

# A Cold Plunge Could Help Burn Body Fat and Lower Diabetes Risk, Study Says



By [Nancy Schimelpfening, MS](#) — [Fact checked by Jennifer Chesak, MSJ](#) — [Updated on October 23, 2023](#)

## On this page



Cold plunge ice baths may have several benefits, such as burning body fat, improving insulin resistance, and reducing stress, among others.



Cold water exposure may have health benefits such as blood sugar regulation and reduced body fat.. [Johner Images/Getty Images](#)

The authors of a new review say that taking a dip in cold water may be just the thing if you are looking to reduce the amount of unhealthy body fat that you have.

The findings, published on September 22 in the [International Journal of Circumpolar Health](#), suggest that cold water exposure might also lower your risk for certain conditions such as [diabetes](#).

Cold water exposure appears to increase the amount of a hormone called “adiponectin,” made by [adipose tissue](#).


## What are the health benefits of cold plunges?

Lead study author [Dr. James Mercer](#), a UIT — The Arctic University of Norway professor, said several benefits of cold water exposure have been previously proposed. These included:

- boosting the immune system
- giving a natural high
- improving circulation
- increasing libido
- burning calories
- reducing stress
- making new friends
- relieving depression
- jump starting the metabolism
- improving cardiovascular health
- reducing pain and inflammation

“Our investigation shows that there is increasing evidence that many of these suggestions may be correct, especially regarding the potential preventative health effects on the immune system, potential prophylactic effects on the cardiovascular system, prophylaxis against insulin resistance, and improved insulin sensitivity and mental health,” Mercer said.

However, he noted that the speculated effects such as a natural high, increased libido, and reduced depression, don’t appear to be supported by evidence.



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## How cold exposure burns fat, improves insulin resistance

Dr. Chris Minson, an expert in exercise physiology, women's health, heart health, and thermoregulation at the University of Oregon, as well as a member of the American Physiological Society, said that one of the key things we should take away from this review is that we still don't know enough about the potential health benefits of cold water exposure.

However, Minson noted that some of the stronger evidence revealed by the study suggests that cold water exposure seems to aid in blood sugar regulation.

"This is through improvements in the way that insulin works in our body," he explained, "and it has real potential for helping to improve the risk of diabetes, and thereby may also improve cardiovascular health."

Minson added there is more limited evidence that repetitive exposure to cold water might reduce the amount of unhealthy body fat, maybe by changing it to be more like the healthy, more metabolically active brown adipose tissue.

As to how this might happen, Minson explained that cold water exposure creates stress on our physiology in much the same way that exercise does.

"If these stresses are repeated over time, and we are able to recover and adapt to the stresses, our physiology will be more resilient," said Minson, "and we may have lower levels of background inflammation (which occurs

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## How to get started with cold plunges

If you find the idea of cold water exposure to be intriguing, Mercer said his best advice is first to be aware of the possible negative effects and then to start gradually, maybe with other people who are already experienced with it. He also suggests reading up on the topic.

Minson noted that cold water exposure is difficult, and many people will not like it. He suggests that a cold-shower challenge is a good way to see how well you can handle it before diving deeper.

“For one week, during your daily shower, decrease the water temperature as low as it will go with still decent water flow for 15 seconds,” he explained. “Stay under the water, including your head and neck and as much of your body as possible. Then turn the water up again to warm yourself.”

Then, start increasing your time under the cold water by 15-second increments each week for a total of four weeks.


Minson said that you should check in with yourself after each shower to see how you are feeling over the next few hours.

“People are often in a better mood and seem to have more energy. Others may hate it and not be happy. But this is a good test to see if you may like cold exposures,” he said.

Minson further advised that it’s a good idea to speak with a healthcare professional before you begin, especially if you have heart disease or have had a heart attack.

“If a person is generally healthy and somewhat active, it is as safe to try this as it is to start an exercise program,” he said.

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#### HISTORY

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#### Current Version

#### Oct 23, 2023

Written By  
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Edited By  
Andrea Rice

Copy Edited By  
Copy Editors

#### Oct 10, 2023

Fact Checked By  
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HEALTH NEWS

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# You Can't Exercise Your Way Out of an Unhealthy Diet



By [Victoria Stokes](#) on July 15, 2022 — [Fact checked](#) by Dana K. Cassell

## On this page



Even if you exercise regularly, a new study finds that having an unhealthy diet can still increase your risk of several diseases and early death. Rob and Julia Campbell/Stocksy United

- **New research finds you can't outrun the effect of a poor diet by simply exercising more.**
- **Regular physical activity and good dietary habits go hand in hand when it comes to your long-term health and longevity.**
- **Physical activity and diet also play a major role in the prevention of many chronic diseases, such as type 2 diabetes, certain cancers, and cardiovascular diseases.**

You've likely heard the phrase 'You can't out-train a bad diet'.

This phrase suggests that, when it comes to calories, it's difficult — if not impossible — to create a calorie deficit through exercise when you're eating poorly.

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However, according to a [new study](#), it appears this phrase rings true in another sense too: Your mortality risk.

According to new research published in the British Journal of Sports Medicine, high levels of physical activity do not counteract the detrimental effects of a poor diet on mortality risk.

A study conducted at The University of Sydney found that participants who had both high levels of physical activity and a high-quality diet had the lowest risk of death.

Compared to physically inactive participants with poor diets, those who had the highest physical activity and a high-quality diet had a mortality risk that was reduced by 17% from all causes.

They also had a 19% lower risk of death from cardiovascular disease, and 27% percent from certain cancers.

