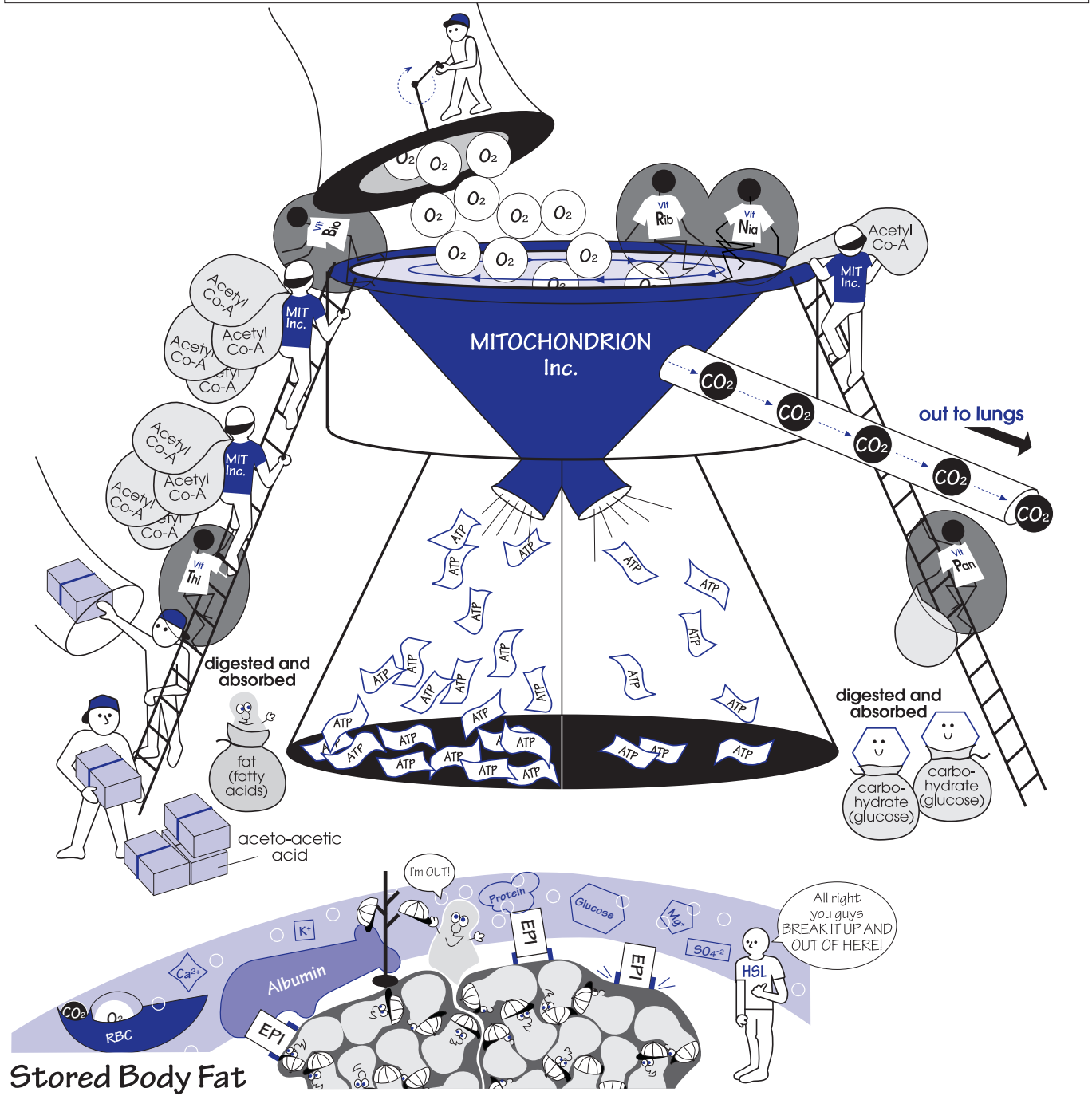
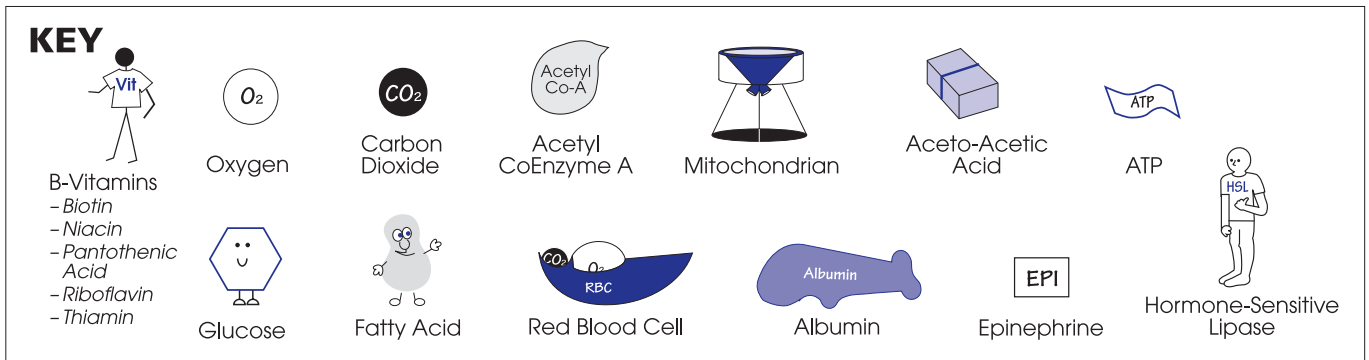


