

NUTRITION

Nutritional Requirements: the average person needs about 2500 calories /day.

Carbohydrate:	4 cal/gram	60%	(200-400 grams/day = 1200-1600 cal/day)
Protein:	4 cal/gram	30%	(30-55 grams/day = 120-220 cal/day)
Fat:	9 cal/gram	10%	(20-60 grams/day = 180-540 cal/day)

Number of calories required varies with activity:

Normal daily activity:	2000-2500 calories/day
Winter outdoor activities	3000-4000 calories/day
High altitude activities	4000-6000 calories/day

HYDRATION

Hydration Requirements: the average person needs about two liters of fluid per day

Normal water losses per day:	Normal Temp	Hot Temp	Heavy Exercise
Skin (moisture loss)	350 ml	350 ml	350 ml
Respiration (breathing)	250 ml	350 ml	650 ml
Sweating	100 ml	1400 ml	5000 ml
Urination	1400 ml	1200 ml	500 ml
Defecation	100 ml	100 ml	100 ml
TOTALS	2200 ml	3400 ml	6600 ml

Water requirements will vary with activity, sweat output, and altitude.

Exertional sweat loss is 1 – 3 liters/hour for up to 4 hours without replacement.

Altitude has a very low vapor pressure; you will lose about 1 cup/hour via respirations.

(24 cups/24 hrs., 6 quarts or liters/24 hrs., 1½ gallons every 24 hrs.)

Information taken from: Hubbell DO, Frank. SOLO's Field Guide to Wilderness First Aid. TMC Books, Conway, NH, 2006.