Free sample from The Base Weight Reduction Planner. This is worksheet 7 of 11. Get all 11 worksheets: ultralightsetup.com/kit/base-weight-planner

Food Planning by Calorie Density

The only weight that disappears on schedule

Hiker	**Trip**
Days to next resupply	**Resupply point**

Food is the one major weight that goes away as you walk, and the only lever you have on it before you leave is calorie density. Three thousand calories at 100 calories per ounce weighs 30 oz a day. The same 3,000 at 125 weighs 24 oz. Over seven days that gap is 2 lb 10 oz, more than most gear upgrades buy.

The calculation

Input	Value	Check
Days on trail		
Calories per day		2,500 to 4,000 depending on mileage
Average calories per ounce		Aim for 120 or better
Ounces per day		Calories per day divided by density
Total food weight (oz)		
Total food weight (lb)		
Pounds per day		Against 1.5 lb per day, three season
Winter check		About 2 lb per day in winter

If you land at 1.4 lb per day you are either eating dense food or under-eating, and only one of those is fine. Well over 2 lb per day is almost always packaging and water content rather than calories.

Day by day

Day	Breakfast	Snacks and lunch	Dinner	Calories	Weight (oz)

Volume and the canister

Volume caps most people before weight does. A week of food is 15 to 20 litres on day one.

Item	Value
Bear canister required on this route?	
Canister model	
Canister volume (L)	
Days it actually holds your food	
Food bulk on day one (L)	
Canister weight (oz)	

A BearVault BV500 is about 11.5 litres of rigid cylinder that will not squash into a corner. It holds roughly seven days of carefully packed food and considerably less if any of it is bulky. Allow 10 to 15 litres of extra pack volume for it, not 11.5.

Fuel

Input	Value
Boils per day	
Fuel per two cup boil	About 0.5 oz of isobutane
Canister size carried	110 g holds about 3.9 oz of fuel
Days per canister	
Canisters carried	

Storage that the regulations require

Where a canister is mandatory it is mandatory, and the fine is not the point. Check the land manager before the trip, because the requirement changes by drainage and by season.

- **BearVault BV500 Bear Canister**: About seven days of carefully packed food. The default for a longer carry, and approved on most of the ranges that require one.
- **BearVault BV450 Bear Canister**: The weekend size. Lighter and shorter, and it fits horizontally in packs the BV500 fights.
- **Sea to Summit Ultra-Sil Dry Bag, 13L**: Where a canister is not required, a dry bag keeps food dry and packs flat when it is empty.

Current prices and our latest picks for each item: **ultralightsetup.com/kit/base-weight-planner/gear/**

Researched guidance, not professional advice. Sleeping bag and quilt temperature ratings printed here are survival limits, not comfort ratings, and hollow fibre filters are destroyed by a single freeze with no visible sign. Confirm current permits, food storage rules and trail conditions with the managing agency before you rely on this kit.