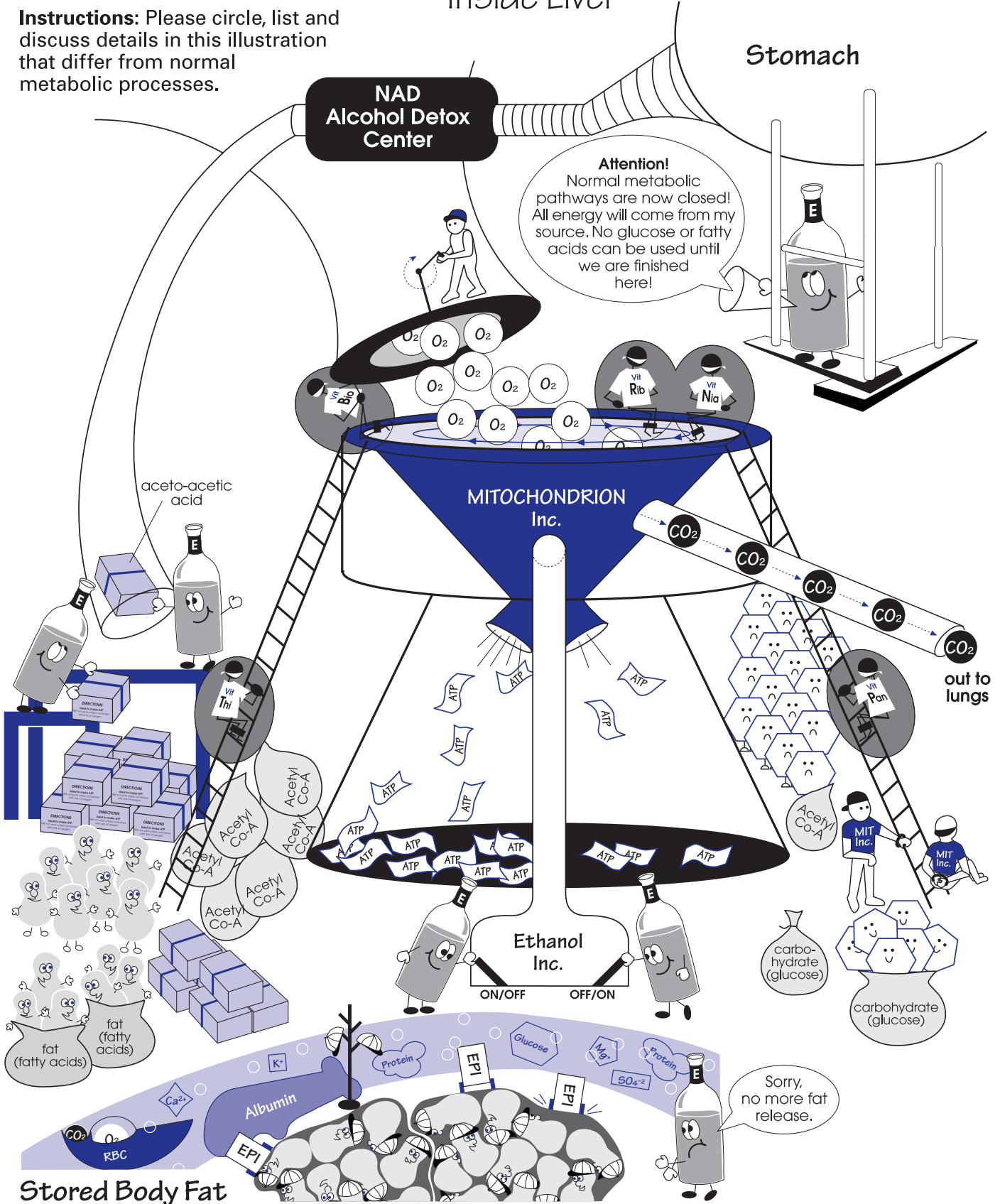
Normal Metabolic Processes



The Metabolic "Cost" of a Night Partying

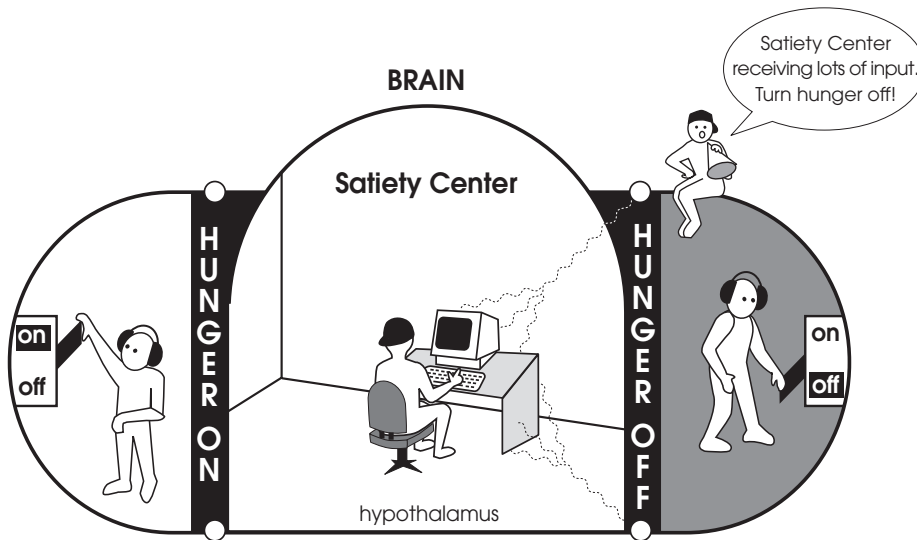
- Inside Liver -

Instructions: Please circle, list and discuss details in this illustration that differ from normal metabolic processes.



The Physiology of Fullness

by Marla Richmond, M.S.



TAKE CONTROL OF YOUR HUNGER

You might recall times when you were very hungry and you just started wolfing down a whole bag of chips, crackers, or cold cereal. Chances are good that you didn't realize why you couldn't control yourself. The fact is too much hunger causes you to binge. Hunger signals will get so strong, they will take control of your behavior. And there is nothing that you can do about it. It is important for you to take control of your hunger so that it does not take control of you.

Hunger is a basic drive. Like any other animal, when you feel hungry, you are driven to eat. You will seek food in order to satisfy your hunger need, without necessarily thinking about making healthy food choices.

When your immediate fuel supply is low, or when your fuel storage is running out, the hunger center in a part of your brain called the hypothalamus drives you to seek food. Your body has several ways to remind you to eat. Your stomach growls and aches; you may get a headache or shaky. Strong hunger signals continue until you eat.

Hunger signals from your brain are strongest when you haven't eaten for a while. For example, if you skipped your last meal, it is likely that your blood levels of the energy-yielding nutrients (carbohydrates, fats, and protein) are low. This is especially true of your blood levels of glucose. Healthy foods that provide glucose are fruits, veggies, low-fat dairy, and whole grains. The presence of various nutrients in your blood indicate that you have eaten, digested, and absorbed foods recently.

Hunger signals from your brain are also strong when your stomach is empty. Stomach walls have special stretch detectors that tell you how full you are. When you are full, signals are sent to your brain to turn off hunger. These signals tell you to stop eating (that is, if you pay attention and listen). Hunger signals continue until your stomach is full.

