

# nutripro<sup>®</sup>

NESTLÉ PROFESSIONAL NUTRITION MAGAZINE

## A Different Kind of Dairy

Fresh takes  
for your café  
and kitchen

Meet the  
new plant-  
based dairy  
solutions







# A BOOMING *market*

Plant-based dairy is popping up everywhere

Once upon a time, animal milk was the only option for certain recipes. Today, that's no longer the case, and you can find plant-based dairy alternatives made from a variety of grains, nuts, and legumes. These versatile ingredients are making their way into breakfast foods, coffee, sauces, and even desserts like soft-ice and custards—and more people than ever are interested in trying or buying them—even if they're not following a vegan diet.

Consumers have lots of reasons for choosing these products, ranging from their own health to concerns about sustainability, climate change, and animal welfare to curiosity about something new. In this issue, we will explore what's driving this market, how the options differ, and what these products are made of. We will also provide tips for chefs and baristas who want to incorporate these ingredients into their recipes, along with ideas for talking about the new options on the menu.

Let's get started.





100% PLANT-BASED COFFEE  
DRINKS, DESSERTS, AND MAIN  
DISHES ARE IN DEMAND



"THE GLOBAL DAIRY  
ALTERNATIVES  
MARKET WAS  
VALUED AT  
**\$20.5 BILLION**  
IN 2020"  
AND WILL REACH  
**\$52.5**  
**BILLION**  
BY 2028<sup>1</sup>

## IT'S NOT JUST FOR VEGANS

Studies have shown that there are multiple factors behind the growing demand for plant-based dairy options.<sup>2</sup>

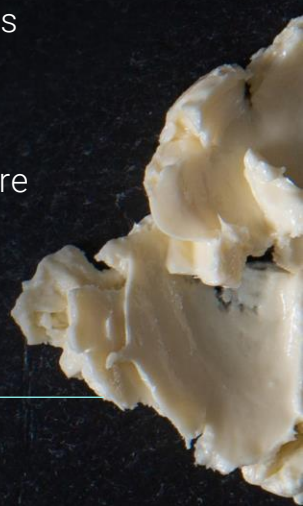
37% Health & wellness

21% Lactose intolerance or allergies

12% Taste

12% Environmental & animal welfare

7% Interest in trying new things



**62%** OF DAIRY  
CONSUMERS  
HAD PURCHASED PLANT-BASED  
ALTERNATIVES IN 2018<sup>3</sup>

## 3 REASONS TO OFFER MORE PLANT-BASED OPTIONS

- 1 Capture a new audience of vegans, vegetarians and flexitarians.
- 2 Keep existing customers who want to change their eating habits.
- 3 Accept larger groups by satisfying everyone in the party.<sup>4</sup>



# Something for *everyone*

Choices, choices! The arrival of so many plant-based products on the market is great news for chefs, baristas, and consumers because it means they can pick the right option for every situation. There's no one best answer. Instead, consider how products made with each of these sources compare when choosing what to offer your guests.

## NUTRITION FACTS

Samples arranged according to protein content.

Information is based on available databases and does not represent all products in the market.

Nutritional values per 100 ml<sup>9</sup>



<b>WHOLE COW'S MILK</b>	
<b>3.3g</b> PROTEIN	
60 kcal	3.2g Total Fat
<b>Major Food Allergen</b> Milk	

Established flavor and performance

<b>PEA</b>	
<b>3.3g</b> PROTEIN	
29 kcal	1.9g Total Fat
<b>Major Food Allergen</b> N/A	

Very neutral taste with same level of protein as milk and excellent foaming

<b>SOY</b>	
<b>2.6g</b> PROTEIN	
43 kcal	1.5g Total Fat
<b>Major Food Allergen</b> Soy	

Good quality protein, neutral flavor, and good foaming



# Flavor. Function. Nutrients. Sustainability.

So many options—how do you choose?

