



## Study Guide: Bench Press

Muscle strengthening is an important part of your exercise regime. You can strengthen your muscles by doing normal household tasks. But if you don't get much muscle strengthening activities in your day-to-day then weight lifting can be a good way to strengthen your muscles, if done properly.

You don't need to lift a lot of weight to strengthen your muscles, but you can build confidence by learning to lift heavy weights. When choosing a bench press it is important to know how much weight you are aiming to lift. Each bench press is only built to withstand a certain limit in weight. This weight limit can be listed as the user's weight plus the weight being lifted (total maximum weight capacity), or it can just be the maximum weight to be lifted (bar holder capacity).

Sometimes a bench press will be just the bench, or it may include other equipment to help facilitate strength training of several muscle groups. These may include:

**Barbell stand:** allows lifting heavy weights, often hundreds of pounds. Depending on the bench press set-up, may be able to do squats, bench press, and other exercises. Mostly strengthens arm muscles. If the bench has an adjustable back this allows for additional muscle groups to be worked.

**Leg Developer:** allows lifting weights with legs to strengthen leg muscles

**Preacher curl:** allows lifting weights with arms to strengthen part of the bicep

**Butterfly press:** strengthens pectoral muscles

These additions can be helpful for strengthening more muscles in the body, but they do take up more space.

Sometimes bench presses will come with weights, usually the weights will need to be purchased separately.



## Study Guide: Reusable Water Containers

Why buy a reusable water bottle? If you don't already think a reusable bottle is a good idea, consider three points:

1. It's better for the environment. Each refillable bottle saves a disposable plastic bottle from being made.
2. A reusable bottle costs less over a relatively short amount of time.
3. Drinking from a reusable bottle is just as healthy as bottled water. Tap water is tested by local, state, and federal agencies, so there is no reason to believe it is less safe or clean than bottled water.

Ready to purchase a reusable water bottle? Consider how and where you will use your water bottle to guide your choices. Although there are a lot of decisions to make, here we focus on four of the materials a reusable container may be made of.

**Material.** Collapsible vs. Rigid materials are a first choice to make. Is there any reason you would like to carry the water bottle with little space, such as in luggage or backpack? Although flexible, collapsible containers also have low durability or won't last as long. A rigid bottle is easier to drink from, doesn't flop around and if needed can act as a rolling pin, hammer or waterproof canister. Other features to consider are for one-handed drinking, integrated filter bottles, leak-proof bottles, etc.

**Single use water bottles.** Are convenient, however, the plastics used may create a health concern, are not a renewable resource and the water may not be better or safer than tap water.

**Glass.** The taste of water from glass is superior; it tastes purer and fresher. It is a safe alternative to plastic. Most have a silicon sleeve on the outside of the glass to increase durability. Pros: generally accepted as posing no health risks, tastes great, transparency allows for easy management of water consumption, and glass components are dishwasher safe. Cons: heaviest material, fragile, cannot use with extreme temperatures (no boiling), and cannot use to freeze water).

**Plastic.** Can be rigid or flexible, clear or colorful. These are less expensive to purchase than the other options. Pros: lightweight, more durable than glass, often less expensive, huge variety in design, translucent for better water management, and able to freeze water inside.

Manufacturers no longer use BPA (Bisphenol A) to harden plastic, as it was shown to be an endocrine hormone disrupter. Cons: potential health concerns, less durable than metal, and uses non-renewable resources to produce.

**Metal.** Aluminum, or stainless steel are options, but stainless steel is the preferred hard container, so it will be highlighted. When stainless steel is insulated, it is great for hot or cold liquids. This surface will dent when hit or dropped but will still hold water. Pros: Most durable material and most reliable, generally accepted as posing no health risk, can double as a cooking vessel if needed, and metal components are dishwasher safe, unless it is vacuum insulated. Cons: slightly heavier than plastic, impart metallic tasted, and prone to dents.

When buying a reusable water container, consider the types of materials, method of cleaning, type of mouth piece, cost and size.

Source: <https://www.outdoorgearlab.com/topics/camping-and-hiking/best-water-bottle/buying-advice>



## Study Guide: Cell Phone Plans

There are four major cellular service providers Verizon, AT&T, T-Mobile and Sprint each have different coverage areas some are larger than others. All these providers have good coverage in most major towns, cities, along interstates and highways.

If you already have a phone you can generally find a better deal on a cell phone plan. When you already have a smart phone when looking for a service provider and a cellular plan you will not be required to sign a contract which gives you the freedom to switch to another provider if you need to.

Switching your Smart Phone to another cellular provider is easy if your phone is compatible with the service provider. It just requires the purchase of a SIM card which connects the phone to the service providers network of satellite towers.

There are a few things to pay attention to when looking for a cellular provider when you have your own phone. Some providers offer a lower monthly payment but leave of services such as Mobile Hotspot capability and exclude any extras such as Hulu or Amazon Prime Video which is included in some of their plans. There may be other promotions such as a credit of \$200 or more to switch providers.

When picking a cellular service plan make sure you know how much money you have to spend for your monthly plan, check the coverage area on the map and make sure it has the options you want to meet your needs.

### Key Terms:

**Data** = Is internet content that is used by a mobile phone or tablet. Mobile data lets you can check e-mails, play games and watch Netflix when are taking a long trip in the car with your parents.

**Coverage Area** = This is the area on the map where your cell phone plan will work. The more of the map that is covered the more places your cell phone will work.

**Mobile Hotspot** = This lets you use your smart phone to share your mobile data with another tablet or computer that can be connected wireless to a WIFI connection.



## Study Guide: Backcountry Backpack/Camping Trip

What to consider when buying for a back country, high altitude backpacking/camping trip

**High Altitude Camping:** defined as land above 8000 ft.- Days may be warm or even hot, however the temperatures at night generally drop to freezing and below. A fit person carrying a pack will average 2.0 mph on a trail and 1mph off the trail. If you are climbing it will take more time and more calories.

### Equipment and Necessities:

**Sleeping bags:** Look at the pros and cons of down filled vs. synthetic. Remember the temperature fluctuations and unpredictable weather. Consider price, weight capacity and seasonal rating, make sure your bag will withstand the coldest temperature you may encounter

**Backpack:** Framed vs non- framed, compartments and other carrying tools available and size of the pack itself.

**Food/cooking:** When backpacking and climbing a person will burn more calories and drink more water. You should have meals with at least 1000 calories each and snack every hour, on average you should consume 2-2.5 lbs. of food/ day. Think about the type of food you should take, weight of food and what you are cooking with. Cookware (pots and pans) needs to be considered, cooking stove vs. cooking over a fire, keep in mind the amount you can take and the weight you can carry.

\*\* Rule of thumb a person should only carry 30% of their body weight.