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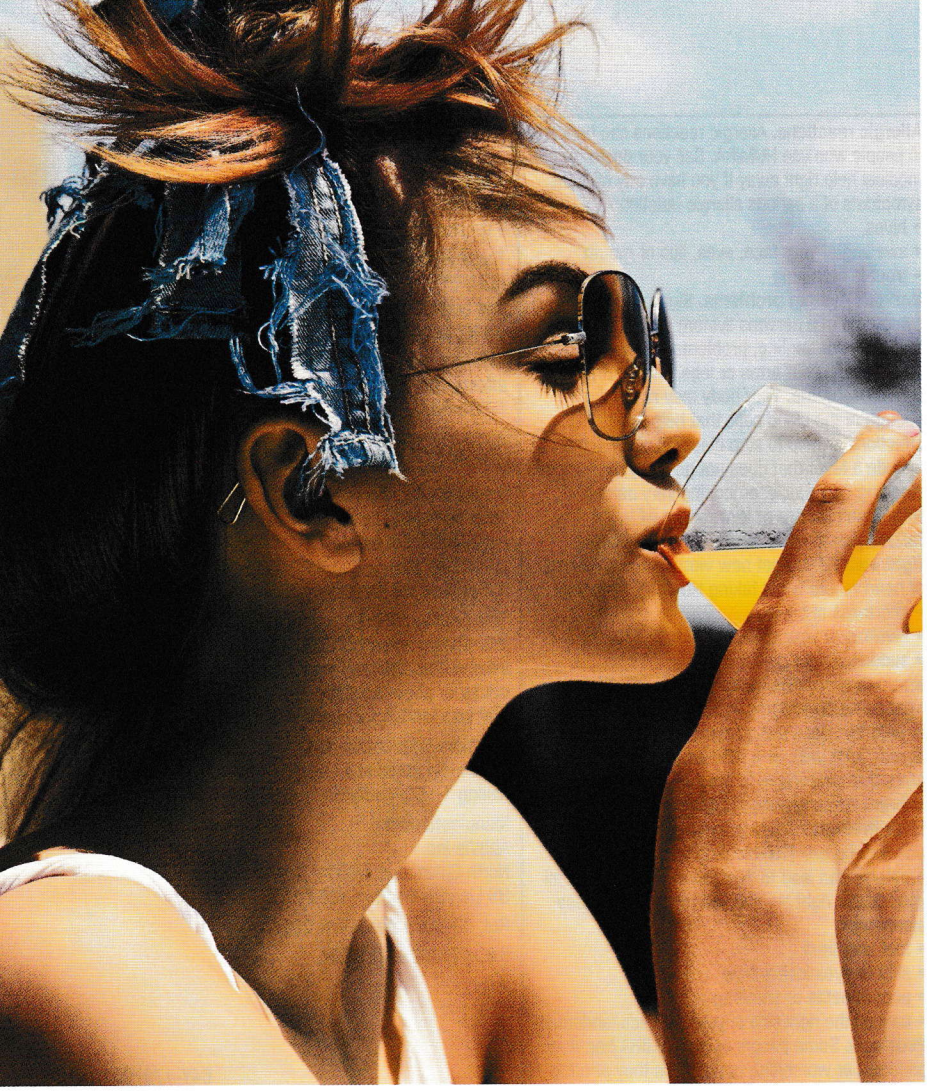

DRINK ME!

Is a smoother, firmer complexion only a sip away? April Long travels to China to learn about ingestible collagen—and why your next beauty buy might be in the vitamin aisle

Wang Pang Zi Donkey Burger is hard to miss. The restaurant, situated on a busy street on the edge of one of Beijing's ancient, alley-tangled *hutong* neighborhoods, boasts a banana-yellow banner and, taped to the windows, colorful photos of mysterious-looking menu items. The burgers themselves—surprisingly palatable slices of garlicky meat tucked into flaky buns—aren't the most intriguing draw, nor are the various innards or hunks of marrow that can be ordered as sides. "Young women, especially, come here to eat donkey hide," the chef tells me, unrolling an expanse of what looks like thick wet leather, which he will soon slice and sauté, across a kitchen countertop. "They believe it keeps them beautiful."

