



he reputation of Miami and New York City dermatologist Fredric Brandt, MD, as a youth-granting genie rests largely on what he puts into faces (namely, injectables such as Botox and Restylane). But in his new book, 10 Minutes/10 Years (Free Press), the good doctor argues that what's going in his patients' mouths may do more to keep them looking vibrant and fresh than what's on offer at his—or any MD's-office. "Research has shown that the sugar we eat has a profound impact on collagen," Brandt says. "It makes it, as well as our elastin fibers, brittle and prone to cracking." Inside the body, sugar attaches to protein fibers, such as those in blood vessels, in a process known as glycation. The action mutates the proteins, creating new molecules, termed advanced glycation end products (AGEs), which trigger collagen-andelastin-pummeling inflammation. Long story short, skin turns saggy and wrinkled. Compounding the matter, glycation also degrades type III collagen (the strongest, plumpest kind we have), leaving only type I, the last stop in a collagen cell's life.

Thankfully, the situation isn't entirely hopeless. Brandt believes

that weaning oneself off the sweet stuff is easier than it sounds. But, as a man who frequently treats unrepentant tanners, he's a realist. He also dispenses advice for mitigating glycation when the lure of the Godiva box melts even the most iron-clad wills.

ELLE: The buzz on glycation's effects on skin is massive at the moment, but you've had a long-term interest in the subject. What sparked your curiosity?

FREDRIC BRANDT, MD: My father, who owned a candy store, died at age 47 from kidney failure related to diabetes. I considered myself a healthy eater, but at the same time, I knew I was consuming a lot of sugar. I drank Orangina every day, and I've never been the type to have just one scoop of chocolate soy ice cream—I'd eat the whole carton. So I tried eliminating sugar from my diet more than two years ago, and I saw how much better I looked.

ELLE: Why do you think that was?

FB: Sugar decreases blood vessels' expansion ability, interfering with circulation. Blood flow feeds the dermis, which produces collagen and elastin cells. If it's not getting enough nutrients, it's not going to generate as many fresh fibers. In addition, sugar stiffens existing collagen and elastin and decreases tissue's overall resilience.

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ELLE: What else did you discover?

FB: A study in the *British Journal of Dermatology* found that when AGEs are exposed to UV rays, they, too, generate free radicals. That means you're compounding the skin injury from the sun.

FB: When sugar molecules attach to proteins inside the body, it's called endogenous glycation. Collagen is the body's largest protein source, so it's particularly susceptible. Cooking and caramelizing food at high temperatures also creates AGEs, whether you're roasting a chicken, baking a potato, or grilling a steak—even without sauce. That's exogenous glycation: AGEs made externally. Conventional wisdom used to hold that when you ate something containing AGEs, they would simply pass through the digestive system. Now we know those molecules latch onto skin cells, too.

ELLE: Your book details an eating plan, the Brandt Cleanse, designed to help a person quit sugar cold turkey. Could you give me an overview?

FB: For 30 days, you cut out all sugars, as well as artificial sweeteners—they'll keep your cravings going. You also need to eliminate wheat, which releases sugar during digestion, most dairy, and any foods high on the glycemic index. That indicates that they're full of sugar or that

indicates that they're full of sugar or that sugar is a by-product of breaking them down in the stomach.

ELLE: What's left to eat?

FB: Plenty. Almost all types of protein, although you need to be careful about how you prepare them, as I mentioned before. Nonstarchy vegetables are also good, as are gluten-free breads and cereals. And rice, blueberries, and green apples have low glycemic indexes. For a true, total-body detox, you'd avoid caffeine, although that's the one thing I didn't.

ELLE: Well, you are human.

FB: Exactly. So I kept my caffeine, and it seemed to work okay. A recent study in *Preventive Medicine* showed that caffeine is healthy for you, you know. It may help you live longer.

ELLE: Are there any sugar substitutes for people who absolutely must have something sweet?

FB: I'm not an advocate of artificial additives. You could try a substitute made from lo han fruit, which is sweet but doesn't

have any glycation risk associated with it. You can find it in Asian speciality markets.

ELLE: Are there other skin-protective measures for those who aren't quite ready to change their dining habits?

FB: Antioxidants can help neutralize AGEs. Besides taking them internally, you can apply antioxidants topically, of course. Some, such as alistin, have proved to be more effective than others at combating AGEs. A lot of skin-care companies, including mine, sell creams whose formulas specifically go after AGEs.

ELLE: Which do you think would make the bigger impact on aging: giving up regular sodas or retiring the gas grill?

FB: If you could modify your diet and keep sugar away, it would probably have the greatest benefit in terms of retaining skin's youth since you're reducing your initial AGE exposure. The problem is

getting people to follow this advice. They think a dermatologist can solve everything. Let me tell you, you can come into the office every few months for shots or laser treatments, and they'll definitely make you look better, but they're not going to make you look like you're 20.

ELLE: Did your new diet have any unexpected side benefits?

FB: It helped get rid of a chronic fungal infection in my toenails. I used to run a lot, which caused it. Once you get a fungal infection, it's very difficult to clear up. Candida yeast, which feeds on sugar, contributes to this condition. Generating too much yeast can also cause digestive problems, such as upset stomach, gas, and bloating.

ELLE: If you reduce the sugar in your body, the yeast dies out?

FB: Yes, but you don't want to eliminate yeast entirely. The goal is balance.

ELLE: Your book contains more than 125 10-minute tips you claim will reduce the pace of aging. Could you pick a favorite?

FB: Try going to bed 10 minutes earlier each week. Scientists have shown that our production of growth hormone, which decreases as we get older, also drops after midnight. You process calories better and burn more fat if your growth hormone levels are high, so it makes sense to get a good night's sleep and be in bed before 12.

ELLE: Does that mean lights out at 8?

FB: No, no. I fall asleep by 10:30 or 11. Let's not go overboard.

MIRACLE WORKERS NOW THAT YOU KNOW WHAT TO CUT FROM YOUR DIET, BRANDT RECOMMENDS DAILY SUPPLEMENTS TO GIVE SKIN EVEN MORE OF A BOOST

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- **BIOTIN** 5 MILLIGRAMS: "I'm obsessed with the vitamin biotin," Brandt says. "It definitely affects hair. We tracked patients taking the supplement, and their hair grew more quickly in a measurable way."
- OMEGA-3 OIL 1,000 MICROGRAMS: "Essential fatty acids are beneficial for skin, and they also help lower your cholesterol. Mine was a little high," he says. "It's funny; I'll inject all of these cosmetic things into myself, but I'm afraid of taking Lipitor or any of those drugs. Omega-3 brought my cholesterol level down naturally."
- o **VITAMIN C** 3,000 MILLIGRAMS: Brandt is a big believer. "Vitamin C plays a part in collagen synthesis," he says. "Since it's water soluble, I take it incrementally throughout the day."
- **ZINC** 30 MICROGRAMS: "Zinc has antiinflammatory properties," Brandt says, "so it's good for the body in general."
- obstandardized pill, B vitamins help reduce homocysteine, an amino acid that may contribute to heart disease. But Brandt also discovered its influence on appearance. "I started getting a few speckled
- seborrheic keratoses—rough patches on my back," he says. "I freaked out. I did the research and discovered that lowering your levels of homocysteine can also reduce the incidence of this type of keratosis. I experimented on myself, which isn't very scientific, and after six months of taking a B complex, I stopped getting new spots. Usually, you have to freeze or scrape them off."
- **MULTIVITAMIN:** "Obviously, it's important to ensure you're getting all the vitamins and minerals that may not be in your regular diet," he says.