



HOP



A GUIDE TO CRAFT BEER AND FOOD PAIRING



A MATCH MADE IN FOOD *heaven*

The 21st century has brought about a huge shift in the way people think about the food and drink they consume both at home and when dining out.



Eating and drinking has become an art form as attested by the myriad of food-based shows, literature, exciting new products and menus which are available, clearly demonstrating both the breadth of knowledge and creativity around the world when it comes to food and drink.

Part of this evolution has been the 'craft beer' movement, which started in the early 1980s in America. Local breweries began appearing which challenged the stance of the Multinational Companies. These locally based breweries had three common hallmarks:

FLAVOUR • INDEPENDENCE • COMMUNITY

Today there are over 5000 breweries in America and over 2000 in the UK which are serving an ever-growing and demanding public. This 'thirst' for flavour and taste means these breweries are continually working on their craft.

Alongside this, the humble potato (*Solanum tuberosum*) has undergone a transformation of its own. Linked to the family of plants which include tomatoes, aubergines, chilli peppers and petunias, it was first cultivated in the region of modern Peru and Bolivia between 8000 and 5000BC. The potato is now one of the top five food crops grown in the world. With a myriad of varieties and products available, the potato has firmly established itself as an essential part of any menu.



THE BEER

Beer styles are terms used to define both quantitative (colour, alcohol, bitterness levels) and qualitative aspects (aroma, flavour and mouth feel) of a beer.

They allow a brewer to express what the beer drinker is likely to experience in only a few short words, e.g. Witbier should immediately make you think of a hazy straw-coloured effervescent beer with aromas of coriander, spice and clove.

While style guidelines themselves can be quite strict (IPAs have over 10 sub-categories!) they generally only apply to judging competitions. Brewers may create a beer to specific style guidelines or something completely different. As a starting point brewers will often take traditional beer styles from countries like England, Germany and Belgium and add their flair by altering ingredients and the brewing processes. This ongoing experimentation means new beer styles are constantly evolving. However, to be denoted as a beer style the beer must have a background of being brewed by a number of breweries over multiple years (not simply an overnight trend that comes and goes); ever heard of a New England IPA – is it a style?

The Ingredients

Water: The water provides a blank canvas for the brewer to construct the beer upon although, different levels of minerals such as sulphate and chloride have an impact on bitterness and mouth-fullness.

Malt: The malt in the beer provides colour (from a pale straw to dense black), flavour and aroma (from biscuit to coffee), and the fermentable sugars for the yeast to consume.

Yeast: The yeast transforms the sweet sugary solution known as wort into beer. The yeast doesn't just convert the sugars into alcohol and carbon dioxide but also provides aroma and flavour compounds such as butterscotch and white pepper.

Hops: The hops provide bitterness, flavour and aroma (from a resinous pine to lemon thyme) in the beer.

Around the 16th century hops replaced gruit (a mixture of herbs and spices) in brewing. Around the same period in Britain a distinction was made between ale, which was unhopped and beer, which was brought in by Dutch merchants, which was hopped.





Some hops are better for aroma while others are better for imparting bitterness. With several hundred varieties to choose from, they usually fall into three main categories:

Aroma

These hops often have lower levels of alpha acids (bitter compounds) and high oil profile associated with strong aromas. Aroma hops are used late in the boil, whirlpool or during/after fermentation.

Bitter

Hops used to impart bitterness in the beer have a higher alpha acid percentage. They are used early in the boiling process to ensure the maximum amount of bitterness is extracted and converted (alpha acid to iso-alpha acid). During this long boil time, any aroma that the hops might have imparted will be boiled off.

Dual-purpose

Some hops have the qualities of both aroma hops and bitter hops and are therefore used for both and are those behind many of the popular single-hop beers.

The four key ingredients of beer provide the framework for brewers to convey their artistry and scientific know-how; with this they can express an impressive number of aromas and flavours from banana and grapefruit to chocolate and toffee.

