
SHC 3. ANALYSIS OF PESTICIDE RESIDUES IN DISPOSABLE BABY DIAPERS

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Most babies wear cotton diapers nearly 24 hours a day, and those diapers are in constant contact with both skin and mucus membranes. This means that any chemicals in diapers are likely to wind up in your baby's system if he or she wears disposable diapers. When parents pull a box of diapers off the shelf, how many of them are aware of the risks to which they are exposing their children: cancer, asthma, hormone disruption, and others. Dioxins, sodium polyacrylate, dyes, fragrances, and phthalates are some of the ingredients which are found in disposable diapers.

Cotton is mostly grown in monoculture and is a very pesticide-intensive crop. Although it is only grown on 2.5% of the world's agricultural land, it consumes 16% of all the insecticides and 6.8% of all herbicides used worldwide. There are some studies that have found pesticide residues in cotton textiles. For this reason, we want to analyze pesticide residue in some disposable baby diapers.

The aim of this study was to analyze some of pesticide residues in disposable baby diapers. Different trademark disposable cotton baby diapers were obtained from local market. LC-MS/MS techniques are used to determine pesticide residues in disposable baby diapers.

The amounts of some pesticides detected in baby diapers were higher than the maximum residue limit values.

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