Taste and performance are always top of mind, but your final decision may come down to other factors, too. For example, sustainability is an urgent reason to use more plant-based products. The global food system is responsible for a third of global greenhouse gas emissions,<sup>5</sup> and unless people's habits change, the environmental effects of the food system could reach levels beyond the planetary boundaries that are safe for humanity by 2050.<sup>6</sup>

"A strong motivation for many people who drink plant-based milks instead of dairy milk is their potential benefits

for the environment."<sup>7</sup> However, even 100% plant-based products vary in sustainability. Farming each kind of crop takes varying amounts of water and land and releases a range of greenhouse gas emissions. There are tradeoffs for each choice, but overall, peas and soy score well on sustainability measures and have an established pipeline to the market, and chickpeas and fava look favorable for developing future products. Growing peas and other legumes that fix their own nitrogen in the soil can also limit the use of chemical fertilizers, helping to contribute to a more stable climate.<sup>8</sup>

But there are still other factors that may influence your choice. Dietary diversity, nutrient adequacy, and balanced energy intake are equally important. And while they don't apply to everyone, food allergies and sensitivities are an important safety consideration, too. Finally, the accessibility and affordability of all options will play into your final decision because if you can't find or afford an ingredient, it won't end up in your kitchen or dining room.



## OAT

**1.3g** PROTEIN

50 kcal | **2.1g** Total Fat

**Major Food Allergen**  
N/A

Creamy texture with an oat flavor and touch of sweetness

## COCONUT

**1.3g** PROTEIN

75 kcal | **7.5g** Total Fat

**Major Food Allergen**  
Tree nut - Coconut

Exotic taste and creamy texture that won't water down coffee

## ALMOND

**0.6g** PROTEIN

15.0 kcal | **1.1g** Total Fat

**Major Food Allergen**  
Tree nut - Almond

Popular for its distinctive, nutty taste

## RICE

**0.3g** PROTEIN

47 kcal | **1.0g** Total Fat

**Major Food Allergen**  
N/A

Appreciated for its neutral taste



# WHAT ELSE IS IN THE *mix?*

## EXTRA INGREDIENTS THAT MAKE PLANT-BASED PRODUCTS PERFECT

When plants are the key ingredient, they may need a little help to perform up to your standards. That's why many plant-based products include ingredients to enhance the flavor, mouthfeel, consistency, or other factors that you expect—and that your customers demand.

## Protein

Some protein is found naturally in the plants used to make these products, like soy and peas. In addition to being an important nutrient, it also helps gel yogurt and cheese and interacts with enzymes to create specific tastes and textures. Beverages formulated for baristas usually contain additional protein to help them perform up to coffee house standards.



## Foaming Agents

Some products, such as pea- or oat-based beverages, create foam easily when subjected to steam or frothing. Other ingredients may also be added to help produce foam and froth in foods and beverages.



## Stabilizers and Emulsifiers

Xanthan gum (derived from microbial fermentation), gellan gum (derived from microbial fermentation), guar gum (a natural extract from guar beans), or carrageenan (a seaweed extract) may be added to stabilize and thicken these products, creating a creamy texture. Soy and sunflower lecithin are also used for emulsifying, and other plant products can be used as buffer systems.





## Fat/Oil

Fat is an essential component of dairy, responsible for its creamy appearance, texture, and mouthfeel. However, since it's lacking in many plants, fats and oils from canola, sunflower seed, olives, soybeans, or coconut may be added to products to recreate the experience that people expect.



## Sugar

Plants contain varying amounts of natural sugars which can affect the sweetness of the final product. Cane sugar may be added to some plant-based products to recreate the sweetness of lactose naturally found in cow's milk, reduce bitterness, or simply help the plant ingredients blend more easily so their flavor does not overwhelm a recipe.



## Flavors

The presence or absence of strong flavors can both work in a product's favor. For example, the rich taste of coconut is a plus in some dishes, while neutral flavors are preferred when you want other ingredients to shine. Some products also contain vanilla, chocolate, or other flavors to enhance their taste.



## Nutrients

Some of the plants used to make these products may be lacking in some vitamins or minerals needed for human health. For that reason, they may be fortified with key nutrients such as vitamin B12, iron, calcium, or vitamin D, which are lacking in many people's diets.





# FUNCTION COMES *First*

## Plant-based alternatives in the kitchen

For the best results when using plant-based dairy options in your recipes, consider the following tips:

### For savory applications

1. Unsweetened, unflavored plant-based ingredients let the other flavors in your dish shine.
2. Products with little to no aroma are a good match for savory dishes.
3. Coconut milk blends well with curries and some Asian dishes.
4. A 25% or 35% fat product should be a versatile choice with good emulsifying and binding qualities.

