EDITOR’S NOTES

Pediatric Exercise Science, 2009, 21, 373-376
© 2009 Human Kinetics, Inc.

Research Digest—The Underground Version

“Borborygmi” has to be one of my favorite words. “Borborygmi”—it just sort of rolls off the tongue, doesn’t it? Is it a board game (“How about a round of borborygmi after we get the kids to bed?”)? Or a once-peaceful Pacific atoll, palm trees swaying, now reduced to kitty litter by an ambitious nuclear testing program? Nope. Not even close. Borborygmi, in fact, is the scientific name for that rumbling of gastrointestinal gas that always seems to occur at the most embarrassing moments. (You will recall that shameful event the last—and, alas, final—time you were invited to a State dinner.) It comes from the Greeks, meaning, well, rumbling. It belongs to that genre of words that dare to be uttered only in hushed tones in shadowy corners. Words like “scybala” and “flatulence.”

The British author Graham Greene once wrote a short story about a young man who suffered from excessive borborygmi, but with a twist. It seems his bowel gas would not just gurgle but also possessed an unexplained talent for mimicking, parrot-like, previously heard sounds. So, at the oddest moments it would, for instance, break into a dance band favorite or even, at least on one occasion, a Brahms clarinet sonata. This musical penchant led to the young man’s downfall when his borborygmi reproduced the sound of an air raid siren during a German attack on London, sending the directors of his company, who were in the midst of a sensitive business negotiation, to the basement shelter for 6 hours (unfortunately, it had failed to learn the all-clear signal).

This intriguing information, worth pondering, will serve as an appropriate introduction to this issue’s Notes, which are dedicated to the proposition that no new scientific news, however unusual, should go unheeded. Even in these times of informational overload it is often difficult for all of us to keep up. So, as an ongoing commitment to its readers, Pediatric Exercise Science provides the following update of published studies you may have missed. These items are all verifiably true, culled from the literature over the past two years. For those feeling a need, specific references are available from this Editor.

Thomas Rowland, M.D.
Editor

A group of Irish investigators found that duration of breast feeding as an infant was not predictive of cardiovascular fitness measured at age 10 years. But a review of 17 published studies by Owen et al. revealed that breast feeding is generally related to lower cholesterol levels in adulthood. On the other hand, researchers from Cambridge University found that the longer a baby was breast fed in the United Kingdom the more likely he or she would have greater arterial stiffness 20 years later. Meanwhile, male babies whose mothers’ diet was supplemented with fish oil in the first four months of breast feeding have been found to have lower...
physical activity and higher blood pressure at age 6 years than those whose mothers took olive oil.

In an article published in the *Archives of Diseases of Childhood*, Baverstock and Finlay presented a literature review on the subject “Does swimming with dolphins have any health benefit for children with cerebral palsy?” They concluded that the question could not be answered, since their search failed to uncover a single publication devoted to this subject. This was despite the fact, according to the authors, that dolphin assisted therapy (DAT) “has become an increasingly popular intervention for children with disabilities.” They report that a typical cost for one week of DAT in Florida is about $2000, not counting travel and hotel.

In September of 2008, the European parliament, reflecting concerns over the adverse health implications of sedentary youth, passed by a vote of 536-37 a proclamation that every child should have compulsory physical activity at least 30 minutes of exercise per day. On approximately the same date, Michael Gard, in his chapter in Smith and Biddle’s book *Youth Physical Activity and Sedentary Behavior*, argued that “the suggestion that children who do not meet minimal physical activity guidelines place themselves at significantly greater risk of life-threatening disease [has been made] in the absence of anything approaching compelling scientific evidence.”

Researchers from the U.S. National Center for Injury Prevention and Control called 20,000 households on the telephone and asked them how their children got to school, and if they didn’t walk, just why not? Of the 2,274 appropriate responders, 46% said they transported their child by car, 40% by bus, and 14% walked. The most common explanation for not walking was that the distance to school was prohibitive (71%). However, of those who lived within one mile of school, half were driven in the family auto or took a bus.

Non-obese girls in Athens have been found to be four times as likely to eat cereal for breakfast than young obese females. And from the laboratories of General Mills, Inc., comes a report that greater physical activity in 9 to 10 year olds is associated with morning consumption of cereal.

Ophthalmologists in a single institution in Cleveland reported nine cases of eye trauma in teenagers due to paintball injuries over a 6-year period. Damage included vitreous hemorrhage, chorioretinitis, retinal detachment, and even optic nerve avulsion in one case. As none were wearing ocular protection at the time of their injury, the concluding advice was obvious.

