

## Start-up kernique catch the zeitgeist

# Nut snack as a sustainable ecological concept

**A delicious vegan nut snack that uses no sugar, artificial additives, gluten or palm oil, is full of essential nutrients, and is part of a commitment to environmental and social sustainability. Impossible? An Esslingen-based start-up called kernique proves otherwise. The start-up is currently planning a crowdfunding phase that offers a lucrative deal for investors. The idea catches the zeitgeist, but what exactly makes it stand out?**



Katja Großmann and Marcel Fortwingel – the founders of kernique.  
© kernique

Snacks of all kinds tempt us on a daily basis, but they nearly always come with pitfalls: the sugar in snacks may be a quick source of energy, but on the down side it triggers major fluctuations in blood sugar and high insulin release, which ultimately lead to fatigue and renewed cravings for sweets. This vicious circle is well documented, as are the pro-inflammatory properties of sugar, its influence on the microbiome and immune system and the development of dental caries.

What if you're looking for a snack that is sugar-free as well as full of key nutrients? "Nuts definitely come to mind quite quickly," explains Marcel Fortwingel, co-founder of the start-up kernique. This newcomer has had a long-term and gradual development process: Fortwingel has been concerned about healthy, low-sugar nutrition ever since he developed type 1 diabetes at the age of twelve. "The fact that nuts are not yet perceived as a superfood is mostly because the nuts on offer are boring mixes or have the disadvantage of too much sugar." Together with his

partner, Katja Großmann, he decided to give nuts a complete makeover.

## It's all about the nut and nothing but the nut

"More and more people are paying attention to healthy and sustainable nutrition, which of course requires a good supply of healthy food," explains Großmann. "So we founded the start-up kernique to make nuts and kernels unique." Nuts are often associated with high energy content, but they are not as fattening as people assume, as Fortwingel explains, "Nuts are packed with proteins, vitamins, minerals and antioxidants. And above all, they contain fibre and unsaturated fatty acids, which are associated with countering lifestyle diseases such as obesity and cardiovascular diseases.<sup>1-3</sup> The DGE<sup>4</sup> recommends 25 to 50 g of nuts per day, but the average German only consumes about 2 g daily."

The two company founders financed the initial experimentation phase from their own pockets. "We use only organic, purely plant-based ingredients for our recipes," says Großmann, explaining the basic principle. "We create sweet and savoury nut bites with different nut mixes and natural components such as cocoa, coconut or Italian herbs." For the two entrepreneurs, the key element in the sweet recipes is erythritol obtained from renewable corn. As erythritol is not metabolised, blood sugar levels remain constant.

A tricky feature of the developmental process was finding a way to bind the ingredients without making the snack too sticky or crumbly. This is one of kernique's unique selling points, as Fortwingel explains: "Our recipe and process development aims to make the crispies stick together without using traditional binders such as eggs and emulsifiers or sugary coatings. We have therefore been able to do away with animal or allergenic additives." And there you have an elegant solution. But where does kernique position itself on the market?

## Taking a holistic concept and creating a crowdfunding campaign

Media designer Großmann and sociologist Fortwingel initially struggled to find a production partner. "We had to do a lot of research. This was especially difficult as we do not have a food industry background. The first organisation we contacted was the local chamber of industry and commerce, which offered us workshops on setting up a company and business support," says Großmann. The young entrepreneurs found further support through the Stuttgart Media University<sup>5</sup> funding programme, where they even won the 2020 Best Pitch award, and through the incubator Social Impact Lab Stuttgart. "Our focus became sustainable entrepreneurship. What essential characteristics does a product need to survive on the market? What does the service look like? Who is our target group, what is the key added value? It became clear to us: we wanted to go beyond the product and think holistically."



What they mean by this is that it doesn't always take great technology, but is more about long-term added value for society. "Awareness of sustainable nutrition can change individual health and our environment for the better," explains Fortwingel. "Responsibility is crucial for us. So we only buy fair-trade cocoa and promote regional products, such as local hazelnuts and walnuts." This is also where the circular economy comes into play, as the start-up aims to utilise press cake, which is a residual product of oil production from nuts and contains a lot of protein, minerals and fibre. The recipes are varied - but how can they be manufactured?

