Unwrapping veggie burgers

What BEUC thinks of plant-based meat alternatives



'Veggie burgers' and similar products are increasingly popular with consumers looking to diversify their diets, reduce their consumption of animal products for health, climate or animal welfare reasons, or simply to try new products. At the same time, plant-based alternatives to meat and dairy have also made headlines because of controversies around how they are named and the ingredients they contain.

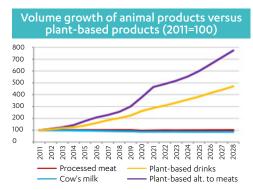
This brochure summarises consumer organisations' views on these products and their place in diets with more diversified protein sources.

Consumption of meat and dairy alternatives is on the rise

In 2021, almost 30% of EU consumers identified as 'flexitarian' – i.e. they 'sometimes eat meat but are trying to reduce their meat consumption and often choose plant-based foods instead' – while 8% indicated following a vegetarian or vegan diet. The recently

published report of the Strategic Dialogue on the Future of EU Agriculture 'observes a trend in the EU towards a reduction of consumption of certain animal-based products and an increased interest in plant-based protein'.²

In Europe, the consumption of plant-based alternatives for meat and seafood products has grown five times since 2011 and is projected to continue growing. The same is true for the consumption of plant-based milk alternatives, which has tripled since 2011.³ Next to more traditional sources of plant protein such as lentils, beans and chickpeas, these products can play a role in supporting consumers to rebalance the share of animal vs plant protein in their diets.



Note: 2023-2028 illustrates Euromonitor forecast. Source: DG Agriculture and Rural Development, based on Euromonitor.

³ EU agricultural outlook 2023-35.

¹ Smart Protein Project (2021): What consumers want: a survey on European consumer attitudes towards plant-based foods, with a focus on flexitarians', European Union's Horizon 2020 research and innovation programme (No 862957). Available at: https://smartproteinproject.eu/consumer-attitudes-plant-based-food-report/ Accessed 08.10.2024

² https://agriculture.ec.europa.eu/document/down-load/171329ff-0f50-4fa5-946f-aea11032172e_en?filename=strate-gic-dialogue-report-2024_en.pdf

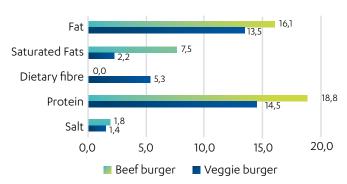
How good are these products for consumers' health?

Consumer organisations regularly test plant-based alternatives to meat and dairy for their composition and nutritional quality. These tests have found that plant-based products vary a lot in nutritional quality and level of processing.

Just like their meat and dairy counterparts, such as sausages and burgers, these products can be 'ultra-processed' and high in fat, sugar and salt, with low vitamins and fibre contents. Ultra-processed foods have been associated with harmful health effects, including a higher risk of heart disease, cancer, and type-2 diabetes, as well as adverse mental health and early death.

Yet on average, plant-based products have been found to be often healthier and more environmentally friendly than their meat-based counterparts.⁴

Nutrient content in grams per 100 grams





Slovenian consumer organisation ZPS compared beef and plant-based burgers and found that beef burgers contained more fat, while salt levels were similar in both. Beef burgers on average contained more protein but some plant-based burgers contained the same level. At the same time, plant-based burgers contained 5% dietary fibre while beef burgers contained none.







Belgian consumer organisation Testachats/Testaankoop and Dutch consumer organisation Consumentenbond both tested veggie burgers with mixed results. The Belgian test found only 3/20 veggie burgers tested "good" as many were ultra-processed and lacked essential nutrients such as iron and protein. The Dutch test found that 2/3 of the 75 veggie burgers tested contained high levels of salt and/or saturated fats. Both consumer organisations underline however that veggie burgers are generally healthier than beef burgers and provide a good alternative as they perform better in terms of animal welfare and environmental impact. Testachats/Testaankoop also tested <u>veggie</u> <u>"meatballs"</u> and found 5 out of 8 products to be of good or very good quality, while Consumentenbond's test of veggie "chicken" found overall good results with all tested products containing around 20% protein, similar to chicken, and having a good nutritional composition, e.g. high in unsaturated fats.

