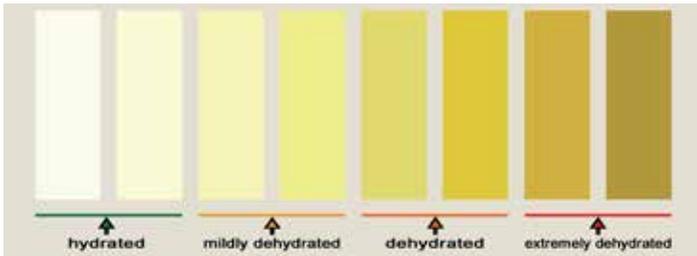


# Hydration



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## WHAT IS DEHYDRATION?

Your body needs a certain amount of fluids to keep your vital organs functioning. Dehydration is when the fluid (water) inside you is less than what you need for vital body functions.

Fluid loss is hard to measure or predict, so monitor hydration, yours and others'. You lose water by sweating, peeing, and especially when the humidity is low (such as winter in the ASRC coverage area), by breathing. Drinking fluids is your only normal means to hydrate.

## WHY IS DEHYDRATION IMPORTANT?

Dehydration causes symptoms ranging from mild to severe depending on how bad it is. It starts with fatigue, progresses to where you can't function normally, and eventually you get blurry vision and may lose consciousness.

A dehydrated team member may slow your team or interrupt your task. Prevent dehydration to keep your team effective in the field.

We spend a lot of time outdoors, with varying workloads, which causes increased sweating. We often have decreased access to fluids, making dehydration an ever-present risk.

## HOW CAN I MONITOR HYDRATION?

Urine color and frequency can provide clues. The goal is to urinate at least every 2-3 hours, with urine that is light yellow to clear in color. Color is more important than the frequency. This can be hard to tell during menstruation.

## DOES IT MATTER HOW FLUID IS LOST?

Fluid losses from sweating, vomiting, and diarrhea contain salt, so you'll also need to replace the salt. Without salt to hold water in your body, water you drink will pass right through you. When you're not acclimatized to heat, sweat is very salty; once acclimatized (mild exercise in the heat 2 weeks) it has a lot less salt.

Fluid loss from breathing (in winter or a very dry environment) is nearly pure water, so just replacing water is adequate.

## HOW DO YOU REPLACE SALT?

To absorb salt from food and drink efficiently you need a bit of sugar too. A sports drink with salt and sugar is ideal. Regular Gatorade is too concentrated, which may cause vomiting, so dilute it to half-strength. The 'G2' and 'sport' Gatorade do not have this issue. Most other newer sport drinks are also fine.

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Another good option is a salty snack. Avoid commercial trail mixes or granola bars that are marked as ‘low sodium’, which means ‘low salt.’” GORP with equal measures of M&Ms, SALTED peanuts, and raisins is a good source of salt (and energy) that’s easy to carry. You can also carry fast-food restaurant salt packets and add to your food or drink.

## WHAT FLUIDS SHOULD I DRINK?

The goal is to get water (and salt) into you.

**Avoid Alcohol** – Alcohol is a mild diuretic; the post-drinking increase in urination often exceeds the fluid intake – a major contributor to hangovers.

Almost any other beverage is good for rehydration. Rumors that soda=pop makes dehydration worse are false. If you are using plain water, make sure you are adding salt via food.

## HOW DO I PREDICT HEAT STRESS?

Default smartphone weather apps show a “feels like” temperature that, in warm weather, is the heat index. Get the “OSHA Heat Safety Tool” smartphone app. From your location it gets National Weather Service heat and humidity and calculates the heat index and may recommend limiting activity during your task.

## TIPS FOR TEAM LEADERS

Make sure every team member has water or sports drink adequate for the task, at least a quart/liter for a half-day task, more for longer tasks or hotter weather. Make sure members are well-hydrated *before* they start out on a task. When you estimate fluid needs, remember that your task might be extended, as for a find.

Don’t continue a task beyond available fluids. If you are out of water, suspend the task until you can get more water. Can someone bring water from base, can you task a team member to get water for the whole team, or can you purify stream water?

Plan on regular breaks for drinking/snacking. The frequency of breaks will vary with conditions, but take one whenever *any* member of your team is exhibiting *any* symptoms or asks for a break. In hot weather, try for breaks in a cool and shaded spot. *Never* ask a team member to “power through” when they are asking for a break.

Monitor how often team members urinate, and ask them to report if their urine is dark yellow or orange.