cocoa content) into your daily diet. Enjoy it as a snack or dessert to reap the potential heart health benefits.

Description

[Cocoa](#) comes from the beans of the *Theobroma cacao* tree. It is found any many foods and drinks, and people have also used it as a medicine for thousands of years. The numerous active components of cocoa can help with weight control, fatigue, mood, and digestion, among others.

[Cocoa](#) comes from the beans of the *Theobroma cacao* tree. It’s often used for making chocolate, hot chocolate, and pastries. People have also used it as a medicine for over a thousand years [\[R\]](#), [\[R\]](#).

Cocoa contains many active components that likely help [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Control weight
- Lower fatigue
- Boost mood
- Improve digestion
- Balance blood sugar
- Support heart health

Note that pure cocoa is likely a healthier choice than chocolate. If you eat chocolate, choose dark chocolate with more cocoa and less sugar and fat.

How it helps

A meta-analysis of 19 trials and 1,131 people concluded that consuming cocoa flavanols (400-1,000 mg/day for 2-8 weeks) may lower triglyceride levels [\[R\]](#).

51



Garlic Supplement

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a garlic supplement, such as a garlic extract or aged garlic supplement, in a dosage of 600-1,200 mg per day, divided into separate doses. This should be taken with meals to minimize digestive issues. Continue daily for at least 8-12 weeks to evaluate its effects on health markers like blood pressure or cholesterol.

TYPICAL STARTING DOSE

200 mg

Description

Garlic is a pungent herb known for its potential health benefits, including cardiovascular support and immune system enhancement. It contains bioactive compounds that may help reduce the risk of chronic diseases and support overall well-being.

[Garlic](#) is a delicious aromatic herb that adds flavor to your food. But did you know that garlic has been a part of traditional medicine for thousands of years? **From ancient Egypt and Rome to China, people have praised garlic for its many health benefits.** Today, we can trace many of those benefits to sulfur-rich compounds found in garlic. People take garlic to help control their blood pressure and cholesterol [\[R\]](#).

Please note: *Garlic can interact with blood thinners (like aspirin, Plavix, Coumadin). If you are on blood thinners, consult your doctor before supplementing with garlic [\[R\]](#).*

How it helps

Garlic supplements (for 8-24 weeks) may lower triglyceride levels. Studied garlic forms include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Garlic oil (8-15 g/day)
- Aged garlic extract (1.8-7.2 mL/day)

Garlic oil may offer the greatest benefits. Garlic may help by:

- Reducing fat absorption in the gut
- Decreasing fat production in the liver

However, garlic did not reduce triglyceride levels in studies of people with heart disease and type 2 diabetes [\[R\]](#), [\[R\]](#).

52



Amla

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Incorporate 1-2 teaspoons (approximately 4-8 grams) of amla powder into your daily diet. You can mix it into a glass of water, blend it into a smoothie, or sprinkle it over salads or cooked meals. Do this consistently every day for best results.

Description

Amla, also known as Indian gooseberry, is a fruit known for its high vitamin C content and antioxidant properties. It is used in traditional Ayurvedic medicine for various health benefits, including immune support and skin health.

How it helps

Amla, or Indian gooseberry, has been shown to reduce levels of triglycerides in the body due to its high antioxidant content. This means it can help improve heart health by lowering harmful fats in your bloodstream.

Two meta-analyses (the largest one with 9 trials) concluded that supplementation with amla (500-1500 mg/day for 14-84 days) **lowers triglycerides (by 22.35 mg/dL)** [\[R, R\]](#).

53



Artichoke Leaf Extract

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take 500 mg of artichoke leaf extract daily with a glass of water, preferably with or after a meal to aid absorption.

TYPICAL STARTING DOSE

500 mg

Description

Artichoke leaf extract is derived from the leaves of the artichoke plant and is used as a dietary supplement. It is being researched for its potential to support liver health and digestive function.

[Artichokes](#) are packed with antioxidants and fiber. People eat the heart of the artichoke. However, many of the plant’s active compounds are also found in its leaves [\[R\]](#), [\[R\]](#).

People use artichoke leaf extracts to help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Lower cholesterol
- Lower blood pressure
- Improve digestion

How it helps

A meta-analysis of 9 trials and 702 people concluded that supplementation with artichoke leaf extract (typically, 600-1200 mg/day for 6-8 weeks) lowers blood triglycerides by 9.2 mg/dL [\[R\]](#).

54



Red Yeast Rice

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a 500 mg capsule of red yeast rice supplement once daily, preferably with your evening meal to help with absorption and efficacy.

TYPICAL STARTING DOSE

500 mg

Description

Red yeast rice is a fermented product made from rice and red yeast (*Monascus purpureus*). It has a long history of use in traditional Chinese medicine, and it is commonly used today as a dietary supplement to help lower cholesterol levels due to the presence of naturally occurring compounds called monacolins.

[Red yeast rice](#) is made when a type of fungus grows on rice. As the fungus ferments the rice, it produces a chemical called *monacolin K*. This chemical is very similar to a cholesterol-lowering drug [\[R\]](#).

People mostly use red yeast rice to manage their cholesterol. It may also help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Inflammation
- High blood pressure
- High blood sugar

How it helps

Supplementation with red yeast rice (500-2400 mg/day for 8-16 weeks) may lower triglyceride levels [\[R\]](#), [\[R\]](#).

Please note: *The FDA does not allow the sale of products containing monacolin K in the United States. Additionally, experts warn about the safety and variable efficacy of red yeast rice supplements. Products containing monacolin K may cause muscle and liver damage. Red yeast rice should not be used during pregnancy or breastfeeding. Talk to your doctor before taking red yeast rice [\[R\]](#), [\[R\]](#).*

55



Psyllium

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take 5 grams of psyllium husk powder with at least 8 ounces of water. Do this once daily, preferably in the morning before breakfast. Continue this regimen daily for ongoing digestive health benefits.

TYPICAL STARTING DOSE

5 g

Description

Psyllium is a plant-based dietary fiber derived from the seeds of the *Plantago ovata* plant. It is primarily used both traditionally and today, as a dietary supplement due to its high soluble fiber content, aiding in digestive health and regulating bowel movements. The main compounds in psyllium are soluble fiber and mucilage.

[Psyllium husk](#) might be beneficial for gut health and heart health. But what exactly is this supplement and how does it work?

Psyllium is an herb that grows around the world. Its “husk,” the outer coating of the psyllium seed, is full of fiber. The health benefits of psyllium husk are due to this fiber.

How it helps

Supplementation with psyllium (10-15 g/day for 8-20 weeks) may lower triglycerides according to a meta-analysis of 8 studies and 395 people [\[R\]](#)

56



Synbiotics

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Take a synbiotic supplement that combines both prebiotics and probiotics daily, ideally with a meal. The specific dosage depends on the product, but generally ranges from 1 to 10 billion CFUs for probiotics. Consult the product's label for exact dosing instructions and continue use for at least 4 weeks to assess effectiveness.

Description

Synbiotics are dietary supplements that combine probiotics (beneficial bacteria) and prebiotics (fiber) to support gut health. They help maintain a balanced gut microbiome and digestive well-being.

How it helps

Synbiotics may lower triglycerides in overweight and obese adults. The benefits may be greater with over 8 weeks of consumption [\[R\]](#), [\[R\]](#).

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Mediterranean Diet

IMPACT3 / 5

EVIDENCE3 / 5

How to implement

Incorporate a variety of primarily plant-based foods, such as fruits, vegetables, whole grains, nuts, and legumes, into every meal. Choose healthy fats, like olive oil, over saturated fats and consume fish and poultry at least twice a week. Limit red meat to a few times a month and include a moderate amount of dairy products. Opt for water and red wine in moderation as your beverages.

Description

The [Mediterranean diet](#) is based on the traditional cuisine from the Mediterranean regions. It moderates the intake of red meat and dairy, while being rich in fruits and vegetables, whole grains, and healthy fats ([olive oil](#)).

The [Mediterranean diet](#) focuses on traditional cuisine from the Mediterranean regions. It’s rich in [\[R\]](#):

- [Olive oil](#)
- Fruits and vegetables
- Whole grains
- Nuts and seeds
- Fish

This type of diet may **reduce inflammation and protect the brain and heart** [\[R, R, R, R\]](#).

Limited intake of animal products, saturated fat, and refined sugar likely contribute to the health benefits of the Mediterranean diet [\[R\]](#).

How it helps

The **Mediterranean diet may lower triglycerides** because it is [\[R, R, R, R\]](#):

- High in fiber
- High in omega-3s
- Low in sugar

Combining the Mediterranean diet with exercise may work even better [\[R\]](#).

 PERSONALIZED TO YOUR GENES

The Mediterranean diet may increase the beneficial effects of your [MLXIPL](#) gene variant on triglycerides [\[R\]](#).

The Mediterranean diet may reduce triglycerides more in people with your [LPL](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
MLXIPL	rs3812316	CG	
LPL	rs13702	TC	

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Zinc

IMPACT

3 / 5

EVIDENCE

3 / 5

How to implement

Take a 15 mg zinc supplement daily, ideally with a meal to enhance absorption.

TYPICAL STARTING DOSE

10 mg

Description

Zinc is an essential mineral found in various foods, including meat, dairy, and nuts. It is crucial for immune function, wound healing, DNA synthesis, and maintaining healthy skin and nails. Zinc supplements are sometimes used to support immune health and manage zinc deficiencies.

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

- Defend against disease
- Protect DNA from damage
- Heal wounds
- Control blood sugar

Some of the best sources of zinc include **shellfish, pork, beef, and beans**. It is also available as a supplement [\[R\]](#).

Adults should get **8-11 mg of zinc** per day [\[R\]](#).

How it helps

Zinc (up to 40 mg/day for up to 12 weeks) may help lower triglyceride levels [\[R\]](#), [\[R\]](#).

Zinc may help by supporting healthy blood sugar levels. This, in turn, reduces how much triglyceride is made [\[R\]](#).

Please note: *A high intake of zinc may cause stomach pain and gut irritation. Medical bodies recommend against taking more than **40 mg** of zinc per day* [\[R\]](#), [\[R\]](#).

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Spirulina

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take 1-8 g of spirulina supplements daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

500 mg

Description

Spirulina is a blue-green algae. It is rich in nutrients like protein, vitamins, and minerals, particularly vitamin B12 and iron, and is a source of antioxidants, chlorophyll, and phycocyanin. It can be found in powdered or tablet form as a supplement, and is often used to boost energy, support the immune system, and enhance overall nutrition. Additionally, spirulina.

[Spirulina](#) is a supplement made from blue-green algae that grows in fresh and marine water [\[R\]](#), [\[R\]](#).

Dried spirulina is up to 70% protein. It’s also rich in vitamins, antioxidants, and healthy fats. This makes it a great source of nutrition for both people and livestock [\[R\]](#), [\[R\]](#), [\[R\]](#).

People use spirulina supplements to reduce [\[R\]](#), [\[R\]](#):

- Cholesterol
- Blood pressure
- Blood sugar

How it helps

Spirulina (1-10 g/day for at least 2 months) may help lower triglycerides by [\[R\]](#):

- Increasing the breakdown of triglycerides
- Reducing inflammation

Please note: *Use caution when buying spirulina supplements. Buy these products only from trusted providers. Some spirulina products may contain toxic contaminants* [\[R\]](#).

60



Evening Primrose Oil

IMPACT

3 / 5

EVIDENCE

2 / 5

How to implement

Take 500mg to 1000mg of evening primrose oil, in capsule form, once daily with a meal to ensure optimal absorption. This regimen is typically recommended for several months to evaluate its effectiveness for the specific condition being addressed.

Description

Evening primrose is a plant known for its seeds, which are a source of gamma-linolenic acid (GLA), an essential fatty acid. Some studies suggest that evening primrose oil, derived from these seeds, may help alleviate symptoms of conditions like premenstrual syndrome (PMS) and eczema, as well as support overall skin health.

Evening primrose (*Oenothera biennis*) is a flowering plant. Its name comes from the fact that its flowers close during the day and open when the sun sets [\[R\]](#).

[Evening primrose oil](#) comes from the plant’s seeds. It is rich in omega-6 fatty acids like [GLA](#). People use this oil to help with high triglycerides [\[R\]](#), [\[R\]](#).

How it helps

Evening primrose oil (up to 4 g/day) may help lower triglycerides [\[R\]](#).

It may slow down the production of triglycerides and accelerate their breakdown [\[R\]](#).

Please note: *Evening primrose oil may interfere with medications. Check with your doctor before taking evening primrose oil* [\[R\]](#), [\[R\]](#).

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Hibiscus

IMPACT3 / 5

EVIDENCE2 / 5

How to implement

Take 250 mg of hibiscus supplement daily, either in the form of a capsule or powder. It can be taken at any time of day, with or without food.

TYPICAL STARTING DOSE
250 mg

Description

Hibiscus is a flower known for its potential to lower blood pressure, boost antioxidant levels, and support heart health. Consuming hibiscus tea or incorporating hibiscus into your diet may provide these health benefits.

[Hibiscus](#) (*Hibiscus sabdariffa*), also known as roselle or sorrel, is a flowering plant. It is traditionally brewed as a tea of a distinctive, bright pink color [\[R\]](#), [\[R\]](#).

For hundreds of years, people from all over the world have taken hibiscus for its potential health benefits [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: Hibiscus can interact with "water pills" (diuretics) like hydrochlorothiazide. If you are using "water pills", consult your doctor before taking hibiscus.

How it helps

Supplementation with hibiscus (100-3,000 mg/kg for 15-30 days) may lower triglycerides. However, other studies found no effects of hibiscus tea on triglycerides [\[R\]](#), [\[R\]](#), [\[R\]](#).

 PERSONALIZED TO YOUR GENES

Drinking hibiscus tea may lower blood triglycerides more in people with your [CETP](#) gene variant [\[R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
CETP	rs708272	AA	

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Monounsaturated Fatty Acids (MUFAs)

IMPACT

2 / 5

EVIDENCE

4 / 5

How to implement

Incorporate monounsaturated fatty acids (MUFAs) into your diet by taking a daily supplement such as fish oil or olive oil capsules. Follow the dosage instructions on the product label, which typically suggest one to two capsules daily with meals.

Description

MUFAs are a type of healthy fat found in foods like avocados, olive oil, and nuts. They are known to support heart health by improving cholesterol levels and reducing the risk of cardiovascular disease.

How it helps

Experts suggest that the majority of fat intake should come from monounsaturated fats. Replacing carbs by MUFAs may reduce triglycerides [\[R, R\]](#).

Research on over 1,400 people associated high-MUFA diets with lower triglyceride levels when compared to high-carbohydrate diets. However, not all studies found this benefit [\[R, R\]](#).

63



Limit Trans Fats

IMPACT

2 / 5

EVIDENCE

4 / 5

How to implement

To limit trans fats, read food labels and choose products with 0 grams of trans fat. Avoid fried foods, packaged snacks, baked goods, and fast foods, which are common sources of trans fats. Aim to eliminate trans fats from your diet completely.

Description

Limiting trans fat intake is vital for heart health and reducing the risk of cardiovascular diseases. Avoiding foods high in trans fats and opting for healthier alternatives promotes better cardiovascular well-being.

Based on their structure, the fats in our diet can be broadly divided into *saturated* and *unsaturated* fat. Trans fat is a type of unsaturated fat [\[R, R, R\]](#).

In large amounts, trans fat and saturated fat may have a negative impact on your heart. Processed foods and animal products like red meat and dairy are rich in these fats [\[R, R, R\]](#).

How it helps

Experts suggest avoiding trans fats or foods with hydrogenated oils or fats. The trans fatty acids produced in the partial hydrogenation of vegetable oils may account for up to 80% of total intake of trans fats [\[R, R\]](#).

Trans fatty acids may raise triglyceride and LDL “bad” cholesterol [\[R\]](#).

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Limit Saturated Fat

IMPACT

2 / 5

EVIDENCE

4 / 5

How to implement

Reduce your intake of saturated fats by choosing lean cuts of meat, opting for low-fat or fat-free dairy products, and using cooking oils high in unsaturated fats (like olive or canola oil) instead of butter or lard. Aim to keep saturated fat to less than 10% of your total daily calories. For someone consuming 2000 calories a day, this means 20 grams or less of saturated fat per day.

Description

Limiting saturated fat intake is crucial for managing cholesterol levels and reducing the risk of heart disease. Choosing lean protein sources and incorporating unsaturated fats into the diet supports cardiovascular health and overall well-being.

How it helps

Experts suggest trading saturated fat found in meats for healthier fat found in fish and plants, such as olive and canola oils. Saturated fat consumption should be below 10% of the total caloric intake in healthy people, and below 7% for those with high triglyceride levels [\[R\]](#), [\[R\]](#).

To achieve lower triglyceride levels, experts suggest replacing saturated fat with polyunsaturated fatty acids. However, the evidence is mixed and more studies are needed to confirm the benefits of such a replacement [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

65



Running

IMPACT

2 / 5

EVIDENCE

4 / 5

How to implement

To implement running into your routine, start with shorter distances and gradually increase as your endurance improves. Aim for 3 to 5 sessions per week, each lasting 20 to 30 minutes. Wear appropriate running shoes to prevent injuries and choose varied routes to keep the activity engaging. Incorporate warm-up exercises before running and cool down with stretches afterward to enhance flexibility and recovery.

Description

Running is a versatile and accessible form of aerobic exercise that improves cardiovascular health, strengthens muscles, and enhances mental well-being. It requires minimal equipment, can be done almost anywhere, and is effective for weight management. Regular running can increase endurance, reduce stress, and boost overall physical fitness, making it a popular choice for maintaining an active lifestyle.

How it helps

Inactive people tend to have higher triglycerides [\[R, R, R\]](#).

Regular exercise is one of the best ways to decrease triglycerides. It helps burn calories and helps your body break down triglycerides. **Experts recommend at least 30 minutes of physical activity a day, on all or most days of the week** [\[R, R, R\]](#).

