Nutrition Meets Sustainability
Feeding Flexitarians
A Taste for Plant-Based Proteins

Make it Sizzle
The New Plant-Based Meat Alternatives
WHAT’S Cooking?

SURPRISE, IT’S NOT MEAT.

It’s not often that the industry gets to welcome a whole new category to the menu. But that’s exactly what’s happening with the latest plant-based alternatives to meat.

In response to a rising demand for sustainable, healthy ways to eat, plant-based proteins are popping up on menus all over the globe. And unlike traditional tofu, tempeh, or even early meat alternatives, these new foods capture the taste and texture of real meat and poultry, making them a hit with all kinds of consumers, from vegans and vegetarians to flexitarians.

These advances come as many consumers are looking for ways to reduce their meat consumption. Whether they’re changing their eating habits out of concern for their health, the environment, animal welfare, or other reasons, people are actively looking for options when they’re dining out. While this trend began in fast food, these products are becoming widely accepted in different channels around the world.

It all adds up to create an exciting opportunity for you. To help you make the most of it, we’ve put together a primer on these new products, who’s eating them and why, and how you can make the most of them to satisfy this new demand. Dig in.

History of Meat Alternatives

People have been using grain to make the center of plate for a long time, but the products that recreate the look, taste, and texture of beef or chicken so closely are more recent cooking innovations.

- Soy-based tofu is invented in China by the Han dynasty. (535 AD)
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- Tempeh is made from fermented soybeans in Indonesia. (1877)
- Dietitian Sarah Tyson Rorer publishes Mrs. Rorer’s Vegetable Cookery and Meat Substitutes in the US. (1902)
- John Harvey Kellogg develops meat replacements from nuts, grains, and soy to feed patients in his vegetarian sanitarium in the US. (1902)
- Marushima Shoyu K.K sells wheat gluten as “seitan” in Japan. It is imported to the US seven years later. (1985)
- Soy schnitzel is created in Israel and mushroom-based meat alternatives in the UK. (2015)
- Use of wheat gluten as protein is recorded in a Chinese agricultural encyclopedia. (200 BC)
- John Harvey Kellogg develops meat replacements from nuts, grains, and soy to feed patients in his vegetarian sanitarium in the US. (1877)
- Marushima Shoyu K.K sells wheat gluten as “seitan” in Japan. It is imported to the US seven years later. (1985)
- Soy schnitzel is created in Israel and mushroom-based meat alternatives in the UK. (2015)

1. Eat Lancet, 2019
2. soyinfocenter.com
DID YOU KNOW?
The main reasons behind the rising demand for plant-based foods are following a healthy diet, climate concerns, animal welfare, food restrictions, and religion.
HERE COME THE FLEXITARIANS

Vegetarians and vegans aren’t the only ones looking for plant-based proteins. Increasingly, many people around the world are following a flexitarian diet, which means they actively choose to eat less meat. Here are some of the reasons that may influence their dining choices:

**Ryan**
**Fitness Junky | Age: 30**
Dines out 3 times per week at both fast food and fine dining restaurants
My doctor wants me to eat less meat and lower my cholesterol. But I still want to get the protein I need for building muscle. Eating plant-based alternatives instead of beef or pork is an easy way for me to change my diet without rethinking everything I eat, and I like the way they leave me feeling full after a meal.

**Jorge**
**Trend-setter | Age: 23**
Dines out 4 times per week at fast food, casual and bistros
I keep hearing about meat alternatives and how much they look and taste like real meat. People are saying they can’t even tell the difference! Now I’m curious. I want to see what everyone’s raving about, so I’m going to order one next time I see it on the menu.

**Piper**
**Animal-lover | Age: 16**
Dines out twice per week at fast food restaurants
I grew up eating meat, but I don’t like the way cows, pigs, and chickens are treated on some farms. By eating less meat, I can send a message to the industry that I don’t support poor living conditions for animals.

**Giselle**
**Mom | Age: 45**
Dines out once per week at casual family restaurants
My daughter recently became a vegetarian because she’s concerned about climate change. However, the rest of our family still eats meat, and we don’t want to be limited to eating at vegetarian restaurants every time we go out together. If we can find a place that offers both plant-based proteins and real meat on the menu, it’s easier for everyone, and each of us can order what we like.

**Wei**
**Activist | Age: 18**
Dines out once per week at fast casual restaurants
I know that animal farms are hard on the environment because they use so much land and water and create harmful runoff and emissions. So I’m doing my part to protect the earth by eating less meat. With so many restaurants adding plant-based sausage and burgers to their menus, it’s easy to make that switch and stick to my commitments.
GREEN... AND GROWING

FLEXITARIANS ARE A LARGE AND GROWING POPULATION.

44% OF CONSUMERS WOULD LIKE MORE RESTAURANTS TO OFFER PLANT-BASED MEAT ALTERNATIVES.

