

Herbs and Spices in the pediatric population

Cincinnati Drug and Poison Information Center

Some household herbs and spices can be dangerous to toddlers if ingested at high doses. Currently, there are not significant studies or data available on accidental ingestion of these herbs and spices.

Furthermore, the FDA does not regulate many of these products so it is sometimes difficult to know the exact contents. There have been a handful of case reports on toxic effects of a variety of spices. Also, there are hypothetical toxicities of many herbs based on how they work in the body as well as known toxicities.

Spices that can cause toxicity in children include several Indian spices. A study published in the journal, *Pediatrics*, has shown that children who regularly ingest imported Indian spices are exposed to lead. Researchers purchased and tested several Indian spices including brown mustard seed, asafetida, turmeric, Black pepper, Cardamom, Chili powder, Coriander, Fennel powder, Fenugreek, Garam masala, Garlic power, Ginger powder, Paprika, and Sindav salt. Of the 38 samples, 24 samples had detectable amounts of lead.

Another common household spice that can have toxic effects in children is nutmeg. In high doses, nutmeg can have hallucinogenic effects. In children, these effects can be more profound.

Most herbs are not recommended for routine use in children. The age cutoff varies from <2 years of age to <18 years of age. The list below provides information about common herbs and their potential toxic effects on children. If you have questions regarding any of these or any other herbs and spices please contact the Drug and Poison Information Center at 1-800-222-1222.

Herbal product	Toxic effects
Bay leaves	Damage to the gastrointestinal tract
Buckthorn, senna, aloe	Dehydration and electrolyte imbalances in children
Cassava	Known as one of the “Top 10 most dangerous foods;” if it is not prepared correctly, cassava plant can produce cyanide
Cascara sagrada	Dangerously severe diarrhea in children
Chamomile	Can cause an allergic reaction in children with allergies to ragweed
Cinnamon oil	Dermatitis, abuse syndrome
Eucalyptus	Drowsiness, ataxia, seizures, nausea, vomiting, coma
Garlic	Nausea, emesis, anorexia, weight loss, bleeding, platelet dysfunction
Ginkgo biloba	Blood-thinning effects can be dangerous in children
Hawthorn berry	May cause significant blood pressure drop in children
Horse chestnut seed extract	Lack of research; reports of death
Juniper oil	Dehydration and electrolyte imbalances in children
Kava	Hepatitis, cirrhosis
Licorice root	Large doses can cause headaches, fatigue, salt and water retention, potassium, high blood pressure and even cardiac arrest

Monkshood	Cardiac arrhythmias, shock, weakness, seizures, coma, paresthesias, nausea, emesis
Nutmeg	Hallucinations, emesis, headache
St. John's wort	Dizziness, nausea, confusion, photosensitivity
Wormwood	Seizures, dementia, headaches, ataxia

References:

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