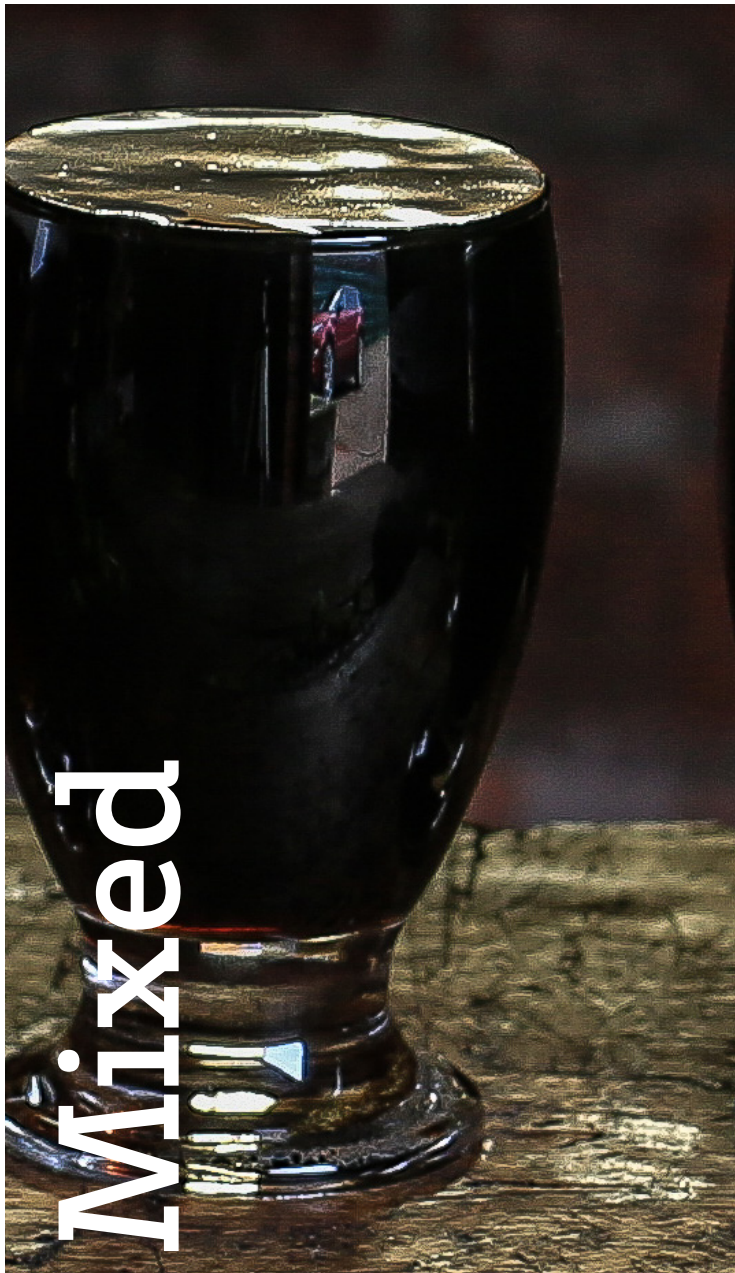
Categories of Beer



These beers are fermented with *Saccharomyces cerevisiae* at warmer temperatures (around 21°C) for 3–5 days. This category has the widest variety of beer styles ranging from Pale Ales and Stouts to Witbiers and Saisons. The wide variety of ale yeasts available allows brewers to create beers with bold characteristics, showing off the hops, malt or yeast itself.



These are beers fermented with *Saccharomyces pastorianus* at cooler temperatures (around 12°C) for 7–14 days and subsequently stored for 14–90 days. Styles using lager yeasts are not all golden, crisp and crystal clear. This category includes beers like Schwarzbier (a dark beer with roast malt character). The limited varieties of lager yeast available were developed to lend themselves to produce subtler clean, crisp beers compared to the ale yeasts.




Trying out different beers is an enjoyable experience. Your taste buds not only get to travel the world, but they can experience the history of a beer enjoyed by generations before, as well as being wowed by the range of flavour complexity and nuances a brewer has placed in your glass!

A catch-all for beers fermented with multiple types and variants of yeast and bacteria. Their production method varies greatly, however, is generally done at ambient temperature and can take anywhere between a couple of days to several years to be complete. Beers like a Flanders Red Ale take two years to produce with a finished sour taste of vinegar.



POTATOES





For over **50** years we have been an industry leader and innovator in the manufacturing of Frozen Potato Products in Great Britain.

We have **five** McCain factories across the UK, including our head office in Scarborough, North Yorkshire. As well as a strong network of farmers who grow our **production crop**, we also **manage our own seed potatoes with our team in Montrose, Scotland, working with specialist seed growers.**

We grow McCain bespoke potato varieties to deliver the best quality, yield and taste, and select them for their dry matter, shape and skin set and pair their attributes with our chips. Longer potatoes mean longer chips, so our customers have the benefit of more portions, more profit and deliciously tasty British chips on their menu 365 days a year.

It all starts with seed potatoes which are grown for us by around 50 specialist seed growers in the north and east of Scotland. **McCain** is the UK's largest purchaser of British potatoes, buying approximately 15% of the annual main potato crop, which is grown for us by over 250 Red Tractor certified farmers.

Throughout the year our agriculture team and fieldsmen work in close partnership because successful potato farming requires extensive knowledge, skill and commitment - from choosing a field with suitable soil, through to the planting in early April, monitoring the crop, and harvesting in early November.