⁴ https://foodfoundation.org.uk/press-release/new-report-shows-clear-environmental-and-health-benefits-eating-whole-plant-foods







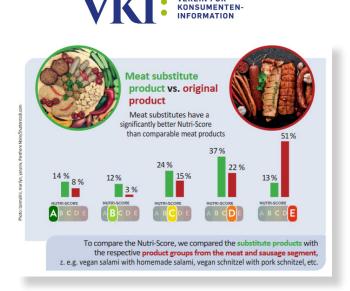
ufc Que Choisir analysed veggie burgers available in France and found that many of them are ultra-processed and contain several food additives. However, some plant-based burgers on the French market made from cereals or beans scored better and were not ultra-processed. While some products contained too much salt and too little iron, some more balanced products had more fibre, protein and iron, and less salt than their meat counterparts.

The Norwegian Consumer Council tested plant-based sausages and burgers and compared them to their meat counterparts. They that the plant-based products contained less fat and less saturated fat than the meat products and a lot more dietary fibre. Both plant-based and meat products tested had high salt levels, although plantbased products contained less. Overall, plant-based burgers and sausages containing mainly whole vegetables and lentils or beans achieved the best results.



Table 1 Nutritional content of plant-based sausages and burgers

Nutritional content per 100 g (median)	Plant-based sausages (n=20)	Barbecue sausage, Food table	Plant-based burgers (n=14)	Hamburgers online, 1 April 2022*(n=10)	Vegetable-based burgers (n=9)
Calories (kJ)	796,5	887	872	918,5	554,0
Calories (kcal)	193,0	214	208,5	220	125,0
Fat	12,3	18,5	13,5	16	4,9
Saturated fat	1,1	6,5	1,9	7,4	0,6
Per cent saturated fat of total fat	9,0	35,1	20,7	44,3	11,5
Carbohydrates	5,5	1,2	4,8	1,3	20,7
Of which sugars	1,2	0,6	1,0	0	3,1
Dietary fibre	4,4**	1	4,4**	0	5,5
Protein	9,5	10,4	13,5	16,0	5,3
Salt	1,8	2	1,2	1,0	1,1
Price (NOK/kilo)	227		234		256



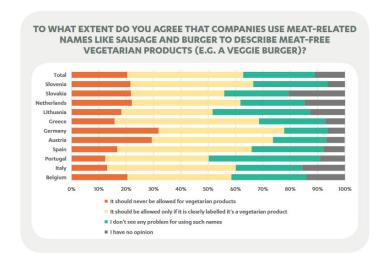
VEREIN FÜR

Austrian consumer organisation Verein für Konsumenteninformation (VKI) tested 323 plant-based products which they compared to their meat counterparts. VKI used the Nutri-Score to evaluate the nutritional quality of similar products from both groups and found that plant-based alternatives scored better overall, with almost 25% of plantbased products receiving an A or B score and 51% of meat products receiving an E. Regarding the degree of processing, the tested plant-based products had a slightly higher degree of processing overall using the NOVA score, even though most tested products in both categories were found to be 'ultra-processed'.

What about their name?

The denomination of plant-based alternatives to animal source foods has been a topic of debate at EU and national level in recent years. The denomination of plant-based alternatives should neither mislead consumers nor discourage them from buying these products. For instance, the use of culinary 'meaty' names on plant-based foods (such as 'steak', 'sausage', 'burger') makes it easier for consumers to know how to integrate these products within a meal. A BEUC survey (2020) found that most consumers are not concerned about the naming of veggie 'burgers' or 'sausages', as long as the products are clearly identifiable as vegetarian/vegan.⁵

In a recent decision, the EU Court of Justice ruled that Member States cannot ban plant-based products from using 'meaty' names unless they have adopted legal names defining what a 'sausage' or 'burger' is.⁶ This



would risk creating uncessary barriers in the Single Market, while bringing little consumer benefit as previously shown.

... and their affordability?

