

Corner Clinic: Skin Whiteners, Sports Physicals and Aspirin for the Heart

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Our experts answer your questions on everything from headaches to tummy aches. This month, our experts discuss skin whiteners, sports physicals and aspirin for heart conditions.

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Are skin whiteners safe for regular use?

Arisa Ortiz, MD, director of Laser and Cosmetic Dermatology, UC San Diego Health

Skin whiteners are products that are used to lighten skin pigment, like sun spots, melasma, or hyperpigmentation. There are many different types of skin whiteners that work by decreasing the skin's melanin content, which is the main substance that contributes to the color of the skin. Skin contains two different types of melanin that accounts for the variation in skin color: eumelanin (black, brown pigment) and pheomelanin (red, yellow pigment).

The most common skin whiteners include hydroquinone, kojic acid, azelaic acid, tretinoin, vitamin C, resorcinol, arbutin, alpha hydroxy acids, and tranexamic acid. These agents decrease melanin either before melanin synthesis, during melanin synthesis or post-melanin synthesis. Hydroquinone is the most common ingredient in skin whitening products. Hydroquinone two percent is available in over the counter cosmetics, while higher strengths require a prescription. It has been banned in certain countries for risk of cancer and leukemia, which has been shown in mice studies. However, research has pointed toward a low risk when used in small amounts as a topical agent so it is commonly available in the U.S. When used

chronically, however, there is a risk of permanent darkening, so it is prudent to take regular breaks when using this product. I usually recommend two months on, one month off.

A treatment that has been used in Asian countries for many years, but has only been used in the U.S. in the last few years is oral tranexamic acid. This is normally prescribed for heavy menstrual bleeding, but has shown to have the unexpected side effect of decreasing melanin. I have seen dramatic improvement with this regimen, but as with any oral medication, it is not without risk. There is a slight increased risk of clotting, similar to oral contraceptives, so I do not prescribe it in patients with a personal or family history of stroke or any other coagulation abnormalities.

Although topical agents are convenient and accessible, the amount of lightening they are able to achieve is limited. My preference is usually to lighten pigment with lasers or other energy-based devices for a more dramatic improvement in skin brightening.



What's the easiest way to get a sports physical for my child? **Desiree Leithem, certified family nurse practitioner, UC San Diego Health**

Sports physicals are intended to determine if an athlete is healthy enough to participate in sports and to help minimize the risk of sports-related injuries. If an existing injury or potential problem is identified during the sports exam, action can be taken to avoid future problems and to rehabilitate an existing injury.

UC San Diego Health offers several options to obtain sports physicals for your children. On Saturday, June 1, 2019, our Sports Medicine team is providing free pre-participation sports exams for San Diego Unified School District student athletes. These screenings will include all elements required to participate in sports for the 2019-20 school year, as well as optional concussion baseline testing, electrocardiograms to help screen for heart abnormalities and sports health and wellness educational presentations. For details, please visit health.ucsd.edu/sports-exams.

If you can't make it that day or your child is part of a different school district or team, you can always schedule an appointment with your UC San Diego Health [family medicine physician or pediatrician](#).

Alternatively, all UC San Diego Health patients are welcome to walk in at one of our [Express Care](#) locations, in Encinitas or downtown San Diego. Express Care clinics are staffed by board certified nurse practitioners and are open 8 a.m. to 8 p.m., Monday through Friday, plus weekend availability at some locations. You can even check wait times and save your spot online or through our [MyUCSDHealth app](#). If you aren't yet a UC San Diego Health patient or do not have insurance, we also accept cash payments at Express Care.

Wherever you go, for a quick and easy visit, be sure to bring the school, camp or team form and your child's corrective eyewear, if needed.



Who should take aspirin daily to prevent heart conditions? Lori Daniels, MD, cardiologist at UC San Diego Health

For patients with a prior heart attack or stroke, the benefits of taking daily aspirin outweigh the potential risk of a major bleeding event. This use, in patients who already have cardiovascular disease, is called "secondary prevention" — and the recommendations for this subgroup on the benefits of aspirin are solid and unchanged.

However, in the past year, new studies have been published that have changed our understanding about who should be taking daily aspirin to prevent heart conditions in the first place. These studies apply to patients who may be at risk for, but who have not yet developed, heart disease — an approach that is called "primary prevention." Daily aspirin is no longer recommended routinely for primary prevention, except in high risk individuals. The reason for this change is the publication of three new studies in 2018: two of them (one in patients with diabetes and another in patients determined to be at moderate risk for cardiovascular disease) showed that the risk of all-cause death was similar with or without aspirin. The third study, which included individuals over 70 years of age, found a slightly higher risk of death with aspirin.

Based upon this new data, the decision on whether to use aspirin for primary prevention should be a personalized one, based upon a discussion between the patient and his or her physician. Factors to be considered include the individual's cardiovascular risk, as well as bleeding risk.

- → In summary, here is who should be taking daily aspirin (generally 81mg daily) for prevention of heart conditions:
- → Individuals with a prior heart attack or who have undergone stenting or bypass procedures in their heart for blockages.
- → Individuals with blockages of the arteries in the legs (peripheral artery disease) or in the carotid arteries.
- → Individuals with a recent stroke due to an artery occlusion.
- → Should be considered in: Adults age 40 to 70 years who are at higher risk of atherosclerotic cardiovascular disease, but not at increased bleeding risk.

For individuals over age 70, aspirin should not be taken routinely for primary prevention, but may be considered for individuals at very high cardiovascular risk and without an increased bleeding risk.

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