Before the harvest, test digs are made, and only when the potatoes are ready are they lifted. Around 30% are sent from the field into the factories, and the rest are sorted and stored where they are continually monitored to ensure the crop is in optimal condition until it is used.

The right sugar levels are the key to a golden chip, so we test and analyse each batch of potatoes by chopping, frying and checking cooked colour. The right levels will give us a beautiful golden finish; too much sugar will result in a potato that quickly browns and too little results in a pale and unappetising chip.

To make our chips we simply wash, peel and cut the potatoes, then lightly fry in sunflower oil (some of our products have light coatings or flavourings which are added before frying), and then we freeze them, which acts as a natural preservative. We make our chips in much the same way that chefs have always done, just on a much larger scale, which means you can cook and serve the portion size you need without the waste and prep-time.

We hate waste. We send zero waste to land fill and we're always looking for further improvements.

The CRAFT OF PAIRING

Food pairing is growing in popularity, and now more than ever consumers are 'hungry' for new experiences and taste sensations.

The wide range of McCain products, such as chips and fries, are the perfect accompaniment to these craft beers and offer chefs a chance to get creative and pair their dishes with a suitable companion.

This is not yet a science, but an art backed by experience and knowledge, the aim of which is to make the individual components interact and create an enhanced overall experience. Due to the vast variety of flavours and sensations out there, it is important to always consider the whole dish and beer being served and not just the primary components of each.





PAIRING STEPS

1. Look at the main ingredient of the dish and take into consideration the cooking method.
2. Identify the secondary ingredients, such as herbs, spices and sauces, used with the other components of the dish, such as vegetables.
3. Check whether any of these secondary elements become a main part of the taste experienced when combined with the main ingredient.
4. Select a beer that matches the intensity of the dish that will neither overpower nor disappear into the dish.
5. Think what you want the beer to achieve, e.g. should it complement the dish's flavours and aromas, should it contrast to create a different experience, or should it cut through the components to provide something new?!

PAIRING PRACTICES

Pairing primarily consists of three possible interactions as detailed below.

Consideration must also be given to the intensity and depths of flavours e.g. match delicate dishes with light beers and strongly flavoured dishes with more assertive beers.

- **Complement:** The most common and successful pairings work by finding harmonies; identifying complimentary flavour and aroma elements that tie the beer and dish together i.e. the caramelisation reaction that occurs when torching the sugars atop a crème brûlée also occurs when crystal malts, which links the flavours.
- **Contrast:** More difficult to master, this type of pairing focuses on the primary flavour profile of the dish and beer e.g. a sickly-sweet desert could be contrasted with an intensely acidic beer to balance out the flavours thus creating a heightened and more balanced experience for both.
- **Cut:** Using beer to cleanse away the flavours from the dish resets the palate back to neutral. The use of highly carbonated beer can leave the palate feeling refreshed, awakened and ready for the next bite. High bitterness levels in a beer can cut through the oil and fats in a dish.

Menu CLASSICS

The right combination of food and beer can be the difference between a good meal and a great meal. We've put together a selection of classic meals and recommended a suitable beer to accompany it. Recognising how these different elements work together is vital in ensuring that your customers are both satisfied and keep coming back for more!



1

Steak & Chips

*Prime fillet steak with
**McCain Signatures Gastro
Chips** served with a malty,
full bodied beer.*

This intense and flavoursome dish should be matched with a robust and comparable beer. Add to this **McCain Signatures Gastro Chips**, whose blown edges become crispy and golden during the cooking process, will add a depth of flavour and complexity to the overall dish. Other factors to consider are how the steak is cooked e.g. grilled, pan fried, sous vide, and what sauces are on offer to complement the meal.

McCain Signatures Chips:

- ✓ British Crop
- ✓ Home-made Style
- ✓ Melt-in-the-Mouth Texture
- ✓ Light Golden Highlights



Peppercorn & English Porters

Porter has a restrained intensity with roasted flavour and bitterness, which complements the peppery undertones provided by the sauce.



Diane & Altbier

A smooth, amber-coloured German beer whose bitterness and malty body compliment the rich sauce not only providing more depth to the dish but also add a layer of complexity to the beer itself.



Mushroom & American Brown Ales

A malty, hoppy beer with slight caramel undertones whose accentuated hop flavour and aroma complements and enhances the sauce, while providing some complexity with the increased bitterness.



Blue Cheese & Belgian Dubbels

Complex Trappist Ales with a deep reddish colour, moderately strong flavour and rich and malty taste, whose higher alcohol content and carbonation cuts the fattiness and richness of the sauce, while the malty sweetness and dry finish, complements the steak.