Types of exercise that may help include:

- **Cardio** (at least 150 min/week) [\[R, R, R, R, R, R\]](#)
- **Resistance training** [\[R, R, R\]](#)
- **Yoga** [\[R, R, R, R, R, R\]](#)
- **Tai chi** [\[R, R\]](#)

Vigorous cardio may work better than moderate cardio. For example, running may help more than brisk walking [\[R, R, R\]](#).

Combining exercise with diet changes may produce even better results [\[R, R\]](#).

66



Soy Isoflavones

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take a soy isoflavone supplement containing 40 to 80 milligrams daily, ideally with food to improve absorption. This dosage can be continued on a daily basis for several months, but it's recommended to reevaluate its effectiveness and any potential side effects with a healthcare provider periodically.

TYPICAL STARTING DOSE

40 mg

Description

Soy isoflavones are natural compounds found in soybeans and soy products. They are phytoestrogens, which means they can mimic the effects of estrogen in the body and are associated with potential health benefits like menopausal symptom relief and improved heart health.

Soy is a common food in many cuisines around the world, especially Asian cuisines [\[R\]](#).

It's a great source of [\[R\]](#), [\[R\]](#):

- Plant-based protein
- Fiber
- Omega-3 fats
- Antioxidants (isoflavones)

Soy-based foods include [\[R\]](#):

- Tofu
- Tempeh
- Edamame
- Miso
- Natto

Soy protein and soy isoflavones are also available as supplements.

How it helps

Research on over 4,000 postmenopausal women found that supplementation with soy phytoestrogens may lower triglyceride levels [\[R\]](#).

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Alpha-Lipoic Acid

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

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

TYPICAL STARTING DOSE
100 mg

Description

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

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

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

How it helps

Alpha-lipoic acid (200-600 mg/day for at least 12 weeks) may help lower triglycerides. It may help the body break down and remove triglycerides. However, not all studies found these benefits [\[R, R, R, R\]](#).

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Maintain Optimal Vitamin D Levels

IMPACT

2 / 5

EVIDENCE

3 / 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

Low vitamin D levels have been linked to higher blood triglycerides [\[R\]](#), [\[R\]](#).

Vitamin D supplements (1000-2,000 IU/day for up to 6 months) may help lower triglycerides. However, it may only help in people who are deficient, and some people may require larger amounts. In addition, several studies did not find a clear benefit [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Vitamin D combined with calcium may also help [\[R\]](#).

Vitamin D may help the body make less triglycerides and increase their breakdown [\[R\]](#).

Please note: *Experts recommend getting 600-800 IU of vitamin D per day. Medical bodies recommend against taking more than 4000 IU per day* [\[R\]](#).

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Avoid Air Pollution

IMPACT

2 / 5

EVIDENCE

3 / 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 22 studies found a 3.14% increase in triglyceride levels per 10 µg/m3 PM₁₀ increment and a 4.24% increase per 10 µg/m3 NO₂ increment. Other pollutants had no effects on triglyceride levels [\[R\]](#).

70



Cumin

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

To implement this supplement recommendation, take 500 mg of cumin in capsule form daily, preferably with a meal to enhance absorption. It's often recommended to continue this regimen for at least 8 weeks to observe potential health benefits.

TYPICAL STARTING DOSE

500 mg

Description

Cumin is a spice used in cooking and traditional medicine. It contains compounds that may have antioxidant and anti-inflammatory effects.

Cumin (*Cuminum cyminum* L.) is a flowering herb cultivated in the Middle East, India, China, and the Mediterranean area [\[R\]](#).

Cumin seeds are used as a spice and, in traditional medicine, for [\[R, R, R\]](#):

- Diarrhea
- Stomachache
- High cholesterol
- Diabetes

How it helps

Supplementation with cumin (for 2-3 months) may lower triglyceride levels in healthy people. Studied forms include [\[R\]](#):

- Powder (3g/day)
- Extract (225-300 mg/day)
- Oil (25-100 mg/day)

Cumin may help by reducing dietary fat absorption in the gut [\[R\]](#).

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EPA (Omega-3)

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

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

TYPICAL STARTING DOSE
500 mg

Description

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

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

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

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

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

How it helps

According to experts, people with elevated triglycerides should take 4 grams of EPA + DHA per day, which requires supplementation to maintain a consistent dose [\[R\]](#).

Supplementation with omega-3 fatty acids (typically, 3.25 g/day EPA and/or DHA for 6-24 weeks) may lower triglycerides [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

EPA alone may also help. A meta-analysis of 21 studies found that both EPA and DHA reduce triglycerides. However, DHA reduced them more than EPA [\[R\]](#).

72



Resveratrol

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

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

TYPICAL STARTING DOSE

150 mg

Description

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

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

- Berries
- Red grapes
- Red wine
- Peanuts

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

How it helps

Multiple meta-analyses on resveratrol supplementation indicate mixed effects on lipid profiles. It generally lowers total cholesterol (by 7.65-9.75 mg/dL), LDL-cholesterol, and triglycerides, with stronger effects in interventions lasting over 3 months or involving type 2 diabetes patients. However, it may raise total and LDL cholesterol, with non-significant effects on triglycerides, in people with type 2 diabetes and obesity [\[R, R, R, R, R, R\]](#).

Resveratrol may help by inhibiting the enzymes that produce triglycerides in the body.

73



Black Seed (Black Cumin)

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take 1000 mg of black seed (black cumin) supplement daily, preferably split into two doses of 500 mg each, one in the morning and one in the evening.

TYPICAL STARTING DOSE

1000 mg

Description

Black seed, also known as black cumin or *Nigella sativa*, has been used for its potential health benefits in traditional medicine. It is believed to have anti-inflammatory, antioxidant, and immune-boosting properties.

[Black seed](#) (black cumin) and its oil are used in cooking and traditional medicine [\[R\]](#).

People use black seed for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Asthma
- Allergies
- High blood sugar
- High blood pressure
- Joint pain

How it helps

Black seed (200-3,000 mg/day for 1-12 months) may help lower blood triglycerides. It may help the body break down and clear triglycerides [\[R\]](#).

74



Milk Thistle (Silymarin)

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take a 300 mg milk thistle (silymarin) supplement daily with water, preferably with a meal for better absorption. Continue this regimen as advised by your healthcare provider.

TYPICAL STARTING DOSE

300 mg

Description

Silymarin is a natural plant extract derived from the milk thistle plant (*Silybum marianum*). It has been traditionally used for its potential anti-inflammatory and liver-protective properties. Silymarin consists of several flavonolignans, including silybin, silydianin, and silychristin.

Milk thistle (*Silybum marianum*) is a purple flowering plant in the daisy family. Traditionally, it has been used for liver problems. Some people also eat the leaves in salads [\[R, R\]](#).

The extract of milk thistle is called *silymarin* [\[R, R, R\]](#).

People use milk thistle to help with [\[R, R, R\]](#):

- Liver problems
- Blood sugar control
- Indigestion
- Skin problems

How it helps

Silymarin (at least 450 mg/day for at least 4 months) may help lower triglycerides in overweight, obese, and diabetic people. However, not all studies found these benefits [\[R, R, R\]](#).

Silymarin may help the body break down triglycerides [\[R\]](#).

Please note: Avoid milk thistle if you’re allergic to ragweed, daisies, or chrysanthemums. Because it belongs to the same plant family, it may cause similar reactions. People with diabetes or some forms of cancer should talk to their doctor before taking milk thistle. Milk thistle may also interact with some medications [\[R, R\]](#).

 PERSONALIZED TO YOUR GENES

People with your [APOC3](#) gene variant may have higher triglycerides. This gene reduces fat breakdown. Silymarin may help the body break down triglycerides [\[R, R, R\]](#).

YOUR GENETIC VARIANTS			
GENE	SNP	GENOTYPE	EVIDENCE
PCSK7	rs7123454	CA	

75



Curcumin

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take a 500 mg curcumin supplement daily with food. To enhance absorption, take it with a meal that contains fats or oils since curcumin is fat-soluble.

TYPICAL STARTING DOSE
500 mg

Description

Curcumin is a compound found in turmeric known for its anti-inflammatory and antioxidant properties. It has been studied for its potential to reduce inflammation, support joint health, and contribute to overall well-being.

[Turmeric](#) is a yellow spice from India. It may reduce inflammation and [oxidative stress](#) [\[R\]](#).

The most important active compound in turmeric is **curcumin**. People use curcumin for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Joint pain
- Hay fever
- Mood
- High blood sugar
- Gut health
- Liver health

How it helps

Curcumin may help lower blood triglycerides. Studied forms include [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- **Turmeric powder:** 2-3 g/day
- **Curcumin:** at least 300 mg/day
- **Bioavailable curcumin:** 70-80 mg/day

However, not all studies found these benefits [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Curcumin may help the body make less triglycerides and increase their breakdown [\[R\]](#), [\[R\]](#).

Note that curcumin is hard to absorb. Look for supplements with *bioavailable* curcumin, which is easier to absorb. Combining it with [piperine](#) (a compound in black pepper) may also help [\[R\]](#), [\[R\]](#).

Please note: *curcumin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using curcumin or turmeric supplements* [\[R\]](#), [\[R\]](#), [\[R\]](#).

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Soy Protein

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Include 20 grams of soy protein in your daily diet. This can be achieved by consuming soy-based products such as tofu, soy milk, or soy nuts throughout the day.

TYPICAL STARTING DOSE

20 g

Description

Soy protein is a high-quality plant-based protein derived from soybeans. It is commonly used in vegetarian and vegan diets and may support muscle growth, weight management, and overall nutritional needs.

Soy is a common food in many cuisines around the world, especially Asian cuisines [\[R\]](#).
It's a great source of [\[R\]](#), [\[R\]](#):

- Plant-based protein
- Fiber
- Omega-3 fats
- Antioxidants (isoflavones)

Soy-based foods include [\[R\]](#):

- Tofu
- Tempeh
- Edamame
- Miso
- Natto

Soy protein and soy isoflavones are also available as supplements.

How it helps

Soy protein (15-40 g/day for 5-16 weeks) may lower triglyceride levels more than soy isoflavones. Doses above 25 g/day may offer greater benefits [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

77



Whey Protein

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Mix one scoop (approximately 25-30 grams) of whey protein powder with 8-12 ounces of water, milk, or your preferred beverage. Consume this drink 1-2 times per day, ideally post-workout or as a meal replacement.

TYPICAL STARTING DOSE

25 g

Description

Whey protein is a complete protein derived from milk during cheese production. It is rich in essential amino acids and is used to support muscle recovery, promote muscle growth, and provide a convenient protein source for athletes and fitness enthusiasts.

Whey is the liquid that separates from milk when cheese is made. [Whey protein](#) is full of amino acids (protein building blocks) that the body needs [\[R\]](#), [\[R\]](#).

Whey protein usually comes in the form of a powder that can be added to soft foods and drinks. People often use it to help with [\[R\]](#), [\[R\]](#):

- Athletic performance
- Nutritional deficiencies

How it helps

Supplementing with whey protein (at least 30 g/day) may help lower blood triglycerides [\[R\]](#), [\[R\]](#), [\[R\]](#).

Whey protein may help reduce fat absorption in the gut. It may also improve triglyceride metabolism [\[R\]](#), [\[R\]](#).

78



Chromium

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Take a 200 mcg chromium supplement daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

200 mcg

Description

Chromium is a trace mineral that plays a role in insulin sensitivity and glucose metabolism. Adequate chromium intake through diet or supplements may help support blood sugar control and overall metabolic health.

[Chromium](#) (Cr) is a trace element. It helps regulate carb, fat, and protein breakdown [\[R\]](#).

Women need 20-25 micrograms (mcg) of chromium per day, while men need 30-35 mcg [\[R\]](#).

It’s easy to get chromium from your diet. Good sources include [\[R\]](#):

- Grape and orange juice
- Ham
- Beef
- Lettuce

You can also get chromium from supplements [\[R\]](#).

How it helps

Supplementation with chromium (200-1,000 mcg for 8-25 weeks) may help lower triglycerides. Chromium picolinate may offer greater benefits [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Chromium may not improve triglycerides in women with polycystic ovary syndrome (PCOS) [\[R\]](#).

79



Canola Oil

IMPACT

2 / 5

EVIDENCE

3 / 5

How to implement

Incorporate canola oil into your diet as a cooking oil or a salad dressing base. Use it in place of other fats such as butter or margarine when baking, frying, or preparing meals to help lower bad cholesterol levels. Aim for using canola oil in 1-2 meals per day, everyday, for consistent dietary benefits.

Description

Canola oil is a heart-healthy cooking oil rich in unsaturated fats and low in saturated fats. Incorporating canola oil into your diet can help lower cholesterol levels and reduce the risk of cardiovascular disease.

How it helps

Experts suggest trading saturated fat found in meats for healthier fat found in fish and plants, such as olive and canola oils [\[R\]](#).

Canola oil may reduce triglyceride levels more than saturated fats [\[R\]](#).

80



Vitamin C

IMPACT2 / 5

EVIDENCE3 / 5

How to implement

Take 500-2000 mg of vitamin C supplement daily. It can be taken at any time of the day, with or without food, according to personal preference or tolerance.

TYPICAL STARTING DOSE

500 mg

Description

[Vitamin C](#) is an essential nutrient. This means that our bodies can’t produce it on their own, so we have to get it from food or supplements [\[R\]](#).

Foods rich in Vitamin C include: [\[R\]](#)

- Citrus Fruits
- Peppers
- Brussel sprouts
- Kiwi
- Broccoli
- Tomato
- Cantaloupe
- Cauliflower
- Spinach

Vitamin C has antioxidant properties. It supports immunity, heart health, and wound healing [\[R\]](#), [\[R\]](#).

Vitamin C deficiency is called *scurvy*. In the past, many sailors suffered from it [\[R\]](#).

How it helps

A meta-analysis of 40 studies concluded that supplementation with vitamin C (500-1,000 mg/day for 6-24 weeks) may lower triglycerides in people with diabetes [\[R\]](#).

81



Probiotics

IMPACT

2 / 5

EVIDENCE

3 / 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
10 billion

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

Studies of probiotics show mixed results in lowering triglyceride levels across different groups. While two meta-analyses with a total of 606 people reported a slight reduction, four other meta-analyses involving 2,177 people found no impact. Similarly, no effects were observed in a study of 976 people taking *Lactobacillus* probiotics or in overweight or obese people from two studies [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Contrasting results were seen in specific health conditions: probiotics did not affect triglyceride levels in pregnant women, people with metabolic syndrome, and people with chronic kidney disease [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

However, probiotics reduced triglycerides in studies of people with type 2 diabetes, women with PCOS, and people with fatty liver. Some studies did not find this benefit for people with diabetes [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

82



Cardamom

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 500 mg of cardamom powder or extract supplement daily with water, preferably after meals. Continue this regimen daily for at least 8-12 weeks to potentially observe benefits.

TYPICAL STARTING DOSE

500 mg

Description

Cardamom is a fragrant spice known for its potential to aid digestion, reduce inflammation, and provide antioxidant benefits. Incorporating cardamom into your diet or as a herbal remedy can promote overall digestive comfort and well-being.

[Cardamom](#) (*Elettaria cardamomum*) is a plant in the ginger family used to flavor food. It’s also known as green cardamom or the “Queen of Spices,” due to its price tag [\[R\]](#), [\[R\]](#).

The plant produces pods or capsules that contain 15-20 seeds each. The seeds can be used whole or can be ground to a fine powder before use [\[R\]](#), [\[R\]](#).

Some people use cardamom powder to help lower triglycerides [\[R\]](#), [\[R\]](#).

How it helps

Cardamom powder (3 g/day for at least 12 weeks) may lower triglyceride levels [\[R\]](#), [\[R\]](#).

Cardamom may help by supporting healthy [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Blood sugar levels
- Fat metabolism

83



Avoid Refined Sugar

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Eliminate foods and beverages high in refined sugars, such as sodas, candies, pastries, and white bread, from your diet. Replace them with natural sugars found in fruits and whole grains. Implement this change immediately and maintain it indefinitely for long-term health benefits.

Description

Reducing the consumption of refined sugar and high-sugar foods can help prevent dental problems, manage blood sugar levels, and support weight management.

How it helps

A study demonstrated that glucose consumption (for 10 weeks) raises triglycerides compared to fructose consumption [\[R\]](#).

Elevating dietary carbohydrate content, particularly from refined sugars, may increase blood triglyceride levels. This effect, known as carbohydrate-induced hypertriglyceridemia, is notable especially when dietary carbohydrates replace dietary fats but overall energy intake remains excessive [\[R\]](#).

84



Blackcurrants

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate about 1/2 cup of fresh or frozen blackcurrants into your daily diet. You can add them to your morning yogurt, oatmeal, or smoothies. For those who prefer, blackcurrant juice or preserves can also be consumed, but be mindful of added sugars in processed forms.

Description

Blackcurrants are small, nutrient-dense berries packed with vitamins, minerals, and antioxidants. They are known for their potential to promote heart health, improve cognitive function, and provide essential nutrients for overall vitality.

How it helps

A study of 2,154 people found supplementation with blackcurrant oil (1.8 g, 2x/day for 6 weeks) may lower triglycerides, especially in people with unhealthy blood fat levels and normal weight [\[R\]](#).

85



Salmon

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate at least two servings of salmon into your weekly diet, aiming for each serving to be about 3.5 ounces (100 grams), cooked. Choose wild-caught salmon when possible for higher omega-3 content.

Description

Salmon is a nutrient-rich fish known for its high content of omega-3 fatty acids, which can support heart health and reduce inflammation. It's also an excellent source of protein, vitamin D, and various minerals.

