

[PERSONAL \(HTTPS://ASWEETLIFE.ORG/LIVING/PERSONAL/\)](https://asweetlife.org/living/personal/)

What Does Insulin Smell Like?

2 Days Ago By
[Larissa Zimmeroff \(Https://Asweetlife.Org/Author/Larissa-Zimberoff/\)](https://asweetlife.org/author/larissa-zimberoff/)



Asking what a clear liquid smells like sounds like an oxymoron, although it makes sense. Of course I'm talking about insulin, which was discovered almost a century ago (1922), but while the industry has advanced far beyond those initial batches, there are still a few things that remain the same. Whether we've lived around this life-saving substance for years, months or days, we all seem to be able to call up a memory, an idea, or a scent.

We posted on our Facebook page asking what you thought about the smell of this life-saving vial. Many of you said it smelled like Band-Aids, which included the old school, cloth kind as well as modern ones. Some of you were more specific: "To me it has the fresh smell of electronics right out of the box with new Band-Aids mixed in." Another set said it smelled like printer ink, like a "book or poster with fresh printing on it," or "the smell of freshly mimeographed purple-inked papers, cool from the roller." April Lynn Weber smelled "new plastic shower curtain liners." Kelly Weets, whose daughter has diabetes, threw out this one for us to ponder: Barbie legs.

I can recall the smell of taking a new toy out of the box and the scent of machine-made plastic, but Barbie doesn't say insulin for me. Scent is, perhaps, that most personal of senses and tapping in to that reservoir brought up ancient history for some.

Kristine Gillihan Woelfel recalled a college professor. "He always had this very familiar scent to him, but I couldn't quite place it. I didn't realize it was insulin until I got a pump years later and thought, 'Aha! He smelled like insulin!' Having a pump makes me feel like I smell like insulin constantly, so this realization about his scent was years in the making. I wish I had known sooner, we could have had a conversation about it."

Others went the romance novel direction. Kate Brandeis wrote, "The odor is medicinal, yes. But in an old-fashioned, BBC war drama sort of way. Think, "Send The Midwife" or "The Crimson Field." It is, at the end of the day, an old remedy. And, oh would there be drama if we didn't have it!"

Shay Nicholson conjured up vivid childhood memories. It's a "little bit like Lysol, a little bit like Band-Aids, a little bit like being five and helping my granddad mix his vials before dinner. I can still hear the clack of his wedding band against the glass vial and smell that odd smell mixed with dinner and his aftershave."

Insulin smells the way it does because manufacturers add phenol to it. Once added, the compound helps to stabilize it and it also acts as both an antiseptic and disinfectant in the liquid, which most of us use over the course of numerous injections.

The NIH

(<https://pubchem.ncbi.nlm.nih.gov/compound/phenol#section=Top>)

tells us exactly what to expect when we drop a vial on the floor: "a sweet tarry odor that resembles a hospital smell." And there's a reason it's familiar. You'll find phenol listed in the ingredients on a host of everyday products like sunscreen, cosmetics, and mouthwash.

There are other purposes for these chemical additives. "Insulin is a protein, and as a protein, it is much more susceptible to degradation by bacteria or free-floating protease enzymes than a small molecule drug like aspirin or ibuprofen," says Patrik D'haeseleer at the Open Insulin Project ([asweetlife%20open insulin](http://asweetlife.com/openinsulin)).

Dr. Michael Weiss, a researcher at Case Western Reserve University who has made a career of working with insulin, says, "With more stable insulin analogs, they [anti-microbial preservatives] would not be needed." His side company, Thermaline (<http://thermalin.com/>), is working on several insulin analogs that will be significantly more stable; in fact the scientist is working on insulin that won't need to be refrigerated. (I'm waiting for glucose responsive insulin, which Thermaline is also working on.)

New comments kept coming on our Facebook page: rubbing alcohol, minty disinfectant, cork, leather and scotch. Another everyday item that some compared it to were telephone poles, which are treated with creosote (a form of phenol) to preserve and waterproof the pole. As an item we think about every single day of our lives, insulin is intrinsically tied up in our brains as a necessary evil—more important than our phones and a hair less important than air or water. What would we do without it?

“It makes me feel safe,” wrote Judi Hoskins. “I’ve taken insulin for 60 years and am grateful that this option is available. Without it, I know my life would end and I’ve always been thankful that insulin exists, whatever it smells like.” Kelly Close, the founder of Close Concerns and [diaTribe](https://diatribe.org/) (<https://diatribe.org/>), wrote this in email: “It’s a pretty intense smell. I always think when I smell it that I’m so grateful to be living.” This was echoed by many of us. Insulin is the smell of life.

Photo by [Denis Bocquet](#)

<https://www.flickr.com/photos/66944824@N05/15515984025/in/photolist-pD6ttX-7sb6mz-41RAZl-4S19q1-qn9u2a-AEFRXu-emESE1-3DF3H-zvQpz-zvQrx-zvQnS-BohBz-3yXUFX-5i6pou-5jgv1J-5E6icm-PJAXaK-6RVXiy-nKz8Mo-678eR7-9vRujM-TJzBqq-3dWCCm-5xeeU7-6sBByX-kDCw-6sFS95-VmzSFe-avpCU-dxUVhe-9xsw47-Slom1j-N7jR3-6sBzy8-3lX2xU-3oSaJH-4TKqD-6sBymK-2Vwem1-5lknzJ-qspW3-aBA6JJ-3NhPsD-5lknpN-bTwp2k-6sBE6z-dCBomA-bttEaU-aBjW2C-8yQSYV>

<https://asweetlife.org/author/larissa-zimberoff/>

[Larissa Zimmeroff](#)



(<https://Asweetlife.Org/Author/Larissa-Zimmeroff/>)

(<https://asweetlife.org/author/larissa-zimmeroff/>)

Larissa Zimmeroff was diagnosed with type 1 diabetes 33 years ago. She is an avid cyclist and a passionate supporter of bike lanes, free WiFi and the Affordable Care Act. She lives in New York City and writes about the intersection of food and technology. You can follow her on (<https://asweetlife.org/author/larissa-zimmeroff/>)Twitter (<https://twitter.com/ibikeforfood>) or read more of her published work (<http://ibikeforfood.blogspot.com/>)