

Home Improvement

WITH AMATEUR CHEMISTS TAKING A STAB AT HIGH-TECH PRODUCT MIXOLOGY, MAGGIE BULLOCK ASKS, CAN I MAKE MY OWN FACE-SAVER? BETTER YET—SHOULD I?

I like to think I'm on top of my skin-care game. I cleanse, exfoliate, and UV-protect with religious zeal; fret, on occasion, about my collagen and elastin infrastructure; and possess a rudimentary understanding of things like thymine dimers and glycation (well, sort of). But I never thought I'd find myself up to my elbows—literally, daubed neck-to-ankle with iodine-color test spots—in a woeful-looking mixture of vitamin C and ferulic acid, with a portable cappuccino frother in one hand and a Pyrex bowl in the other, actually attempting to cook up my own products.

I had stumbled upon a particularly obsessive nook of the DIY universe, you see—one in which skin savants mix face-smoothing, age-fighting potions in their kitchens (I'm not talking about whisking up Grandma's trusty egg-white mask, either) and compare notes and swap detailed recipes on the message boards of websites such as Essentialdayspa.com, Gardenofwisdom.com, and Skinactives.com.

They get their ingredients online, too—not just every botanical active under the sun (for starters, green tea, rosemary extract, and ingredient du jour, coffeeberry), but also chemical powerhouses such as lipoic acid, niacinamide,



and superoxide dismutase. The truly ambitious even snap up vials of raw, individual actives such as Idebenone and Matrixyl, formerly available only in top-dollar antiaging lines PreVage MD and StriVectin, respectively.

Is skin-care mixology really so simple that anyone with a beverage aerator and a WiFi connection can do it? The beauty industry has a long tradition of eccentric visionaries turning their kitchens into makeshift labs, after all. Jo Malone founded her empire on a souped-up cold cream that originated on her stove top; Crème de la Mer inventor Max Huber, PhD, perfected his ultrarich balm in his at-home lab. But then, Skinactives.com clients don't seem like the types to be satisfied with Malone's low-tech moisturizer. And Huber was a physicist. Even top Estée Lauder chemists who took over for Huber in 1995 found that—for reasons

even they couldn't quite understand—any attempt to cheat on his original formula produced disappointing results, which demands the question: If they couldn't DIY, can you?

So why would civilians choose to undertake a task that pros—equipped with advanced degrees and sterile, state-of-the-art labs—are presumably more qualified to do? Expense is one major motivator. Ordering a vial of SkinActives EGF for \$9.50 opens a gold-plated door for those who could only dream of shelling out \$400 for EGF-based RéVive Intensité Fluide Superbe. Amy, a 34-year-old mother from Fort Worth, Texas, and a regular poster on Essentialdayspa.com, told me she got into the DIY game because of “fear of aging and the awareness that I wasn't always getting the best bang for my buck.” A digital scale and professional-speed mixer weren't cheap, but now she spends just \$200 a year on ingredients.

Model: Marc Philibert; still lifes: Steven Krause

FAKING IT: CAN GENERIC INGREDIENTS MATCH A BRAND-NAME CLASSIC?



SkinActives three-piece set— (From left) Sea Kelp Bioferment customization kit, Canvas Base Cream, Sea Kelp Bioferment—and the real deal, **Crème de la Mer** (far right)



OR



Many of today's label-scanners—notably, those who aren't eBaying for EGF—are driven by a desire for freshness and purity. "By making something yourself, you can avoid chemicals and parabens [preservatives], make smaller batches that are more active for a shorter time period, and know exactly what you're applying to your skin," says Gardenofwisdom.com founder Markey Martin, a venerable, maternal presence on several sites' message boards. She stocks sophisticated chemicals such as arbutin and alpha-lipoic acid but still preaches the be-reasonable approach: "Should you read a Perricone label and say, 'I'm going to throw that together'? No."

innovation. Commercial companies test every product for irritants and allergic reactions, and inoculate them against infectious bacterias or molds. "Any company that's behind a product has to jump through hoops," Miraglia says. "Every batch is tested for safety, so when I get a submission I know it won't rip my face off."