How it helps

In a clinical trial involving overweight adults, regular consumption of farmed Atlantic salmon for four weeks resulted in reduced triglyceride levels and increased HDL cholesterol. It also lowered large VLDL and chylomicron particle counts while raising large LDL particles in a dose-dependent manner. Salmon intake reduced total triglycerides, VLDL, and chylomicron triglyceride content, and altered lipoprotein particles in a way associated with reduced cardiovascular disease risk. Another study with healthy subjects showed that salmon consumption increased omega-3 levels and decreased triacylglycerols and heart rate. Salmon protein intake lowered serum glucose and triglycerides and increased certain amino acid concentrations. In HIV-infected patients with dyslipidemia, salmon oil reduced triglycerides. However, a separate trial found that salmon consumption did not significantly alter various health markers in overweight/obese participants. [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

Salmon is rich in omega-3 fatty acids, which can reduce triglyceride levels by decreasing their production in the liver and removal from the blood.

86

Cold Exposure

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Gradually expose yourself to cold temperatures for short periods, starting with 1-2 minutes and increasing up to 5-10 minutes. This can be achieved through cold showers, outdoor exposure in cold weather, or ice baths. Aim to do this 2-3 times per week.

TYPICAL STARTING DOSE

1 minutesute

Description

Cold exposure, when done safely and gradually, can have potential health benefits like increased calorie burn, improved circulation, and enhanced resilience to cold temperatures. Cold exposure techniques, such as cold showers or outdoor winter activities, may help boost metabolism and promote overall well-being when practiced mindfully.

Please note: rapid instead of gradual cold exposure causes dangerous, and even fatal, changes in the breath and heart rates, known as the cold shock response. Be cautious with any form of sudden temperature change in your environment, especially if you have heart disease or other chronic conditions [\[R\]](#).

How it helps

A meta-analysis of 7 studies found significantly lower levels of triglycerides after whole-body cryotherapy. Sensitivity analysis also demonstrated significantly lower levels of total cholesterol and low-density lipoproteins. Meta-regression analysis showed that a lower BMI was significantly associated with greater changes in the levels of total cholesterol and LDL during whole-body cryotherapy [\[R\]](#).

Please note: *Rapid cold exposure can cause life-threatening changes to your breathing and heart rate. This is called the cold-shock response. Be cautious of any form of sudden temperature change to your environment, especially if you have heart disease or other health conditions* [\[R\]](#).

87



Mulberry

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a mulberry supplement at a dosage of 500mg to 1,000mg per day, preferably with meals to enhance absorption. This should be continued daily for at least 3 months to observe potential health benefits.

Description

Mulberries are the fruit of the mulberry tree, often used in traditional medicine and cuisine. It is a source of vitamins and antioxidants, potentially offering health benefits such as blood sugar control and immune support.

How it helps

A meta-analysis of 12 trials concluded that mulberry consumption lowers triglycerides by 19.67 mg/dL [\[R\]](#).

Mulberry may help regulate fat metabolism, thereby lowering triglyceride levels.

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Ginger

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 500 mg ginger supplement daily, preferably with a meal to enhance absorption and minimize potential stomach discomfort.

TYPICAL STARTING DOSE

500 mg

Description

Ginger is a versatile spice known for its potential anti-inflammatory and digestive benefits. It may help alleviate nausea, reduce muscle soreness, and support gastrointestinal comfort when consumed as part of a balanced diet.

[Ginger root](#) is a cooking spice and a traditional remedy. People mostly use it to relieve [\[R\]](#):

- Nausea
- Menstrual cramps
- Joint pain

How it helps

Supplementation with ginger (1-3 g/day for 8-12 weeks) may lower triglyceride levels [\[R\]](#), [\[R\]](#).

However, not all studies found this effect of ginger on triglyceride levels [\[R\]](#).

89



Sunflower Seeds

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate a small handful of sunflower seeds (about 1 ounce or 28 grams) into your daily diet. You can eat them alone as a snack, sprinkle them on salads, or add them to homemade bread or muffins. Ensure they are unsalted to keep your sodium intake in check.

Description

Sunflower seeds are nutrient-dense plant-based snacks high in protein, healthy fats, fiber, and essential minerals like magnesium and selenium. They are associated with promoting heart health, supporting digestion, and providing energy.

Sunflower seeds are a great source of biotin, protein and antioxidants, minerals like zinc and selenium, and vitamins E and B6. A ¼ cup serving provides 2.6 mcg of biotin or 9%DV.

How it helps

Consuming sunflower seed oil (25 mL/day for 7 weeks) lowered triglycerides in 60 healthy volunteers. Eating a diet enriched in sunflower oil lowered triglycerides better than one rich in olive oil in a trial on 18 men [\[R\]](#), [\[R\]](#).

Sunflower seeds are rich in healthy monounsaturated and polyunsaturated fats, which can help lower harmful triglyceride levels in the blood. They also contain fiber that can reduce your body's absorption of fat and cholesterol, further helping reduce triglycerides.

90



Whole Grains

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate at least three servings of whole grains into your daily diet. This can include consuming foods such as whole grain bread, brown rice, whole grain pasta, and oats. Aim to replace refined grains with whole grains at each meal for optimal benefits.

Description

Whole grains encompass a variety of grains like wheat, oats, and quinoa, where the entire grain kernel is intact. They are rich in fiber, vitamins, minerals, and antioxidants, supporting heart health and reducing the risk of chronic diseases.

Unlike refined grains, whole grains contain nutritious parts of the grain like bran and germ.

Whole grains provide many crucial nutrients, including:

- Fiber
- B-vitamins
- Iron
- Magnesium
- Phosphorus

Due to their high fiber content, whole grains don’t tend to spike blood sugar like refined grains do.

How it helps

Experts suggest that reducing triglycerides may be achieved by decreasing the carbohydrate content of the diet. However, this is usually accompanied by reduction of fiber. Hence, people should add fiber-rich foods, such as whole grain cereals and bread [\[R\]](#).

Research shows that whole grain consumption may lower triglyceride levels, especially in overweight and obese people or those with metabolic conditions [\[R, R\]](#).

91



Magnesium

IMPACT

2 / 5

EVIDENCE

2 / 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

250 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

Supplementation with magnesium (300-450 mg/day for 2-4 months) may lower blood triglyceride levels [\[R\]](#), [\[R\]](#).

However, research suggests that magnesium supplementation may offer no benefit to people with type 2 diabetes [\[R\]](#).

92



Acupuncture

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Visit a licensed acupuncturist for a session, typically lasting between 30 to 60 minutes, once or twice a week. Depending on your specific condition, a course of treatment might range from a few weeks to several months.

TYPICAL STARTING DOSE

1 hour

Description

Acupuncture is a part of traditional Chinese medicine. It involves inserting thin needles at specific points on the body. People use it to relieve pain and allergies, as well as reduce nausea and improve sleep.

[Acupuncture](#) is a part of traditional Chinese medicine. It involves **inserting thin needles at specific points on the body**. People use it to [\[R, R, R, R, R\]](#):

- Relieve pain
- Improve sleep quality
- Relieve allergies
- Reduce nausea

How it helps

Acupuncture may have triglyceride-lowering effects. However, the evidence is of moderate quality, hence larger-scale high-quality studies are needed to confirm this benefit [\[R, R, R\]](#).

93



Myo-inositol

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 2 grams of myo-inositol supplement orally twice a day, preferably with meals to enhance absorption. This regimen should be followed daily for at least 6 months to observe significant benefits.

TYPICAL STARTING DOSE

4 g

Description

Myo-inositol is a naturally occurring compound that plays a role in various cellular functions. It is used in dietary supplements and is believed to have potential benefits for mental health, hormone regulation, and insulin sensitivity.

Inositol is a type of sugar that our bodies need to function. It was considered a vitamin (vitamin B8) until it was discovered that our bodies can make it from another common sugar, glucose [\[R\]](#).

[Myo-inositol](#) is the most common form of inositol. It plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart health
- Normal blood sugar levels
- Mental health
- Cognitive function
- Reproductive health

Myo-inositol can convert to [D-chiro-inositol](#) in the body. These two forms of inositol are often combined in supplements. People use them to improve blood sugar control and PCOS [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

In a double-blinded RCT with 48 obese NAFLD patients, MI (4g/day) led to significant weight loss, lower systolic BP, reduced insulin levels, improved lipid profile, liver enzymes, and NAFLD severity compared to placebo after 8 weeks [\[R\]](#).

In a 12-month study with 80 postmenopausal women and metabolic syndrome, myo-inositol (2g b.i.d) showed significant improvements in glucose, insulin, HOMA-IR, triglycerides, HDL cholesterol, and blood pressure compared to placebo, while BMI and waist circumference remained unchanged [\[R\]](#).

In a study of 80 postmenopausal women with metabolic syndrome, myo-inositol (2g BID) alongside diet for 6 months significantly improved systolic and diastolic blood pressure, HOMA index, cholesterol, and triglycerides, while increasing HDL cholesterol (22%) compared to the diet and placebo groups [\[R\]](#).

Myo-inositol works by influencing the insulin signals that your body sends, helping to improve metabolic processes. This could potentially lower high triglyceride levels, a type of fat in your blood that, in high amounts, can increase heart disease risk.

94



Almonds

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate a handful of almonds (about 23 kernels) into your daily diet. You can eat them as a snack, add them to your breakfast cereals or yogurt, or include them in salads and other dishes. Do this consistently for ongoing health benefits.

Description

Almonds are a good source of omega-6s, protein and vitamins, making for a great snack food. A 1-ounce serving provides 3700 mg of omega-6.

Almonds are nutritious tree nuts that originate from the *Prunus dulcis* tree. They are packed with essential nutrients, including healthy fats, fiber, vitamin E, and magnesium, which collectively contribute to heart health, support weight management, and may help regulate blood sugar levels.

How it helps

Research in over 2,000 people found that almonds may help lower triglyceride levels. However, studies involving over 500 people did not find any benefit [\[R\]](#), [\[R\]](#).

95



Green Tea

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Consume 400 mg of green tea extract daily. This can be taken in the form of capsules or tablets available that specify the amount of green tea extract. Ensure the supplement is taken according to the product's specific instructions, usually once a day with water.

TYPICAL STARTING DOSE

400 mg

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 antioxidants 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 antioxidants called **flavonoids**, which may help prevent [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart disease
- Cancer
- Diabetes

How it helps

Green tea (600-1,344 mg/day catechins for 4-12 weeks) may lower blood triglycerides. However, not all studies found this benefit [\[R\]](#), [\[R\]](#), [\[R\]](#).

Please note: polyphenols from green tea 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 green tea [\[R\]](#).

96



Fasting Mimicking Diet

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Adopt a fasting mimicking diet for 5 consecutive days per month, consuming between 750 and 1,100 calories per day consisting mostly of plant-based soups, vegetables, nuts, seeds, and herbal teas. Ensure adequate hydration. Resume a normal, healthy diet for the remaining days of the month.

Description

The fasting mimicking diet is a dietary approach that involves cycles of fasting and calorie restriction to potentially promote longevity and metabolic health. It is currently an area of research interest for its possible health benefits.

How it helps

In a non-placebo-controlled trial of 100 generally healthy subjects, eating a fast-mimicking diet for 5 consecutive days during 3 months reduced blood pressure and IGF-1. These parameters were more beneficially affected in subjects at risk of disease. In a non-placebo-controlled trial of 100 patients with type 2 diabetes, following a fasting-mimicking diet for 4 months lowered total cholesterol, LDL cholesterol, triglycerides, and blood pressure, while raising HDL cholesterol [\[R\]](#), [\[R\]](#).

This diet may help by cutting back on calories and carbs, triggering the body to use stored fat for energy.

97



Green Tea Extract

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a green tea extract supplement containing 250-500 mg of EGCG (the active compound in green tea) daily, preferably with a meal to enhance absorption. This dosage is typically split into two separate doses, taken in the morning and later in the day. Continue this regimen for at least three months to observe potential health benefits.

TYPICAL STARTING DOSE

250 mg

Description

Green tea extract is a concentrated form of the beneficial compounds found in green tea, such as catechins. It is used in dietary supplements for its potential to enhance metabolism, aid in weight management, and provide antioxidant protection.

[Green tea](#) is made from the same plant as black tea (*Camellia sinensis*). However, the leaves and buds are processed differently [\[R\]](#).

Green tea contains **catechins**. These are antioxidants that help prevent [oxidative stress](#) [\[R\]](#).

EGCG is the main catechin found in green tea. It may help reduce inflammation and support weight loss [\[R\]](#).

How it helps

Green tea extract taken at doses higher than 800 mg/day for over 8 weeks may lower blood triglycerides in people with type 2 diabetes. However, not all studies found this benefit [\[R\]](#), [\[R\]](#).

Please note: polyphenols from green tea 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 green tea [\[R\]](#).

98



Nordic Walking

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

To implement Nordic walking as a lifestyle change, use specially designed walking poles and engage in this activity for at least 30 minutes a day, most days of the week. Ensure proper technique by maintaining an upright posture and alternating the poles with your steps for balance and effectiveness.

TYPICAL STARTING DOSE

30 minutes

Description

Nordic walking is a form of exercise that involves walking with specially designed poles. It provides a full-body workout, helps improve cardiovascular fitness, and can enhance muscular strength and endurance.

How it helps

- A 10-week Nordic walking rehabilitation program led to reductions in triglyceride levels among postmenopausal women with overweight and obesity. This was also associated with improvements in muscle integrity and nutritional states [\[R\]](#).
- Another study found that a 10-week Nordic walking program resulted in changes in basic lipids in blood. Specifically, it caused reductions in total cholesterol, LDL, and triglycerides, while increasing HDL levels [\[R\]](#).
- A 12-week Nordic walking program showed reductions in body weight, body mass index, and triglyceride levels, demonstrating that this form of exercise may be an effective part of lifestyle interventions aimed at improving metabolic health [\[R\]](#).

99



Fenugreek

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a 500 mg fenugreek supplement daily, preferably with a meal to aid in digestion and absorption.

TYPICAL STARTING DOSE

500 mg

Description

Fenugreek is an herb and spice commonly used in traditional medicine for its potential to support digestive health, regulate blood sugar levels, and promote lactation in nursing mothers. Its compounds, such as soluble fiber and fenugreek seeds, contribute to its various health benefits.

[Fenugreek](#) is a leafy green legume originating from central Asia. Its leaves and seeds are both used in cooking. Some people also use the seeds to make tea [\[R\]](#), [\[R\]](#).

People use fenugreek tea or supplements for [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reproductive health
- Blood sugar control
- Decreasing cholesterol

How it helps

Supplementation with fenugreek (for 6-12 weeks) may lower blood triglycerides. Studied forms include [\[R\]](#), [\[R\]](#):

- Seed powder (5-10 g/day)
- Extract (0.6-1.2 g/day)

However, some studies found no benefit for people with diabetes or prediabetes [\[R\]](#).

100



Apple Cider Vinegar

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate 1-2 tablespoons of apple cider vinegar into your diet daily by diluting it in a large glass of water. Consume this mixture before meals to potentially benefit from its effects.

Description

Apple cider vinegar is a fermented liquid made from crushed apples and is known for its potential health benefits. It is rich in acetic acid and may aid in weight management, improve digestion, and help regulate blood sugar levels, often used as a natural remedy for various conditions like acid reflux and insulin resistance.

[Vinegar](#) is often used in cooking to add sour flavor and to preserve foods through pickling. Some people also use vinegar for cleaning [\[R\]](#).

Apple cider vinegar is one of the most common vinegars produced from apples. As a health food, apple cider vinegar may help [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce blood sugar
- Lower cholesterol
- Fight infections

How it helps

Apple cider vinegar's acetic acid may help lower triglyceride levels in your blood, reducing the risk of heart disease. It's thought to inhibit the enzyme that forms triglycerides, thus, lowering their concentration in your bloodstream.

A meta-analysis of 9 studies concluded that consuming apple cider vinegar lowers triglycerides in patients with type 2 diabetes, people taking less than 15 mL/day, and those consuming it for over 8 weeks [\[R\]](#).

101



Pecans

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate about a handful of pecans (roughly 1 ounce or 28 grams) into your daily diet. You can eat them as a snack, sprinkle chopped pecans over salads, or blend them into smoothies. Aim to do this regularly as part of your daily dietary habits to enjoy their health benefits.

Description

Pecans are a type of nut derived from the hickory tree, primarily native to North America. They are rich in nutrients like healthy fats, protein, dietary fiber, and various vitamins and minerals, including vitamin E, manganese, and zinc.

Pecans are a good source of fiber, along with manganese, molybdenum, copper, thiamine, and zinc. A 1-ounce serving provides 1.1 mg of manganese or 48%DV.

How it helps

Including pecans in your diet may help lower your triglycerides as they are rich in heart-healthy unsaturated fats and dietary fiber. Both components aid in the reduction of triglycerides levels, improving heart health.

In various non-placebo-controlled trials on healthy volunteers, older adults, and individuals at risk of cardiovascular disease, pecan consumption had positive effects on cholesterol levels and heart health. When incorporated into the diet, pecans were associated with reductions in total cholesterol (by 0.8 mmol/L or 13.8-20.4 mg/dL), LDL cholesterol (by 0.26-0.32 mmol/L or 13.1-14.3 mg/dL), triglycerides (by 0.14 mmol/L or 13.9 mg/dL), TC/HDL ratio (by 3.92), non-HDL-C (by 14.5-15.1 mg/dL), LDL particle number (by 83 nmol/L), LDL medium (by 18 nmol/L), and apoB (by 0.99 mg/dL), while increasing HDL cholesterol (by 0.06 mmol/L). Pecan-enriched diets showed significant improvements in lipid profiles and cardiovascular risk factors compared to regular diets or dietary modifications. However, supplementing a healthy diet with pecans didn’t further improve lipid profile in patients with coronary artery disease [\[R, R, R, R, R\]](#).

102



Low-Intensity Exercise

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Incorporate 60 minutes of low-intensity activities, such as walking or gentle yoga, into your daily routine. Aim to do this 5 days a week to achieve the best results.

TYPICAL STARTING DOSE

1 hour

Description

Low-intensity exercise, such as walking or gentle yoga, provides numerous health benefits, including improved cardiovascular health, stress reduction, and enhanced overall fitness without the strain of high-intensity workouts.

