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If you have ever had a cold or flu, you know that a stuffy nose can make even the most flavorful foods taste bland.

The sensors in your nose work closely with those on your tongue to determine how foods taste. Taste buds can only distinguish between five basic flavors: sweet, sour, salty, bitter, and savory. The sensors in your nose, by contrast, can sense as many as 10,000 different odors.

In fact, noses are so good at sniffing out the flavor in food that many packaged food and drink makers are now using an electronic version of the human nose to "taste test" their products.

Electronic noses do not look anything like their human counterparts. E-noses are actually a combination of metal and chemical sensors that can be trained to react to the different parts of an odor in specific patterns. These patterns are tracked on a computer and become the digital fingerprint of a smell.

One company using the e-nose is CP Kelco. The Delaware-based firm makes ingredients with difficult-to-pronounce names -- like xanthan gum and pectin -- which are listed in the fine print on food labels. CP Kelco's products give food texture and are used in everything from yogurt to salad dressing to donuts.

The e-nose aims to ensure these ingredients do not alter the taste of the foods they are used in -- a job that humans used to do exclusively.

"Setting up a group of people... is hard to do," said Ross Clark, a food scientist for CP Kelco. "You have to call them off their normal jobs. You have to keep them trained. You have to make sure they stay consistent. Over time, people tend to accommodate 'off odors' that may signal a problem with the product. We prefer using the electronic nose instead of the panel, because it doesn't need to be retrained from time to time."

E-noses were first introduced in the early 1990s. In the ensuing decade, they have found a growing market in various industries.

Wine makers use the devices to sniff corks and wine barrels. Beer makers use them to check the flavor of brews. Cosmetics giant L'Oreal employs the electronic proboscises to sniff out the flowers used in its perfumes.

Alpha Mos, a French firm that is one of the leading makers of e-noses, also makes a device called an e-tongue. The e-tongue is able to distinguish flavors in liquids instead of vapors. E-tongues have found a market among beverage makers like Coca-Cola and Pepsi -- which use it to test corn syrups -- and drug manufacturers. Bristol-Myers Squibb, for example, uses an e-tongue to test whether new drugs are able to hide the bitter taste of medicine.

But while e-noses and e-tongues have become increasingly sophisticated in their ability to distinguish the scents and flavors of the world, some things are still best left to their flesh-and-blood counterparts.

"Humans are still the arbiters in all things relating [to] whether or not a food tastes good," CP Kelco's Clark said. "No instrument is going to replace that."