

THE IMPORTANCE OF WATER

Hydration is a vast topic, we have come a long way from “8 glasses of water per day”. I once watched a movie where the villain’s plot was to cause all the available drinking water to rapidly evaporate. A heinous fellow indeed. Arguably the most valuable resource on earth, humans can only go a very short time without water, and mankind would unlikely survive the dastardly plan.

All jokes aside, the data on exactly how much hydration is need before, during and after activity is a topic of much scrutiny and perhaps thousands of research studies have been conducted. So for this presentation we will stick to basic facts about the basic rehydration fluid – water.

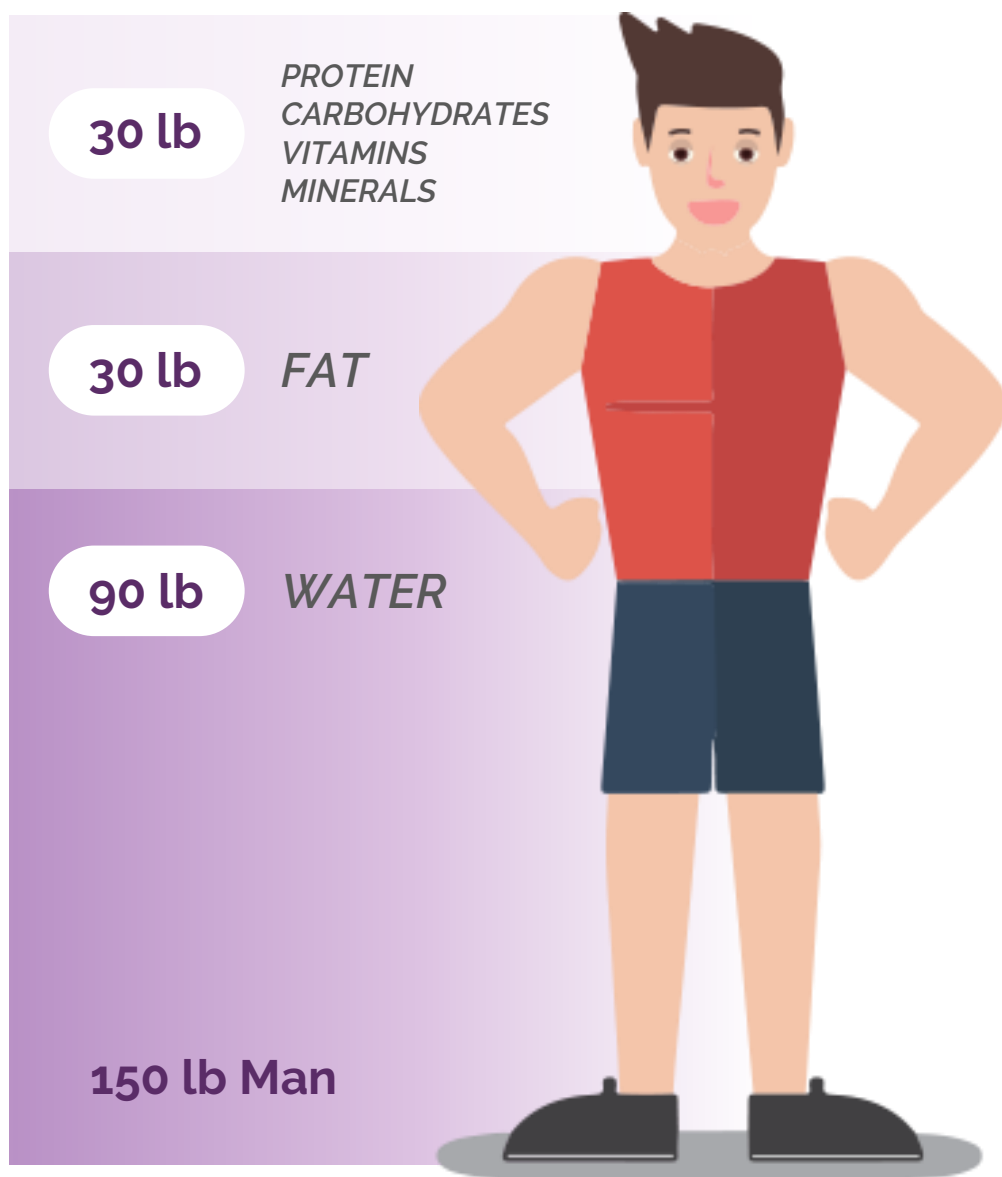
We will cover the importance and functions of water, and recommended intake. For other rehydration beverages, we will save that for another time, for that my friends, is quite an adventure.

Dr. Kent Bazard
Sports Physician
Sports Performance Trainer
Sports Nutrition Specialist

THE IMPORTANCE OF WATER

For the human body, water is a vital resource. We know it is indispensable for life itself, and it provides a host of essential functions for good health.

