



SPORTS DRINK V WATER

If you ever watch sports, you have probably seen athletes sipping on brightly coloured beverages before, during or after a competition.

These sports drinks are a big part of athletics and big business around the globe.

Many people believe that these drinks are the magic elixir to improve exercise performance, even if you are not an athlete.

However, others will tell you that this is just marketing, and you should stick with water.

WATER VS SPORTS DRINKS

Water makes up most of your body weight and is critical for your body's proper functioning. In addition to losing water through urine, sweat and feces, your body is continually losing water through your skin and the air you exhale. To replace these losses and promote good health and exercise performance, it's often recommended to drink fluids regularly throughout the day. Although needs can vary, the recommended daily fluid intake is 91 ounces (2.7 liters) for adult women and 125 ounces (3.7 liters) for adult men.

THE MAIN INGREDIENTS IN SPORTS DRINKS

Water is the main ingredient in sports drinks, but they also contain other substances, including carbs and electrolytes, which are supposed to improve performance.

The carbs in these drinks are often in the form of sugars like glucose, sucrose, and fructose, but they may also be found in other forms.

Typically, sports drinks are 6–8% carbohydrates. A 6% solution contains about 14 grams of carbs per 8 fluid ounces (240 ml).

However, some sports drinks are low- or zero-carb to appeal to those who want water and electrolytes without extra calories.

Electrolytes, or minerals that have an electrical charge, are essential for your body's normal operation.

The main electrolytes found in sports drinks are sodium and potassium.

Although there are several different brands of sports drink available, there is likely not a large difference in the effectiveness of the major sports drinks on the market. While much research has been conducted on sports drinks, some people have questioned the validity of these studies. Specifically, some have raised

concerns about the relationship between the large companies that make sports drinks and the scientists performing the studies.

SPORTS DRINKS CAN BENEFIT ATHLETES

The main components of sports drinks — water, carbs, and electrolytes — are each important for different aspects of exercise performance. Water and electrolytes are lost in sweat, and it's important to replace them, particularly during long-duration exercise.

Your body stores carbs in your muscles and liver called glycogen, which is used for fuel during exercise.

Consuming carbs before or during exercise can help slow down how quickly your body runs out of its own carbohydrate stores. Sports drinks are designed to provide these three important ingredients with the goal of improving exercise performance or recovery.

Many studies have examined the effects of sports drinks on exercise performance, and much of this research has been conducted in athletes.

Short-Duration Exercise

It's not fully clear if sports drinks are beneficial for short-duration exercise.

One study in trained cyclists



found that a sports drink improved performance by about 2% during one hour of intense cycling, compared to a placebo.

Despite these findings, there is not strong evidence to support the benefits of sports drinks for short-duration activities, such as jumping, sprinting and agility exercises. Similarly, clear benefits have not been demonstrated for weight training.

Team Sports and Intermittent Exercise

The usage of sports drinks is very common in team sports like football, basketball, and rugby. These sports involve intermittent activities, which alternate between intense exercise and rest.

Some research shows that ingesting carbohydrate drinks like sports drinks can reduce fatigue and improve performance in sports like football and rugby.

Prolonged Continuous Exercise

Unlike intermittent exercise, continuous exercise is performed with no rest periods. Many studies have examined the effects of carbohydrate beverages like sports drinks during continuous exercise lasting 1-4 hours or longer, such as running and cycling. Most of these studies show improvements in performance when consuming these beverages.

These improvements may be because sports drinks provide carbs for energy as your body's stores get low and help prevent dehydration.

HOW MANY CARBS?

Generally, the number of carbs that may be beneficial increases as the duration of exercise increases.

Research has shown that small amounts of carbs (fewer than 30 grams per hour) may improve exercise performance in events lasting 30-75 minutes. It's recommended to consume up to 30 grams per hour of carbs, or about 16 fluid ounces of a sports drink with 6% carbs, in sessions lasting 1-2 hours.

Sessions lasting 2-3 hours may benefit from more carbs — up to 60 grams per hour.

However, these recommendations are for continuous high-effort activity without rest. The same guidelines don't apply to certain intermittent activities like weight training.

They Are Unnecessary For Most People

There are factors to consider when deciding whether sports drinks may benefit you.

Type and Intensity of Exercise

First, consider your exercise habits, as well as the duration and intensity of your training.

While sports drinks can benefit athletes who engage in long or intense training sessions, they are probably unnecessary for most gym-goers. If you perform light-to-moderate exercise, such as walking or jogging, for less than 1 hour, you probably do not need to use sports drinks.

They May Affect Weight Loss

For those trying to maintain or lose weight, another important factor to consider is energy balance, or the balance between the number of calories you consume and burn. If you want to lose weight, you need to burn more calories in a day than you consume.

If sports drinks are unnecessary for the type of exercise you do, consuming them provides you with unnecessary calories that could hinder your weight loss goals.

MANY DIFFERENT BEVERAGES CAN HELP YOU STAY HYDRATED

Much of the marketing of sports drinks focuses on their ability to keep you hydrated by replacing water and electrolytes lost through sweat.

Staying Hydrated

How much you sweat can vary based on many factors, including how long and intensely you exercise, your training level and your environment.

The rate of sweating in humans may range from about 10 fluid ounces/hour (0.3 liters/hour) to 81 fluid ounces/hour (2.4 liters/hour).

What's more, it's recommended that athletes do not lose more than 2-3% of their body weight through sweat during exercise.

However, it's debated whether sports drinks are more effective than water at keeping you hydrated.



OTHER OPTIONS TO STAY HYDRATED

One study compared 13 different beverages, including sports drinks and water, to see how well they hydrated the body.

Researchers provided 33.8 fluid ounces (1 liter) of each of these drinks and collected urine over the next several hours.

They found that milk, orange juice and an oral rehydration solution provided the highest amount of hydration.

Oral rehydration solutions are specifically designed to cause fluid retention and contain higher levels of sodium and potassium than a normal sports drink.

An interesting finding from this study was that there was no difference in the hydrating ability of water, sports drinks, tea, and cola.

In fact, some beverages that are typically considered to be dehydrating, such as coffee and beer, hydrate the body about as much as water.

In fact, other research has indicated that coffee can help keep you hydrated, contrary to popular belief.

It's important to note that most drinks can contribute to your daily fluid requirements and help keep you hydrated.

This doesn't mean that you should drink cola or beer during exercise, but it demonstrates that a wide variety of beverages can provide hydration throughout the day.

ENJOYING YOUR DRINK

Another factor to consider is that your enjoyment of certain beverages could affect how much you drink.

THE BOTTOM LINE

Sports drinks are very popular among athletes and recreational exercisers, but it's debated whether they're any better than plain water. The main components of sports drinks are water, carbs, and electrolytes.

Research supports their benefits in athletes and those performing long or intense exercise. The recommended amount varies based on the type of exercise. However, most active individuals in the general population do not exercise intensely enough or long enough to need sports drinks.

Additionally, many beverages can hydrate your body just as effectively as sports drinks, including plain water.

If you choose to use sports drinks, be aware of their calorie contents. Overall, sports drinks can benefit very active individuals and athletes, but they are not necessary for most people.