How it helps

Combined low-intensity exercise before and after meal intake may prevent the elevation of postprandial triglyceride concentration, highlighting the effectiveness of light physical activity in managing lipid levels [\[R\]](#).

Low-intensity exercise performed after meal intake effectively reduces the transient elevation in serum triglyceride observed after meals [\[R\]](#).

Isoenergetic intermittent walking at approximately 25% VO2max (low-intensity exercise) reduced postprandial triglyceride levels compared to a sedentary control, although slightly less effective than moderate-intensity exercise [\[R\]](#).

103



Tocotrienols

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take tocotrienols as a dietary supplement in doses ranging from 100 to 200 mg, 1-2 times a day, ideally with meals to enhance absorption. This intake can be continuous, but it's recommended to review its effects with a healthcare provider periodically, typically every 6 to 12 months.

TYPICAL STARTING DOSE

100 mg

Description

Tocotrienols are a form of vitamin E that helps to protect your cells. They fight harmful substances in your body called free radicals, which can damage our cells and lead to illness. By helping your body in this way, tocotrienols contribute to overall health, boosting immunity, and slowing down aging processes.

How it helps

In a trial of 90 hypercholesterolemic patients, the tocotrienol-rich fraction of rice bran (100 mg/day) decreased serum triglycerides by up to 12%. A meta-analysis of 15 randomized controlled trials found no overall effects of tocotrienols on triglyceride levels, but doses above 200 mg did lower them (by 0.177 mmol/L) [\[R\]](#), [\[R\]](#).

Tocotrienols may help by reducing the liver's production of this type of fat. They also assist your body in breaking down existing triglycerides.

104



Red Clover

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take a red clover supplement in the form of capsules, typically ranging from 40 to 80 milligrams daily. This should be done under the guidance of a healthcare provider, especially if you're using it for menopausal symptoms or bone health, to ensure it's appropriate for your individual needs. Generally, it's used for periods ranging from 3 to 12 months.

TYPICAL STARTING DOSE

40 mg

Description

Red Clover is a plant that's often utilized for its health benefits. Not just pleasing to the eyes with its bright color, it's known to help with skin health and menopause symptoms. Additionally, it may improve heart health and bone density. It's like a power-plant, offering multiple health benefits in one package.

How it helps

Research shows that supplementation with red clover (40-80 mg/day red clover isoflavones for 5-13 weeks) may lower blood triglycerides in perimenopausal and postmenopausal women [\[R\]](#), [\[R\]](#), [\[R\]](#).

105



Keto Diet

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

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

Description

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

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

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

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

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

The ketogenic diet may help with:

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

How it helps

Experts mention that a low carbohydrate intake may be associated with lower triglyceride levels [\[R\]](#).

A low-calorie ketogenic diet may lower blood triglycerides in overweight and obese people. However, some studies show that a keto diet may offer no benefits over a balanced diet for triglyceride control [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#).

106



Magnesium Chloride

IMPACT

2 / 5

EVIDENCE

2 / 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

Magnesium Chloride supplements can help control triglycerides by assisting in the breakdown of fats in the body, thus helping to lower triglyceride levels. It also aids in maintaining a steady heart rhythm and healthy blood pressure, both of which are important for cardiovascular health.

- In a placebo-controlled trial of 198 participants with metabolic syndrome and low serum magnesium, supplementation with 5% magnesium chloride lowered systolic blood pressure (by 3.6 mmHg), diastolic blood pressure (by 5.5 mmHg), fasting glucose (by 12.4 mg/dL), triglycerides (by 61.2 mg/dL) while increasing HDL cholesterol (by 0.9 mg/dL) [\[R\]](#).
- Similarly, supplementation with 2.5 g magnesium chloride per day for 4 months lowered systolic blood pressure (by 15.3 mmHg), diastolic blood pressure (by 7.5 mmHg) while increasing HDL cholesterol (by 0.2 mmol/L) in a placebo-controlled trial of 82 diabetic, hypertensive patients [\[R\]](#).
- However, sustained-release magnesium chloride (384 mg/day for 6 weeks) only lowered systolic blood pressure (by 7.4 mmHg) in a placebo-controlled trial of 28 diabetic patients [\[R\]](#).

107



Jujube

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take jujube supplements in the form of capsules or extract, generally ranging from 250 mg to 500 mg, once or twice daily. It is recommended to follow the dosage instructions on the product label or consult a healthcare professional for personalized advice. For best results, incorporate into your daily routine for at least 4 to 8 weeks.

TYPICAL STARTING DOSE

250 mg

Description

Jujube is a fruit rich in antioxidants and vitamins. It can support digestive health, provide a source of essential nutrients, and contribute to overall well-being when included in the diet.

How it helps

Taking Jujube supplements may help lower triglyceride levels as it contains compounds like saponins and flavonoids, which have demonstrated lipid-lowering effects in studies. By reducing triglycerides, Jujube can support heart health and reduce the risk of cardiovascular disease.

In a non-placebo-controlled trial of 48 patients with type 2 diabetes, supplementation with dried jujube (30 g/day) for 12 weeks lowered fasting glucose (by 11.36%), triglycerides (by 13.59%), LDL cholesterol (by 7.46%), and CRP (by 24.46%). Similarly, consuming jujube infusion (10 g/100 mL boiling water) 3x/day before meals as an add-on to a balanced diet for 12 weeks lowered HbA1c, total cholesterol (by 5.69 mg/dL), triglycerides (by 16.14 mg/dL), LDL cholesterol (by 13.30 mg/dL), LDL:HDL, and TC:HDL in a non-placebo-controlled trial of 116 patients with type 2 diabetes. In a placebo-controlled trial of 86 obese adolescents with dyslipidemia, supplementation with jujube fruit powder (5 g, 3x/day) for 1 month decreased total and LDL cholesterol [\[R\]](#), [\[R\]](#), [\[R\]](#).

108



Extra Virgin Olive Oil (EVOO)

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate 1-2 tablespoons of extra virgin olive oil into your daily diet. Use it as a dressing for salads, vegetables, or incorporate it into cooking, but avoid using it at high temperatures to preserve its health benefits.

Description

Extra virgin olive oil is a high-quality olive oil obtained from the first pressing of olives. It is rich in monounsaturated fats and antioxidants, like polyphenols, and is associated with various health benefits, including heart health and anti-inflammatory properties.

[Olive oil](#) is fat from the olive, a traditional tree of the Mediterranean Basin [\[R\]](#).

Olive oil has anti-inflammatory and antioxidant properties. It may also reduce the risk of [\[R\]](#), [\[R\]](#):

- Heart disease
- Diabetes
- Cancer

Olive oil is also the primary fat source in the [Mediterranean diet](#), which may improve brain and heart health [\[R\]](#).

How it helps

Experts suggest trading saturated fat found in meats for healthier fat found in plants, such as olive oil [\[R\]](#).

According to an analysis of 27 studies involving 1,089 people, olive oil may lower triglyceride levels. However, other plant oils may lower triglyceride levels more [\[R\]](#).

109



Astaxanthin

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Take an astaxanthin supplement daily, with a typical dosage ranging from 4 to 12 mg. It is best taken with a fat-containing meal to enhance absorption.

TYPICAL STARTING DOSE

12 mg

Description

Astaxanthin is a powerful antioxidant found in certain microalgae and seafood. It is known for its potential benefits in reducing oxidative stress, supporting skin health, and promoting eye health.

[Astaxanthin](#) is a naturally-occurring orange-red pigment carotenoid found in algae, shrimp, lobster, crab, and salmon [\[R\]](#). As an antioxidant, astaxanthin is **10 times stronger than zeaxanthin, lutein and [beta-carotene](#), and 100 times stronger than [vitamin E](#)** [\[R\]](#). People take astaxanthin to:

- Support skin health [\[R, R\]](#)
- Reduce exercise fatigue [\[R, R\]](#)
- Prevent heart disease [\[R, R, R\]](#)

How it helps

Astaxanthin, a potent antioxidant, could help lower your triglycerides by reducing oxidative stress and inflammation which play key roles in fat metabolism disorders. However, always consult with a healthcare professional before starting any new supplement regimen.

A [meta-analysis of 7 studies and 321 participants at risk of metabolic syndrome](#) concluded that astaxanthin **significantly lowers LDL cholesterol and marginally lowers total cholesterol and systolic blood pressure** [\[R\]](#).

In a [placebo-controlled trial of 61 participants with elevated triglycerides](#), supplementation with astaxanthin (6-18 mg/day) for 12 weeks **lowered triglycerides and raised HDL** [\[R\]](#).

Astaxanthin (8 mg/day taken for 8 weeks) **lowered plasma glucose, triglycerides, visceral fat, VLDL, total cholesterol, and systolic blood pressure** in a [placebo-controlled trial of 44 patients with type 2 diabetes](#) [\[R\]](#).

A multi-ingredient nutraceutical with astaxanthin, red yeast rice, berberine, policosanol, coenzyme Q10, and folic acid (NComb) **lowers total cholesterol (by 26.15mg/dL), LDL-cholesterol (by 23.85mg/dL), triglycerides (by 13.83mg/dL) and glucose (by 2.59mg/dL) while increasing HDL-cholesterol (by 2.53mg/dL)** according to a [meta-analysis of 14 trials and over 3k participants](#) [\[R\]](#).

110



Quercetin

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 250-1000 mg of quercetin supplement daily with a glass of water, preferably with a meal to aid in its absorption.

TYPICAL STARTING DOSE

200 mg

Description

Quercetin is a natural plant flavonoid found in various foods, particularly in fruits and vegetables like apples, onions, and broccoli. It is used as a dietary supplement and is valued for its potential antioxidant and anti-inflammatory properties.

[Quercetin](#) is a **plant-based antioxidant**. It supports the immune system and helps lower inflammation [\[R\]](#), [\[R\]](#).

Good sources of quercetin include [\[R\]](#):

- Apples
- Onions
- Tea

People mainly use quercetin supplements to relieve allergies [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

Supplementation with quercetin (at least 500 mg/day for at least 8 weeks) may lower blood triglyceride levels [\[R\]](#), [\[R\]](#).

Quercetin may offer greater benefits in people with a healthy weight, blood pressure, and blood sugar levels [\[R\]](#), [\[R\]](#).

Please note: *quercetin may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using quercetin and always consult with a healthcare provider before taking this supplement* [\[R\]](#).

Please note: *quercetin may interfere with iron absorption due to its iron-chelating properties, potentially exacerbating anemia or making it harder to manage. If you have anemia, consult your healthcare provider before using quercetin supplements* [\[R\]](#).

111



Inositol

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take inositol as a daily supplement, usually available in powder or capsule form. The typical dosage ranges from 2 grams to 18 grams per day, divided into smaller doses taken with meals and water to aid absorption. It's important to start with a lower dose and gradually increase to avoid digestive side effects.

TYPICAL STARTING DOSE
2 g

Description

Inositol is a naturally occurring compound that plays a role in cell signaling and neurotransmitter function. It has been studied for its potential in promoting mental health and managing conditions like anxiety and depression when used as a supplement under the guidance of a healthcare professional.

Inositol is a type of sugar that our bodies need to function. It was considered a vitamin (vitamin B8) until it was discovered that our bodies can make it from another common sugar, glucose [\[R\]](#).

[Myo-inositol](#) is the most common form of inositol. It plays a role in [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Heart health
- Normal blood sugar levels
- Mental health
- Cognitive function
- Reproductive health

Myo-inositol can convert to [D-chiro-inositol](#) in the body. These two forms of inositol are often combined in supplements. People use them to improve blood sugar control and PCOS [\[R\]](#), [\[R\]](#), [\[R\]](#).

How it helps

In a double-blinded RCT with 48 obese NAFLD patients, MI (4g/day) led to significant weight loss, lower systolic BP, reduced insulin levels, improved lipid profile, liver enzymes, and NAFLD severity compared to placebo after 8 weeks [\[R\]](#).

In a 12-month study with 80 postmenopausal women and metabolic syndrome, myo-inositol (2g b.i.d) showed significant improvements in glucose, insulin, HOMA-IR, triglycerides, HDL cholesterol, and blood pressure compared to placebo, while BMI and waist circumference remained unchanged [\[R\]](#).

In a study of 80 postmenopausal women with metabolic syndrome, myo-inositol (2g BID) alongside diet for 6 months significantly improved systolic and diastolic blood pressure, HOMA index, cholesterol, and triglycerides, while increasing HDL cholesterol (22%) compared to the diet and placebo groups [\[R\]](#).

Myo-inositol works by influencing the insulin signals that your body sends, helping to improve metabolic processes. This could potentially lower high triglyceride levels, a type of fat in your blood that, in high amounts, can increase heart disease risk.

112



Whole-Body Cryotherapy

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Participate in whole-body cryotherapy sessions by entering a cryotherapy chamber for 2-3 minutes, where temperatures drop to between -100°C to -140°C (-148°F to -220°F). These sessions should be performed 2-3 times a week for optimal benefits.

TYPICAL STARTING DOSE

2 minutes

Description

Whole-body cryotherapy involves brief exposure to extreme cold temperatures in a controlled chamber. It is used to reduce inflammation, alleviate muscle soreness, and promote recovery in athletes and individuals seeking pain relief.

How it helps

A meta-analysis of 7 studies found significantly lower levels of triglycerides after whole-body cryotherapy [R].

Whole-body cryotherapy can increase metabolism and enhance weight loss, which can help lower high triglyceride levels.

Please note: Rapid cold exposure can cause life-threatening changes to your breathing and heart rate. This is called the cold-shock response. Be cautious of any form of sudden temperature change to your environment, especially if you have heart disease or other health conditions [R].

113



Paleo Diet

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Adopt a diet that includes lean meats, fish, fruits, vegetables, nuts, and seeds, resembling the diet of our hunter-gatherer ancestors. Exclude all dairy products, legumes, grains, added sugar, and processed foods. This should be a consistent dietary approach, not a short-term diet, to observe its benefits on health and well-being.

Description

The paleo diet, also known as the caveman diet, emphasizes whole foods such as lean meats, fish, fruits, vegetables, nuts, and seeds while excluding processed foods, grains, and dairy. It is believed to support weight management and reduce the risk of chronic diseases by focusing on foods more in line with our ancestors' diets.

How it helps

Research on 159 people found that following a paleolithic diet may lower triglyceride levels [R].

114



Biotin

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

For adults, take a biotin supplement of 30 to 100 micrograms daily. This can be consumed in a single dose with a meal to improve absorption. It is recommended to continue daily for optimal benefits on hair, skin, and nail health.

TYPICAL STARTING DOSE

30 mcg

Description

Biotin, also known as vitamin B7, is an essential nutrient that plays a key role in metabolizing carbohydrates, fats, and proteins. It is important for maintaining healthy hair, skin, and nails and supporting overall metabolic function.

A **biotin supplement** of up to 30 micrograms per day can be taken to meet needs not achieved through diet.

How it helps

In a placebo-controlled trial of 18 diabetic and 15 non-diabetic individuals, supplementation with biotin (6.14 mcmol/day) for 28 days significantly reduced triglyceride levels. The combination of biotin (2 mg/day) and chromium picolinate (600 mcg/day) taken for 28-90 days also lowered triglycerides in 3 placebo-controlled trials of 427 patients with type 2 diabetes [\[R, R, R, R\]](#).

Biotin may help break down and use different fats in your body, potentially helping lower triglyceride levels.

115



Legumes

IMPACT2 / 5

EVIDENCE2 / 5

How to implement

Incorporate a serving of legumes, such as beans, lentils, chickpeas, or peas, into your diet at least four times a week. A serving size is approximately half a cup cooked. Ensure to prepare them properly by soaking and rinsing beans, if applicable, to reduce anti-nutrients and improve digestibility.

Description

Legumes, such as beans, lentils, and chickpeas, are excellent sources of plant-based protein, fiber, and various vitamins and minerals. Including legumes in your diet can promote satiety and support digestive health.

Legumes are plants from the *Fabaceae* family. Their edible seeds are called **pulses**. Legumes are important food staples and sources of carbohydrates, fiber, protein, iron, and other key nutrients.

Common legumes include:

- Peanuts
- Beans
- Chickpeas
- Peas
- Lentils

How it helps

Legumes have been associated with a reduction in serum triglyceride levels in women with central obesity when included in a hypocaloric diet [\[R\]](#).

A study on the genetic interactions in people with impaired fasting glucose or type 2 diabetes revealed that replacing refined carbohydrates with legumes and whole grains (for 12 weeks) led to reductions in triglyceride levels, irrespective of the genetic makeup of the individual [\[R\]](#).

A crossover feeding study found that diets rich in legumes (for 4 weeks) may reduce triglyceride levels in comparison to average American diets [\[R\]](#).

116



Selenium Supplements

IMPACT

2 / 5

EVIDENCE

2 / 5

How to implement

Take 50 mcg of selenium supplements once daily, preferably with a meal to enhance absorption.

TYPICAL STARTING DOSE

50 mcg

Description

Selenium is a trace mineral found in Brazil nuts and many other foods as well as supplements. It is an essential nutrient that plays a crucial role in maintaining the body's antioxidant defenses and supporting thyroid function.

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

- Reproduction
- Thyroid function
- DNA production
- Immune response

Adults should be getting **55 micrograms** of selenium per day. Selenium supplements are available for people who can't meet their needs with a balanced diet [\[R\]](#).

How it helps

Selenium supplementation (50-200 mcg/day for 8-16 weeks) may lower triglyceride levels. However, not all studies have found this benefit [\[R, R\]](#).

117



Avoid Low-Fat High-Carb Diets

IMPACT

2 / 5

EVIDENCE

1 / 5

How to implement

Opt for a diet that balances macronutrients rather than focusing on low fat and high carbohydrates. Include moderate to high amounts of healthy fats and proteins while choosing complex carbohydrates over simple ones. Aim to make this dietary adjustment a permanent part of your eating habits rather than a temporary diet.

Description

Avoiding low-fat-high-carb diets can help promote a balanced macronutrient intake and better blood sugar control. Incorporating healthy fats into the diet supports satiety, hormone production, and overall nutritional well-being.

