



HYDRATION

The W.H.A.T of Hydration?

- Fluid Intake
(approx 5-6 glasses daily)
- Fluid Replacement
 - fluids lost through breathing, perspiration, bowel movement, exercise etc.
- Opposite of dehydration

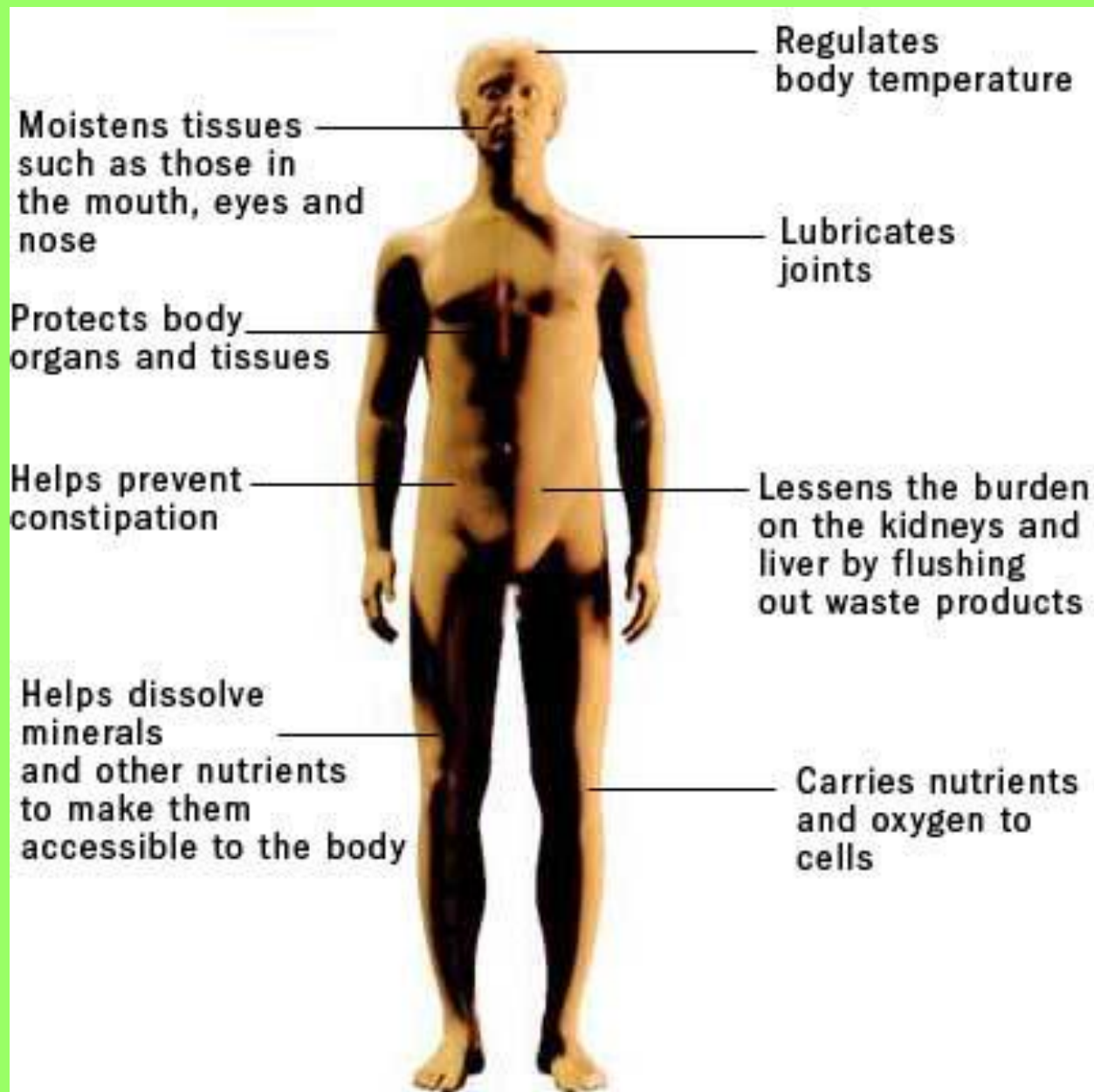


The W.H.Y of Hydration

Water is the most essential ingredient to a healthy life.

Water has many important functions in the body including:

- Transportation of nutrients / elimination of waste products.
- Lubricating joints and tissues.
- Temperature regulation (sweating).
- Facilitating digestion.
- Proper hydration is especially important during exercise. Adequate fluid intake for athletes is essential to comfort, performance and safety.



Regulates
body temperature

Moistens tissues
such as those in
the mouth, eyes and
nose

Lubricates
joints

Protects body
organs and tissues

Helps prevent
constipation

Lessens the burden
on the kidneys and
liver by flushing
out waste products

Helps dissolve
minerals
and other nutrients
to make them
accessible to the body

Carries nutrients
and oxygen to
cells

Warning!!!

Fluid loss of just 2% of your body mass can result in a marked decrease in performance.

Fluid loss of approximately 6% of your body weight can even result in **DEATH!**



Effects of Dehydration on Performance and Health



- Athletes need to stay hydrated for optimal performance. Studies have found that a loss of approx 2% of body mass due to sweating is linked to a drop in blood volume. This results in a marked decrease in performance. For a 60kg person, that's 1.2kg (or approx 1.2 litres of sweat).
- When fluid loss is $> 2\%$ of body mass, cramps, dizziness and fatigue, even heat illness including heat exhaustion and heat stroke may occur.
- Death may result when fluid loss of approx 6% of body mass occurs. For a 60kg person, that's 3.6kg (or approx 3.6 litres of sweat).

Causes of Dehydration

- Inadequate fluid intake
- Excessive sweating (exercise, weather...)
- Failure to replace fluid losses during and after exercise
- Exercising in dry, hot weather
- Drinking only when thirsty



Symptoms of Dehydration

Thirst is one indicator of dehydration, but it is **not** an early warning sign. By the time you feel thirsty, you might already be dehydrated.

Other symptoms of dehydration include:

- feeling dizzy and lightheaded
- having a dry or sticky mouth
- producing less urine and darker urine

THIRST

- Thirst is a symptom of dehydration.
- This means that when we are feeling thirsty, we are already in a state of dehydration.
- Therefore, hydration should be carried out even before we feel thirsty. And when we hydrate ourselves, we should drink beyond the point of thirst, especially for endurance athletes.

Thirsty?
you're already Dehydrated.

Dehydration can lead to headaches, fatigue, dry skin, problems concentrating, cancer, constipation, kidney stones and even death!

A healthy adult loses 8-10 glasses of water a day!

Just a glass of water every half an hour could be a life saver.

Supreme Safety

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The H.O.W of Hydration?

- For a sedentary individual, daily water intake is about 5-6 glasses or 1.2 litres.
- For an active individual, you need to:
 - prepare yourself adequately by increasing water intake 2-3 hours before, right up to 15 min before exercise begins.
 - constantly hydrate every 10 to 15 min of exercise depending on the intensity
 - replenish fluid loss post exercise

And remember, drink even before the onset of thirst!

http://www.sportsmd.com/SportsMD_WatchVideo/vid/324/cid/61.aspx