**The Water in You**

|  |
| --- |
| An average adult body is 50 to 65 percent water -- that's roughly 45 quarts. Men are more watery than women. A man's body is 60 to 65 percent water, compared to 50 to 60 percent for a woman. In infants, the figure is a whopping 70 percent according to statistics compiled by the International Bottled Water Association.   |

|  |
| --- |
| http://ga.water.usgs.gov/edu/graphics/drippyinyou.gifPercentage of water making up tissues, organs, fluids and bone in the human body: Brain 75%, Heart 75%, Lungs 86%, Muscle 75%, Liver 85%, Kidney 83%, Bone 22%, Blood 83%, Saliva 95%, Perspiration 95%  |

Think of what you need to survive, really just survive. Food? Water? Air? MTV? Naturally, I'm going to concentrate on water here. Water is of major importance to all living things; in some organisms, up to 90 percent of their body weight comes from water. Up to 60 percent of the human body is water, the brain is composed of 70 percent water, and the lungs are nearly 90 percent water. About 83 percent of our blood is water, which helps digest our food, transport waste, and control body temperature. Each day humans must replace 2.4 litres of water, some through drinking and the rest taken by the body from the foods eaten.

There just wouldn't be any you, me, or Fido the dog without the existence of an ample liquid water supply on Earth. The unique qualities and [properties of water](http://ga.water.usgs.gov/edu/waterproperties.html) are what make it so important and basic to life. The cells in our bodies are full of water. The excellent ability of water to dissolve so many substances allows our cells to use valuable nutrients, minerals, and chemicals in biological processes.

Water's "stickiness" (from [surface tension](http://ga.water.usgs.gov/edu/waterproperties.html)) plays a part in our body's ability to transport these materials all through ourselves. The carbohydrates and proteins that our bodies use as food are metabolized and transported by water in the bloodstream. No less important is the ability of water to transport waste material out of our bodies.

**Water Content of Foods**

Here's an activity to use when discussing the percentages of water and land on the earth and when discussing water content of the human body and the foods we eat. Bring in a slice of bread, a carrot, an apple, popped popcorn, a potato, celery, an orange and a banana. Make a 7-column chart to record the data. The column headings include food, estimated and actual fresh weight, estimated and actual dried weight, difference and percentage of water. Estimate, weigh, slice, dry and re-weigh each food. Lastly, graph the fresh and dried weights on a bar or line graph and the students write a summary of their findings.

Dry seeds, such as the grains and legumes were intentionally left off the following list as they should have a common moisture content of 10% or less. All pure fats and oils contain no water. The water content of each of the foods below is shown by the number following the food. After these foods have been dehydrated, their weight will be reduced by close to the following percentage:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|

|  |  |  |
| --- | --- | --- |
| Almonds 7%Apples 85%Apricots 85%Bananas 76%Bean Sprouts 92%Beef Raw Hamburger 54%Bread Whole Wheat 35%Broccoli 91%Butter 20%Cabbage Raw 92%Cantaloupe 91%Carrots Raw 88% | Cauliflower Raw 91%Celery 94%Cheese American 37%Cherries raw 80%Chicken Broiled 71%Coconut Dried 7%Collards boiled 91%Corn, Sweet Fresh 74%Cucumbers Raw 96%Eggs Raw Whole 74%Eggplant Raw 92%Fruit Cocktail 80% | Grapefruit Raw 88%Grapes 82%Ham Smoked Cooked 54%Honey 15%Jams/Preserves 30%Kale 87%Lettuce Head 96%Macaroni/ Spaghetti Cooked 72%Margarine 20%Molasses 25%Okra Boiled 91% |
| Olives 80%Onions 89%Oranges 86%Papyas Raw 89%Parsley Raw 86%Peaches Raw 90%Peanuts Shelled TracePeanut Butter TracePears Raw 82%Peas Raw 81%Pecans 7%Peppers Green 94% | Pickles Dill 93%Pineapple Raw 85%Plums Raw 87%Pork Chops Broiled 45%Potatoes Raw 85%Pumkin Canned 90%Radishes Raw 95%Raspberries 81%Rutabas Boiled 90%Sauerkraut Canned 93%Spinach Raw 92%Squash Boiled 96% | Strawberries Raw 90%Sweet Potatoes Boiled in Skin 71%Swiss Chard 94%Tomatoes Raw 93%Turkey Roasted 62%Veal Broiled 60%Walnuts 4%Watercress Raw 90%Watermelon 93% |

 |