How it helps

A study of 4,700 people demonstrated people with a certain variant of an enzyme that transports cholesterol and triglycerides in blood had better triglyceride levels than people with other genetic background when consuming a low fat and high carbohydrate diet [\[R\]](#).

118



Avoid Alanine Supplements

IMPACT2 / 5

EVIDENCE1 / 5

How to implement

Do not purchase or consume supplements that list alanine, specifically as an ingredient. This includes not using powders, pills, or any form of supplement designed for direct consumption that contains alanine.

Description

L-alanine is a non-essential amino acid that plays a crucial role in the body's energy metabolism, particularly during periods of intense exercise. It can help support endurance and muscle recovery by providing a source of energy and aiding in the removal of harmful metabolic byproducts like lactic acid.

How it helps

In a study involving oral contraceptive users, who typically exhibit elevated triglyceride levels, alanine supplementation was found to further increase serum triglyceride concentrations. This effect was specific to oral contraceptive users and was not observed in control subjects [\[R\]](#).

119



Walking

IMPACT1 / 5

EVIDENCE4 / 5

How to implement

Incorporate at least 30 minutes of brisk walking into your daily routine, aiming for a minimum of five days a week. This can be done in one continuous session or broken into shorter periods, such as three 10-minute walks throughout the day.

TYPICAL STARTING DOSE

30 minutes

Description

Walking is a low-impact form of exercise that can contribute to cardiovascular fitness, weight management, and improved overall health. It is used to support physical activity goals, enhance mood, and promote better cardiovascular health.

How it helps

Experts suggest exercising for at least 30 minutes on most or all days of the week, which may include taking a walk during breaks [\[R\]](#).

However, research on over 1,100 people found that walking has no effects on triglyceride levels [\[R\]](#), [\[R\]](#).

How to implement

TYPICAL STARTING DOSE

500 mg

Description

- Heart problems
- Overactive thyroid
- Fertility problems
- Blood sugar control
- Weight control

How it helps

However, not all studies found the same benefit [R, R, R, R, R].

121



Honey

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Consume 1-2 tablespoons of raw honey daily, either directly or by mixing it into warm water, tea, or yogurt. Continue this practice regularly to observe benefits.

Description

Honey is a natural sweetener known for its antimicrobial properties and potential benefits for wound healing. It contains antioxidants and may have soothing effects on sore throats and coughs.

[Honey](#) is a thick, sweet substance. It’s made by honeybees from the nectar of flowering plants. There are many different types of honey. Besides sugar, honey also contains amino acids (protein building blocks), vitamins, and minerals [\[R\]](#).

People use honey for its anti-inflammatory and antioxidant properties. It can potentially help with [\[R\]](#):

- Heart problems
- Gut problems
- Cough
- Burns

How it helps

Honey, particularly dark honey, has been known to help lower triglyceride levels as it has compounds that can reduce the amount of triglycerides in the bloodstream. However, it should be consumed in moderation due to its high sugar content.

A [meta-analysis of 18 trials](#) found **low-certainty evidence** that honey, **especially Robinia, clover, and unprocessed raw honey, reduces total cholesterol (by 0.18 mmol/L), LDL-cholesterol (by 0.16 mmol/L), triglycerides (by 0.13 mmol/L), and ALT (by 9.75 U/L)** and **high-certainty evidence that it increases HDL-cholesterol (by 0.07 mmol/L)** [\[R\]](#).

However, a [meta-analysis of 23 studies](#) concluded that honey has **no significant effects on cholesterol and triglyceride levels** [\[R\]](#).

122



Avoid MCT Oil

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

To avoid MCT oil, scrutinize food labels for MCT oil content, commonly found in supplements, processed foods, and some health products. Opt for natural alternatives like coconut oil, which contains MCTs but in a balanced form, minimizing digestive disturbances. Prioritize whole foods rich in healthy fats such as avocados, nuts, and seeds to maintain a well-rounded diet while sidestepping the potential drawbacks of isolated MCT oil consumption.

Description

While medium-chain triglyceride (MCT) oil gained popularity for weight loss and energy, its high concentration of fats may lead to digestive issues and disrupt blood lipids. Try abstaining from MCT oil consumption and opt for whole food sources of healthy fats instead.

How it helps

A systematic review found that medium-chain triglyceride (MCT) oil does not impact total, LDL, or HDL cholesterol levels but slightly increases triglycerides. Effects on cholesterol vary with the fatty acid profile of the control oil used [\[R\]](#).

123



Grapes

IMPACT

1 / 5

EVIDENCE

3 / 5

How to implement

Incorporate a serving of grapes, which is about 32 seedless grapes or approximately 1 cup, into your daily diet. You can eat them as a snack, add them to salads, or blend them into smoothies. Do this consistently for a period of at least 3 months to observe potential health benefits.

Description

Grapes are a nutrient-dense fruit rich in vitamins, fiber, and antioxidants like resveratrol. Regular consumption of grapes is associated with potential benefits for heart health, skin health, and overall well-being.

How it helps

Grapes are rich in antioxidants, specifically resveratrol, which can help lower triglyceride levels in the blood. Eating grapes regularly can therefore aid in preventing high triglyceride-related health issues like heart disease.

A meta-analysis of 48 randomized controlled trials with 59 arms found that grape products significantly reduced total cholesterol, low-density lipoprotein, and triglyceride levels but had no significant effect on high-density lipoprotein [\[R\]](#).

How to implement

TYPICAL STARTING DOSE

300 mg

Description

Some companies add sterols and stanols to foods like **orange juice and margarine** [R, R].

How it helps

However, they may offer no benefit when added to standard therapy for unhealthy blood fat levels [R, R].

125



Olive Leaf Extract

IMPACT1 / 5

EVIDENCE2 / 5

How to implement

Take 500-1000 mg of olive leaf extract daily, ideally in divided doses with meals. This regimen should be followed for at least 8 weeks to assess its effects on your health.

TYPICAL STARTING DOSE

500 mg

Description

Olive leaf extract is derived from the leaves of the olive tree and contains bioactive compounds such as oleuropein. It is believed to have various health benefits, including antioxidant and anti-inflammatory properties that may contribute to improved immune function and overall well-being.

How it helps

Supplementation with olive leaf extract reduced triglycerides (by 0.18 mmol/L) in prehypertensive men. A beverage with olive leaf extract also lowered LDL cholesterol and triglycerides in prediabetic subjects. However, olive leaf extract had no effect on blood lipids in overweight and obese participants [\[R\]](#), [\[R\]](#), [\[R\]](#).

How to implement

Description

How it helps

High exposure to lead may disrupt the body's ability to properly handle fats and lipids, potentially leading to higher triglyceride levels.

How to implement

Description

How it helps

Extra virgin olive oil (EVOO) is rich in monounsaturated fats that can help lower triglyceride levels. Additionally, thyme contains phenolic compounds and flavonoids that have antioxidant effects and could also lower triglycerides.

128



Intermittent Fasting

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Limit your daily eating to a specific window of time, typically within an 8-hour period such as from 12 pm to 8 pm, and fast for the remaining 16 hours of the day. Repeat this daily or for at least 3-4 days per week.

Description

Intermittent fasting is an eating pattern that involves cycling between periods of fasting and eating. It may help with weight management, improve metabolic health, and offer potential benefits for certain health conditions when done under proper guidance.

[Intermittent fasting](#) (IF) is a pattern of eating that alternates between periods of eating and fasting. The most popular IF method is called the 16/8 method, where you fast for 16 hours and eat during an 8-hour window.

People mainly practice IF to lose weight. Besides benefits related to weight reduction, IF may help lower the risk of [\[R\]](#):

- Alzheimer's disease
- Joint pain
- Asthma
- Multiple sclerosis
- Stroke

Some types of intermittent fasting, such as Ramadan fasting, are also practiced for religious reasons.

How it helps

In a meta-analysis of 33 studies, intermittent fasting and extended nightly fasting interventions led to significant decreases in total cholesterol, LDL cholesterol, and triglyceride levels but did not significantly affect HDL cholesterol [\[R\]](#).

However, an analysis of 33 studies on intermittent fasting showed no significant effects on triglycerides, total cholesterol, or LDL cholesterol levels but a decrease in HD cholesterol and VLDL cholesterol, particularly during Ramadan fasting [\[R, R\]](#).

Intermittent fasting may help by reducing the amount of calories and fats you consume and facilitating weight loss.

129



Clostridium Butyricum

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take Clostridium butyricum as a supplement in capsule or powder form, typically ranging from 300 to 450 mg per day. This should be consumed with a glass of water, ideally before meals. Continue daily for at least four weeks to evaluate its benefits.

TYPICAL STARTING DOSE

300 mg

Description

Clostridium butyricum is a probiotic bacterium believed to support digestive health by producing beneficial short-chain fatty acids in the gut. It is used in some probiotic supplements to promote gut microbiome balance and overall well-being.

How it helps

Clostridium Butyricum is a probiotic that can promote gut health, and healthy gut flora plays a role in the regulation of triglycerides. Therefore, maintaining a healthy gut by taking this supplement could potentially help in managing triglyceride levels.

In a placebo-controlled trial of 68 participants with borderline high cholesterol, consuming shiitake bars for 66 days **reduced triglyceride levels by 10%** [\[R\]](#).

In a non-placebo-controlled trial of 96 patients with NAFLD, supplementation with C butyricum as an add-on to rosuvastatin **improved intestinal flora imbalance, reduced blood lipid (total cholesterol, triglycerides, free fatty acids) levels, and alleviated liver fibrosis and liver function damage markers (bilirubin, AST, ALT)** [\[R\]](#).

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Rutin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 500mg of rutin supplement daily, preferably with a meal to enhance absorption. Continue this supplementation regularly for at least 4 weeks to evaluate its benefits on your health, as effects may take some time to become noticeable.

Description

Rutin is a flavonoid found primarily in citrus fruits, buckwheat, and tea, and is known for its antioxidant and anti-inflammatory properties. It may support cardiovascular health and promote strong blood vessels.

How it helps

A double-blind, placebo-controlled trial with 50 type 2 diabetes mellitus patients found that rutin (500 mg/day for 3 months) decreased fasting blood glucose, insulin, HbA1c, HOMO-IR, LDL-c, TG, VLDL, total cholesterol, LDL-c:HDL-c ratio, atherogenic index of plasma (AIP), IL-6, and malondialdehyde (MDA), while increasing HDL-c, quantitative insulin sensitivity check index (QUICKI), BDNF, and total antioxidant capacity (TAC). Hence rutin may improve metabolic parameters, BDNF, and inflammatory and oxidative stress factors in T2DM patients [\[R\]](#).

In a prospective, randomized, controlled study conducted on 53 type 2 diabetes patients. rutin with vitamin C and vitamin C only reduced fasting blood glucose and LDL- and total cholesterol [\[R\]](#).

Rutin may help by reducing the production of triglycerides in the liver. It also increases HDL cholesterol, which helps remove triglycerides from your bloodstream.

Please note: *rutin may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using rutin and always consult with a healthcare provider before taking this supplement* [\[R\]](#).

131



Celery Seed

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a celery seed supplement capsule of 600-1000 mg daily with a glass of water, preferably with a meal to aid absorption and minimize potential stomach discomfort. Continue this regimen for at least 4-6 weeks to evaluate its effects on your condition.

TYPICAL STARTING DOSE
600 mg

Description

Celery seed extract is a natural supplement derived from the seeds of the celery plant, known scientifically as *Apium graveolens*. This extract is rich in various bioactive compounds, including flavonoids, linoleic acid, and volatile oils like limonene and selinene. These compounds contribute to its potential health benefits, which may include anti-inflammatory properties, support for joint health (often used in treating conditions like arthritis), and assistance in managing blood pressure levels. Celery seed extract is available in various forms, including capsules, tablets, and tinctures, and is often used in traditional medicine for its diuretic and antispasmodic effects.

How it helps

In a placebo-controlled trial of 51 patients with hypertension, supplementation with celery seed extract (1.34 g/day) for 4 weeks reduced triglycerides by 16.22 mg/dL [R].

Celery seed contains antioxidants that may help maintain healthy cholesterol and triglyceride levels.

132



Shilajit

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a pea-sized portion (approximately 500mg) of purified shilajit resin and dissolve it in warm water, tea, or milk. Consume this once daily, ideally in the morning on an empty stomach for best absorption. Continue this routine daily for 6 to 8 weeks to observe benefits.

TYPICAL STARTING DOSE

500 mg

Description

[Shilajit](#), also known as shilaras or bitumen, is a tar-like substance that oozes from sedimentary rocks worldwide, especially in the Himalayas. It is made of rock humus, minerals, and organic substances (e.g., marine organisms) decomposed by microbes and compressed by layers of rock [\[R\]](#).

Shilajit is called a rasayana (rejuvenator) and a maharasa (super-vitalizer) in Ayurveda (indigenous Indian medicine). It is traditionally used to [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Boost energy levels
- Improve memory and focus
- Fight stress
- Manage male reproductive disorders

Shilajit is sold as capsules or powder [\[R\]](#).

How it helps

Shilajit contains fulvic acid and other compounds that have antioxidant and anti-inflammatory properties, which can help lower high triglyceride levels. Regular intake of it can contribute to better heart health by reducing triglycerides and maintaining overall lipid profile.

In a [placebo-controlled trial of 30 medical students](#), supplementation with shilajit (2 g) for 45 days **lowered triglyceride levels (by 24 mg/dL)** [\[R\]](#).

133



Sage Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take sage extract in supplement form, ideally in doses ranging from 300 to 600 mg daily, divided into 2 or 3 doses throughout the day. It is recommended to follow this regimen for at least 1 to 2 months to evaluate its effects on cognitive function and mood improvements.

TYPICAL STARTING DOSE

300 mg

Description

Common sage (*Salvia officinalis*) is an herb from the mint family. It is native to the Mediterranean region. The main compounds in sage extract include essential oils like thujone and cineole, which contribute to its flavor and potential benefit for sore throats and digestive issues [R].

People commonly use sage as a spice and a traditional remedy for [R, R]:

- Sore throat
- Mood
- Blood sugar and cholesterol control
- Heavy sweating

How it helps

In a placebo-controlled trial of 67 hyperlipidemic participants, supplementation with sage extract lowered total cholesterol, LDL cholesterol, VLDL cholesterol, and triglycerides while increasing HDL cholesterol [R].

Please note: *rosmarinic acid from sage may inhibit the production of the thyroid hormone T4 (thyroxine). Individuals with thyroid disorders, particularly hypothyroidism or low T4 levels, should exercise caution when using sage extract and always consult with a healthcare provider before taking this supplement* [R].

134



Biotin And Chromium Picolinate

IMPACT

1 / 5

EVIDENCE

1 / 5

Description

Biotin and Chromium Picolinate are nutrients that your body needs for good health. Biotin, a type of B vitamin, helps to turn the food you eat into energy. Chromium Picolinate helps your body maintain proper sugar levels and can contribute to weight loss. Both are essential for maintaining a healthy metabolism and overall wellbeing.

How it helps

The combination of biotin (2 mg/day) and chromium picolinate (600 mcg/day) taken for 28-90 days lowered triglycerides in 3 placebo-controlled trials of 427 patients with type 2 diabetes [R, R, R, R].

Biotin may help break down and use different fats in your body, potentially helping lower triglyceride levels. Chromium aids in increasing the effectiveness of insulin, which can indirectly reduce triglyceride levels.

135



Hatha Yoga

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

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

TYPICAL STARTING DOSE

1 hour

Description

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

How it helps

Hatha Yoga, with its focus on physical postures and breathing exercises, helps reduce stress and promotes weight loss. This, in turn, helps lower the levels of triglycerides in the blood, improving overall heart health.

In a study with 173 Chinese adults, the yoga group showed significant improvements compared to the control group, including reduced waist circumference, fasting glucose, triglycerides, and MetS z score. Yoga also enhanced overall health perceptions, physical well-being, and social functioning in quality of life, with no significant changes in blood pressure or HDL cholesterol [\[R\]](#).

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Guava

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate fresh guava into your diet by consuming 1-2 whole fruits daily or adding sliced guava to salads, smoothies, or yogurts. This can be continued as a regular part of your daily dietary intake to obtain its nutritional benefits.

Description

Guava is a nutritious fruit rich in vitamins, minerals, and dietary fiber. Consuming guava can support immune health, digestive regularity, and overall well-being.

Guava (*Psidium guajava* L.) is a tropical fruit found from India to Indonesia, and the Caribbean to Latin America. The fruit and leaves of the guava plant have been used medicinally for centuries.

People use guava fruit and leaf extracts to potentially help with [\[R\]](#), [\[R\]](#):

- Diabetes
- Digestive issues
- Weight control
- Joint health

How it helps

Guava is rich in dietary fiber and powerful antioxidants which can help reduce levels of triglycerides within the blood, improving heart health. Moreover, its low glycemic index makes it a good food choice for people looking to manage or prevent high triglycerides levels.

In 2 non-placebo-controlled trials of 265 patients with hypertension, consuming guava (0.5-1 kg/day) for 12 weeks lowered total cholesterol (by 7.9-9.9%), triglycerides (by 7-7.7%) and blood pressure (by 7.5-9.0 mmHg for systolic and 8.0-8.5 mmHg for diastolic) while increasing HDL cholesterol (by 4.6-8.0%) [\[R\]](#), [\[R\]](#).

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Brewer's Yeast

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 to 2 tablespoons of brewer's yeast daily, mixing it into water, juice, smoothies, or food. It can be consumed at any time of day, but incorporating it into a regular, daily routine ensures consistent intake. Continuation can be long-term if it agrees with your system and you're seeing desired outcomes.

Description

Brewer's yeast is a nutritional supplement rich in B vitamins, minerals, and protein. It's often used to support energy levels, boost metabolism, and promote overall health, particularly for individuals with dietary restrictions or specific nutritional needs.

Brewer’s yeast is a great source of B-vitamins and minerals like chromium, iron, zinc, and selenium. A 1 tablespoon serving provides 3.3 mcg of chromium or 9%DV.