In China, the tradition of consuming certain foods to rejuvenate the complexion is a very old one. The practice of ingesting donkey skin, for example, has been traced as far back as the first century B.C.; it even acquired a celebrity endorsement of sorts by becoming a beauty-ritual must for Empress Dowager Cixi, who ruled as regent from 1861 to 1908. And while a Beijinger's palate differs somewhat from a typical Westerner's—Eeyore hide aside, this is a place one can pick up a fried duck head, complete with its bill, as an on-the-go treat from a street vendor—there might be something to the idea that eating collagen-rich food can boost the natural collagen in one's own skin.

"When I first came to China 15 years ago, I couldn't help but notice that the women, who have extremely collagen-dense diets, also have beautiful skin," says Naomi Whittel, the enterprising founder of Florida-based nutritional supplement company Reserveage, who leads me through the *hutong*'s food stalls one misty morning, pointing out pig's trotters and chicken feet. "But at the time, there wasn't scientific evidence to prove any cause-and-effect between the two."

Despite that dearth of proof, collagen supplements have long been a full-fledged craze not only in China, but across Asia. Japanese pharmacy shelves are lined with fruit-flavored shots and ampoules hawking make-you-pretty promises; you can even buy collagen-infused marshmallows and quaff a new beer marketed to women, called Precious, that contains two grams of the stuff. "In Japan, people are consuming an average of five grams of collagen a day, mostly through drinkables," says Whittel. "In China, where they have bone broth nearly every day, it's even more than that. But in the U.S., where we're eating skinless and boneless everything, our diets are virtually devoid of collagen. I think we're only beginning to understand the difference it makes."

A little skin-science 101: Collagen (the word is derived from the Greek *kolla*, which means "glue") is the most abundant protein in the human body. The main component of connective tissue, it cements cells together and gives skin its structure and elasticity. Collagen production begins to decline at a rate of about 1 percent a year in our mid-twenties and goes rapidly downhill in our forties and fifties, with the majority of women experiencing a 30 percent drop in the first few years postmenopause. (This is a natural process, but it's also aggravated by sun exposure: UV rays disable collagen-generating fibroblasts.) The effects we see in the mirror? Dryness, sagginess, dullness, and loss of plumpness.

While there are some topicals known to ramp up collagen production—chiefly retinoids, which remain dermatologists' gold-standard go-tos for diminishing wrinkles—their benefits are limited only to the areas where they're applied. It's easy to understand, then, why the prospect of rebuilding collagen from the inside out is so compelling. And now there's proof that goes beyond wishful thinking: Recent stud-

David Burton (styled by Julie Chanut-Bombard; model: Julija Step at IMG)

ies show that ingesting specific hydrolyzed collagen peptides, derived from cow, pig, fish, and poultry sources—sadly, there are no vegetarian options—can indeed directly benefit the skin.

In the most impressive example, an independent, double-blind, placebo-controlled study published in 2013 in *Skin Pharmacology and Physiology* that involved 100 women between the ages of 45 and 65, those who took 2.5 grams of a hydrolyzed collagen peptide once a day for eight weeks exhibited a 20 percent reduction in wrinkle depth around their eyes. Additionally, the subjects' levels of pro-collagen I—the precursor to collagen—were up 65 percent. And these results were long-lasting: The women's skin still demonstrated elevated moisture levels and elasticity four weeks after they stopped taking the supplements.

