

report symptoms of clinical depression. Infant sleep offers an important avenue for treating postnatal depression, because women are more likely to identify their baby's sleep as an issue when speaking with a health professional than their own mental wellbeing. Thus, improving infant sleep is a simple way to improve mothers' own sleep and mental health.

The Kids Sleep Study has shown that that, at six years of age, there are no long-lasting harms or benefits to children or parents who had been offered controlled comforting

when their child was a baby. Much of the information available about the long-term effects of behavioural sleep strategies is inconsistent and outdated, and can be confusing for parents and health professionals who want help to manage infant sleep. Parents who may have been incorrectly told that behavioural strategies like controlled comforting can have negative effects on babies can be reassured that these techniques work and are safe to use.

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Medicine Time Does Not Have To Be a Struggle

By Ursula Chizhik, PharmD

The reasons why children resist and parents struggle when it comes to giving children medicine are numerous. Busy schedules and scattered brains will always be the enemies of higher compliance. Sometimes, the side effects of the drugs turn parents off from giving their kids more.

With children, though, the mere thought of taking medicine tends to be the most common barrier. That's what typically causes the wrestling matches that result in parents throwing their arms in the air and giving up. What's the root cause for children putting up such a fight? In most cases, it all comes down to taste.

Until a child is around eight years old, swallowing pills can be challenging. This is often due to the smaller structure of a child's esophagus. Therefore, children under the age of eight are typically prescribed liquid medications. While liquids are easier to swallow, getting the child to take the liquid medication is a whole different story. For the pediatric population, taste and poor

palatability are identified among the most significant barriers to full cooperation with a medication regimen.

Focus groups and nationwide surveys reveal that seven in ten parents report a moderate to severe struggle giving a child medicine because of how it tastes, and 79% of children complained about bad-tasting medication or taste that is "too yucky" to take.

While it may seem the child is being difficult, this rejection is rarely the result of a child's desire to be picky or fussy. Rather, it is an actual physical inability to swallow an awful-tasting substance. Unfortunately the active ingredients in many medications frequently taste bitter and/or have a pungent smell. Masking the taste of these medications can often be difficult simply because the natural flavor is so overpowering.

Not to mention that children have a greater number of taste buds than adults. These taste buds regenerate every two weeks. As with

many of the senses, taste becomes altered as a function of the aging process. That explains why most children find certain flavors to be too "strong": when adults do not. Children, and infants in particular, are more sensitive to bitter and sweet tastes, making them less likely to swallow bitter-tasting medications and also more prone to liking sweeter, fruity flavors.

Unpleasant-tasting medications inevitably result in the all too familiar fight between parent and child when it comes to medicine time. Struggling with or forcing a child to take an unpleasant tasting medication adds additional strain to the already unpleasant state of feeling sick. It can also predispose children to believe that all medications, regardless of taste or smell, are unpleasant, giving them a negative impression of all medicinal treatments. Like most of us, children will resist unpleasant experiences.

Not surprisingly, children embrace pleasant experiences including pleasant tastes. Studies have

shown that allowing a child to play an active role in choosing the flavor of his medication makes him more compliant to drug regimens. Informing a child that he has the capability to modify the flavor of a medication to a flavor of his liking grants him some authority in his treatment.

Flavoring not only helps mask the unpleasant taste of a medication but also customizes the medication to satisfy the individual child's taste preferences. Allowing her to choose how her medication will taste encourages a child to take charge of her own health and is yet another way to promote compliance. The addition of a safe pharmaceutical flavoring to medicine can greatly improve a child's sensations of taste and smell, leading to acceptance and therefore compliance. In fact, studies show that proper flavoring can increase compliance in children from 53% to over 90%.

Oftentimes a parents, frustration with giving a bad-tasting medication will cause them to stop treatment as soon as their child's symptoms go away, thus not completing the full course of medication as prescribed by their physician. This is a classic example of poor treatment adherence and a fundamental cause of antibiotic resistance.

Adherence means adhering to or following one's treatment plan as specified by a physician. That means taking the correct dose of your medication at the correct time, for the correct duration, and exactly as prescribed. Discontinuing medications without being instructed to do so is counterproductive and can be harmful.

It is important to recognize that all liquid medications come flavored already by the manufacturer. That doesn't mean they taste good and it certainly doesn't mean that single

flavor is going to appeal to all children. For those children and their parents, medication administration is a daunting task. To lessen the stress and anxiety of taking medications, parents have resorted to improving palatability through refrigeration, or by mixing medications with milk, juice, soda, or syrup. Unfortunately, these "home remedies" can compromise the stability, efficacy, and potency of many liquid medications.

On the other hand, taste masking at the pharmacy is a highly specific and controlled process that does not interfere with the safety or efficacy of a child's medication. That is something parents can be confident about. Flavoring not only makes medicine more palatable, but also gives children a sense of empowerment over what is, in most cases, a pretty helpless situation. Custom flavoring makes medicine time a lot less stressful for everyone involved!

Adherence is very important for successful health outcomes. Conversely, non-adherence can lead to continued disease processes,

health complications, hospitalization, additional doctor visits, therapeutic drug changes, spread of illness, slower recovery, and absenteeism for both parent and child.

For children, taste and choice may be the only motivation to take a medication and complete a full treatment program. Improving the taste of a medication and allowing children to choose how their medication will taste can improve therapy adherence, leading to both improved clinical and economic outcomes.

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Hiding Tobacco

The 1,216 teens in this study were exposed to virtual convenience stores. Half of the stores had openly visible tobacco displays at the cash register or tobacco that was in a locked cabinet. In addition, some of the stores had visible tobacco ads and others didn't.

The teens were divided into six groups, each with a different combination of tobacco availability, advertising and teen smoking status. All the teens were given a shopping task to complete in the virtual store. The researchers tracked the teens' paths in the stores, their attempts to purchase tobacco, and then asked them

about their perception of ease of purchasing tobacco. All the results were compiled.

There were two factors that resulted in fewer attempts to purchase tobacco and decreased overall awareness of tobacco availability—tobacco kept in locked cabinets and no tobacco ads. These changes in real stores could help discourage tobacco purchases by teens.

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