Your body makes sure that you have enough energy to be physically active. In fact, a report of your fuel storage status is regularly sent to your brain. As your body runs low on its fuel storage (both carbohydrate and fat), a variety of mechanisms cause hunger signals to drive you to seek food in order to replenish it.

The opposite of hunger is satiety. When you achieve satiety, or a feeling of fullness, hunger signals are turned off. (FYI, research has shown that alcohol interferes with satiety signals.)

Pop Quiz – by Merle Levy, LDN and Marla Richmond, M.S.

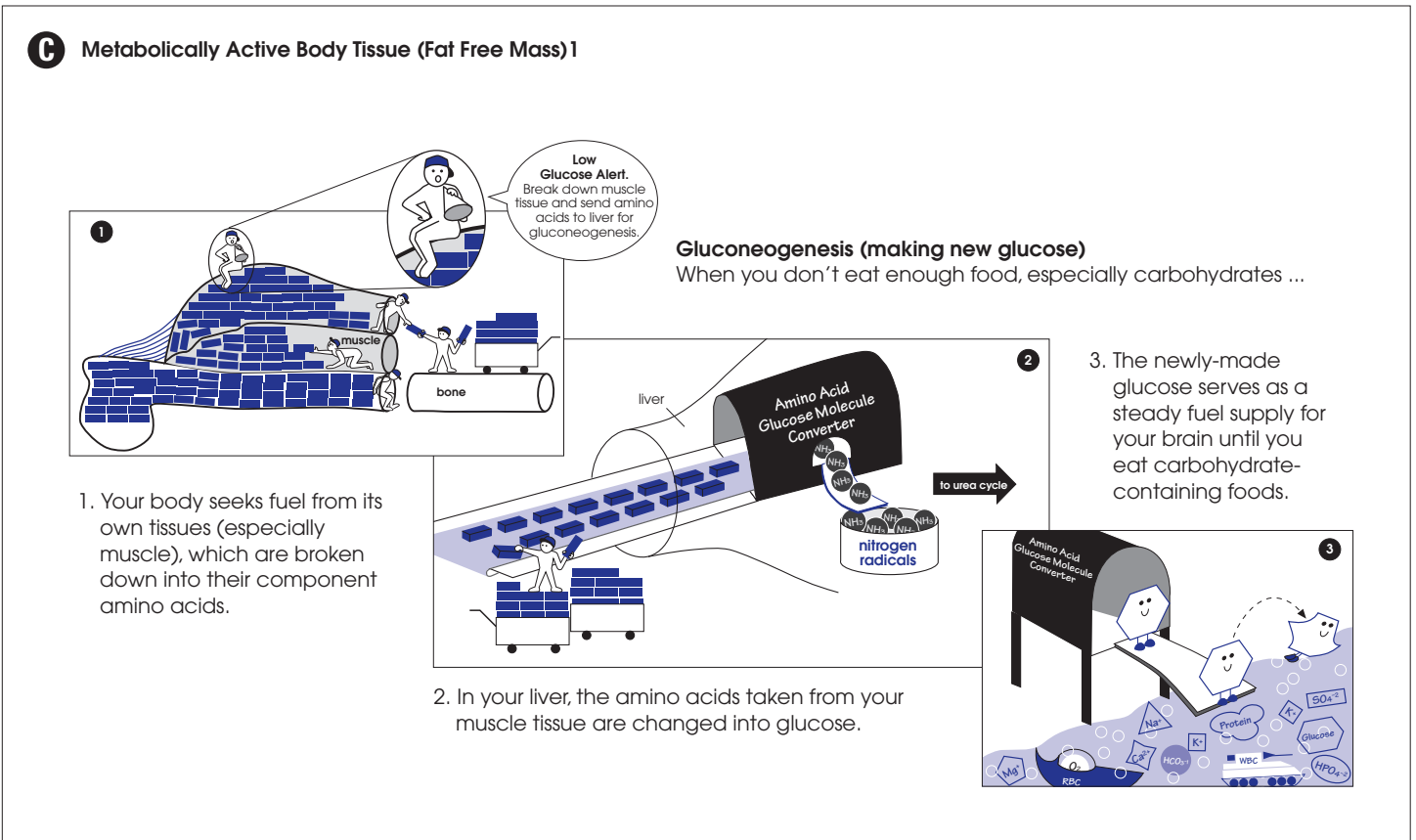
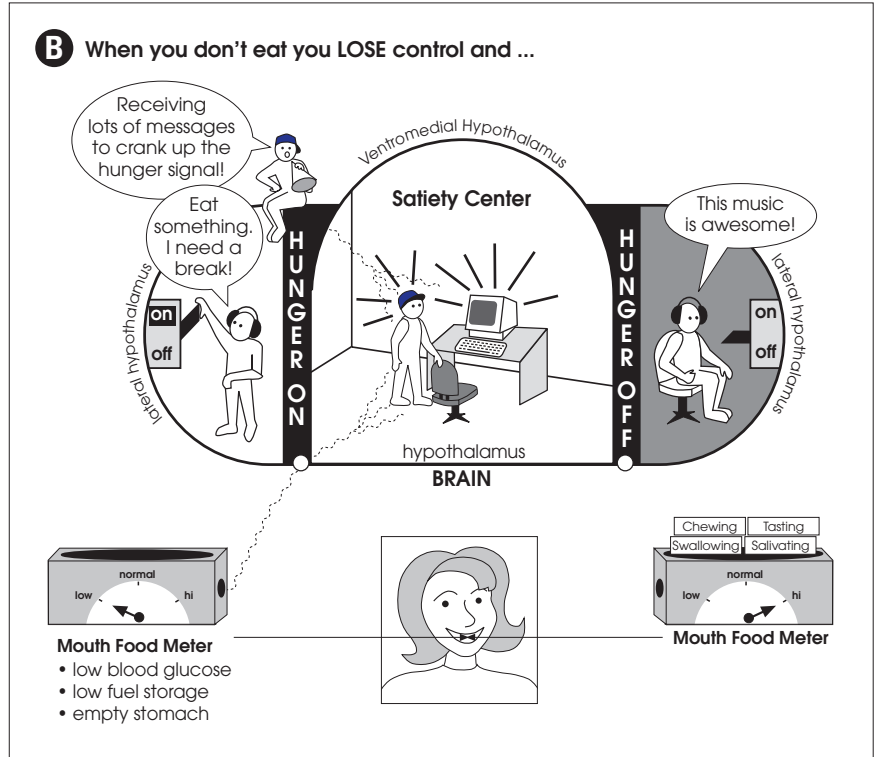
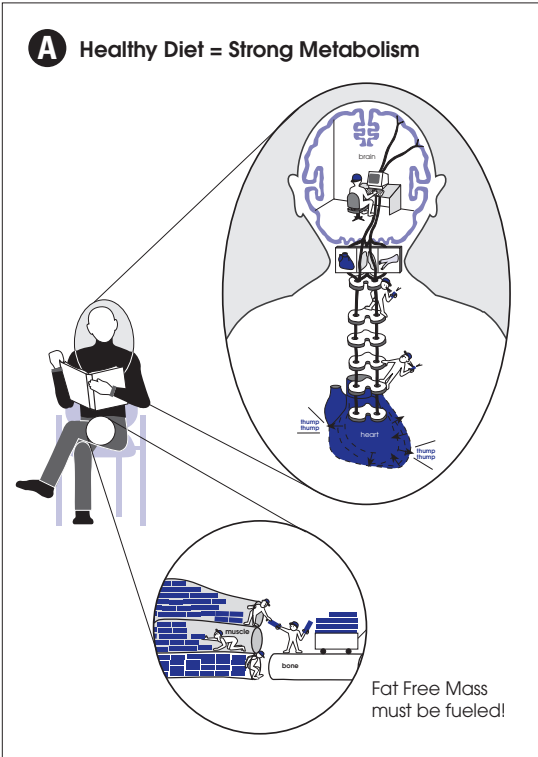
**What do you suppose has more calories?
Which foods would fill you more?**