Japanese investigators have revealed that, when compared to a control group, kindergarten children can be effectively instructed on discus throwing by their trained 5-year old peers.

Hutto et al. reported that telephone surveys requesting self-reported levels of physical activity provided different results when the questioner requested information regarding walking behavior followed by quantification of moderate activity than when these two items were reversed in order.

Researchers at the University of Minnesota reported that in their study group Black girls enjoyed physical education more than Whites. Major contributing fac-
tors to enjoyment of PE were self-efficacy, perceived benefits, and teachers’ support. After considering all these variables, however, 90% of the variance in PE enjoyment was unexplained.

According to a questionnaire mailed to 781 Minnesota adolescents, 62% had a television in their bedroom. Those without a bedroom TV were more likely to eat vegetables and fruit and had higher grades in school.

A questionnaire survey conducted in Japanese high schools found that use of a mobile phone while bicycling was “quite common,” being most frequent in males who were commuting by bike to school. The authors reported that a significant association was observed between use of a mobile phone while cycling and the experience of a bicycle crash or near-crash, but “its causality was not established.” Meanwhile, a report from the University of Alabama at Birmingham indicated that children ages 10-11 years who performed simulated road crossings were less attentive and experienced more collisions with virtual vehicles while using cell phones.

Researchers in the United Kingdom noted that 40 million students in the United States, and an equal number in Europe, carry backpacks to school, these weighing, on the average, nearly one-fourth of body weight. They found that carrying a backpack weighing 17% body weight on the right shoulder resulted in significant lateral spinal curvature, while carrying the load on both shoulders caused a decrease in thoracic kyphosis as viewed in the sagittal plane.

A report from the Hospital for Sick Children in Toronto indicated that mandated bicycle helmet use in youth had over a period of 12 years resulted in a decrease in annual mortality rate in the 1-15 year age group of 52%. Meanwhile, a survey of Dutch pediatricians revealed that when cycling for transportation, 94% never wore a helmet. The most common explanation given: “I never thought about it.”

In Croatia, researchers found that flexibility is the best predictor of belly dance performance in 15-18 year olds.

Investigators at the University of Missouri-St. Cloud administered a questionnaire to male and female athletes in grades 5 through 8 seeking characteristics of poor sportsmanship. They found that self-reported poor sport behaviors were best predicted by behaviors of the coach and spectators.

In a cross-sectional study of 4132 Australian students ages 6 and 12, children who had the greatest amount of daily outdoor activity (by parents’ report) had the lowest frequency of myopia (near-sightedness).

Researchers in California have found that people who own dogs walked an average of 18.9 minutes more each week than those who did not own pets. Owners of cats, on the other hand, reported similar walking behaviors as non-pet owners.

A report in the journal Adolescence indicated that athletes who are characterized by “the need to win” were more likely to express acceptability of dating violence.
Plastic surgeons at the University of California, San Diego, have described a previously unreported abnormality termed “swimmer’s nose deformity”. This is an asymmetric hump that develops over years of training and persists even when sport participation stops. They proposed that the etiology was most likely tissue remodeling in response to pressure of swim goggles during the water re-entry phase of breathing.

Belgian researchers have found that fall from the balance beam during gymnastics performance was related to slowing of the heart rate in the preparatory period. They concluded that preparatory heart rate deceleration may be detrimental to balance beam performance by gymnasts.

Swiss investigators compiled questionnaire data from the World Health Survey to rank 51 countries in level of adult physical activity. The country with the lowest level of inactivity was Comoros (3.8%), while the most sedentary citizens were those of Mauritania (51.7%).

Retired Turkish boxers have been reported to have a 47% incidence of growth hormone deficiency, which is associated with a reduced pituitary volume.

Cowboys in northern Australia who wear protective helmets do not experience increased thermal strain during mustering compared to those who do not.

A report from the University of Zurich indicated that prepubertal hockey players who sleep less during the night have greater total daily physical activity than those with longer sleep hours.

According to a report in the International Journal of Sports Medicine, wearing a custom-made mouthpiece by athletes does not significantly affect maximal aerobic power or physical performance.

A 15-minute brisk walk has been found to reduce the urge to eat chocolate.

German investigators report that baby swimming classes were associated with an increased rate of diarrhea and ear infections.

From the Dental School at the University of Glasgow comes a report that asymptomatic children who watch television for a greater number of hours at age three years are more likely to develop asthma in later childhood.

British researchers have found that trained cyclists who consume chocolate milk after an exhaustive ride perform 50% better on a subsequent trial than if they drank a sports drink during the recovery period.

Thomas Rowland, MD
Editor