### For sweet applications

1. Look for plant-based alternatives to sweetened condensed milk, evaporated milk, and sweetened whipping cream.
2. Try soy, which is an effective binder in baked goods due to its high protein level.
3. If creating a vegan recipe, remember to replace the butter with a plant-based option and find a substitute for the eggs.
4. Lower baking temperatures and slower cooking can help prevent splitting.



## DID YOU KNOW?

You've probably heard of "non-dairy" products, which mimic the taste and texture of dairy but are mainly made from vegetable fat and milk proteins. However, these are not the same as 100% plant-based products, which contain no ingredients made of or by animals.





### What the chef wants

*“Functionality, versatility, and predictability are key in cooking. As a chef, I don’t want to change my cooking habits or skills—I just want these ingredients to perform like cow’s milk. In other words, they should look and feel as creamy as cow’s milk and keep their smoothness instead of splitting or getting watery when blended or heated. As long as the performance and taste are right, I can trust them in my recipes without having to make more adjustments.”*

## Crash Test Kitchen

Before using a new plant-based product in your recipes, subject it to a thorough “crash test” to make sure it doesn’t split or get watery:

- Bring it to a boil and check consistency.
- Add it to a tomato base to see if it handles acidity well.
- Add spices to see if it handles spiciness well.
- Make a sauce or soup preparation and leave it for a few hours in a bain-marie to see if it holds up to heat and holding time.
- Try a baking application like a potato/vegetable gratin or a quiche.

## Fitting a budget

Due to the costs of processing, some of these ingredients may cost more than their animal milk counterparts. When adding them to the menu, look for ways to maximize your return through strategies like offering smaller portion sizes, promoting dishes as premium health-driven choices, making them extra appealing and indulgent, and highlighting them on the menu.

## Stir up something new

### REPLACE COOKING CREAM WITH A PLANT-BASED OPTION FOR:

- Desserts
- Savory dishes like gratins, sauces, stews, and soups

### REPLACE WHIPPING CREAM WITH A PLANT-BASED OPTION FOR:

- Cheesecake, chocolate mousse, tiramisu, lemon pie
- Sweet beverages like shakes, hot chocolate, or smoothies

### REPLACE ALFREDO WITH A PLANT-BASED OPTION FOR:

- Comfort foods like pasta bakes and noodles
- As a sauce for a main entrée
- On pizza
- With appetizers or sides, in place of butter or as a dipping sauce





IN THE CAFÉ,  
IT'S A MATTER OF  
*taste*



# How baristas balance flavor + function

Cooking with plant-based alternatives is one thing, but using them in coffee-based drinks is another. When it comes to meeting customers' expectations for smooth, creamy, and delicious beverages, what are the best practices?

## What the barista wants

*"In coffee beverages, there's no room for off-flavors to hide, so the taste of a plant-based alternative needs to complement the coffee instead of clashing or overwhelming it. At the same time, I expect the creamy, velvety texture that cow's milk brings to mixed coffee drinks. And of course, it needs to produce durable, fine-textured micro-foam that's worthy of my best latte art."*

## Try these expert tips in your café:

1. Store plant-based ingredients cold (37-39 °F), and shake them very well before mixing with coffee. They are less homogenized than cow's milk.
2. For a balanced taste profile that pairs well with coffee, choose products such as oat or pea which are naturally sweet but will not overwhelm the flavor.
3. Always taste and evaluate the sweetness of products before adding them to coffee. For best results, taste them both cold and after steaming. You can then adjust the sweetness of the blended beverage.
4. To avoid curdling plant-based products, warm them first, then slowly add hot coffee.
5. When perfecting your recipes, taste the beverage after you blend it to see if you need to add sugar.
6. If you are promoting plant-based drinks as vegan, make sure ALL ingredients are vegan. For example, since honey is made by bees, it is not vegan.

## Mastering the Microfoam:

For optimal results, add LESS air volume in the beginning, and add it very FAST to give yourself the longest time possible for swirling the liquid. This action causes big bubbles to break down into microfoam, so the longer you can swirl, the nicer the microfoam will be.



# SOUNDS

*delicious*





# SIX TIPS FOR THE MENU

If you're introducing new foods and beverages to your menu, you want your guests to be excited about them right away. Here are a few ideas to get your new offerings off to a successful start.

