# The Hornet's Nest Net Episode 33 Nutritional Needs

### I. Daily Energy Needs

#### Calories:

Baseline (sedentary): 2,000–2,500 kcal/day

Active (physical labor): 2,500-3,500+ kcal/day

Cold weather/extreme conditions: Up to 4,000+ kcal/day

The World Health Organization (WHO) has a standardized formula for Oral Rehydration **Solution (ORS)** designed to treat dehydration from diarrhea, heat stress, and other causes—ideal for grid-down, field, or off-grid use.



# WHO ORS Formula (Per 1 Liter of Clean Water)

ingrealent	Amount
Table Salt (NaCl)	2.6 grams (~½ tsp)
Baking Soda (optional version)	2.5 grams (~½ tsp)
Trisodium Citrate (preferred)	2.9 grams

Potassium Chloride (KCI) 1.5 grams (~½ tsp) Glucose (sugar) 13.5 grams (~6 tsp

Clean Water 1 liter (33.8 oz)



## Why It Works

**Sodium & potassium**: Replaces lost electrolytes

**Glucose**: Helps absorption of electrolytes via the sodium-glucose co-transport

mechanism

**Citrate or bicarbonate**: Helps correct acidosis from dehydration



## Field-Ready Homemade Version (Simplified)

If you don't have lab-grade ingredients:

½ tsp salt

6 tsp sugar

1 liter (quart) of clean drinking water

½ tsp baking soda or a splash of orange juice/banana for potassium if available.	