According to Steffen Oesser, PhD, founder of the Collagen Research Institute in Kiel, Germany, who conducted the study, what this means is that "these bioactive peptides are activating the body's own physiological processes" by sending a signal to the fibroblasts to produce more collagen. And this doesn't just help the skin. "The underlying problem [the loss of collagen with age] is the same in all of our connective tissues," says Oesser, who also conducted studies showing that collagen supplements help alleviate joint pain. "When we have this degenerative process in our joints, we call it arthritis. When we have it in our bones, we call it osteoporosis. And when we have it in our skin, we call it wrinkles." By strengthening the extracellular matrix, which is what these peptides appear to do, "you can see improvement in all of these areas."

There is one caveat: Not all ingestible collagen is created equal. First of all, hydrolyzed collagen, which is made by purifying and breaking down the protein's amino acids into low-molecular-weight fragments, is different from the old-school gelatin our mothers used to make wobbly desserts; because hydrolyzed peptides are so tiny, they're much more easily absorbed by the body. But even among the these options, Oesser says, there is variation. "From a scientific point of view, nobody knows exactly what makes a collagen peptide effective. All we can do is test them. There are products on the market that are less effective or ineffective, so my advice is to look for the ones that have studies supporting them."

When Naomi Whittel introduced a range of Reserveage collagen supplements last year, she chose to incorporate peptides from the two manufacturers with the most persuasive science: Verisol, which makes the patented porcine-derived variety Oesser used in his study, and BioCell, which makes a collagen peptide complex derived from chicken cartilage (a company-funded study published in *Clinical Interventions in Aging* in 2012 showed a 76 percent reduction in skin dryness in women who took one gram daily for 12 weeks). "We wanted to make sure that if we were bringing collagen to the U.S. in a big way, it had to be from a clean, reliable source, with solid science to back it up," says Whittel.

Dermatologists, meanwhile, are cautiously optimistic. "These studies are very well done," says Boca Raton–based derm Marta Rendon, MD. "But there's still a lot more data on joints than there is on skin. I think we need to do more research to really say, 'This absolutely works.'"

That a whole slew of beauty-from-within products have hit the market recently—including not only collagen drinks and supplements but also those containing hyaluronic acid, which was shown in a 2014 Japanese study to have a moisturizing effect on skin when ingested—dovetails nicely with the Zeitgeist. This is an age in which we've come to understand that how we treat ourselves, and what we consume, is reflected in our appearance. We guzzle green juice, utter oms and affirmations, and even—in New York, at least—stand in line for bone broth, which, ancient Chinese remedy or not, emerged last winter as the buzziest energy-, immunity-, and beauty-boosting elixir in the wellness world.

My last stop in Beijing is the Tongrentang Drugstore, a traditional-Chinese-medicine mecca founded in 1669. Past the stone Foo dogs guarding the entrance, and up an ornate staircase bedecked with fluttering paper lanterns, I find an entire section devoted to collagen. There are endless shelves of *ejiao*, donkey-hide gelatin (one particularly unappetizing translation is "ass-hide glue"), which can be purchased as jerkylike sticks or in sachets to be brewed as tea. A woman at a little cart heats chunks of *ejiao* in a skillet with rice wine, nuts, and dates to make donkey "cake"; aisles of glass countertops display an exotic type of bird's nest, consisting purely of swiftlet spit, which forms the basis for an unsettlingly viscous, extremely expensive, purportedly collagen-enhancing soup (a box of eight nests will set you back roughly $1,150).

I leave with a box of instant *ejiao* (dissolvable donkey!) and a $60 jar of bird's nests suspended in jelly—neither of which I will ever eat. I will, however, be incorporating bioactive collagen peptides into my diet: mixing Reserveage powder with juice, or swallowing a capsule as regularly as I can. As New York derm Elizabeth Hale, MD, points out, this just might work synergistic magic with my topical skin care to keep my complexion pillowy and plush well into the future. It definitely strikes me as significantly more salubrious than donkey skin. And regardless, as Rendon says, as long as I stick to quality supplements, "It can't hurt." ●

THE INSIDERS

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Devon Jarvis/Studio D (2); Getty Images (1)