

ADVISER'S VIEWPOINT

Do Kids Crave Caffeine? Let's Ask Them

Over time, we seem to have acquired a greater need for round-the-clock energy, and children and adolescents feel this need, too. Caffeine, the most popular mood-altering substance in the world, fuels our desire for perpetual energy.

What are the long-term effects of constant caffeine consumption on children? No one knows for sure, but in August USA Today published a story about a teenaged British girl who was hospitalized after consuming 14 shots of espresso in quick succession. Shortly before this incident, a July issue of Newsweek published a feature story about Americans' desire for caffeine, and how beverage companies are responding. PEDIATRIC NEWS ran an article about the potential dangers of teenage use of caffeine-laden energy drinks earlier in the year ("Energy Drink Sales Hit \$3 Billion—At What Health Cost?" February 2007, p. 1).

These types of news stories started me thinking about children and caffeine, and I began collecting articles on the subject. My reading and observations over the past few months have reinforced my feelings that the beverage companies are targeting preteens and teens with cute, catchy drink names and promises to boost brain power, athletic prowess, and overall health.

In most of the medical articles that I have read—by neuroscientists, pediatricians, and behavioral specialists—no one is sure about the long-term effects of caffeine on children's health. But past studies have shown

that excessive caffeine can cause heart palpitations, anxiety, nausea, and depression.

No one is fully committing to the idea that caffeine is harmful, but it is something that we have to watch because it appears that caffeine has been glamorized.

To get a sense of caffeine consumption in an average preadolescent and adolescent population, I devised a short, four-question survey that was distributed to adolescents in my practice in Silver Spring, Md. Also, I wanted to get a sense of their understanding about which products contain caffeine, and the effects of caffeine.

The surveys were anonymous and identified only the adolescent's age and gender. I said that the survey was about teen beverage choices, and the questions were:

► What are your four favorite drinks?

► How much of these do you drink daily?

► Which beverages contain caffeine?

► How do they make you feel?

Some of the answers were very specific and mentioned brands of sodas, tea drinks, and coffee drinks. As for amounts, some were specific while some simply said "a lot" or "a little." Some teens said that a cola was one of their favorite drinks but they didn't think colas contained caffeine.

Over a 6-week period, I collected 108 completed surveys that included 49 males aged 10-20 years and 59 females aged 11-21 years, with the outlier addition of one 9-year-old girl whom I included because she was pubescent and eager to talk about nutrition and beverage choices.



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were aware of the energizing properties of caffeine. Their answers to the fourth question about how their beverages make them feel and why they like them included comments such as "gets my day going," "makes me feel hyper," and "makes me feel happy."

Some of them recognized the addictive properties of caffeine and commented that, "I can't get enough" and "I just keep wanting more of it."

Interestingly, all the respondents who listed one popular energy drink as a favorite were aware of its high caffeine content, but most were not sure which beverages other than coffee (such as colas and tea drinks) contained caffeine and which did not.

Although I can't make any statements about the danger of caffeine, the lack of caffeine awareness surprised me. Those who want caffeinated drinks will seek them out, but many others don't know the caffeine content of their favorite drinks.

I think the popularity of tea, Vitamin Water, and energy drinks reflect the savvy marketing of these products. Although adolescents are aware of how some beverages change their alertness, there seems to be a perception of these drinks as healthier choices regardless of whether they contain caffeine (and some do).

In our query about our patients' food choices, we need to ask about their preferred beverages. We may be surprised about their caffeine consumption, and they may discover that some of their favorite drinks may not be as healthy (or decaffeinated) as they think. ■

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LETTERS FROM MAINE

Like Dancing Bears

I had just finished a full morning of seeing patients with a third-year medical student who was beginning his second clinical rotation. His half day with me was billed as an "Introduction to Outpatient Community Pediatrics." And, I thought I had given him a pretty good run for his 3-hour investment.