1. Six cups of air-popped popcorn or eleven baked chips?
2. 4 ounces of orange juice or two tangerines?
3. 2 tablespoons of raisins or an apple, orange, or pear?
4. 15 jelly beans or a bowl of oatmeal
5. A one-ounce cube of cheese or a bowl of vegetable soup?

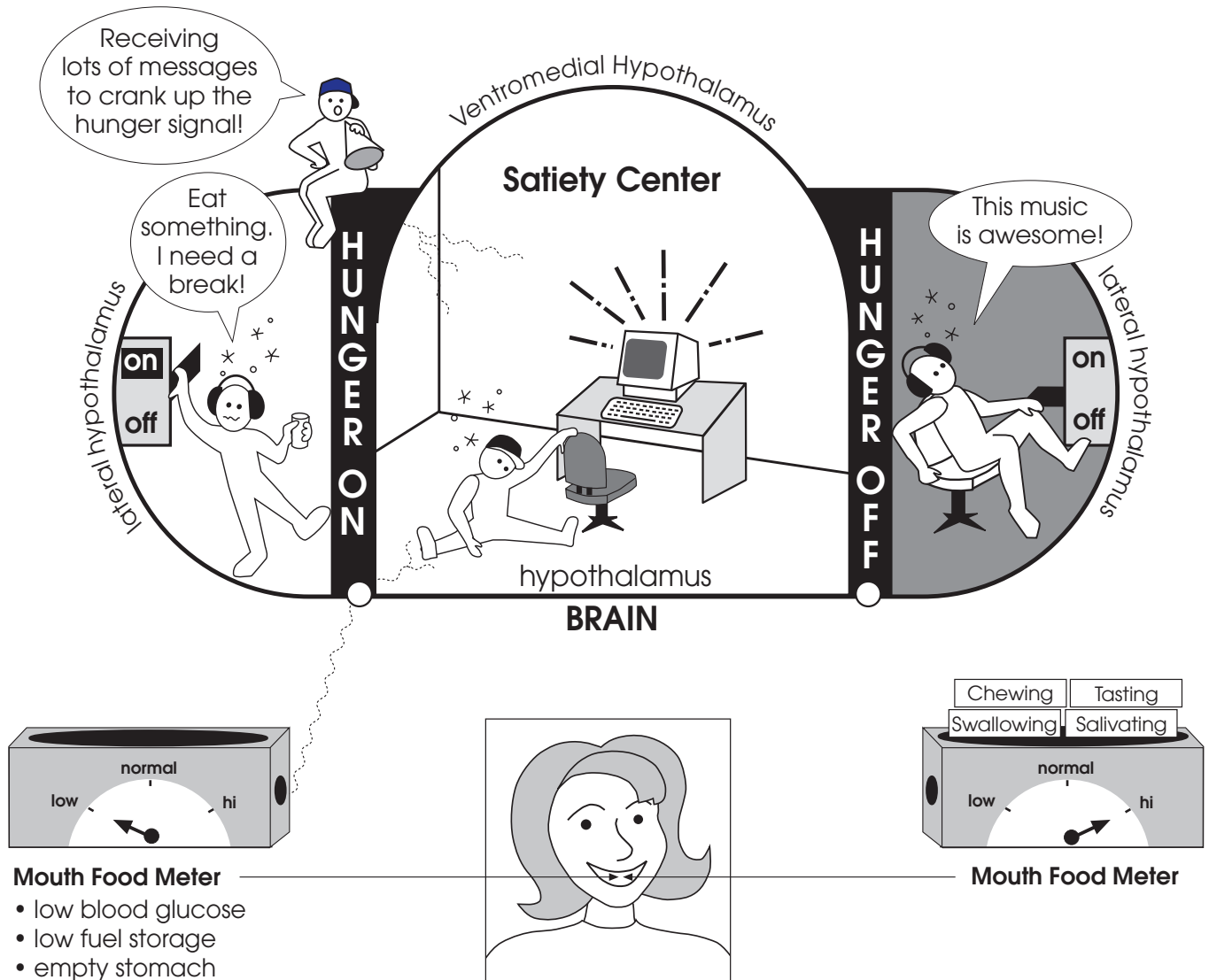
If you guessed that the calorie values are the same, you are correct. If you wonder which foods would fill you the most, compare them yourself and feel the difference in fullness.

POWERFUL TRIGGERS FOR EATING DISORDERS

Inappropriate Dieting + Resulting Hunger



The Cost of a Night of Partying



The six essential nutrients, the foods you eat contain
 You must include them daily to keep your cells sustained
 Three of them yield energy to fuel all that you do
 Carbohydrates, fats and protein, mainly the first two
 If you feed them alcohol, your fat, cells will not burn
 They'll use acetylaldehyde, the rest to fat will turn
 Not only is the fat not used, but hunger pangs get strong
 After shots of alcohol, your brain gets it all wrong
 It thinks that you're not satisfied, that you need more to eat
 You wolf down food in buckets, your fat cells scream with greed!