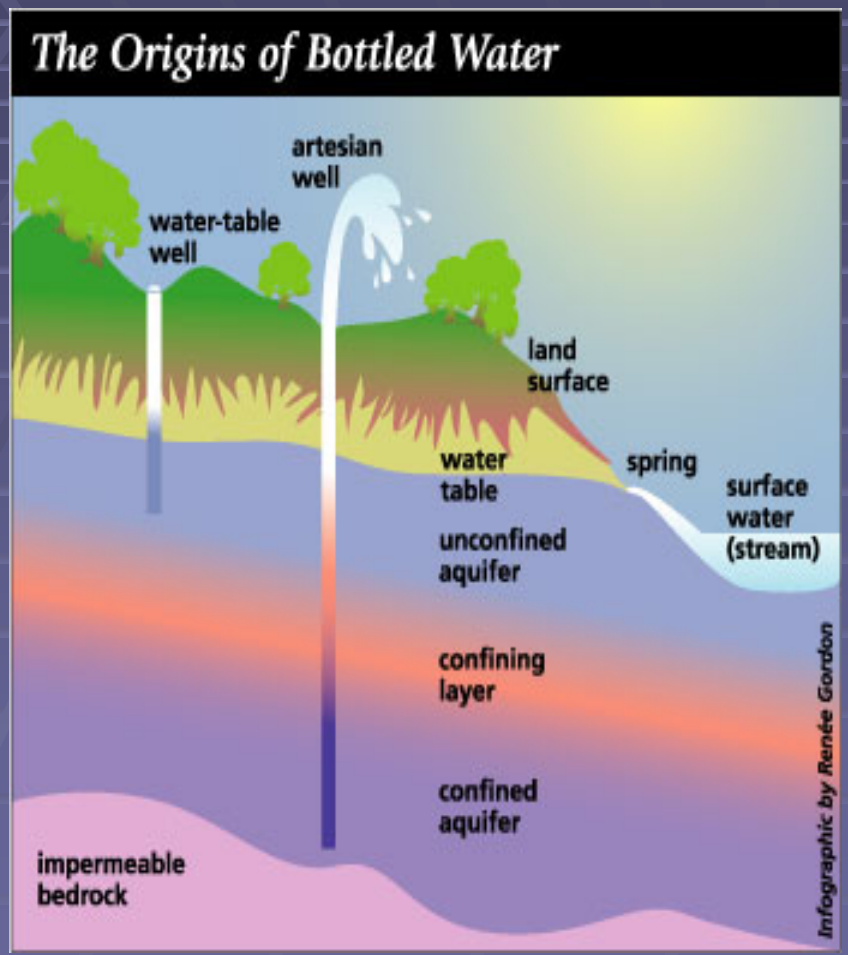
Bottled water versus tap water

Market takeover

- Huge multinational companies currently make billions of dollars on water they simply extract from the ground, slap a label on and sell at competitive prices.

- Examples of these companies include: Aquafina (Pepsi), Dasani (Coke), Perrier (Nestle), Evian, and Fiji Water among hundreds of others.

Created a whole new culture



- Bottled water consumption has grown exponentially over the past ten to fifteen years.
- This growth has taken place globally, but particularly in Europe and North America. The bottled water industry has literally created its own water culture.

Misconception

- First starters, we all often hear the label that all bottled water is called “Spring Water”. This is kind of misleading to the consumer.

- The origin and processing of different types of bottled water actually make them quite different in content and taste.

Differences in bottled water

- *Spring Water*: Ah, the ever-popular "spring water" is defined as bottled water derived from an underground formation from which water flows naturally to the surface of the earth.

- *Purified Water: This is a type of drinking water that has been treated with processes such as distillation, deionization or reverse osmosis. In simple terms, it just means that that the bacteria and dissolved solids have been removed from the water by some process, making it "purified."*

Differences (cont.)

- *Mineral Water*: Mineral water contains not less than 250 parts per million total dissolved solids and is defined by its constant level and relative proportions of mineral and trace elements at the point of emergence from the source. Despite its name, no minerals can be added to the water.

- *Sparkling Bottled Water*: This type of water contains the same amount of carbon dioxide that it had when it emerged from its source. Sparkling bottled waters may be labeled as sparkling drinking water, sparkling mineral water, sparkling spring water, *etc*.

Differences (pt. 3)

- *Artesian Water/Artesian Well Water*: Artesian water comes from a well that taps *a* confined aquifer-a water-bearing underground layer of rock or sand-in which the water level is above the top of the aquifer.