In other words? You can't outrun the effects of a poor diet simply by exercising more. Regular physical activity and good dietary habits go hand in hand when it comes to your long-term health and longevity.

"This recent research sets up a controversial argument," says [Brian Carson, PhD](#), exercise psychologist at the University of Limerick and head of science and innovation at [WholeSupp](#).

"What should not be taken from it is that one should be prioritized or is more important than the other. Both diet and physical activity are important for our health, and there are synergies between them."

So, how exactly do these two important lifestyle factors work together to ensure you live a long and healthy life? And more importantly, how can you work them to your advantage?

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new cells, as old damaged ones are being replaced,” explains [Sophie Chabloz](#), MSc in food science, a nutrition expert and co-founder and CPO of [Avea Life](#).


“However, fitness cannot be left out of the health equation. It keeps your muscles and bones strong, keeps a healthy heart pumping, and balances your moods and hormones.”

Physical activity and diet also play a major role in the prevention of many chronic diseases, such as type 2 diabetes, certain cancers, and cardiovascular diseases.

“One of the major – and most widely debated – ways diet and physical activity impact our health is through weight control,” says Carson.

“Excess fat is associated with the onset of many of the aforementioned chronic diseases.”

Beyond weight control, Carson says physical activity and diet can improve other aspects of your health, including the regulation of inflammation, immune function, and muscle mass, which can all extend your lifespan.



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## What makes up a high-quality diet?

The phrase ‘high-quality diet’ is open to interpretation. In Chabloz’s opinion, the Mediterranean diet remains the gold standard for lifelong good health and low inflammation.

“It includes staples such as fruits and vegetables, whole grains, seafood,

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Various studies have confirmed the links between the Mediterranean diet and good health. One [study](#) conducted in 2006 found eating a Mediterranean-style diet lowered cardiovascular risk factors.

In a [2011 study](#), the Mediterranean diet appeared to prevent the development of type 2 diabetes.

Beyond the Mediterranean diet, Chabloz says adding some fermented foods for optimal gut health and choosing unprocessed (preferably organic) foods as much as possible is beneficial.

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## How much exercise do you really need?

One of the common reasons people often cite for not exercising regularly is a lack of time.

Good news if you're one of them: getting the recommended amount of exercise may be more achievable than you thought.

"The World Health Organization revised their physical activity guidelines in late 2020," Carson points out.

"For adults aged 18-64 years it's recommended to achieve at least 150-300 minutes of moderate to vigorous physical activity per week or 75-150 minutes of more vigorous activity," he explains.

That might mean walking for 90 minutes three days a week, spending 30 minutes every evening playing outdoors with the kids, or getting sweaty every other morning in the gym.

"It's also recommended to engage in strength or resistance training on 2 or more days a week," adds Carson.

[Strength training](#) is linked with better heart health, increased mobility, and stronger bones, so it's a good one to add to your current routine.

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Incidental exercise counts too, whether it's climbing the stairs to work, running to catch your bus, or doing the household chores.

## Building sustainable habits

So, now that you know what a high-quality diet looks like and understand just how much exercise you actually need, how can you build healthier habits into your daily routine?

### Diet

Chabloz says to 'eat the rainbow'.

"Food that has a vibrant color (think fresh fruits and veggies, kidney beans, matcha, pure cacao, etc.) is full of antioxidants that help fight inflammation and oxidative stress," she explains.

Therefore, one of the easiest ways you can improve the quality of your diet is by adding colorful, fresh food to your plate.

Ensuring you eat enough high-quality protein and fat is key too.

Chabloz says you'll find protein in foods like legumes, lentils, and beans, as well as fish, eggs, poultry, and meat.

"Aim for 15 to 30g at every meal to keep your muscles and bones strong," she advises.

As for healthy fats, you'll find these in avocado, olive oil, salmon, nuts, and seeds.

Begin adding these foods into your diet to balance your hormones and keep your skin supple, Chabloz suggests.

### Exercise

Where exercise is concerned, Carson is an advocate of finding exercise you actually enjoy.

"People often ask me what exercise they should do. My answer typically is to do the one that you are most likely to keep doing," he says.

"If there is a type of exercise you don't enjoy, then trying to pursue that will only have benefits in the short term as you are unlikely to sustain it."

Once you've found a type of exercise you enjoy, Carson advises finding ways to build it into your routine. This might include sharing your exercise

plan with others.

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“Exercise can be a social outlet. It might be an opportunity to spend time with friends pursuing a common goal, or much-needed family time,” he points out.

“Rather than taking away from these interactions, consider building exercise with others into your overall routine.”

Above all else, start small. Carson says one of the easiest things you can do to increase your physical activity is to limit the amount of time you spend sitting.

“We have conducted research at the University of Limerick as well as building a body of evidence that shows sitting for long periods can negatively impact your health, independent of your physical activity and exercise,” he says.

His advice? “Try to break up sitting with short ‘exercise snacks’ for even 2-3 minutes throughout the day.”

## The bottom line

You can’t undo the ill effects of a poor diet simply by squeezing in an extra session at the gym or lifting a heavier weight.

You need both a high-quality diet and at least 150 minutes of moderate exercise a week for optimum health and longevity.

Prioritizing both diet and fitness may feel like a tall order, but by making a few small adjustments to your current routine, it may be easier than you think.

### How we reviewed this article:

#### HISTORY

Our experts continually monitor the health and wellness space, and we update our articles when new information becomes available.

#### Current Version

 Jul 15, 2022

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