We sat down in my cluttered but homey office for a brief recap of the morning's experience. Unless it is a question about a physical finding that will vanish when the patient leaves, I usually ask students to hold most of their questions until the end of the half-day session, when we can have a more leisurely opportunity to explore the answers. But, my young appendage for the morning had no questions, just an observation: "You certainly have your patients well trained."

This was not the first time a visitor to my practice has made this comment. And

each time I hear it, I get a bit uncomfortable ... and defensive.

No question about it. I see patients more quickly than the average clinician. And, I'm not embarrassed to admit that



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my approach to problems, health-related or otherwise, is pragmatic, no-nonsense, get-to-the-point. I am old enough that I introduce myself to patients and parents as "Doctor Wilkoff." That's what everyone did when I started, and I've seen no reason to change.

But, I hope I'm not an ogre. My coworkers don't snap to attention and click their heels when I enter the room. I ask people what is

bothering them in a way that I hope encourages the best answers, and I listen to their responses. So, it troubles me when someone makes an observation that suggests that I have patients and parents performing like a troupe of dancing bears.

Here's a snapshot of my survey results:

Among the 19 males aged 10-14 years, 15 (79%) included a carbonated beverage as one of their favorite drinks, while only 2 boys (11%) in this group mentioned coffee or tea.

Among the 24 males aged 15-17 years, 17 (71%) listed water; of those, 4 specified Vitamin Water, a specific product line of vitamin-enhanced juice drinks, and some flavors contain caffeine. In addition, 14 (58%) listed carbonated drinks, 7 listed milk—including chocolate milk and milkshakes—and 4 (17%) listed energy drinks.

Among the six males aged 18-20 years, three (50%) mentioned coffee or tea in their top four choices and three listed colas. One 18-year-old specified that he also drank "lots of Red Bull."

Among the 30 girls aged 9-14 years, a total of 14 (47%) girls in this age group listed coffee or tea drinks; most of these were bottled iced teas and some girls listed specific brands. In addition, 13 (43%) of these girls listed water among their favorite drinks, and 2 specified Vitamin Water. Also among the favorites 10 included root beer, 10 included colas, and 10 listed milk. Most of the girls in this group included a juice drink in their lists, and one girl listed a diet energy drink.

Among the 23 females aged 15-17 years, 16 (70%) listed a specific tea drink, 12 listed water, 5 (22%) listed coffee, and 10 listed root beer.

All six of the girls aged 18-21 years listed water among their top choices, and three specified Vitamin Water. Three of these young women also listed coffee, and four included juice among their favorite drinks.

Based on my discussions with them, most of these adolescents and young adults

Struggling to sound undefensive, I asked "What do you mean by well-trained?!" Seeing through my thin disguise, the student replied, "No, no, I didn't mean it that way. I was just impressed how many calls you received during your call time. And, I don't remember that we were interrupted once while we were seeing patients. You told one of your partners you only got one call last night."

I replied, "I was hoping that's what you would say. You know that every physician's patients are trained. ... We are all just slaves to positive and negative reinforcement. Our patients know they can always reach us at a call time and they know we keep our promises to call them in the morning. In that sense, they are 'trained' to wait."

A physician who always runs late will find that when he is on time his patients will be late. The physician who instructs his staff to take temperatures on every sick child and makes a big deal about the number is training parents to focus on fever and call him with frequent updates

about each tenth-of-a-degree change.

Physicians who include teething in their diagnostic repertoires and fail to correct parents who use teething as an explanation for a variety of symptoms may be training those parents to be less accurate and safe observers of their children. The physician who is less than rigorous with his diagnostic criteria for otitis and/or who treats when observation would be a better course is training parents to expect a diagnosis and antibiotics when their children have fevers and runny noses.

I could have given my young tutee even more examples of how parent/patient behavior is a reflection of their physicians' behavior. But, it was pushing 12 o'clock and our patients are trained that for the next hour they can reach me, and that I'll be on my bicycle and out of breath when I answer my pager. ■

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