Solid versus liquid calories? Which is better? [1]

(1) Hi Alice,

I have to admit, I hate to cook. Because I have special diet issues (mostly allergies), cooking is extremely time consuming. Often I find myself just eating one-item meals (carrots, anyone?) or just not eating. So I've considered buying myself one of those super high-powered blenders that can turn anything into a smoothie-type drink.

My question is though, is it safe to live on a liquid diet for a long period of time if I'm sure to get a variety of foods in there? Or will it make my digestive tract lazy if I want to actually eat a solid meal?

(2) Dear Alice,

Would it be dangerous for me to take in all my calories in liquid form? Also, is it true that liquid calories are lost quicker than solid calories?

Sincerely,
Confused About Calories

Answer

Dear Reader #1 and Confused About Calories,

Good questions! While a liquid diet probably wouldn't affect the way your digestive system works, you would still need to ensure that you are receiving plenty of calories and nutrients. Discussing this issue with a health care provider, such as a gastroenterologist or nutritionist, may be good steps if a liquid diet is something you want or think you need to pursue. Also, Reader #1, check out the related Q&As for more information about food allergies.

As for the calorie query submitted by Confused About Calories, the fact of the matter is, regardless of the consumption method, a calorie is a calorie. The energy it takes to burn one liquid calorie equals exactly the same as that needed to burn one solid calorie. What throws some people off is the concept of caloric density. Foods that have high water content tend to have lower caloric density (think fruits and veggies), meaning a greater calorie to volume ratio. For example, to consume the same amount of calories you would get from one cup of raisins, you would need to eat nearly ten cups of grapes. What adds to this is that low caloric density foods tend to make you feel fuller faster because of their water content.
This does not mean that simply consuming more liquid will make you want to eat less. Liquid calories may in fact be deceiving because beverages like sodas often contain a lot of calories but do little to satiate hunger. When studies compared food intake between one group given water to drink and the other given soda, there was little difference in the amount of solid calories they ate. However, even though both groups ate roughly the same amount of food, the group who drank the soda consumed more calories overall because of the beverage that accompanied their meal.

Depending on the motivation for your question, you may want to consider meeting with a registered dietitian or other health care provider to discuss this matter further. Keep in mind that a health care provider can also make any referrals to a specialist, if appropriate. In addition, you may find it helpful to read some of the responses in the Go Ask Alice! Nutrition & Physical Activity archives.

Remember though, your body needs more than just calories; it also needs nutrients, which may be lacking in a liquid diet. Although liquid calories may seem less significant than calories consumed from solid foods, keep in mind that a raisin in the hand is worth ten grapes in the bush.

Alice!
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