



health+fitness

## Higher IQs found in breast-fed children

Researchers aren't sure whether nutrition or nurture is the factor

By Nicole Ostrow  
Bloomberg News

NEW YORK | Breast-fed kids are smarter, according to a Harvard University study that found the longer babies are nursed, the greater their intelligence.

The research, which followed more than 1,000 women and their babies, found that each additional month a child was breast-fed resulted in better language skills at 3 years old and intelligence at age 7, compared with babies not breast-fed. The findings were published last week in JAMA Pediatrics.

The study is one of the largest to look at the role of breast-feeding on a child's intelligence, the authors said.

It also underscores the need to support mothers in the workplace and in public to enable them to breast-feed during their babies' first year of life, said Dimitri Christakis, who wrote an accompanying editorial in the journal.

"With this we can close the book and decide there is a link between child breast-feeding and intelligence," said Christakis, a professor of pediatrics at Seattle Children's Research Institute, a pediatric medical research center, in a phone interview.

"The fact that breast-feeding really promotes cognition in our children is something we should all care about. It takes a village to breast-feed a child. We should take the actions necessary not to just initiate breast-feeding but to sustain it."

Still, breast-feeding is not the only contributing factor to intelligence, said Mandy Belfort, the lead study author and a neonatologist at Boston Children's Hospital and an assistant professor of pediatrics at Harvard Medical School.

"It's important to point out that breast-feeding is just one factor that influences a child's intelligence," Belfort said in

a July 26 interview. "Our results shouldn't make parents feel bad for the choice they have made."

The American Academy of Pediatrics suggests exclusive breast-feeding for six months after birth before adding food, and that mothers continue to nurse until their child is at least 1 year old.

In the U.S., about 77 percent of women whose babies were born in 2009 started breast-feeding when their child was born, that number dropped to 47 percent at 6 months of age and 26 percent at 12 months, according to the U.S. Centers for Disease Control and Prevention.

It's not known how breast milk benefits intelligence, Belfort said.

It may be nutrients in the milk help the developing brain or the way mom and baby interact during breast-feeding, she said. More studies are needed to better understand the relationship.

"I hope our findings provide a scientific basis for women to make choices about not only whether to breast-feed or not, but for how long to continue breast-feeding," she said.

Belfort said parents also should speak to their babies, including newborns, and expose them to a lot of language to help promote language development.

Researchers in the study followed more than 1,000 pregnant women and their babies until the children were age 7.

After controlling for maternal intelligence, they found that IQ scores for 7-year-olds increased by about one-third of a point for every month of breast-feeding.

That means a 7-year-old child who was breast-fed as a baby for 12 months would score four points higher on intelligence tests than a child who was never breast-fed, Belfort said.

There was no association between breast-feeding and visual motor skills or visual memory, the authors said.

"Individual women should use this as one further incentive to breast-feed their children," Christakis said.

# Healthy athletes are also heat smart

Sports physicals can identify medical issues before they become problems

By Stephen Lucie  
For the Times-Union

It's about time for school to open, and many middle school and high school students will be going out for sports. And those area athletes are required to have pre-participation physical examinations.

The Jacksonville Sports Medicine Program, a volunteer-based program that provides quality care to youth athletes — and the only program of its kind in the U.S. — has given more than 60,000 pre-participation sports physicals with the help of the Nemours Children's Clinic, Wolfson Children's Hospital and the Duval County Medical Society.

Free physicals were given to area high school athletes Aug. 3, while area middle school boys can get the free exams on Saturday. Most of these physicals are done by volunteer family physicians or pediatricians across the area.

School physicals are extremely important for preventing medical problems and even sudden cardiac death in young athletes. The child's medical history is vital as certain symptoms such as a racing heart, shortness of breath, lightheadedness or passing out during exertion may be clues to more serious medical conditions that must be evaluated prior to the child playing sports.

During the physical exam, the health care provider will be looking for irregular heart rhythms, unusual breath sounds, hernias, orthopedic concerns and neurologic issues that may be critical to the young athlete's ability to participate in sports.