69% OF FLEXITARIANS ARE REDUCING BEEF

60% ARE REDUCING PORK

34% OF CONSUMERS OCCASIONALLY CHOOSE PLANT-BASED PROTEIN WHEN DINING OUT OF HOME FOR BETTER HEALTH

25% BECAUSE IT’S BETTER FOR THE ENVIRONMENT

GLOBALLY, PEOPLE ARE TRYING TO INCREASE THEIR INTAKE OF PLANT-BASED PROTEIN

25% USA

20% UK

16% GERMANY

44% MEXICO

37% CHINA

MEAT ALTERNATIVES ARE BIG BUSINESS

$1.4 BILLION IN 2019

$2.7 BILLION IN 2023 (PROJECTED)

POLLUTION COMPARISON

PRODUCING A 115G STEAK IS THE SAME AS DRIVING A SMALL CAR FOR 23.6 KM.

BUT A 115G PLANT-BASED MEAT ALTERNATIVE IS LIKE DRIVING JUST 2.4KM.

4. Nestlé Professional plant-based menu, 2018
5. Dataessentials plant-based entry, 2018
6. Globaldata, 2018
7. Globaldata survey, 2019
8. sciencedaily.com/releases/2016/04/160404170427.htm
Typically made from soy, peas, wheat, or mushrooms, these products look and taste similar to real meat, making them easy to substitute and integrate into favorite recipes. Using only plant-based ingredients, it’s possible to create the look, taste, texture, cooking properties, and even the key nutrients found in real meat. Let’s take a look at the main ingredients in plant-based meat alternatives.

**PROTEIN**
The proteins in these foods may come from soy, peas, mushrooms, potatoes, fava beans, brown rice, or other sources.

**COLOURING**
Natural pigments from vegetable extracts, spirulina, and malt mimic the red hues of beef and pork and brown when cooked.
**JUICINESS**
Plant-based oils may be added for juicy texture, flavour, and the appearance of marbled fat.

**BINDERS**
Egg whites can be used in non-vegan foods, but methyl cellulose (made with vegetable fibre) is an effective binder for vegan options.

**FLAVOUR**
Yeast extract may be added to enhance the savoury umami flavours.

**ALLERGY ALERT**
Some meat alternatives may contain food allergens, so be sure to check with guests before serving.

**NUTRIENTS**
Some recipes contain vegetables, nuts, and seeds, along with the vitamins, minerals, and dietary fibre they provide. Others even have vitamin B12, iron and zinc added to more closely resemble the nutrient profile of meat.

**CHEF’S SECRETS**
- Choose products that don’t contain artificial colours. Instead, pick products with pigments from vegetable extracts.
- Try to provide a complete protein. Soy offers all essential amino acids in sufficient quantities, but sources like pea should be combined with rice or wheat.
- Look for products made with 100% plant sources.
- Choose the products with the shortest list of ingredients.
CULINARY TIPS

STOCK YOUR KITCHEN
When thinking about how to use these products, consider the application. Do you want to substitute directly for an item traditionally made with meat (such as a burger, sausage, or schnitzel) or just add minced protein to a sauce, omelet, etc.? Thanks to the many different formats available, you have lots of options.

PREP & SETUP
From a chef’s perspective, the great advantage of these products is that they are very simple to use. Kitchen organization can be pretty similar to your process for meat. However, avoid cooking these products on the same hob where you cook meat if you plan to offer them as vegetarian/vegan options.

COOKING & SERVING
Keep in mind that not everyone has tried meat alternatives before, so customers might be more critical than they are with “familiar” dishes. Just as you would with meat, don’t hesitate to add flavours, seasoning, and herbs to complete and enhance the dining experience. You can also add mushrooms and onions to increase the umami flavour. Let your creativity speak!
DID YOU KNOW?
In the last 4 years, fast-casual menus have seen a 32% increase in plant-based protein options and 65% more vegan options.9

5 REASONS TO USE MEAT ALTERNATIVES IN YOUR KITCHEN

1. They give you an easy way to satisfy the growing number of consumers who want something besides meat.
2. They’re quick and easy to prepare.
3. Their wide range of choices provide a blank slate for your creativity.
4. They contain protein and fibre, which helps nourish your consumers and satisfies their hunger.
5. Their familiar look and flavour lets you swap them into standard dishes without overhauling your recipes.

9. Dataessentials, 2018
Where can you use meat alternatives? Almost anywhere! With forms ranging from burgers to grounds to filets, these foods lend themselves to all different styles and levels of cuisine. Whether you specialize in street food or fine dining, if you can make it with meat, you can make it with plant-based meat alternatives.

Plant-based Chili Sin Carne
Thai Green Curry

Mixed Salad with Plant-based Schnitzel

Plant-based Shepherd’s Pie

Spaghetti with Plant-based Meatballs

Stir Fry
Meatless proteins only recently came on the market, so you may need to take some extra steps to help your staff and guests learn more about them. The following tips can help you introduce these in-demand foods to your restaurant, anticipate some of the questions you may hear, and serve them to your guests with confidence.

