

When someone ingests a hazardous chemical or poisonous substance, time is a critical factor in successfully treating him. One popular treatment is giving the affected person [activated charcoal](#) to swallow. While it is an effective counteragent to many hazardous substances, there are dangers of activated charcoal that should not be ignored.

#### The Facts

1. Activated charcoal is a gastrointestinal decontaminant. Made from burned wood products, it is used to treat people who have ingested dangerous substances. Charcoal is not absorbed by the body, nor is it metabolized. It absorbs chemicals in the stomach and digestive tract, trapping them and carrying them out of the body without allowing them to be absorbed into the bloodstream. It is a common pre-hospital treatment for chemical and poison ingestion, but using [activated charcoal](#) does involve some dangers.

#### Impaired Patient

2. Activated charcoal should not be given to a patient who is not fully conscious. There is a danger that he will react to the [activated charcoal](#) by vomiting. If the patient is extremely drowsy or cannot actively protect her own airway, she may inhale the vomit. This leads to the activated charcoal and whatever it was intended to counteract getting into the lungs. It can also be a severe choking hazard.

#### Diarrhea

3. Two adverse effects of activated charcoal are constipation and the formation of bezoars, or large foreign objects, in the digestive tract. To counteract these effects, activate charcoal may be combined with a laxative like sorbitol or magnesium sulphate. These laxatives can lead to their own dangers. Patients may develop diarrhea as a reaction to them, an especially dangerous result in newborns and young children.

#### Dehydration

4. Some patients react to [activated charcoal](#) with vomiting. Some patients experience diarrhea. Some patients experience both adverse effects and this can lead to a new danger: dehydration and electrolyte imbalance. Not only are these results dangerous on their own, especially in the very young, but they can also compromise the body's ability to recover from ingesting whatever hazardous material the activated charcoal was intended to counteract.

#### Delay

5. [Activated charcoal](#) is odorless and tasteless, but it does have markedly granulated texture that most people find extremely repellent. One danger of choosing it as a treatment for chemical or poison ingestion is the risk that a patient, particularly a child, will resist swallowing the charcoal because it is so unpleasant. This can lead to a dangerous delay in treatment when time may be critical for successfully counteracting whatever substance was ingested.

Several factors influence the effectiveness of activated charcoal. The pore size and distribution varies depending on the source of the carbon and the manufacturing process. Large organic molecules are absorbed better than smaller ones. Adsorption tends to increase as pH and temperature decrease. Contaminants are also removed more effectively if they are in contact with the activated charcoal for a longer time, so flow rate through the charcoal affects filtration.