How it helps

Brewer's yeast can help reduce triglycerides as it is rich in chromium, which can improve your body's ability to use insulin, thus reducing triglyceride levels. Additionally, it is high in fiber, which helps in controlling your body's fat levels, including triglycerides.

The subjects (n=21) were randomly assigned into either brewer's yeast or torula yeast group and consumed 10 g yeast powder daily for 12 wk. Brewer's yeast demonstrated a beneficial effect on decreasing serum triacylglycerol values [\[R\]](#).

In a study with 78 type 2 diabetes patients, Brewer's yeast (23.3ug Cr/day) and CrCl3 (200ug Cr/day) supplements, given sequentially with a placebo in between, led to decreased glucose levels (fasting and post-glucose load), fructosamine, and triglycerides, while increasing HDL-cholesterol, serum, and urinary chromium [\[R\]](#).

This study aimed to investigate the impact of brewer's yeast on plasma glucose and lipid profiles in 55 patients with type 2 diabetes and hypercholesterolemia. Patients took 12 tablets of 300 mg yeast daily for 8 weeks, resulting in decreased triglycerides and LDL-C levels at Weeks 4 and 8, while HDL-C levels increased significantly at both time points compared to baseline [\[R\]](#).

However, in a 12-week trial, 84 adults with type 2 diabetes received brewer's yeast (1800 mg/day) or a placebo, and brewer's yeast reduced systolic and diastolic blood pressure significantly but had no significant impact on LDL-C, HDL-C, triglycerides, or cholesterol levels [\[R\]](#).

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Banaba

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 32-48 mg of a standardized banaba extract containing 1% corosolic acid, once daily with water. It is best taken with a meal for optimal absorption and effectiveness. Continue this supplementation for at least 2 weeks to potentially begin observing benefits such as improved blood sugar levels.

TYPICAL STARTING DOSE

32 mg

Description

Banaba, a plant traditionally used in herbal medicine, is believed to have potential benefits for blood sugar management and weight control. It is used in various dietary supplements and herbal remedies.

How it helps

In a placebo-controlled trial of 24 patients with metabolic syndrome, supplementation with banaba (500 mg, 2x/day) for 12 weeks lowered triglycerides by 0.6 mmol/L. Supplementation with banaba extract (300 mg/day, 0.3% corosolic acid) for 12 weeks also lowered triglycerides in a placebo-controlled trial of overweight subjects with mild hyperglycemia [\[R\]](#), [\[R\]](#).

Banaba is rich in corosolic acid that may help by improving your body's sensitivity to insulin. Additionally, it promotes glucose metabolism and helps in maintaining a healthy weight. This contributes to lowering triglyceride levels.

139



Mangiferin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a mangiferin supplement of approximately 150-300 mg daily, ideally with a meal to enhance absorption. The duration of use depends on the specific health concern being addressed and recommendations from a healthcare provider.

TYPICAL STARTING DOSE

150 mg

Description

Mangiferin, a natural compound found in mangoes and other plants, is known for its antioxidant and anti-inflammatory properties. It has the potential to protect cells from oxidative stress and inflammation, promoting overall well-being.

Mangiferin is a natural compound found in mangoes and several other plants.

Researchers are interested in its potential benefits for blood sugar control, liver health, heart health, and more. However, the available evidence to support its use as a supplement is limited [\[R\]](#).

How it helps

According to a single study, supplementation with mangiferin (150 mg/day for 12 weeks) may lower blood triglycerides and free fatty acids. It may help by promoting fatty acid metabolism [\[R\]](#).

140



Chlorella

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 3 to 5 grams of chlorella in tablet or powder form daily, ideally before meals to improve digestion. Continue this supplementation for at least 2 to 3 months to observe benefits.

TYPICAL STARTING DOSE
3 g

Description

[Chlorella](#) is a microalga from freshwater. People consume chlorella in rice, pancakes, or tea. It can also be found as a supplement [\[R\]](#), [\[R\]](#).

Chlorella is **rich in protein** and several micronutrients. It may be useful to [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Reduce blood sugar
- Lower cholesterol
- Reduce blood pressure
- Improve immunity

How it helps

In 2 placebo-controlled trials of 146 patients with NAFLD, supplementation with chlorella (1200 mg/day), both alone and as an add-on to metformin and vitamin E, for 8 weeks lowered triglyceride levels [\[R\]](#), [\[R\]](#).

141



Nattokinase and Red Yeast Rice

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 100mg of nattokinase and 1,200mg of red yeast rice daily with water. It is best consumed with food to enhance absorption and reduce any potential gastrointestinal discomfort. This regimen should be followed consistently for at least 3-6 months to evaluate effectiveness.

Description

Nattokinase is an enzyme derived from natto (fermented soybean) and is believed to have potential blood-thinning properties, potentially supporting cardiovascular health by promoting healthy blood circulation. Red yeast rice is a natural product made from fermented rice and contains compounds that may help lower cholesterol levels and support heart health when used as a dietary supplement.

How it helps

A study evaluated the lipid-lowering effect of nattokinase alone and in combination with red yeast rice extract on people with hyperlipidemia. While nattokinase alone showed no effects on blood lipids until 6 months, the combination formula showed improvements from the first month, including a 15% reduction in triglycerides [\[R\]](#).

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Rooibos

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take rooibos as a tea by steeping 1.5 to 2 teaspoons (2.5-5 grams) of loose leaf rooibos or one tea bag in about 8 ounces of boiling water for 10 minutes. Drink 1 to 2 cups daily. This can be enjoyed hot or cold, according to personal preference.

TYPICAL STARTING DOSE

3 g

Description

Rooibos, also known as red bush tea, is a plant native to South Africa. Traditionally, its leaves are harvested, fermented, and brewed into a caffeine-free herbal tea. It's rich in antioxidants, such as aspalathin and quercetin, and is valued for its low tannin levels and high content of nutrients like vitamin C and minerals like manganese and potassium.

How it helps

Rooibos tea is rich in antioxidants that can help reduce oxidative stress and inflammation in the body which, in turn, may lower high levels of triglycerides. Also, its low tannin content allows for better absorption of certain minerals that help maintain a healthy lipid profile.

In a 6-week clinical trial with 40 at-risk adults for cardiovascular disease, drinking 6 cups of fermented/traditional rooibos daily resulted in reduced lipid peroxidation markers, increased glutathione levels, improved redox status, and favorable changes in cholesterol levels [\[R\]](#).

143



Fucoxanthin And Pomegranate Seed Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a combined supplement of fucoxanthin and pomegranate seed oil once daily, typically found in capsule form. The standard dose is 200-250 mg of pomegranate seed oil and 2.4-5 mg of fucoxanthin, depending on the product's concentration. This regimen should be taken for at least 12 weeks to observe potential benefits.

TYPICAL STARTING DOSE

200 mg

Description

Fucoxanthin is a natural pigment found in certain types of seaweed and algae. It is believed to have potential health benefits, including supporting weight management and promoting antioxidant activity. Pomegranate seed oil is rich in antioxidants and essential fatty acids. It is often used in skincare products for its potential to promote skin health and hydration.

How it helps

Fucoxanthin, a carotenoid found in seaweed, may help manage triglycerides by boosting your metabolism and helping the body burn fatty acids more efficiently. Pomegranate seed oil contains punicic acid, which studies suggest can reduce triglycerides and improve overall cholesterol levels.

144



Okra

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take okra supplements in the form of capsules or powder. If using capsules, consume 1-2 capsules daily with water, preferably with a meal. If using powder, mix one teaspoon into a glass of water or into a smoothie once daily. Continue this routine for at least 8-10 weeks to observe potential health benefits.

Description

Okra is a flowering plant of the mallow family, rich in vitamins, minerals, and fiber, offering potential benefits for digestive health, blood sugar control, and overall nutrition.

How it helps

In a [placebo-controlled trial of 60 patients with type 2 diabetes](#), supplementation with okra powder (10 g blended in 150 g conventional yogurt) for 8 weeks **decreased triglycerides and insulin** [\[R\]](#).

Okra is rich in dietary fiber and antioxidants, which can assist in reducing high triglyceride levels.

145



Buckwheat

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate buckwheat into your diet by adding it to meals 2-3 times per week. You can use buckwheat flour for pancakes or bread, include buckwheat groats in soups, salads, or as a side dish instead of rice or pasta.

Description

Buckwheat is a gluten-free whole grain that provides essential nutrients, including protein, fiber, and minerals. It can contribute to heart health, digestive regularity, and balanced nutrition.

How it helps

Buckwheat is high in fiber and contains niacin, which can both aid in reducing high triglyceride levels. By incorporating it into your diet, your body can better regulate lipid levels, and thus, lower your triglycerides.

A study of 3542 participants associated consuming buckwheat seeds as a staple food with lower rates of hypertriglyceridemia (26.58% compared to 31.04% in those consuming corn) [\[R\]](#).

146



Colocynthis

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take colocynthis in supplement form, usually found as capsules, following the manufacturer's guidelines. Since the correct dose may vary, it's often recommended to start with the lowest possible dose and gradually increase if necessary. Due to potential side effects, it's crucial to use colocynthis under the supervision of a healthcare provider, especially if intended for short-term use, typically not exceeding a week.

Description

Colocynthis, also known as bitter apple, is a plant that has been used in traditional medicine for its potential as a laxative and digestive aid. However, its use should be approached with caution and under the guidance of a healthcare professional due to its potent effects.

How it helps

In a study of 100 dyslipidemic people, supplementation with colocynthis (300 mg/day) for 6 weeks lowered triglyceride and cholesterol levels [\[R\]](#).

147



Capsaicin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply a capsaicin cream or gel to the affected area up to 4 times daily. Make sure the skin is intact and not broken. Start with a lower concentration (0.025%) and gradually increase to 0.075% if needed for pain relief. Use continuously for at least 4 weeks to evaluate its effectiveness.

Description

Capsaicin, found in chili peppers, is known for its potential to boost metabolism and promote weight loss. It can also provide pain relief when used topically in certain creams and ointments.

How it helps

In a placebo-controlled trial of 12 male patients with stable coronary artery disease, transdermal patches with oleic capsaicin (3 g) applied for 1 day improved ischemic threshold. In a placebo-controlled trial of 42 adults with low HDL cholesterol, supplementation with capsaicin (4 mg/day) for 3 months increased HDL cholesterol (by 0.08 mmol/L) while lowering triglycerides, CRP, and phospholipid transfer protein activity [\[R\]](#), [\[R\]](#).

Capsaicin boosts metabolism, wich may help break down fats like triglycerides more effectively.

148

Avoid Mercury Exposure

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Limit consumption of large fish such as shark, swordfish, king mackerel, and tilefish, which are known to have higher mercury levels. Opt for smaller fish like salmon, shrimp, pollock, and catfish, and limit seafood intake to 8-12 ounces (two to three servings) per week. Check and follow local advisories regarding the safety of fish caught by family and friends in your local lakes, rivers, and coastal areas.

Description

Avoiding exposure to mercury, a toxic heavy metal found in certain seafood and environmental sources, is essential to prevent adverse health effects, including neurological damage and developmental issues.

Mercury and other [heavy metals](#) are found in the soil, water, food, and some commonly-used household products. They adversely affect the environment and living organisms. According to some studies, mercury is considered **the most toxic heavy metal** in the environment [\[R\]](#), [\[R\]](#).

A major source of mercury exposure is seafood, especially large fish such as [\[R\]](#):

- Tuna
- Shark
- Swordfish

How it helps

Avoiding mercury exposure can help reduce your triglyceride levels, as mercury can disrupt metabolic processes, leading to increased triglyceride levels. It may also impair liver function, which regulates triglyceride production, potentially leading to higher levels.

A representative sample of 2591 Korean adults from the Korean National Environmental Health Survey; After adjusting for demographic and socioeconomic factors, the proportional changes in serum lipid levels were significantly associated with increases in BPb, BHg, and UHg levels (p for trend < 0.05). Overall, BPb, BHg, and Uhg levels positively correlated with dyslipidemia [\[R\]](#).

MIXED: This study analyzed the mercury (Hg) exposure and cholesterol profiles in 3951 adults based on fish consumption frequency. Blood Hg levels were higher in groups with high cholesterol, low HDL-C, and high triglycerides (TG). Blood Hg levels increased with more frequent fish consumption, but cholesterol profiles didn't consistently follow this trend. Elevated blood Hg levels were linked to higher total cholesterol (TC) and LDL-C levels, but this effect waned in groups with frequent fish consumption [\[R\]](#).

149



Nicotinamide Riboside (NR)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 250-300 mg of Nicotinamide Riboside (NR) supplement daily, with or without food. It can be taken any time of the day, but maintaining a consistent routine, such as taking it every morning, is advised for best results. Continue this regimen daily for an ongoing basis to support cellular health and energy levels.

TYPICAL STARTING DOSE

250 mg

Description

Nicotinamide riboside is a form of vitamin B3 that is used in dietary supplements. It is believed to support cellular energy metabolism and may have potential benefits for overall health, including cognitive function and mitochondrial function.

How it helps

Supplementation with NR (1000 mg/day) for 6 weeks lowered blood triglycerides and ceramides in a placebo-controlled trial of 25 patients with CKD [\[R\]](#).

150



B. Lactis Bi-07 and L. Acidophilus NCFM

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

TYPICAL STARTING DOSE

10 billion CFU

Description

Bifidobacterium lactis Bi-07 and Lactobacillus acidophilus NCFM are both probiotics that have been shown to have a number of health benefits. They can help to improve gut health, boost the immune system, and reduce the risk of diarrhea.

How it helps

The combination of *Bifidobacterium lactis* Bi-07 and *Lactobacillus acidophilus* NCFM taken for 3 months increased the levels of the vitamins D and B12 while lowering triglycerides, TMAO, and alanine in a placebo-controlled trial of 31 Roux-en-Y gastric bypass patients [\[R\]](#), [\[R\]](#).

151



Bilberry

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Incorporate bilberry fruits into your diet by eating a small handful, approximately 1/4 to 1/2 cup, daily. You can also consume bilberry in the form of tea, by steeping 1-2 teaspoons of dried bilberries in hot water for about 10 minutes, up to three times a day.

Description

Bilberry is a fruit rich in antioxidants and flavonoids, which may contribute to eye health and circulatory function. It's often used in supplements for its potential to support vision and overall well-being.

How it helps

Bilberry contains potent antioxidants which can lower triglycerides levels by enhancing fat metabolism and preventing fat deposits in your bloodstream. Remember, a balanced diet and regular exercise are also important for maintaining healthy triglyceride levels.

In a [randomized crossover study with 80 overweight women](#), bilberries (100g/day) reduced **triglycerides in small HDL particles** in participants who had a metabolic profile that reflected higher cardiometabolic risk at baseline, but not in participants who had a lower-risk profile [\[R\]](#).

In a trial with 36 participants, frozen bilberries (150g, 3x/week for 6 weeks) reduced BMI in women but not men. Both groups experienced improvements in various blood markers including cholesterol, glucose, and liver enzymes. In men, there were additional positive changes in several markers, although LDL-C increased. Blood pressure, magnesium, and antiradical activity remained unchanged [\[R\]](#).

152



Gamma-Linolenic Acid (GLA)

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

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

TYPICAL STARTING DOSE

200 mg

Description

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

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

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

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

- Skin conditions
- Dry eyes
- Hair and nail care

How it helps

In a clinical study, dietary intake of GLA (3 g/day) decreased triglyceride levels by 48% and increased HDL-cholesterol concentrations by 22% [R](#).

153



Coriander

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take coriander supplements in the form of capsules or powder. If using powder, aim for 1/4 to 1/2 teaspoon per day, mixed into food or drinks. If taking capsules, follow the dosage instructions provided on the product label, typically one capsule, one to two times daily with meals. Continue consistently for at least a few weeks to observe effects.

Description

Coriander is an herb and spice rich in antioxidants and essential oils. It's used in culinary dishes and traditional medicine for its potential to aid digestion, reduce inflammation, and contribute to overall nutritional wellness.

How it helps

A randomized controlled trial with 80 hyperlipidemic patients found that coriander seed powder (CSP) and mixture (1:1 dry weight basis) with garlic powder (2 g/day for 8 weeks) reduced triglycerides and blood pressure while increasing HDL [\[R\]](#).

Coriander may help because it contains antioxidants that impede the process of lipid oxidation.

154



Coriander And Garlic

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing dried coriander and garlic powder. The typical dosage is 500 mg each, taken once daily with a meal to aid in digestion and absorption. Continue for at least 4-6 weeks to evaluate its benefits.

TYPICAL STARTING DOSE

500 mg

Description

Coriander is an herb and spice rich in antioxidants and essential oils. It's used in culinary dishes and traditional medicine for its potential to aid digestion, and reduce inflammation. Garlic is a flavorful bulb known for its potential health benefits, including cardiovascular support and immune system enhancement.

How it helps

A randomized controlled trial with 80 hyperlipidemic patients found that coriander seed powder (CSP) and mixture (1:1 dry weight basis) with garlic powder (2 g/day for 8 weeks) reduced triglycerides and blood pressure while increasing HDL [\[R\]](#).

155



Coconut

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Incorporate coconut into your diet by adding 1-2 tablespoons of unsweetened coconut flakes to your breakfast cereal or smoothie daily. You can also replace cooking oils with virgin coconut oil when sautéing or baking, not exceeding 2 teaspoons per day to maintain a balanced intake of dietary fats.

Description

Coconut is a versatile fruit with potential health benefits, including providing healthy fats and dietary fiber. It can support satiety, digestion, and overall nutritional wellness when incorporated into a balanced diet.

How it helps

Coconut flakes are high in healthy saturated fats that can turn bad LDL cholesterol into a less harmful form, thereby reducing high triglyceride levels. Incorporating coconut flakes into your diet can therefore help prevent high triglycerides, promoting better heart health.

