

# Variety for water drinkers

**A Munich-based company, air up, is bringing flavor to water – without actually adding any new ingredients. Its founders have developed a bottle with an aroma ring that carries a scent into the mouth in such a way that the brain registers a flavor even though the person is only drinking water.**

“**N**utritional science has taught us that water is a very healthy drink. In the long run, though, it tastes boring,” says Fabian Schlang, the company’s founder, who studied nutritional science and food technology at TUM. Flavored water does exist, but it almost always contains sugar or sweeteners. “By contrast, the bottle we have developed allows a person to drink pure water while still enjoying a flavor experience.” The start-up hopes to offer water drinkers a simple and healthy chance at variation and to make the transition to water easier for those who prefer soft drinks and juices.

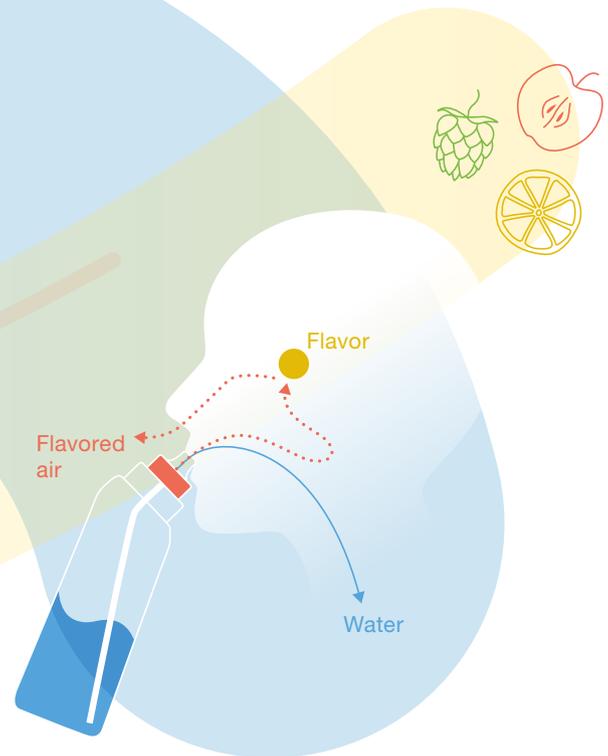
The bottle has a straw-like nozzle onto which the aroma ring is placed. It can be filled up with tap water, either still or carbonated. Five aromas are available at present, from classic apple to lemon and hops. The ring snaps into place in two positions and can be engaged or disengaged depending on whether the user fancies some pure water or a flavorful drink.

Retronasal olfaction is the name of the process behind the product. While humans perceive smell directly through the nose, scents can also take a detour via the throat, such as the aroma of food. As scents in the mouth are usually associated with food, the brain perceives them as flavors – even if they are only scents carried with water.

*“It was sort of basic research for a retronasal drink system.”*

Fabian Schlang, air up founder

The drinks bottle developed by air up uses an aroma ring so that, when the user drinks water, they also inhale scented air. This gives them the impression of drinking flavored water because the scent produces a taste experience in the brain.



Product design students Lena Jüngst and Tim Jäger from the Hochschule für Gestaltung Schwäbisch Gmünd stumbled across this topic quite by chance, and asked themselves: How could a scent be carried directly into a person's mouth to produce the experience of taste? They created a prototype for a bottle that combined water with flavored air. Friends put them in contact with Fabian Schlang, who was looking for a topic for his Master's thesis. Trained as a chef, he leaped at the opportunity. There were many questions to answer: How do people actually drink? How can we achieve a positive taste experience for both small sips and large gulps? What would be the best carrier material for the aroma? What would be the most effective design for the aroma ring? What's more, how do you even measure aroma? "It was sort of basic research for a retronasal drink system," remembers Schlang. His enthusiasm shines through when he talks about how much he benefited from the fact that, at TUM, there was somebody to answer practically every question – someone who knows the topic, can lend a device, or help in some other way. A lot of work went into the bottle's design. It had to ensure that, when the user took a drink, exactly the right amount of air was sucked in, flowed through the aroma ring and mixed with the water. And, despite its sophisticated design, it had to be possible to clean the entire system to ensure flawless hygiene.

The three-strong team were then joined by Jannis Koppitz and Simon Nüesch, both TUM Management and Technology graduates. UnternehmerTUM helped the founders to access the EU's Climate-KIC business accelerator. The company was then awarded an Exist Business Start-Up Grant and moved into the TUM Entrepreneurship Center in Garching. "Being in contact with other start-ups, the TUM network and the Maker Space helped us to develop quickly," recalls Schlang. Investors got on board and put the company in touch with production companies. Since then, air up has moved into offices of its own and – as of the summer of 2019 – has grown to 15 employees. New aromas are currently in the works and additional bottle designs, including models made from glass, are also in the pipeline. The product has been on the market since July 2019 – just three years since the company was founded – and is available online, in supermarkets and in sports stores. Quite obviously, air up has struck a chord: Only a few days after the product's sales launch, many retailers had sold out.

Christine Rüth