"We are developing versatile processes with our production partner. Currently, we are in the process of jointly working on product optimisation and we are aiming to present our snacks to the public this summer as part of our crowdfunding campaign on Startnext," says Fortwingel. He goes on to explain that the crowdfunding initiative is aimed directly at the public including individuals, companies, gyms and offices. Anyone wishing to support the company's idea can either opt to sponsor the company by giving money, or by providing financial support by choosing from a variety of offers, including a selection of kernique snacks, personal meetings with the founders or running campaigns.

The Startnext platform offers crowdfunding opportunities as well as customer feedback. Großmann sees this as an optimal starting point for sustainable lifestyle products: from snacks for the office, bars for backpacks and jersey bags, to multiple-use bags of muesli or savoury croutons for soups and salads. The nut composition is also suitable for people with certain allergies: as the ingredients are free of soy, lactose, gluten and sugar, they already meet key criteria.

The start-up is looking for investors who are interested in its values and want to grow with the company, including collaboration partners who support the social impact and sustainability awareness trend.

### It's not just about the nut: combining health, enjoyment and sustainability





Kernique's crispies come in different flavours (pictured: chocolatey and exotic nut snacks) and are produced sustainably with no sugar or artificial additives.

© kernique

The decisive factor in selecting production partners was that they met certain quality criteria covering individual raw materials, organic certification, fair trade and production. "Our aim is to be transparent about the whole value chain," says Großmann, highlighting both the objective and the challenges. "Fair trade is about ensuring fair conditions from the cocoa plantation through the entire chain. As a start-up with small product volumes, this is not feasible on our own in the beginning, which is why we have involved a certified production partner. In the long term, we would like to operate independently."

Kernique's products have a great advantage: unlike fresh produce, the snacks do not need to be kept cold, so no cold chain is necessary. The start-up is not only aiming for climate-neutral production, but also wants to use climate-neutral shipping and be increasingly represented in regional markets in the future. The company founders have already been contacted by interested parties. Fortwingel mentions another important aspect: "Many non-native nuts have a CO<sub>2</sub>-positive effect in total, even after transport. This is because nut bushes store large amounts of CO<sub>2</sub>."

The concept is holistic. Animal breeding is avoided from the outset, as is the use of palm oil with its environmentally harmful consequences. The company wants to create long-term added value for society, work with cooperation partners and put in place educational campaigns on healthy and sustainable nutrition, including in schools. An exciting melting pot for sustainable ideas.

#### References

- 1) Guasch-Ferré, M. et al. (2017): Nut Consumption and Risk of Cardiovascular Disease. *Journal of the American College of Cardiology*, 70(20).
- 2) Graziany Machado de Souza, R. et al. (2017): Nuts and Human Health Outcomes: A Systematic Review. *Nutrients*, 9.
- 3) Schlörmann, W. et al. (2016): Nüsse – Kleiner Snack mit großer Wirkung. Rohe und geröstete Nüsse haben ein hohes gesundheitliches Potenzial. In: Matissek, R. (Ed.): *Moderne Ernährung heute*. Wissenschaftlicher Pressedienst.
- 4) German Nutrition Society
- 5) Academic Seed Accelerator Program: Start-up BW ASAP ([asap-bw.com](http://asap-bw.com))
- 6) Poore, J. & Nemecek, T. (2018): Reducing food's environmental impacts through producers and consumers. *Science* 360(6392):987-992.

---

## Article

29-Jun-2021

Simone Giesler

© BIOPRO Baden-Württemberg GmbH

---

## Further information

kernique - NU STEP GmbH

Kirschenstraße 10

73035 Göppingen

Katja Großmann & Marcel Fortwingel

Phone: +49 (0) 171 5161649

E-mail: hi(at)kernique.de

► [kernique](#)

---

## The article is part of the following dossiers



Bioeconomy: a new model for industry and the economy



More food sustainability: crucial for people and for the environment

metabolism

company foundation

proteins

food

bioeconomy

circular  
economy