But such large-scale testing is costly; to some degree, Sivak and Martin judge a product's quality based on repeat orders and client feedback. Martin recently stopped importing certain products because she couldn't be sure they weren't conduits for stuff formulated in China, where safety controls are questionable at best. And both seem to put an

Add a little bit; if you like it, that's perfect. If you add too much, it will still be good for your skin, you just may not like it as much."

But Joe Lewis, a cosmetics formulator who holds the patent for Idebenone, scoffs at what he calls "cookbook chemists." "A novice is not going to understand the interactions between ingredients," Lewis says. "It's, 'I put A and B in my formula. Now I have C, and I don't know what it is!'" When I tell Lewis my theory that SkinCeuticals' mega-antioxidant serum, C E Ferulic—my own daily insurance policy against everything from UV rays to Marlboro Lights to taxi fumes—seemed prime for replication (it has relatively few components and is extremely low-fluff—vaguely yellow, a tiny bit sticky, clinical-smelling.... How much worse could my version be?), it didn't take long for him to dampen my enthusiasm. "We're talking about antioxidants—inherently unstable compounds. Formulated incorrectly, they won't last more than an hour or so," Lewis says. "Plus, both vitamins C and E can auto-oxidize in the wrong formula, meaning they're not antioxidants anymore, but pro-oxidants. They're causing oxygen decay instead of preventing it." Via e-mail, Sivak acknowledged vitamin C's instability and suggested I avoid the problem by dissolving the active in a teaspoon of distilled water each morning. But her site failed to mention this complexity—how would I have realized I was making a mistake if Lewis hadn't told me to ask?

Not only was my fake C E Ferulic potentially damaging, it was a little gross: bright orange, slightly chunky. Likewise, upon assembly, my SkinActives la Mer kit resembled pinkish hair conditioner and completely lacked the original's addictive, rich texture. But Sivak seems thrilled with this not-so-pleasant point of difference. "When you buy a brand-name product, a large part of its appeal is that it comes in pretty containers and smells nice," she says. "I don't care at all about that."

Ultimately, it appears, I do. In the case of the low-fi vitamin E oil and raw-sugar body scrub I made that really did the trick, irregularities (a gloopy consistency for which I'd return a commercial product to the store) seemed like evidence of "authenticity" and homemade goodness. But as for anything significantly more sophisticated, I can't put it any better than Culler did in one tidbit of advice: "High-tech stuff belongs in the high-tech realm."

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On the other hand, Hannah Sivak, PhD, the self-described "cranky scientist" behind Skinactives.com, sells premixed base creams and serums plus individual vials of actives and, for the novice, prepackaged easy-mix kits—all so that average Janes can re-create their favorite commercial potions. And she's not big on warning labels. "I think Crème de la Mer is great—so great I imitate it," Sivak says. Her version is based on sea kelp bioferment, an ingredient similar to the one that fuels its namesake, and can be customized with "whatever else you like," such as additional actives and fragrance.

Unsurprisingly, this laissez-faire approach doesn't sit particularly well with the formulators Sivak so boldly "imitates"—as much for safety reasons as for dubious efficacy. "You buy something online, and it comes in these mysterious tubes and seems scientific, but do you believe it contains what it claims or that it will do what it promises?" says Loretta Miraglia, la Mer's senior vice president of product development and

inordinate amount of faith in the amateur chemists they cater to, relying on the checks-and-balances bulletin-board format of their sites to prevent potential mishaps. "Formulating can be dangerous—absolutely," Martin says. "But my customers actually ask questions. If someone came on the site and said, 'I just used X and my skin is freaking out,' I guarantee somebody else would pop right in and say, 'Stop experimenting. Go back to basics, give your skin a break.'"

Virginia Culler, a naturals-only DIY-er from Seattle, says mistakes are not uncommon. "I've seen people write, 'Oh, my gosh, I burned my skin with a 15 percent TCA peel,'" Culler says. "Playing with a whole chemistry set on your face is playing with fire."

Sivak's stance on the vagaries of experimentation is almost flippant, considering it doesn't take a heavy-duty chemical to do damage—even bergamot oil can burn and UV-sensitize skin. Asked how much of an active should be added to a serum, she says: "Anything you add is going to be good for your skin."

All still lifes: Steven Krause

KITCHEN AIDE: DIY ANTIOXIDANTS?