Different test foods were evaluated, including corn flakes, oat bran flakes, and corn flakes with 15% and 25% dietary fiber from coconut flakes. Results showed that all test foods, except cornflakes, significantly reduced serum total and LDL cholesterol levels. Additionally, serum triglycerides were reduced for all test foods, particularly in individuals with moderately raised cholesterol levels. In conclusion, both 15% and 25% coconut flakes effectively lowered cholesterol and triglycerides in these individuals [\[R\]](#).

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Carnosine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

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

TYPICAL STARTING DOSE

1000 mg

Description

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

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

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

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

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

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

How it helps

Carnosine can help lower elevated triglyceride levels as it is thought to enhance fat metabolism. It works by acting on enzymes in your liver responsible for triglyceride synthesis, helping to keep your levels balanced.

Among 21 included studies, 18 were analyzed in a meta-analysis. Carnosine usage resulted in lower triglyceride levels (in 5 RCTs, n=309, P < 0.001), but no significant differences were observed in blood pressure, heart rate, LDL cholesterol, HDL cholesterol, or the total cholesterol to HDL cholesterol ratio between groups [\[R\]](#).

However, 4 studies reported TG changes as an outcome measure variable, but combined results did not show a significant reduction in this outcome. Furthermore, combined results did not show any significant change in HOMA-IR, Cholesterol, fasting blood sugar, or HDL-C [\[R\]](#).

157



Colostrum

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take colostrum supplements orally, typically 20 to 60 grams daily, split into two to three doses. It is recommended to start with a lower dose and gradually increase as needed. This supplement can be taken for varying durations, from a few weeks to several months, depending on the health goals and responses observed.

TYPICAL STARTING DOSE

20 g

Description

Colostrum is the first milk produced by mammals, including humans, after giving birth. It is rich in nutrients and antibodies and is believed to support newborns' immune systems and overall health.

Colostrum, or “first milk,” is the very first type of milk produced right after a mammal gives birth. It supports the newborn’s immune system and provides a rich source of nutrients and growth factors [R].

People take colostrum to boost immunity and exercise performance [R].

How it helps

Colostrum, the first milk produced after pregnancy, has been found to improve lipid metabolism, which might lower levels of triglycerides. Therefore, colostrum supplements could potentially help manage higher triglyceride levels.

This study investigated the effects of bovine colostrum (BC) on Type 2 diabetes patients. BC supplementation for 4 weeks reduced blood glucose, cholesterol, and triglyceride levels, potentially benefiting diabetic patients by improving these parameters [R].

158



White Kidney Bean Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a supplement containing 500 to 1500 mg of white kidney bean extract before meals containing carbohydrates, once to twice daily. It's advisable to start with the lower dose to assess tolerance and gradually increase to the desired dose as directed on the product label or by a healthcare provider.

TYPICAL STARTING DOSE

500 mg

Description

White kidney bean extract contains compounds that inhibit the digestion of carbohydrates, potentially supporting weight management by reducing the absorption of calories from starchy foods.

[White kidney bean](#) is a variety of the common bean (*Phaseolus vulgaris*), which is native to South America. People use the extract of white kidney bean to [\[R\]](#), [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Decrease appetite
- Support weight loss

How it helps

In a trial of 27 obese people, the white kidney bean extract Phase 2 had no effect on weight loss but reduced blood triglyceride levels after 8 weeks [\[R\]](#).

A supplement combining white kidney bean and carob extracts increased the elimination of triglycerides in a clinical trial of 62 overweight and obese participants [\[R\]](#).

159



Perilla Oil

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 600-900 mg of perilla oil daily, ideally with meals to enhance absorption. This should be divided into two or three doses throughout the day. Continue this regimen for at least 8 to 12 weeks to evaluate its effectiveness.

TYPICAL STARTING DOSE

600 mg

Description

Perilla oil is an edible oil extracted from the seeds of the *Perilla frutescens* plant, which is native to Asia. It is rich in omega-3 fatty acids, particularly alpha-linolenic acid (ALA), and is known for its potential health benefits, including supporting heart health, reducing inflammation, and providing essential nutrients like vitamin E and omega-3s.

How it helps

Perilla oil is rich in alpha-linolenic acid, a type of omega-3 fatty acid, which is known to help reduce triglyceride levels. This means that consuming perilla oil can potentially decrease your high triglyceride levels, contributing to better cardiovascular health.

A [trial with patients with hyperlipidemia](#) found that perilla oil (for 8 weeks) **lowered triglyceride (TG), total cholesterol (TC), and LDL-C** after 56 days of treatment. It also **increased HDL-C after 28 and 56 days of treatment**. Plasma lipid levels were significantly lower after 56 days of treatment [\[R\]](#).

160



Fucoidan

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 300 mg of fucoidan supplement once daily, preferably with a meal to aid absorption. Continue this regimen for a minimum of four weeks to evaluate its effects on your health.

TYPICAL STARTING DOSE

300 mg

Description

Fucoidan is a compound found in certain brown seaweeds and marine plants, and it is consumed for its immune system support and anti-inflammatory effects.

How it helps

In a placebo-controlled trial of 42 patients with NAFLD, supplementation with low-molecular-weight fucoidan and high-stability fucoxanthin (275 mg LMF and 275 mg HSFx, 3x/day) for 24 weeks reduced liver fibrosis and steatosis, AST, ALT, total cholesterol, triglycerides, fasting glucose, HbA1c, IL-6, and IFN-gamma [\[R\]](#).

Fucoidan may help by boosting fat metabolism.

161



Hazelnuts

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Incorporate a handful of hazelnuts (about 1 ounce or 28 grams) into your diet daily. You can eat them as a snack, sprinkle chopped hazelnuts over salads, or use hazelnut butter in smoothies. Ensure they are unsalted to keep your sodium intake low.

Description

Hazelnuts are a nutrient-dense nut rich in healthy fats, fiber, and essential vitamins and minerals. Incorporating hazelnuts into your diet can support heart health, provide energy, and contribute to overall nutritional wellness.

Hazelnuts are a good source of manganese, magnesium, as well as being really good for vitamin E, B6, and healthy fats. A 1-ounce serving provides 1.6 mg of manganese or 70%DV.

How it helps

Hazelnuts are high in healthy fats and dietary fiber, which can both help lower levels of triglycerides, a type of fat found in your blood. This reduction can decrease your risk of heart disease.

Consuming a diet enriched with hazelnuts (18-20%) for 4 weeks increased FMD (by 56.6%) and HDL cholesterol (by 6.07%), while lowering total cholesterol (by 7.8%), triglycerides (by 7.3%), LDL cholesterol (by 6.17%), oxidized-LDL, hs-CRP, and sVCAM-1 levels in a non-placebo-controlled trial of 21 hypercholesterolemic participants. In a non-placebo-controlled trial of 61 healthy volunteers, consuming unpeeled hazelnuts increased HDL cholesterol (by 7.3%) and brachial artery peak systolic velocities (by 43.4-60.7%). Their combination with cocoa further increased the beneficial effects [\[R\]](#), [\[R\]](#).

162

Chinese Rhubarb

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a supplement containing Chinese rhubarb extract, typically available in tablet or capsule form. The common dosage ranges from 500 to 1,000 mg per day, taken with water. It is advised to consult with a healthcare provider for the exact dosage based on individual health needs. Use this supplement daily for a period as recommended by the healthcare provider, usually not exceeding 8 weeks without medical advice.

TYPICAL STARTING DOSE

500 mg

Description

Chinese rhubarb is another traditional Chinese herbal remedy known for its potential to support digestive health and relieve constipation. It contains compounds that may have mild laxative effects.

[Rhubarb](#) (also named *Rhei* or *Dahuang*) is one of the most ancient herbs in traditional Chinese medicine. Rhubarb includes approximately 60 species of plants of the genus *Rheum* L. [\[R\]](#), [\[R\]](#).

The rhubarb rhizome is considered a top medicinal plant in Chinese medicine. It is used for [\[R\]](#), [\[R\]](#):

- Constipation
- Kidney disease
- Herpes
- Gum disease

It may help due to its antibacterial and anti-inflammatory effects [\[R\]](#).

How it helps

A study administered prepared rhubarb and nifedipine to one group while the control group received only nifedipine. Monitoring various parameters, the study group showed significant reductions in triglycerides and LDL cholesterol levels, and an increase in HDL cholesterol [\[R\]](#).

Chinese rhubarb contains anthraquinones that can help reduce the absorption of fats and sugars in your gut, thus helping to lower your triglyceride levels.

Please note: *Be careful with rhubarb if you are prone to allergies. High doses of rhubarb may cause diarrhea and abdominal cramps. Avoid long-term use due to dependence risk. Rhubarb is not safe for people with gut conditions, women who are pregnant or breastfeeding, and children under 12 years of age. Make sure to consult your doctor before taking rhubarb* [\[R\]](#), [\[R\]](#).

163



Glycine And Tryptophan

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take 3 grams of glycine and 500 mg of tryptophan daily, preferably on an empty stomach, before bedtime for better absorption and effect on sleep and mood. Continue this regimen for at least 4 weeks to evaluate its benefits.

TYPICAL STARTING DOSE
3 g

Description

Glycine is an amino acid that may have calming and anti-inflammatory effects, potentially benefiting sleep quality and joint health. [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. Your body uses tryptophan to make [serotonin](#) and [melatonin](#). These brain chemicals are important for mood and sleep.

How it helps

Combined daily supplementation of glycine (3 g/day) and tryptophan (0,2 g/day) for 6 weeks decreased serum triglyceride levels in people with mild hyperuricemia [\[R\]](#).

164



Chamomile

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take chamomile supplements in the form of capsules or tablets, usually ranging from 300 to 400 mg, up to three times daily between meals. If using chamomile tea as a supplement, drink 1 to 4 cups daily.

TYPICAL STARTING DOSE

300 mg

Description

Chamomile is an herbal remedy derived from the dried flowers of the chamomile plant. It is widely used for its calming and soothing properties

Chamomile is an herb native to Africa, Asia, and Europe. It was used as a traditional herbal remedy in ancient Greece, Rome, and Egypt. Today, chamomile is used in cosmetics, aromatherapy, tea, and supplements. It may help with [\[R\]](#), [\[R\]](#), [\[R\]](#):

- Skin problems
- Period cramps
- Gut problems
- Sleep quality
- Mood

How it helps

Chamomile possesses anti-inflammatory properties that may help reduce triglyceride levels. By reducing inflammation throughout the body, chamomile may contribute to improved metabolic health, potentially leading to lower triglyceride levels and a reduced risk of cardiovascular disease.

In a placebo-controlled trial of 64 subjects with type 2 diabetes, drinking chamomile tea (3 g/150 mL hot water) 3x/day after meals for 8 weeks lowered HbA1c, serum insulin, insulin resistance, total cholesterol, LDL cholesterol, triglycerides, and MDA [\[R\]](#), [\[R\]](#).

165



Shiitake Mushroom

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take shiitake mushroom in supplement form, typically ranging from 500 to 1,000 mg per day, divided into two or three doses. It can be consumed with or without food. Continue this regimen daily for at least one to two months to observe potential health benefits.

TYPICAL STARTING DOSE

500 mg

Description

Shiitake mushrooms are edible fungi native to east Asia. They contain compounds like lentinan, which may have immune-boosting properties.They are also rich in vitamins, minerals, and compounds like beta-glucans, which are believed to support immune health and overall well-being.

How it helps

In a placebo-controlled trial of 68 participants with borderline high cholesterol, consuming shiitake bars for 66 days reduced triglyceride levels by 10% [\[R\]](#).

Shiitake mushrooms can contribute to reducing triglyceride levels because they contain polysaccharides with cholesterol-lowering effects.

166



Avoid Exposure to Heavy Metals

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

To avoid exposure to heavy metals, ensure you're not using cosmetic products with heavy metals, opt for organic foods to minimize pesticide exposure, and use filters for drinking water to remove possible contaminants. Check for lead-based paints in older homes and avoid cooking or storing food in uncoated metal containers. When possible, choose glass or BPA-free plastics instead.

Description

Heavy metals are elements naturally found in the environment. They are also used for agricultural, industrial, and medicinal purposes. Some can even be found in small amounts in your body [\[R\]](#), [\[R\]](#).

Long-term exposure to high amounts of heavy metals can be harmful to your health [\[R\]](#), [\[R\]](#).

Heavy metals that are most often linked to health problems include [\[R\]](#), [\[R\]](#):

- Lead
- Cadmium
- Arsenic
- Chromium
- Mercury

How it helps

A study of 232 women associated elevated levels of blood cadmium, chromium, and nickel with increased total cholesterol, LDL cholesterol, and triglycerides, and decreased HDL cholesterol, as well as increased cortisol levels [\[R\]](#).

Exposure to heavy metals can increase oxidative stress, which in turn can raise triglyceride levels

167



Broccoli Sprouts

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Consume 2-4 tablespoons of fresh broccoli sprouts daily. They can be added to salads, sandwiches, or smoothies to make them easier to consume. Continue this practice daily for at least 3 months to potentially see benefits.

TYPICAL STARTING DOSE
2 tbsp

Description

Broccoli and broccoli sprouts are nutrient-dense vegetables packed with vitamins, minerals, and antioxidants. They are known for their potential to support a healthy immune system, protect against chronic diseases, and promote overall nutritional wellness.

How it helps

Broccoli sprouts contain sulforaphane, which reduces inflammation and oxidative stress, promoting heart health. Therefore, it may help lower high triglyceride levels, contributing to better cardiovascular health.

In a study with 72 participants (23 in group A, 26 in group B, and 23 in group C), a 4-week treatment with 10g/d of BSP significantly reduced serum triglycerides, OX-LDL/LDL ratio, and the atherogenic index of plasma (p<0.05). Group A also showed a significantly higher HDL-C concentration compared to group B and the placebo (p<0.01) [R].

A study involving 40 hypertensive individuals without diabetes and normal cholesterol levels found that ingesting 10g of dried broccoli sprouts daily for 4 weeks did not significantly improve endothelial function (measured by flow-mediated dilation, FMD) compared to a control group [R].

168



Diatomaceous Earth

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 1 tablespoon of food-grade diatomaceous earth once daily mixed into at least 8 ounces of water. It is best taken on an empty stomach at least 1 hour before or 2 hours after meals. Continue this regimen for up to 4 weeks, then take a break for a week before reassessing whether to continue.

Description

Diatomaceous earth is a natural substance that may have various health uses, including as a dietary supplement to support detoxification and digestive health. It is believed to have potential benefits due to its high silica content, but its safety and efficacy may vary depending on the source and intended use.

How it helps

In a study of 19 healthy people with moderately elevated cholesterol levels, supplementation with diatomaceous earth (250 mg, 3x/day for 8 weeks) lowered triglyceride and cholesterol levels [R].

169



Salvia Miltiorrhiza

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 200-600mg of Salvia miltiorrhiza extract in capsule or tablet form daily, divided into two or three doses. This should be taken with water, preferably 30 minutes before meals. Continue for a period of 8 to 24 weeks for noticeable effects.

Description

Salvia miltiorrhiza, also known as Danshen, is a traditional Chinese medicinal herb. It is primarily used for its potential cardiovascular benefits, including improving blood circulation and reducing the risk of heart-related conditions. It contains various compounds, including tanshinones and salvianolic acids.

How it helps

In a non-placebo-controlled trial of 81 patients with hyperlipidemia, supplementation with *Salvia miltiorrhiza* for 3 months decreased total cholesterol, LDL cholesterol, and triglycerides as effectively as simvastatin [\[R\]](#).

Salvia miltiorrhiza may help by improving fat metabolism.

170



Fucoxanthin

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take fucoxanthin as a dietary supplement in a dosage of 2.4 to 8 mg per day, with a meal that contains fat for better absorption. It can be taken in a single dose or divided into two doses throughout the day. Continue for at least 5 to 16 weeks to observe benefits.

TYPICAL STARTING DOSE

3 mg

Description

Fucoxanthin is a natural pigment found in certain types of seaweed and algae. It is believed to have potential health benefits, including supporting weight management and promoting antioxidant activity.

How it helps

In a study focusing on metabolic syndrome, fucoxanthin (1x/day for 12 weeks) was found to reduce body weight, body mass index, waist circumference, systolic and diastolic blood pressure, and decrease triglyceride levels [\[R\]](#).

171



Pilates

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Engage in Pilates exercises for at least 20-30 minutes, 3 times a week. Focus on core strength, flexibility, and mindful breathing. It is suitable for both beginners and advanced individuals, adjusting the difficulty of exercises as necessary.

TYPICAL STARTING DOSE

30 minutes

Description

Pilates is a form of exercise that focuses on strengthening the core, improving flexibility, and enhancing overall body awareness through controlled movements and breathing techniques. Its health benefits include increased core strength, improved posture, enhanced flexibility, and better balance, making it a popular choice for those seeking a holistic approach to fitness.

Pilates is a type of exercise that emphasizes proper alignment, breathing techniques, and precise movements.

It involves a series of controlled movements performed on a mat or with specialized equipment, such as a reformer or Cadillac. Pilates helps strengthen the core muscles, improve flexibility, and promote mind-body awareness.

How it helps

In a non-placebo-controlled trial of 196 overweight or obese women, practicing Pilates for 10 weeks lowered total cholesterol (by 5.3%), non-HDL cholesterol (by 8.3%), LDL cholesterol (by 7.5%), and triglycerides (by 6%), while increasing HDL cholesterol (by 3.1%). However, Nordic walking was more effective. A hypoxic pilates intervention (3x/day for 12 weeks) improved total cholesterol and triglycerides in a non-placebo-controlled trial of 32 obese women. However, Pilates failed to improve blood lipid profile in a non-placebo-controlled trial of 35 sedentary women with dyslipidemia [\[R\]](#), [\[R\]](#), [\[R\]](#).

Pilates focuses on core strength, flexibility, and cardiovascular health, which both promote weight loss and improve body composition, thus beneficial in managing triglycerides.

172



Kiwifruit

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Eat one to two kiwifruits daily, either as a snack or incorporated into your meals. You can consume them for breakfast, add them to a salad for lunch, or blend them into a smoothie. Continue this practice as a regular part of your diet to gain its nutritional benefits.