Plant-based products are often much more expensive than their meat and dairy counterparts – although this situation has started to evolve in some countries, e.g. in The Netherlands. Since consumers perceive price as a key barrier to sustainable eating, plant-based alternatives need to become more affordable.

Some retailers such as Lidl in Germany and Belgium, and Jumbo in the Netherlands, have dropped prices of own-label plant-based products to match the price of their animal counterparts. Six months after announcing the price parity strategy, Lidl Germany reported to have sold 30% more own-brand veggie products.⁹

What's the verdict?

Current European diets are not in line with healthy eating recommendations. Average consumption of meat in EU countries is often 2 to 4 times higher than the recommended intake, while the consumption of whole-grain cereals, fruit and vegetables, legumes and nuts is insufficient – only 12% of Europeans eat their '5 (fruit and vegetables) a day'. Not only do unhealthy diets increase the risk of non-communicable diseases and obesity, with over half of the EU population being overweight, but they also have a higher environmental impact.

In addition, the EU has a protein deficit, as it imports 19 million tonnes of crude protein every year, mainly to feed livestock (pigs and poultry).¹² Rebalancing diets towards more plant protein would thus contribute to reducing this protein gap, increasing food security and the resilience of the EU food system.

When trying to diversify protein sources in their diets, consumers should be advised to favour minimally processed foods such as (wholegrain) cereals and legumes. Yet because they bring convenience, plant-based alternatives to meat and dairy can also play a role – but they need to improve in terms of their composition, availability and affordability.

⁵BEUC, One bite at a time: consumers and the transition to sustainable food, An analysis of a survey of European consumers on attitudes towards sustainable food, June 2020.

⁶ https://curia.europa.eu/jcms/upload/docs/application/pdf/2024-10/cp240168en.pdf

⁷ https://proveg.com/nl/blog/plantaardig-boodschappen-doen-loont/

⁸ BEUC, One bite at a time: consumers and the transition to sustainable food, An analysis of a survey of European consumers on attitudes towards sustainable food, June 2020.

⁹ https://www.presseportal.de/pm/81399/5756012. Accessed on 08.10.2024

¹⁰ European Commission (2023). Drivers of food security. SWD(2023) 4 final.

https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220104-1

¹² https://agriculture.ec.europa.eu/farming/crop-productions-and-plant-based-products/cereals/reducing-plan-protein-deficit-eu_en#diversifying-sources-of-feed-protein

¹³ Hristob, J., Tassinari, G., Himics, M., Beber, C., Barbosa, A.L., Isbasoiu, A., Klinnert, A., Kremmydas, D., Tillie, P. and Fellmann, T., Closing the EU protein gap – drivers, synergies and trade-offs, Publications Office of the European Union, Luxembourg, 2024, doi:10.2760/84255, JRC137180.



Member States should factor in environmental impacts of food choices in their **national food-based dietary guidelines** (FBDGs) and advise consumers to eat more fruit, vegetable, wholegrain cereals, and pulses, favouring minimally processed, local and seasonal fresh products.

At the same time, food companies should work on **reducing the level of processing and on improving the composition and taste** of plant-based alternatives to meat and dairy, including the bioavailability of key nutrients such as iron, calcium and B12, and the presence of potentially harmful substances such as soy isoflavones. Levels of salt, saturated fat, and added sugars should also be cut.

Retailers should strive to close - if not reverse - the price gap between plant- and animal-based foods. They should also **improve the availability, positioning and appeal of these products** so they become more attractive to consumers when shopping.

Following Denmark's example and as recommended by the Strategic Dialogue, the EU should **develop an EU Action Plan for Plant-Based Foods**, to promote the production and consumption of these products, whether pulses, cereals and vegetables, or more processed plant-based alternatives to meat and dairy.

The EU and Member States should **refrain from restricting the use of 'meaty' names for plant-based products** while ensuring these products are always clearly labelled as 'vegetarian' or 'vegan' in order not to mislead consumers.

Member States should **incentivise production of protein crops** for human consumption (chickpeas, lentils, beans) through their CAP strategic plans and **stimulate demand for products containing them** through fiscal measures, e.g. lower VAT.



