

Why does an onion sometimes have another skin inside?

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An onion is a woman conforming to the beauty ideal, but gasping for breath in her corset.

Sometimes you cut an onion and hey, like some kind of matryoshka, there is a second hard brown skin hidden inside, an onion inside an onion. What is that second skin doing there?

To understand that, you first need to know what an onion is, says Chris de Visser, onion researcher at Wageningen University. An onion is a living organism: in its first year of life, the bulb we eat grows from a seed; in its second year, it wants to bloom and reproduce. You can see this if you leave an onion for a long time: relentlessly, at some point it starts sprouting. Although the modern consumption onion does that for nothing: those are almost all barren varieties.

A brown-dried skirt

"To stay alive as a bulb, an onion has to breathe, just like us," he says. Unlike us, an onion breathes on two sides: on the side where the roots are formed, at the bulb chair, and at the top at the neck. If it can. Because if both sides are closed off, no oxygen can get in. This situation has been simulated in research by sealing both sides with paraffin, says De Visser. Carbon dioxide can no longer get out, oxygen can no longer get in. "What was first a glassy skirt slowly turns brown, then leathery, and finally it dries up," he says. Such a brown-dried skirt - a sign of rot - is called a water skin.

That onions sometimes get breathless is a consequence of how a consumer likes to see the onion: with a golden-yellow skin, tightly wrapped around the packed leaves - because that's what an onion is: packed fleshy leaves. A 'skin-tight' onion is a fresh onion, in consumers' perception. For years, therefore, onions have been refined on that trait. But because of that tight skin, the onion now sometimes runs out of breath. Like a woman conforming to the beauty ideal, but gasping for breath in her corset.

Modern onion has no purpose

Almost everything in nature has a function. But what is the function of those water skins? De Visser wouldn't know. "The onions we eat now are so far removed from the wild varieties, you shouldn't look for any meaning behind them. It's like with dogs. A Pekinese is nothing like the wolf either. It is bred for its flat nose, but that nose has no function whatsoever. Such a dog only suffers because of it. An onion with a water skirt also has no purpose. It is simply a consequence of breeding on."

Yet De Visser sees the phenomenon less and less in recent years. "Probably because we have succeeded in removing even that defect with breeding."

Incidentally, you can store onions for quite a long time before they sprout. This is not only due to breeding and good climate control, but also due to the use of maleic hydrazide (MH), a plant protection product that is absorbed into the interior of the onion and prevents it from sprouting.

From the man who has cut countless onions both professionally and at home, we would have expected him to have a lifehack to quickly peel an onion. Alas, De Visser does it the way every lazy housewife/man does it: not just that stubborn outer skin, but hop, the whole skirt underneath right away. Yes, we can do it that way too.