

Not All Sunscreens Created Equal

See the Doctor Today and Keep Your Child Healthy Tomorrow

Vitamin D Shining Bright in the News

Team Spotlight

June 2011

Summer Sun

Not All Sunscreens Created Equal

"The sun only illuminates the eye of the man, but shines into the eye and the heart of the child."

Ralph Waldo Emerson

Recent tests by Consumer Reports Health, gave 9 out of 22 sunscreens top ratings. The results, which will be published in the July 2011 Consumer Reports, gave three sunscreens "best buy" ratings, and six were also "recommended". Sunscreens were tested on UVB protection, UVA protection, and how well they fared in water. All 9 sunscreens received excellent scores for protection from UVB rays and very good ratings for protection against UVA rays. [Our knowledge of the various effects of UVA and UVA rays is evolving, but it seems that each play a role in the development of skin cancer and photoaging. For more on understanding the sun's ultraviolet rays, see <http://www.skincancer.org/understanding-uva-and-uvb.html>] The results are as follows:

Best Buy:

- Up & Up Sport SPF 30
- No-Ad with Aloe and Vitamin E SPF 45
- Equate Baby SPF 50

Others Recommended:

- Banana Boat Sport Performance SPF 30
- Coppertone Sport Ultra Sweat-proof SPF 30
- CVS Fast Cover Sport SPF 30

- Walgreens Sport SPF 50
- Ocean Potion Kids Instant Dry Mist SPF 50
- Banana Boat Sport Performance SPF 100

Despite "best buy" and "recommended" ratings, proper use of sunscreen is essential, in addition to taking extra measures to protect oneself from sun exposure. It is not recommended to rely on sunscreen alone. Other precautions to be taken are: wearing protective clothing, limiting the amount of time spent in the sun, and seeking shade from the sun between 10am-4pm, when UV rays are the strongest. In order to receive the amount of protection sunscreen labels claim, users should use 2-3 tablespoons of sunscreen on the majority of the body. When applying spray sunscreens, spray them on most of your body, rub them in, and reapply. All sunscreens should be reapplied about every two hours, and after sweating or swimming. Additionally, a sunscreen's effectiveness decreases as the product gets older, and it is typically recommended that sunscreen be thrown away and replaced after 3 years.

The complete article by WebMD can be viewed at <http://www.webmd.com/skin-beauty/news/20110524/9-sunscreens-get-top-ratings-by-consumer-reports>

See the Doctor Today and Keep Your Child Healthy Tomorrow

Having babies and young children checked regularly by a doctor is not only recommended, but necessary for tracking growth, discussing development, and administering vaccinations. Children are seen most often in the first 5 years of life due to the regularly scheduled well visits and the typically greater number of illnesses seen during these years. However, even if a child has completed the shots needed to register for school or is considered a "healthy" kid, it is still important to see a doctor regularly throughout late childhood and adolescence. The foundation for lifelong health is laid during the first two decades of life, and preventive healthcare may be your child's number one defense in avoiding health problems later in life. Additionally, it is no secret that healthcare is costly; preventing medical problems as well as diagnosing diseases early (when they are less costly to treat) can save a lot of money down the road.

According to research by The University of California, San Francisco, the majority of American teenagers do not receive the recommended preventive healthcare. The study was published by the American Academy of Pediatrics, and surveyed 8,500 teens ages 10-17. The survey, which targeted many different facets of preventive care such as the amount of care received in the last year, whether or not healthcare providers coun-

seled the teens on age-appropriate health issues, and if they spent time alone with the doctors, concluded that 38% of the participating adolescents received preventive health care within the last year.

Yet, even in adolescents who did receive some form of preventive care, the quality of the healthcare, specifically concerning counseling parents and teens on major health issues that may be encountered as a young adult such as dental health, healthy eating, regular exercise, seat belt use, helmet use, and exposure to secondhand smoke. Less than half the teens who received preventive healthcare in the last year were counseled on at least one of the issues, and only 10% were counseled on all six topics. This "suboptimal care" is what is typically encountered in physical exams administered in walk-in clinics and free "sports physicals" done en masse at schools.

Pediatricians are uniquely trained in the issues of child and adolescent health, and are able to help guide the teenager and his/her family. Let one of the items on your summer schedule be a yearly checkup for your son or daughter.

For the full report visit pediatrics.aapublications.org



Vitamin D Shining Bright in the News

It seems like every vitamin has its day, and these days vitamin D is definitely the hottest one out there. Hardly a day goes by without another new medical article discussing the potential role vitamin D may play in some disease. Why all the recent attention? Are we really deficient and, if so, why? Where does vitamin D come from?

NOT REALLY A VITAMIN

To get an understanding of our need for vitamin D, it is helpful to review some background information. Technically, vitamins are naturally occurring substances essential for normal function AND MUST be ingested (i.e. “vita”; thus the term “vitamin”) because our bodies do not produce them. They are “role players” in our bodies, helping to regulate a large number of the body’s activities, and other than this essential need to be ingested, they are fairly unrelated to one another.