Description

Kiwifruit is a vitamin C-rich fruit that supports immune health, digestion, and skin vitality. It's also a good source of dietary fiber, making it a nutritious addition to a balanced diet.

Kiwifruit are technically berries, full of vitamin E, fiber, other minerals and vitamins, particularly vitamin K and C. One kiwifruit provides 1.1 mg of vitamin E or 7%DV.

How it helps

Eating kiwifruit can help lower triglyceride levels as it is rich in fiber and antioxidants which reduce harmful cholesterol in the body. Additionally, its high vitamin C content aids in reducing triglycerides and preventing related heart diseases.

In a randomized controlled cross-over study with 85 hypercholesterolaemic men (LDL-C > 3.0 mmol/l and TAG < 3 mmol/l), kiwifruits (2 units/day for 4 weeks) plus healthy diet **increased plasma HDL-cholesterol** (MD 0.04; 0.07 mmol/L) and **lower total cholesterol:HDL-C ratio** (MD 20.5; 20.05 mmol/L). In carriers of the APOE4 allele, kiwi **also lowered triglycerides** (MD -0.18; -0.02 mol/L) but did not change plasma total cholesterol, LDL-C, insulin, glucose, hs-CRP, or blood pressure [\[R\]](#).

In a controlled cross-over study with 85 hypercholesterolaemic men following a healthy diet (for 4 weeks), kiwifruit (2 units/day) plus healthy diet (for 8 weeks) **improved plasma HDL cholesterol (MD 0.08 mmol/L), total cholesterol /HDL-C ratio (-0.29 mmol/L), plasma hs-CRP (-22.1%) and IL-6 (-43.7%)** compared to control treatment **in people with hs-CRP <1 mg/L** but did not change these parameters in people with hs-CRP <1 mg/L [\[R\]](#).

173



Jiaogulan (Gynostemma Pentaphyllum)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a capsule of jiaogulan (gynostemma pentaphyllum) containing 450 mg to 500 mg, three times a day with meals.
Continue this routine daily for best results.

TYPICAL STARTING DOSE
1350 mg

Description

Jiaogulan, often referred to as the "immortality herb," is an herb used in traditional Chinese medicine for its potential adaptogenic and antioxidant properties. Some research suggests it may support overall well-being and longevity, but more studies are needed to confirm these effects.

[Gynostemma](#) (*Gynostemma pentaphyllum*), also called jiaogulan, is a climbing vine native to Southeast Asia. It is used in traditional Chinese medicine for [R](#):

- High cholesterol
- Diabetes

People call it the "poor man's [ginseng](#)" because it may have similar benefits but cost less than Panax (Asian) ginseng [R](#), [R](#).

How it helps

Jiaogulan (*Gynostemma pentaphyllum*) contains saponins that can help lower the level of triglycerides in your blood by diminishing their absorption in the intestines and increasing their reduction in the liver.

In a placebo-controlled trial of 117 overweight participants, supplementation with *Gynostemma pentaphyllum* (450 mg/day) for 16 weeks lowered triglyceride levels [R](#).

174



Ergothioneine

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take ergothioneine as a dietary supplement in the range of 5-10 mg per day. This is typically done by consuming a capsule or tablet once daily, ideally with a meal to enhance absorption. There is currently no established duration for ergothioneine supplementation, so it may be taken indefinitely or as needed based on personal health goals and under the guidance of a healthcare provider.

TYPICAL STARTING DOSE

5 mg

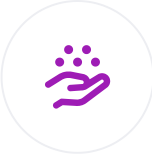
Description

Ergothioneine is an amino acid-like compound found in certain foods, particularly mushrooms. It is believed to have antioxidant properties and may contribute to overall cellular health and protection against oxidative stress.

How it helps

A study assessing the bioavailability of ergothioneine from mushrooms (8-16 g) found that it could attenuate the postprandial triglyceride response. Ergothioneine may help in moderating the increase in triglycerides following a meal due to its antioxidant effects [\[R\]](#).

175



Cucumber Seed Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Apply the cucumber seed extract topically to the affected area of your skin once or twice daily, depending on the severity of the condition. Allow the extract to absorb fully into the skin for optimal benefits. Consistent use over several weeks is recommended for noticeable improvements.

Description

Cucumber seed extract is known for its potential skin benefits and antioxidant properties. It's often used in skincare products to support skin health and hydration.

How it helps

In a study of 47 people with unhealthy blood fat levels, supplementation with cucumber seed extract (500 mg/day for 12 weeks) reduced triglycerides, cholesterol, and weight [\[R\]](#).

176



Tart Cherries

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Consume about 200 grams (7 ounces) of tart cherries or drink 240 ml (8 ounces) of tart cherry juice daily. This can be done at any time of the day but consuming it in the evening might improve sleep quality. It is recommended to continue daily consumption for at least 4 weeks to observe benefits such as reduced muscle pain, improved sleep, and potential reduction in inflammation.

Description

Tart cherries, often available in the form of juice or supplements, has vitamin C, as well as anthocyanins and melatonin, known for their potential to reduce inflammation and improve sleep quality. They are rich in antioxidants and may aid in recovery from exercise-induced muscle soreness.

Cherries are stone fruits with numerous species. Tart or “sour” cherries (*Prunus cerasus*) are native to parts of Europe and Asia [\[R\]](#), [\[R\]](#).

They are close to regular, sweet cherries (*Prunus avium*) but more acidic. Hence, people do not eat them fresh but dried or in syrups, salads, pies, or liqueurs.

People consume tart cherries to help with [\[R\]](#):

- Gout
- Exercise recovery
- Blood sugar control
- Blood pressure

How it helps

Tart cherries contain anthocyanins, potent antioxidants that can intervene in cellular pathways involved in lipid metabolism, potentially helping reduce high triglyceride levels. The fiber in cherries also aids in reducing the absorption of triglycerides from your food.

In a [placebo-controlled trial of 12 men](#), consuming tart cherry concentrate before a meal **lowered postprandial triglycerides** [\[R\]](#).

177



Alpha-Linolenic Acid (ALA)

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

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

Description

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

How it helps

Consuming Alpha-Linolenic Acid (ALA) helps lower triglyceride levels because it's a type of omega-3 fatty acid, which has a proven effect in reducing these fats in your bloodstream. A diet rich in ALA can help your body maintain a more balanced lipid profile and improve heart health.

Dietary ALA has positive effects on cholesterol, blood pressure, and inflammation, contributing to cardiovascular benefits. It may also reduce diabetes risk and potentially counteract cognitive impairment. Inconclusive evidence exists for metabolic syndrome and obesity benefits [\[R\]](#).

In a study involving 1305 individuals in the ALA group and 1325 in the control group, dietary ALA intake significantly reduced TG, TC, LDL-C, VLDL-C, TC/HDL-C ratio, and LDL-C/HDL-C ratio, but had no effect on HDL-C levels [\[R\]](#).

In a review of 14 studies, ALA had a significant effect on three out of 32 outcomes. It reduced fibrinogen levels (0.17 micromol/l) and fasting plasma glucose (0.20 mmol/l) but did not significantly impact other factors like total cholesterol, triglycerides, weight, BMI, LDL, blood pressure, VLDL, and apolipoprotein B [\[R\]](#).

In kidney disease patients, a meta-analysis of 19 studies revealed that ALA supplementation significantly reduced C-reactive protein (CRP) levels (WMD: -1.32), indicating anti-inflammatory effects. However, it had no significant impact on total cholesterol, high-density lipoprotein, low-density lipoprotein, and triglyceride levels [\[R\]](#).

178



Bitter Melon Supplement

IMPACT1 / 5

EVIDENCE1 / 5

How to implement

Take a bitter melon supplement in the form of capsules or tablets, typically ranging from 500 mg to 1000 mg per day, split into two to three doses before meals. It's recommended to follow the dosage instructions on the product label or consult a healthcare provider for personalized advice. Continue for as long as recommended by the healthcare provider, usually a few weeks to months, to monitor effectiveness and tolerance.

TYPICAL STARTING DOSE

500 mg

Description

Bitter melon supplements are often used in traditional medicine for their potential to support blood sugar control. They contain compounds that may help regulate glucose metabolism and promote overall metabolic health.

How it helps

Bitter melon supplements has been found to lower levels of triglycerides, which are a type of lipid (fat) in your blood. When your body has high levels of triglycerides, you're more likely to develop conditions like heart disease, so taking this supplement could help prevent these problems.

In a 10-week study with 95 diabetes patients, three groups were formed: Group I and Group II received bitter melon (2 g/day and 4 g/day, respectively), while Group III received glibenclamide (5 mg/day). Parameters such as blood lipids, atherogenic index, body weight, and SBP improved in Group I and Group II but worsened in Group III [\[R\]](#).

In a 12-week study, 12 patients received 2000 mg/day of Momordica charantia (MC), while 12 received a placebo. Although there were reductions in body weight, BMI, WC, and body fat percentage in the MC group, they did not reach statistical significance. However, significant decreases in triglycerides (TG) and very low-density lipoprotein (VLDL) levels were observed with MC supplementation [\[R\]](#).

179



Passion Fruit Peel Extract

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take 150-300 mg of passion fruit peel extract supplement daily, preferably with a meal to enhance absorption. This should be done consistently for a period of at least 4 to 8 weeks to observe potential benefits in conditions such as asthma or anxiety. Always check the supplement’s label for specific dosing instructions.

TYPICAL STARTING DOSE

150 mg

Description

Passion fruit peel extract is derived from the peel of the passion fruit (*Passiflora edulis*), a fruit native to South America. It contains carotenoids, flavonoids, and polyphenols, that are utilized for skin health and boosting the immune system.

How it helps

A placebo-controlled trial of 43 adults with dyslipidemia found that a jelly drink containing polyphenol-rich roselle calyces extract and passion fruit juice with pulp concentrate (for 8 weeks) decreased LDL-C and triglycerides. It also reduced inflammation and improved oxidative stress, as demonstrated by the reduction of tumor necrosis factor- α and malondialdehyde, and the enhancement of glutathione [\[R\]](#).

Passion fruit peel extract is high in piceatannol and scirpusin B, which are antioxidant compounds that can potentially lower triglyceride levels.

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Pranayama (Yoga Breathing)

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Practice pranayama for 10 to 15 minutes daily. Choose a quiet, comfortable spot where you won't be disturbed. Begin with simple techniques like Ujjayi (Ocean Breath) or Anulom Vilom (Alternate Nostril Breathing), gradually working your way up to more advanced techniques. Consistency is key for observing benefits.

TYPICAL STARTING DOSE

15 minutes

Description

Pranayama is a yogic practice involving controlled and mindful breathing techniques. It is believed to enhance mental clarity, reduce stress, and improve respiratory health by optimizing the flow of life force energy (prana) in the body.

How it helps

Yoga interventions including Pranayama may lower triglycerides in people with excess weight, as well as in those living at high altitudes [\[R\]](#), [\[R\]](#).

Pranayama may help by reducing stress, which can indirectly support metabolic processes that regulate triglycerides.

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Indian Gooseberry

IMPACT

1 / 5

EVIDENCE

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How to implement

Take 500 mg of Indian gooseberry extract daily, either in the morning or evening, with or without food. Continue this regimen for at least 3 months to observe potential health benefits.

TYPICAL STARTING DOSE
500 mg

Description

Indian gooseberry, also known as amla, is a fruit rich in vitamin C and antioxidants. Consuming Indian gooseberry can boost the immune system, promote healthy skin, and support overall health.

How it helps

In a study of 98 people with unhealthy blood fat levels, supplementation with Indian gooseberry extract (500 mg/day for 12 weeks) reduced both triglyceride and cholesterol levels [\[R\]](#).

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Baicalin

IMPACT

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EVIDENCE

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How to implement

Take baicalin supplements in doses ranging from 50 to 500 mg per day. Choose a high-quality supplement and consult with a healthcare provider before beginning, especially if taking other medications or if pregnant or breastfeeding. Baicalin should be taken with a glass of water, preferably with a meal to aid absorption, and can be divided into 1-2 doses throughout the day. Continuous use should be reassessed every 3-6 months with healthcare guidance.

TYPICAL STARTING DOSE
50 mg

Description

Baicalin is a natural compound found in certain plants like the Chinese skullcap. It has several health benefits like reducing inflammation, battling bacteria, and protecting the brain. Research also suggests it could be useful in treatments for heart and liver conditions.

How it helps

In a placebo-controlled trial of 374 patients with coronary artery disease and rheumatoid arthritis, supplementation with baicalin (500 mg/day) for 12 weeks lowered triglyceride levels [\[R\]](#).

Baicalin may help by reducing the production and increasing the clearance of triglycerides.

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Boron

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

Take a boron supplement of 3 to 6 mg daily, with food to enhance absorption. This dosage range is commonly recommended for general health benefits, based on nutritional studies. It's advisable to continue this regimen daily for an extended period, as long-term benefits depend on consistent supplementation.

TYPICAL STARTING DOSE

3 mg

Description

Boron is a trace mineral that plays a role in bone health, cognitive function, and hormone regulation.

Boron is a mineral in many foods, including:

- Fruits and fruit juices
- Avocados
- Potatoes
- Legumes
- Drinks (coffee, milk, cider, wine, and beer)

Scientists aren’t sure if boron has any roles in the body, so they don’t consider it an essential nutrient.

Some people take boron supplements to balance hormone levels, increase athletic performance, and more. However, the evidence to support these uses is weak.

How it helps

In one study, both doses of calcium fructoborate (56 and 112 mg/day) decreased triglyceride levels by around 9% [\[R\]](#).

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Bergamot

IMPACT

1 / 5

EVIDENCE

1 / 5

How to implement

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

Description

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

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

How it helps

In a study of 80 people with moderate hypercholesterolemia, supplementation with a bergamot extract (containing 150 mg flavonoids for 6 months) lowered triglyceride levels [R].

However, supplementation with another formulation of bergamot polyphenols (500 mg, 2x/day for 12 weeks) failed to lower triglycerides in another study of 64 overweight and obese people [R].

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Hydroxytyrosol

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take a hydroxytyrosol supplement at a dose of 5 to 10 mg per day, with or without food. This supplement should be taken daily for at least 8 to 12 weeks to observe potential health benefits.

TYPICAL STARTING DOSE

5 mg

Description

Hydroxytyrosol is a natural phenolic compound found in extra virgin olive oil. It is known for its antioxidant properties and may contribute to the health benefits associated with the Mediterranean diet.

How it helps

In a 20-week placebo-controlled trial with 84 subjects, supplementation of hydroxytyrosol (9.9 mg) and punicalagin (195 mg) significantly reduced LDL cholesterol, oxidized LDL, triglycerides, systolic and diastolic blood pressure, increased HDL cholesterol in all, and FMD in those with endothelial dysfunction. In an 11-day placebo-controlled trial with 36 participants, hydroxytyrosol supplementation (50-100 mg/day) lowered triglyceride levels by up to 21.64% [R, R, R].

Hydroxytyrosol may help by reducing the amount of fats your liver produces and increasing the quantity your body can successfully eliminate.

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Brazil Nuts

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Consume 1-2 Brazil nuts daily to meet your selenium needs and potentially improve heart health and thyroid function. Do not exceed this amount to avoid selenium toxicity.

Description

Brazil nuts are a nutritious snack rich in selenium, a mineral essential for various bodily functions, including thyroid health and immune support.

Brazil nuts have an enormous amount of selenium along with other minerals like magnesium, phosphorus, and copper, and vitamins E and B1. A 1-ounce (6–8 nuts) serving provides 544 mcg of selenium or 989%DV.

How it helps

Consuming Brazil nuts may lower triglycerides more in people with certain gene variants [\[R\]](#).

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Nattokinase

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

Take 100-200mg of nattokinase supplement daily, preferably on an empty stomach to enhance absorption. This dosage can be taken continuously, but it is important to consult with a healthcare professional before starting, especially if taking blood-thinning medications.

Description

Nattokinase is an enzyme derived from natto (fermented soybean) and is believed to have potential blood-thinning properties, potentially supporting cardiovascular health by promoting healthy blood circulation.

How it helps

In a 6-month placebo-controlled trial of 47 patients with hyperlipidemia, the combination of nattokinase (50 mg, 4x/day) and red yeast rice (300 mg, 4x/day), but not nattokinase alone, lowered triglycerides (by 15%), TC (by 25%), LDL-C (by 41%), and TC/HDL-C ratio (by 29.5%), while increasing HDL-C (by 7.5%) [\[R\]](#).

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Glycine

IMPACT

0 / 5

EVIDENCE

0 / 5

How to implement

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

TYPICAL STARTING DOSE

3 g

Description

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

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

How it helps

Combined daily supplementation of glycine (3 g/day) and tryptophan (0,2 g/day) for 6 weeks decreased serum triglyceride levels in people with mild hyperuricemia [\[R\]](#).

Next Steps

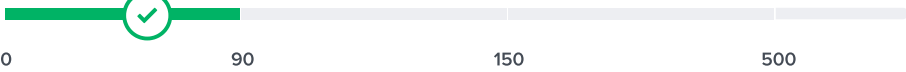
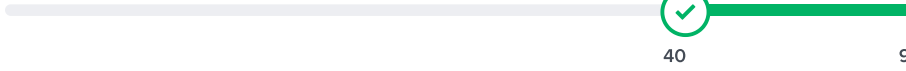
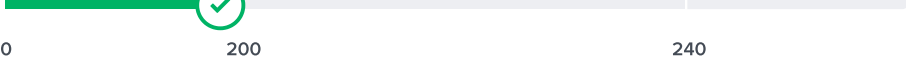
Remember, your genes only tell one important part of your health story!

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.

 TSH	2.76 mIU/mL		9 Nov 2025
 Triglycerides	54 mg/dL		9 Nov 2025
 HDL Cholesterol	42 mg/dL		9 Nov 2025
 Insulin, Fasting	9.08 uU/mL		9 Nov 2025
 Cholesterol, Total	182 mg/dL		9 Nov 2025