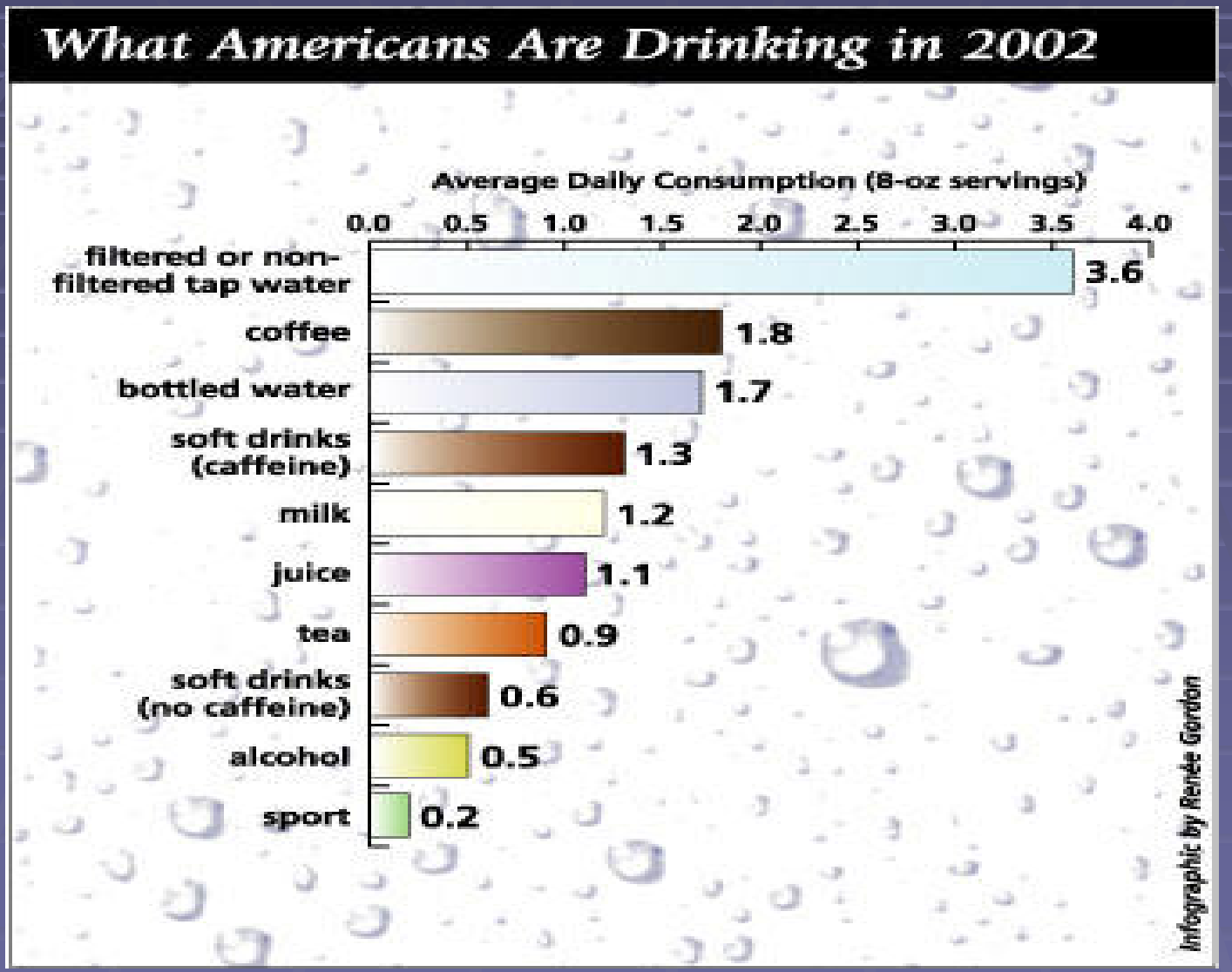
- *Well Water*: Well water is exactly what it sounds like-water from a hole made in the ground that taps the water source.

FDA Regulation

- *Bottled Water Regulation*: The FDA is in charge of the bottled water industry and is one of the most extensively regulated packaged-food products.

- The bottled water industry receives government oversight from federal and state agencies across the country, providing consumers with multiple layers of safety assurance - from the finished water product back to the source.

Tap Water Debate



Shifting of the markets

- According to campaigners, the planet's health may be suffering as a result. A new report warns that people's thirst for bottled water is producing unnecessary garbage and consuming vast quantities of energy, even in areas where perfectly good drinking water is available on tap.

Cash-cow

- The Earth Policy Institute (EPI), says global consumption of bottled water doubled between 1999 and 2004, reaching 41 billion gallons (154 billion liters) annually. Bottled water is often no healthier than tap water, but it can be 10,000 times more expensive, says Emily Arnold, a researcher with the Washington D.C.-based nonprofit.

The Forgotten Sink (fighting back)

- To combat the use of bottled water, due to the excessive plastic waste, companies began creating in-home filtration systems for your sink.
- (remember the good ‘ol sink?)

Different water filtrations

- **1. *Charcoal water filters* -** Carbon Block is a solidified form of honeycombed carbon. It is the best form of filter but flow rate is significantly slower than with loose charcoal**.**

- **2. *Water Distillers* –** In recent years there has been growing awareness of distilled water's effects on the balance of minerals in the body, plus the acidic result that a typical distiller creates. People now realize that dissolved minerals in the water are more natural than pure water, and serve an important function in supporting the body's immune system an metabolism.

- **3. *Ceramic Water Filters* –** Some ceramic filters incorporate nano-silver impregnated into a porous ceramic outer shell that can trap bacteria down to as low as .22 of a micron in particle size

Filtrations (cont.)

- **4. *Reverse Osmosis Filters* –** The membrane act like an extremely fine filter to create drinkable water from salty (or otherwise contaminated) water. The contaminated water is put on one side of the membrane and pressure is applied to stop, and then reverse, the osmotic process. It generally takes a lot of pressure and is fairly slow, but it works. The result is extremely finely filtered water.

- **5. Ultra Violet Radiation Systems –** UV systems use high frequency light to irradiate water through a glass element. Water passing the element is exposed to the light, which kills all living organisms.

- **6. Catalytic Conversion Water Filters –** These systems use technology not unlike that used to control emissions in our modern car. They convert heavy metals, chlorine, pollutants and viruses into harmless oxidized form, breaking them down to their basic elements.