Properly done physicals can detect problems before they happen. In 2011, the latest statistics available, the Jacksonville Sports Medicine Program doctors saw 1,062 high school and middle school boys and girls. Most were cleared without any concern, while 125 were referred back to their primary care providers for additional follow-ups. But the doctors found that eight boys could not be cleared for sports because of cardiac concerns. That's a potential saving of eight lives.

While a completed physical will never guarantee against sudden collapse or injury, it certainly will help these young athletes have a safe and productive sports season.

At this time of year, we are also concerned that the heat will lead to many problems, including dehydration and heatstroke, the most serious heat-related illness.

We always encourage athletes to pre-condition over the summer to avoid

## The stages of heat illness

Hyperthermia, or overheating of the body, can be mild and temporary, but in advanced stages, it can be life-threatening. The degrees of severity:

	Skin	Pulse	Body temperature
<b>Heat stress</b> Occurs when hot weather puts strain on the body	Normal sweating	Normal	Normal
<b>Heat fatigue</b> Feeling of weakness caused by high temperature	Cool, moist	Weakened	Normal
<b>Heat syncope</b> "SIN-co-pee" Sudden dizziness after exercising in the heat	Pale, sweaty; feels moist, cool	Usually rapid; may be weak	Normal
<b>Heat cramps</b> Painful spasms of abdomen, arm or leg muscles following exertion	Usually moist, cool	Normal or rapid	In normal range
<b>Heat exhaustion</b> Symptoms warning that body is overheating	Cold and clammy	Normal or rapid	Usually normal
<b>Heat stroke</b> A life-threatening emergency; person needs immediate medical care; death rate is high after symptoms appear	Dry and red	Strong and fast	Above 104 F (40 C)

Low sodium level may cause cramps, but don't take extra salt without a doctor's advice

Often caused by dehydration or sodium depletion, but don't take salt supplements without medical advice

Perspiration stops; person may faint or stagger, become confused or combative; coma begins if person is not assisted

Source: National Institute on Aging

McClatchy Newspapers

## FREE PHYSICALS

The Jacksonville Sports Medicine Program will offer free sports pre-participation physicals for middle school boys only at 8:30 a.m. Saturday at the Nemours Children's Clinic, 907 Childrens Way in San Marco.

suddenly entering a practice season out of shape. Athletes need to drink before they are thirsty and should pre-hydrate with a 20-ounce bottle of a sports drink or water before beginning practice in extreme heat.

The Florida High School Athletic Association adopted in June 2012 measures to make participation in sports during these hot and humid months safer:

- Coaches must gradually acclimatize their athletes to heat and have water readily available.
- Weekly practice time is limited to 18 hours during the first two weeks of practice, to allow students to adapt to conditions.
- For every 30 minutes of practice, student-athletes must get a minimum 5-minute break for rest and hydration.
- Coaches and other

## THE DOCTORS ARE IN

Your H section has doctors "on call." Physicians who are members of the Duval County Medical Society write columns each month based on their specialties and recent topics in the news. If you have a subject area you're interested in, or questions that you would like answered (please don't request individual diagnoses), you can email us at [lifestyle@jacksonville.com](mailto:lifestyle@jacksonville.com). The names of real patients will not be used because of privacy laws.

people in authority can never deny a student-athlete access to water, if requested.

Athletes should be weighed between practices to determine exactly how much weight they have lost. If a student has lost 3 pounds, that generally means that he or she needs to drink three 16-ounce bottles of sports drink or water.

Any athlete who experiences dizziness, nausea, or

vomiting should be immediately removed from play and cooled down. Athletes who have been sick, particularly with nausea or vomiting, should not be permitted to participate in the heat until they are over their illness.

Finally, athletes need to be encouraged to look out for each other if signs and symptoms arise during the workout. Coaches, trainers or managers may not see an athlete in trouble as quickly as fellow players might.

The beginning of the school year is an exciting time for those participating in sports. A common-sense approach will help ensure that our athletes will have a safe and productive year.

Stephen Lucie is a founding member of Jacksonville Orthopaedic Institute and has been in the field of sports medicine in Florida for over 30 years.

He oversees medical care of area public high school and middle schools as well as being a team physician for The Bolles School, Jacksonville University and the Jacksonville Jaguars. He is a member of the Duval County Medical Society.

