

SCOUTS-L

Date: Tue, 25 Mar 1997 10:00:17 EST
From: "blaine a. jackson" <blainej@JUNO.COM>
Subject: Re: Backpacking Water?

On Tue, 25 Mar 1997 09:11:40 -0500 Wayne Hill
<whill@CBIS.ECE.DREXEL.EDU>

writes:

>Hi all,

>I'd like to hear your opinions about how much water a person needs a
>day when backpacking.

Wayne,

I am posting this to the list as a means of generating more comments on a VERY important subject.

1. Easy answer, scouts need more water than they will drink. They should avoid soft drinks. "Sports" drinks are better than "coke", but anyone eating a balanced diet probably does not need the "extras" in the sports drinks. Since the boys will be more likely to drink the "sports" drinks, they do serve a useful purpose.
2. You can find any number of guidelines about the volume of water that a person should drink. It is really depends on the person, the activity and the environment. Many leaders forget, or do not know, that water intake is as important in cold weather to prevent hypothermia, as it is in hot weather to prevent hyperthermia.
3. DO NOT use "salt" pills, etc.
4. The best "on the trail" way to determine fluid needs is to monitor "output" rather than "intake". After a break, ask each scout what color his urine was. Any "color" other than "clear" means that he needs to increase his fluid intake.
5. When in doubt, keep drinking. Although it is possible to develop "water poisoning", the chances of it happening to a scout are so small that it can be ignored in almost any troop situation.
6. DO NOT encourage scouts to "save" drinking water. Let them drink all they will. It is lighter to carry "inside" than "outside". If

availability of water is a significant problem, you should re-evaluate the safety of the outing. I cringe every time I hear a scouter boast that he carried a 75 pound pack 15 miles a day with only one quart of water. (This guy will always be carrying quarts, because the idea of a liter is too modern for him.)

7. See the latest issue of Backpacker magazine for an excellent review of water purification, water filters and the "bugs" to worry about.

YIS,
Blaine Jackson
blainej@juno.com
Wilderness First Responder
NASAR certified -- Wilderness Medicine
SM T450, Bentonville, Arkansas 1st SA Jambo T1807I used to be a
Bodacious
Bobwhite Non habes malus, habes equus
Date: Tue, 25 Mar 1997 07:58:01 -0700
From: Jack Kelly <kellyj@OAK.PHX.MCD.MOT.COM>
Subject: Backpacking Water

How much water per day backpacking?

We carry 4 liters per person per day.

We are a little hotter and dryer here.

We also carry water pumps with us in

case we find a water source.

Jack Kelly
Scoutmaster Troop 127
Phoenix, Arizona USA

Date: Tue, 25 Mar 1997 11:36:34 -0700
From: Amick Robert <amick@SPOT.COLORADO.EDU>
Subject: Re: Backpacking Water?

It is well to carry a supply to "dehydrated water" in case of emergency <g> (just kidding, but you can actually buy "cans" of dehydrated water; Makes for an interesting conversation piece).

On the subject of dehydration and backpacking, water needs will vary from individual to individual, but some standard indicators for dehydration

include monitoring the frequency of urination and the color of urine. If a person is sufficiently hydrated, urination will occur relatively frequently and will be nearly clear or only lightly amber- tinted. If dehydration is present, urination will be infrequent and the color of urine will be dark which indicates that the kidneys are concentrating waste products and conserving water.

Perspiration in low humidity environments may not be noticeable due to the rapid evaporation which occurs. Additionally, substantial water is lost through breathing. This is especially true in winter activities where relative humidity is typically very low and dehydration occurs very rapidly.

Thirst may not indicate dehydration until it becomes substantial. You can be one or two quarts "low" on fluids and not necessarily feel thirsty. So it is very important to educate Scouts that they need to drink small amounts of water and/or electrolyte "sports drinks" such as gatorade frequently. This way, the loss of fluids is being balanced by equivalent replacement on a regular basis. Waiting until the end of a trek and then drinking large amounts of fluid can cause nausea and is not nearly as effective as frequent rehydrating when it is most needed.

If you are using powdered sports drinks, dilute them at half-normal strength with water since they have glucose or other sugars which require water to metabolize. With heavy exertion or high temperatures, it is not unusual to consume 10-20 ounces of water per hour or sometimes more. Of course avoid highly sugared drinks or soda except perhaps with meals for the same reason. The electrolyte drinks are important because consuming large amounts of water without some electrolyte replacement can result in muscle cramps and heat exhaustion. Oral rehydration with electrolyte drinks is highly effective in preventing or treating these problems.

Dehydration is somewhat insidious because when it is present, accompanying symptoms and signs may include fatigue, chest pain, irritability, malaise, dizziness and indigestion. Most folks who are dehydrated don't associate their symptoms with the cause, and therefore don't take steps to reverse it. They often just assume they are "tired" and that sleep will fix the problem. Unfortunately if they go to bed dehydrated, they will wake up

just about as tired as when they went to bed, so it becomes a "vicious circle. Additionally, there is a good chance they will experience muscle cramps in the legs while sleeping, again due to dehydration and electrolyte deficiency. So it is again very important to rehydrate before going to sleep, even if it means waking up and "finding a bush at 'o-dark-thirty'."

Taking frequent mandatory water breaks can often forestall the onset of dehydration and make for much "happier campers" on a backpack trip. Most backpackers will take water filters for purifying water found on their itinerary. It is difficult to carry sufficient water along on such a trip to meet individual needs without adding substantial weight to each pack. Sometimes you have to make sure that you know where potable water can be found along your itinerary so you don't run into a supply problem. In any case you should always have a "reserve" supply in case of an emergency or unanticipated supply problem. Distribute extra water bottles among the crew just for emergent situations.

It is really important to educate the Scouts and Leaders on watching themselves for signs of dehydration, and also checking each other especially if someone starts getting grumpy, feeling tired, getting cramps, etc. It is amazing how quickly consuming water and/or electrolyte drinks will turn around these symptoms.

For those folks going to National Scout Jamboree, avoiding dehydration is extremely important and should be continuously emphasized due to the high heat and humidity of the locale. Each participant has been asked to carry two water bottles in a day pack and to be sure to take frequent water breaks.

Hope this helps..

Bob Amick, EMT-B, Explorer Advisor, High Adventure Explorer Post 72, Boulder, CO/ and Medical Technician, Subcamp 9, National Scout Jamboree

On Tue, 25 Mar 1997, Wayne Hill wrote:

> Hi all,
> I'd like to hear your opinions about how much water a person needs a day

- > when backpacking. Even after what I would consider an exhausting day, some
- > of the boys still have enough energy to run around. Does this mean they
- > need to have more water? What's your experience with water needs and how
- > much do you carry for emergencies..like a dried up spring?