I need my protein.
Most of these products are complete proteins, like soy or blends such as pea and wheat, offering all the essential amino acids and about the same amount of protein found in real meat. For a high quality protein profile, pick products containing soy, or protein blends such as pea with brown rice or pea with wheat.

I've heard that soy can cause health problems.
Soy is a common food since ancient times, and no available studies have linked it to specific health issues for humans. It may even help lower cholesterol and the risk of heart disease.

Are plant proteins enough to fill me up?
Yes. You won’t be hungry after eating these types of products. Because they’re made of plants, these foods usually have a higher fibre content than meat, and that helps people feel full.

Some products specify that they don’t contain GMOs. What do they mean?
GMOs are usually the result of selecting a desirable gene from a microorganism and placing it into a plant (like soybean, cotton or corn). The process has been widely used in global agriculture to improve crop yields by making them more resistant to insects, weeds and diseases.

Regulatory agencies around the world including the European Food Safety Authority (EFSA) have concluded that authorized Genetically Modified (GM) crops and food ingredients derived from them are safe for human consumption. However, their use remains controversial. That is why most meat alternatives specify that they don’t contain ingredients derived from GMO crops.

These foods are highly processed. How healthy can they be?
The term "processed foods" is usually negatively perceived. However, foods are processed for many reasons, including making raw ingredients safer, more palatable, and easier to digest.

Food processing can also minimize food safety risks, reduce food waste, increase shelf-life, increase the bio-availability of nutrients in some products, and create flavours.

Food processing, either conducted at home or in an industrial environment, may decrease the content of certain heat-sensitive vitamins. But the food industry minimizes these losses through controlled and often very fast processes and by restoring the original vitamin content after heat exposure.

Finally, processing can also increase the nutritional value of foods. For example, it enables us to eliminate anti-nutritional factors in pulses or to increase the digestibility of starch.

In the case of plant-based meat alternatives, processes are what allow us to achieve a highly palatable texture, flavour, and variety. Without advances in food technology, it wouldn’t be possible to provide a nutrient profile and experience so similar to meat, which is what many flexitarian consumers want.
SPEAKING OF PLANT-BASED
MEAT ALTERNATIVES

**DO**

Use “plant-based” descriptions on your menu. Your diners have heard of plant-based foods and are eager to try them!

Talk about the taste and texture, describing them as “delicious” and “juicy.”

Tell guests if these foods are vegan, non-GMO or gluten free since some diners are actively seeking these choices.

Promote high protein and zero cholesterol levels of these foods (if mentioned on the label).

**DON’T**

Don’t use words like “fake” or “like meat,” which may be unappealing to your guests.

Don’t forget to ask your guests about food allergies and check the ingredients carefully.
From the environment to health concerns to simple curiosity, there are many reasons behind the recent rise in flexitarians. And just in time for this growing trend, there’s also a brand new category of flexitarian-friendly food that’s versatile, easy to work with in the kitchen, and good to eat.

From a chef’s standpoint, this is an exciting time to add something new to your repertoire. Make room for plant-based meat alternatives, and let’s get cooking.

Six Steps to Success

Since demand for these products is already high, it’s easy to plan a successful launch and create buzz.

Spread the Word
Diners in your area are probably already looking for meat alternatives, so make sure they know you offer them! Consider adding signage in your restaurant and/or using social media to call attention to new offerings.

Introduce Foods Gradually
Try a two-step plan where you begin by modifying your customers’ favorite dishes, such as chili sin carne, spaghetti bolognaise, etc. Start with what your customers crave and show them how delicious it is, even as a plant-based option. Then branch out into more creative plant-based dishes for your customers to try.

Highlight on the Menu
List plant-based meat alternatives alongside meat-based proteins in your menu so diners can find them easily and understand their options. Consider adding a statement like, “Make this dish vegetarian/vegan by choosing...”

Make Dishes Dazzle
Since it’s a brand new category, some customers might approach these foods with a more critical attitude. You can break down these barriers and win them over by pulling out all the stops to make dishes made with meat alternatives visually appealing and delicious.

Train Your Staff
Educate your servers about which dishes can and cannot be made using meat alternatives. Prepare them to answer questions about the taste and texture of these foods and how they compare to real meat, and remind them to ask guests about food allergies before serving.

Offer Samples
Consider introducing these items to diners with a complimentary appetizer. Think quesadillas with crumbles, nuggets and dip, or flatbread with toppings. You might also plan a special tasting event for new menu items.

The topic of plant-based meat alternatives is very high in the agenda of regulators. Please be aware that the term “plant-based” could be regulated at some point, and guidelines may be country-specific. Stay informed with your local regulatory body.