

# HYDRATION & WATER TREATMENT

## HYDRATION

The popularity of hydration packs has increased over recent years as versatility in design has improved and walkers have become more aware of the dangers of dehydration and heat stroke. Whether you are a bushwalker, mountain biker, Nordic walker or sightseeing anywhere on the planet there is a hydration pack for you.

Perhaps the most popular feature of hydration packs is the ability to store a range of liquid volumes which can be drunk while on the go. Bite valves connected to long pliable hoses extend out of the pack and are conveniently clipped to the shoulder harness. Frequent consumption of water, like sipping from a bite valve, is an excellent way to reduce the chances of dehydration and heat stroke, and certainly more efficient than sporadic gulping from a water bottle. Remember – if your mouth is dry, then you are already suffering from mild dehydration!

It is important that your water system remains hygienic and is easy to clean, as well as being the right volume. In general, we recommend you carry:

- 1.5 litres for walks of up to a couple of hours, or high activities of up to 1 hour.
- 2 litres for walks up to 3 hours, or high activities of up to 1.5 hours.
- 3 litres for walks up to 4 hours, or high activities of up to 2 hours.

We recommend that you consult your doctor about your personal water needs, and your propensity to suffer from dehydration or heat stroke.

## BOTTLES VS BLADDERS

**Beverage bottles haven't changed much over the years, mainly because they are so well made.**

Thermoses are made from lightweight coated aluminium for durability, Lexan plastic continues to be a favourite for super-tough transparent water bottles, and the famous aluminium SIGG bottle (with ceramic coating) now comes in a range of attractive colours and designs.

Bladders are an excellent way to carry and store water both on the trail and in camp. Your choice of brand will depend on how rugged you need the bladder to be and whether you already have a hydration-compatible pack. All our bladders are extremely easy to clean and are made from hygienic food-friendly plastics.

- **CAMELBAK** use a HydroGuard Anti-Microbial Technology - an embedded silver ion compound in the bladder reservoir film and drink tube. This treatment eliminates up to 99.99% of common bacteria and fungus, is easy care and very hygienic. Boiling water can be poured into these bladders.
- **DEUTER** use a special film that leaves the bladder co-extruded PU inner surface as smooth as glass. This keeps water for days and even weeks without changing taste nor does it leave a plastic taste. Due to the special molecular properties of the bladder, this system is hygienic, it is also easy to keep clean.
- **MSR** Dromidaries are made from a tasteless food grade polyurethane laminated to tough Cordura for durability.
- **PLATYPUS** use a lightweight, puncture-resistant 3-ply plastic laminate which is lined with food-grade polyethylene that won't flavour your water with a plastic taste.



## WATER TREATMENT

There are 2 major types of water treatment: **Purification and Filtration.** Due to a number of high profile court cases in the USA water treatment has now become one of the most technologically advanced (and legislated) areas of the outdoor industry. In general terms, purifiers are necessary whenever you are in inhabited areas where there may also be animals. However, if you are in remote wilderness regions then it may be possible to rely only on a filter system.

To be considered a **Purifier** a system must remove all protozoa, bacteria and viruses - which means either developing a very small filter hole (see First Need at 0.1 Microns) or using a chemical (see MIOX salt brine system) or UV light (see SteriPEN). Fortunately, purification systems generally require little effort to operate but you may need to be patient.

Standard **Filtration** systems are effective against protozoa and bacteria, but because their filtration holes are larger (typically 0.2 to 0.3 Microns) they are unable to remove viruses - see Katadyn and MSR WaterWorks. However, these systems normally incorporate an activated-carbon filter which makes the water taste good!

For those who rarely need to treat their water then iodine tablets (we advise the use of neutralisers) or Micropur tablets are a cheap and convenient method of removing nasties.

