Dear Alice,

Some friends and I were debating how long it takes for food to digest within our bodies, and then the total time it stays until it is excreted. Please settle this issue for us.

Union of Uranus

Answer

Dear Union of Uranus,

From the way you signed your letter, your question is most likely related to the discharge of food from the colon and "your anus." In order to cover the ins and outs of the process (no puns intended) it’s best to start from the very beginning:

1. The eater spots a delicious-looking bite to eat (amount of time depends how picky of an eater we’re dealing with).
2. Food is chewed, lubricated, and partially digested by saliva in the mouth, and then the tongue moves it to the back of the throat. This process takes about one minute to complete.
3. Chewed and partially digested food is travels through the pharynx and into the esophagus, where it takes about ten seconds to be propeled into the stomach.
4. The stomach is a hollow, elastic sac where food is churned and mixed thoroughly with digestive juices secreted by the stomach lining. This process takes about two to four hours to complete, depending on the type of food and the amount of food eaten.
5. Processed food is then released gradually into the small intestine. In the small intestine, digestive juices produced in the liver and pancreas convert carbohydrates, proteins, and fats into chemical mixtures used by the body. The broken down mixtures then pass through the wall of the small intestine into the bloodstream or lymph system if it is fat. This process takes around three to ten hours to complete.
6. Water and undigested food are then passed into the large intestine, where the water can be absorbed. It takes between seven to sixteen hours for this process to be completed.
7. The solid waste from the large intestine is then stored in the rectum for a variable period of time (between twelve and fourteen hours). The muscles then push the solid waste out of the anus as feces.

So, as you can see, there is a range of time, usually between 24 and 44 hours. Exactly how long it takes is up to the individual’s digestive system, not to mention what s/he eats. For
example, eating fiber-rich foods helps speed up digestion, while eating animal proteins, like meat, poultry and seafood can slow it down.

Bon appétit!

Alice!

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