There is no more important nutrient in our bodies than water. It is the most widely used nutrient at work within the body's functions and processes, as well as constituting a huge part of its physical makeup.



The typical man is made up of around **60%** water, a woman around **50%** and our brains around **75%**. We can only survive a small number of days without water, yet can survive weeks without food.

EFFECTS OF DEHYDRATION

Daily water intake is extremely important in helping to replenish the water lost through our bodily processes including urination, sweating and breathing.

WHEN THE WATER IS NOT REPLACED,
WE BECOME DEHYDRATED:



1% DEHYDRATION

*we become thirsty
with reduced
concentration*



5% DEHYDRATION

*we become hot
& tired with decreased
performance*



10% DEHYDRATION

*delirium and blurred
vision*



20% DEHYDRATION

may result in death

THE FUNCTION OF WATER IN THE BODY



*Transports nutrients
through the body*



*Moistens eyes,
mouth and nose*



*Can help maintain
pH and electrolyte
balance*



*Participates in many
chemical reactions*



*Helps maintain
normal body
temperature*



*Reduces chances of
kidney stones*



*May reduce cancer
risk*



*May reduce
constipation*



*Ensures adequate
blood volume*



*Forms main
components of body
fluids*

RECOMMENDED SOURCES OF WATER



- *Potable (drinking) water*
- *Bottled water*
- *Artesian water*
- *Ground water*
- *Mineral water*
- *Purified water*
- *Sparkling bottled water*
- *Spring water*
- *Well water*

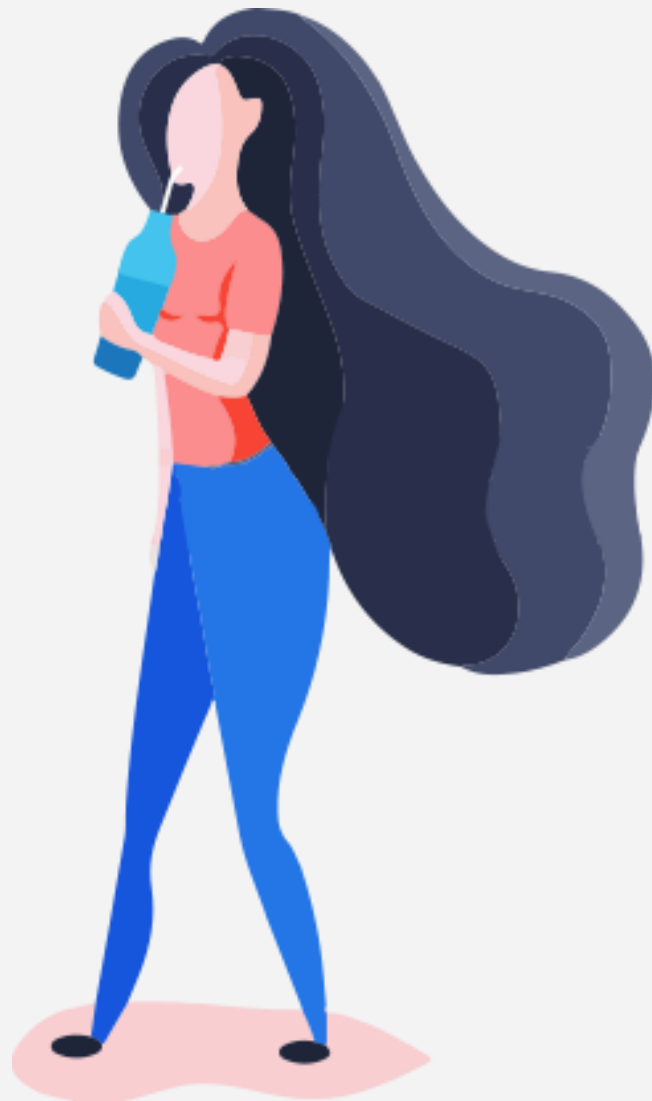
RECOMMENDED WATER INTAKE

Water leaves the body through several routes - this amount equals between 1.4-2.8 litres per day.

ADVISED WATER CONSUMPTION FOR ADULTS

Consume **1-1.5 ml** of water for each calorie-expended daily.

For example: if your daily energy expenditure (**BMR x activity level**) is **2000kcal per day**, then you would require **2-3 litres** of water per day.



EXERCISE AND WATER INTAKE

Water consumption throughout training should be a given, and it is suggested for every pound in bodyweight lost between the start and finish of training, 500ml of water per pound should be replaced.

THE GENERAL GUIDELINES WORK VERY WELL:



When thirsty, drink.



When not thirsty anymore, stop.



During high heat and exercise, drink enough to compensate for the lost fluids.