

## Children and Activated Charcoal Doses: Let's Simplify!

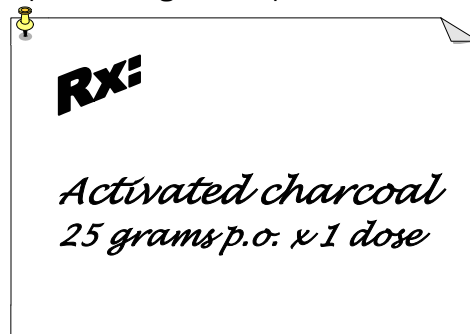
Recommendations on pediatric doses of activated charcoal vary. Often, textbooks make a recommendation of a 10:1 (activated charcoal:drug) ratio based on a 30 year old study with very poor clinical applications. The amount of drug ingested by a small child is often unknown. Other textbooks recommend 1g/kg, neglecting to consider that the amount of drug that is intended to be adsorbed has little to do with the child's weight. This method might lead to under-dosing in small children. A more reasonable approach would be to give as much activated charcoal as the child will tolerate until a maximum is reached. The maximum dose for a small child should be 25 grams.

Activated charcoal should be ordered/administered as a water slurry. Although it is often administered in combination with sorbitol, the addition of a cathartic (sorbitol) does not improve efficacy and does not limit the adverse effects of activated charcoal. Palatability can be improved by the addition of cherry syrup, chocolate syrup or chocolate milk without diminishing the adsorptive properties of activated charcoal.

Activated charcoal should be administered early, in the pre-hospital setting if at all possible. Studies show that a delay of approximately one hour occurs when administration of activated charcoal is deferred until arrival in the ED.

Multiple doses of activated charcoal are seldom recommended and are only indicated for certain drug overdoses.

Call the Maryland Poison Center for more information on the administration of activated charcoal – **1-800-222-1222**.



## **DID YOU KNOW THAT.....** Homemade lava lamps might contain highly toxic ethylene glycol?

Some internet sites give instructions for making glow-in-the-dark lava lamps using antifreeze containing ethylene glycol and fluorescein. A recent case report of college students unintentionally ingesting antifreeze for a lava lamp that was stored in a vodka bottle brings to light this potential source of toxicity. (*Ann Emerg Med* 2003; 41:890).