## 1. Romance the language!

Once you've perfected your recipes, describe them in a way that's too appealing to resist. Words like creamy, rich, smooth, and frothy can help convince guests that they will be satisfied.

## 2. Consider every category.

Sure, they're easy to add to smoothies and coffee. But how about dips, sauces for entrées, or creamy desserts?

## 3. Plant-based products are not a compromise.

So treat them as an exciting new ingredient that more guests are eager to try—not just a substitute for vegans or lactose-intolerant diners.

## 4. Make the switch easy.

By creating plant-based versions of familiar dishes, you can encourage regular guests to try them and help vegan diners to feel in sync with their eating partners.

## 5. Integrate them on the menu.

Remember, people may choose a plant-based dish or beverage for many reasons, so don't segregate them in their own section.

## 6. Be proud to point them out.

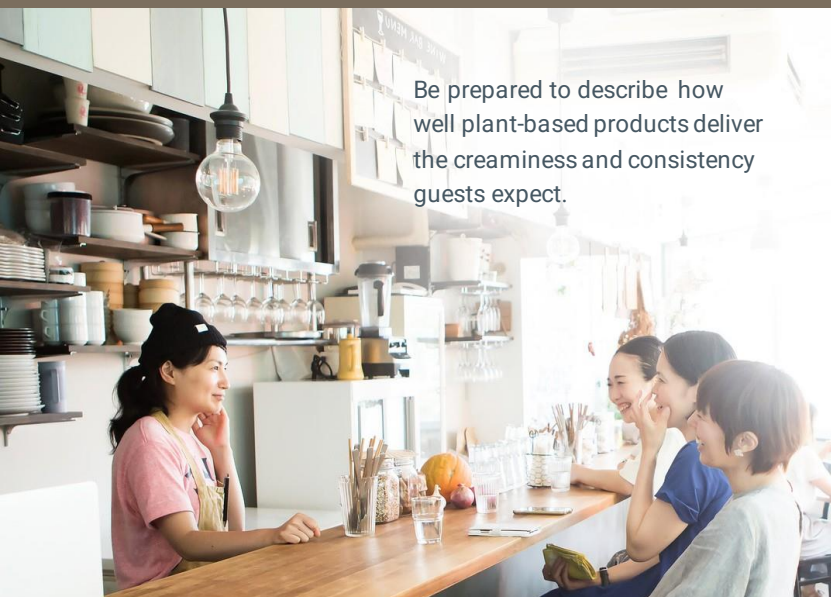
Remember to mark these options as 100% plant-based or vegan (as long as all ingredients in the dish qualify) so guests will feel confident choosing them.





# PROMOTING *plants* IN THE DINING ROOM

## Educate Your Staff



Be prepared to describe how well plant-based products deliver the creaminess and consistency guests expect.



Remind your staff to ask guests about allergies when serving beverages or dishes with soy, gluten, or nut-based ingredients.

Make sure servers know which products you use in your dishes and beverages and how their flavors may differ from each other and cow's milk.



## Spread the Word!

Remember, consumers are looking for more plant-based options, so promote them visibly. Otherwise, you run the risk of losing customers who are specifically seeking these items.



Use newsletters, social media, or signs and table-cards around your restaurant to promote your new items and explain why you've added them. Values statements like these may attract new customers or increase the loyalty of those you have.





## Serving Up Satisfaction

Plant-based products have been on the market for a while now, so many of your guests have probably already heard of them. This growing awareness (and in some cases, a preference for plants) will make it easier for you to promote new recipes. Here are a few ideas to help you plan a successful rollout.

## Show & Tell

A picture (or a display case) can be worth a thousand words. If guests can see how amazing dishes made with these ingredients can be, they'll be tempted to give them a try!



Draw attention by creating posters for your waiting area, adding promo cards to the table, or featuring plant-based menu items in online menus and social media.

## Try It, You'll Like It



If you have self-serve stations, include a variety of plant-based mixers so guests can experiment by themselves.



Offer a sampler of smoothies, coffee drinks, or desserts made with plant-based dairy products to help create acceptance.

## Sources

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The advent of new ingredients is always an exciting time for the food industry. With consumer demand for plant-based foods and beverages on the rise, now is the perfect time to begin experimenting and searching for ways to add them to your repertoire.



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