[Vitamins are often grouped into one of two big categories—water-soluble and fat-soluble. Practically, this means that fat-soluble vitamins can be stored in our body tissues; water-soluble cannot. Therefore if our intake is more than needed, water-soluble vitamins will simply be urinated out; fat-soluble will be stored in tissues. This has a couple of implications. First, since water-soluble cannot be stored, they must be continually/daily ingested; fat-soluble vitamin levels can be maintained for some time even if not ingested by utilizing available stores. The second implication is that fat-soluble vitamins are more likely to cause problems if taken in excess (typically with supplements) because the body stores them.]

Adequate amounts of vitamin D are essential for bone health, the way our body handles calcium is dependent on vitamin D. There are two main ways that we get the vitamin D our body needs—from the sun and from our diets. Our skin produces vitamin D when it absorbs sunlight, typically producing all the body’s daily needs with about 15-30 minutes of exposure. Food sources of vitamin D include fortified dairy and cereal products, egg yolks, fish oils, and cod liver oil. Since it is possible (and relatively easy) to get all the vitamin D we need from exposure to sunlight (without needing to have dietary sources), vitamin D is not really a “vitamin”, but more on this later. Reaching our current point of understanding is a great story of medical history.

GREAT STORY FROM THE HISTORY OF MEDICINE

The disease caused by vitamin D deficiency, “rickets”, was first described in the 1600s. Although at the time they had no idea what caused the condition, doctors noticed that rickets tended to occur in young children, more commonly in winter months, more commonly in polluted cities of Europe and in cities of northern latitudes (i.e. colder). Additionally, it was seen more commonly in the darker-skinned races and in children exclusively breastfed for longer periods of time. Therefore the theory was developed that rickets was due to dietary issues (not enough fat

and lifestyle issues (poor hygiene, not enough fresh air). In the early part of the 20th century, it was discovered that giving cod liver oil to children with rickets helped dramatically. The fact that both sunshine (this had become more evident) and cod liver oil could improve rickets was confusing. There had to be some common pathway between these two seemingly unrelated treatments, and this questioning helped lead to the specific identification of vitamin D. Within a few decades, milk began to be fortified with vitamin D, and this public health measure virtually eradicated rickets in America.

VITAMIN D IN THE 21st CENTURY

So if rickets is now a rare occurrence, why is there so much recent attention to vitamin D? There are a couple of reasons—first, there is a concern that we are seeing later onset (and more subtle) bone disease (e.g. osteoporosis) as a result of vitamin D deficiency; second reason, and perhaps far more responsible for vitamin D’s current celebrity status, is that there are numerous studies suggesting that vitamin D plays a role in preventing many other conditions such as cancer, diabetes, depression, and heart disease, to name a few. These latter claims need more research before being proven, but in our information age, media attention comes much more quickly than scientific evidence.

It does seem that we as a population are not getting enough vitamin D, and this is primarily due to getting far less sun exposure. Much of this is understandable and justifiably due to concerns related to skin cancer; additionally, we as people spend far too much time indoors. Risk factors for vitamin D deficiency include living in northern latitudes (in the U.S., above the line from San Francisco to Philadelphia), failing to get at least 5 minutes of direct sun exposure daily, being African American or dark-skinned, being elderly, or being overweight or obese). Sunscreen inhibits the sun exposure necessary for our skin to produce vitamin D. So, in a way, vitamin D was originally not really a “vitamin” at all, but has now become one because of our lifestyles. As a result, the recommended amount of daily vitamin D has gone up in recent years and may continue to do so in the years ahead.

Increasing one’s vitamin D levels will require doing so either by dietary means (which includes supplements) or by getting adequate sun exposure. Drinking adequate amounts of milk that contains vitamin D and/or orange juice that has been fortified with calcium and vitamin D are two steps that will go a long way toward improving vitamin D intake. One suggestion for improving our vitamin D through sun exposure (without substantially increasing our risk for skin cancer) is to apply sunscreen immediately prior to going outdoors. It typically takes sunscreen approximately 15 minutes to start working, and this is precisely the amount of time our body needs to produce a day’s worth of vitamin D!

Team Spotlight: Kelli Coon



Hometown: Orlando, FL

Favorite Book: The Kite Runner

Favorite Vacation Memory: Paris 2010

Hobbies: Ballet, cooking, baking, oil painting, yoga

Favorite City: Washington, DC

Favorite Holiday: The 4th of July

Favorite Restaurant: The Ravenous Pig

Why she loves working at Middleton Pediatrics: “I love seeing how much the kids have grown each time they visit us. And of course the wonderful team I work with!”

Favorite Movie: Father of the Bride

Favorite Candy: Reese’s Peanut Butter Cups

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