# 28 DAY CHALLENGE HYDRATION

# Hydration

Proper hydration is important for overall health and well-being. Our bodies are made up of about 60% water, and water is essential for many bodily functions, including:

Regulating body temperature: Water helps regulate body temperature through sweating and evaporation.

Transporting nutrients and oxygen: Water helps transport nutrients and oxygen to cells and tissues throughout the body.

Removing waste: Water helps remove waste products from the body, including through urine and bowel movements.

Lubricating joints: Water helps lubricate joints, which can reduce the risk of joint pain and injury.

Supporting digestion: Water helps digest food and absorb nutrients. Maintaining healthy skin: Water helps keep skin hydrated and healthy.

If we do not drink enough water, our bodies can become dehydrated, which can lead to a range of negative health effects.

Dehydration occurs when the body loses more fluids than it takes in. This can be caused by factors such as excessive sweating, vomiting, diarrhea, or not drinking enough fluids. Dehydration can have several negative effects on the body, including:

Reduced physical and mental performance: Dehydration can lead to fatigue, dizziness, and decreased cognitive function.

Digestive problems: Dehydration can cause constipation and other digestive issues. Kidney problems: Dehydration can lead to kidney stones and other kidney problems. Muscle cramps and weakness: Dehydration can cause muscle cramps and weakness, as well as decreased endurance during exercise.

Heat exhaustion and heatstroke: Dehydration can increase the risk of heat exhaustion and heatstroke, especially during hot weather or intense physical activity.

Increased risk of urinary tract infections: Dehydration can increase the risk of urinary tract infections and other urinary problems.

To avoid the negative effects of dehydration, it is important to drink enough fluids throughout the day, especially during hot weather or physical activity

## Electrolytes

Electrolytes are important for hydration because they help regulate the balance of fluids in the body. Electrolytes are minerals such as sodium, potassium, calcium, and magnesium that are dissolved in the body's fluids, including blood and sweat. They play a vital role in maintaining proper hydration levels by regulating the movement of fluids in and out of cells.

When we sweat, we lose not only water but also electrolytes. If we do not replenish these electrolytes, we can become dehydrated and experience symptoms such as fatigue, muscle cramps, and dizziness. Drinking fluids that contain electrolytes can help replace those lost through sweat and prevent dehydration.

In addition to regulating fluid balance, electrolytes also play important roles in many other bodily functions. For example, sodium helps regulate blood pressure, while potassium is important for muscle and nerve function.

#### Water Consumption & Electrolytes

Drinking lots of water can dilute the concentration of electrolytes in the body, leading to a condition called hyponatremia, or low blood sodium levels. This can occur when a person drinks excessive amounts of water and does not consume enough electrolytes to maintain proper balance. Hyponatremia can cause symptoms such as nausea, headaches, confusion, seizures, and in severe cases, coma and even death. While it is important to drink enough water to stay hydrated, it is also important to consume a balanced diet that includes electrolyte-rich foods and beverages. Examples of electrolyte-rich foods include bananas, oranges, potatoes, nuts, seeds, and leafy green vegetables. Electrolyte-rich drinks include sports drinks and coconut water. In addition, athletes and individuals who engage in intense physical activity may benefit from electrolyte supplements.

#### How Much?

The Institute of Medicine (IOM) recommends that adults drink at least 8 cups (64 ounces) of water per day. This includes water from all sources, including beverages and food. In addition to the IOM recommendation, some health experts suggest using a formula based on body weight to determine how much water a person needs. One such formula recommends dividing a person's body weight in pounds by 2 to determine the number of ounces of water they should drink per day. For example, a person who weighs 150 pounds would need to drink at least 75 ounces of water per day. 1 fluid ounce = 0.0295735 liters

So, to convert the recommended daily intake of 64 ounces to liters, we can use the following calculation:

64 fluid ounces x 0.0295735 liters/fluid ounce = 1.89271 liters

Body Weight	Daily Water Intake
50 kg	25 ounces (0.7 L)
60 kg	30 ounces (0.9 L)

Body Weight	Daily Water Intake
70 kg	35 ounces (1.0 L)
80 kg	40 ounces (1.2 L)
90 kg	45 ounces (1.3 L)
100 kg	50 ounces (1.5 L)
110 kg	55 ounces (1.6 L)
120 kg	60 ounces (1.8 L)

## Additional Hydration With Exercise

If you train a lot and sweat a lot then you also want to replace the additional water lost through sweating.

A simple way of doing this is weighing yourself before and after exercising. Then replace the water lost during exercise.

Alternatively you can follow a general guideline like this

Drink 7-10 ounces (200-300 milliliters) of water every 10-20 minutes during the workout.

Drink 8 ounces (240 milliliters) of water within 30 minutes after the workout.

For the most part the training we will be following will be pretty chilled. So don't worry too much.

#### When to add electrolytes?

I recommend having electrolytes in the first drink you have each day, which I want you to sip. This will allow for better hydration.

A good example

500ml of water with  $1 \times \text{Dioralyte}$  sachet (or other similar hydration product) Then do the same again during your training session.