Béarnaise & Scotch Ales

A rich, malty, caramel-sweet beer with complex secondary malt and alcohol flavours which complement the vinegar undertones and creaminess of the sauce while the richness of the beer matches the intensity of the steak.



The Classic Burger

*Prime beef burger served with **McCain Sweet Potato Fries** accompanied by a bitter, yet flavoursome, hoppy Pale Ale.*

An American 'craft beer' favourite, Pale Ale is more flavoursome in both taste and aroma than International Lagers; it can handle the intensity and meatiness of the burger. The range of hops used in these also varies tremendously, and it is best to see what flavours and aromas they are using to get the perfect pairing. A modern take would be to add **McCain Sweet Potato Fries** to this combination, the sweetness of the potato balancing out any perceived bitterness of the ale.

McCain Sweet Potato Fries:

- ✓ Gluten Free
- ✓ Crispy Coating
- ✓ Tempura-style Batter
- ✓ Customers Upgrade

3

Seasoned Roast Chicken & All The Trimmings

*Tender Roast chicken served with
McCain Signatures Roast Potatoes
accompanied by a refreshing, palate-
cleansing Best Bitter.*

A traditional combination that can be as simple or complex as you want. If using lots of strong herbs, such as rosemary, thyme or sage, then a Bière de Garde with complex clove phenols from the yeast can interplay well with the herbs and spices of the chicken. In either method the rich fat, juices and fullness of the gravy needs something to cut through it. The bitterness from both beers provides this mechanism, cleansing the palate and enabling the drinker to enjoy their next bite. **McCain Signature Roast Potatoes** are crispy on the outside and fluffy on the inside making them the perfect absorber for all the juices from the meat and gravy, providing a wonderful platform for the intensity of the food to match the intensity of the beer.

McCain Signatures Roast Potatoes:

- ✓ Ready in under 30 Minutes
- ✓ Fresh Roast Potatoes Flavour
- ✓ No Preparation Needed
- ✓ 100% Consistency

4

Gammon, Egg & Chips

*Marmalade roasted gammon served with duck eggs and **McCain Original Choice Thick Cut Chips** and accompanied by a grainy-sweet, malt-flavoured, moderately bitter Bocks.*

This savoury pork dish pairs well with a relatively pale, strong, malty lager beer with a nicely attenuated finish that enhances drinkability. Bocks have a moderately strong, grainy-sweet, malt flavour with some toasty notes. The very low to moderate hops flavour (spicy, herbal, floral, peppery) is matched with moderate hop bitterness. The clean fermentation and well-attenuated beer pairs well with the lightness of the pork meat, the sweet glazed marmalade on top and the simple fluffiness of the potato of the **McCain Original Choice Thick Cut Chips**.

McCain Original Choice Thick Cut Chips:

- ✓ 100% British Potatoes
- ✓ Longer Chips for More Portions
- ✓ Store Frozen or Chilled for up to 5 Days
- ✓ Lower Saturated Fat – Prepared with Sunflower Oil



5



Steak & Ale Pie & Chips

*A rich & meaty steak & ale pie served with **McCain Signature Gourmet Chips** accompanied by a distinctive, rich and aromatic Old Ale.*

Ale is a category of beers and could in fact be one of many e.g. IPA, Pale Ale, Dubbel, Port etc. What makes this popular dish so special is the regular use of old cask beer such as Porter, Stout or Bitter. As the beer 'turns' it goes slightly acidic from the introduction of bacteria from the air during the serving process; this acid helps to break down the protein in the meat resulting in increased tenderness. The richness of the steak and ale pie is a perfect match for **McCain Signature Gourmet Chips** as they are coated with a unique batter meaning they stay crispy even when served with rich gravy dishes. As an accompanying beer, Old Ale has a malt character with a luscious complexity, often having nutty and molasses-like flavours coupled with aromas of toffee, dried fruit and port. The flavoursome combination of strong, dark, satisfying beer and tender steak in a rich and meaty gravy makes for a satisfying and hearty dish.

McCain Signature Gourmet Chips:

- ✓ Crispy Exterior Whether Oven or Fried
- ✓ Longer Chips for Better Plate Coverage
- ✓ Light Savoury Coating Extends Holding Time
- ✓ Gluten Free

6

Chicken Wings & Fries

*Tender smoked wings served with a sauce and **McCain Staycrisp Skin on Fries** accompanied by malt sweet-bodied, highly carbonated IPA.*

Another staple of the American craft beer scene combination is wings and hoppy beers. The smoked BBQ meat often has sauces paired with it, such as hot sauce, pickled chilli, coriander and lemon zest.

McCain Staycrisp Skin on Fries add additional texture to the dish; the colour of the chicken skin in direct contrast with the tones of the chicken and fries, creating a highly visual and mouth-watering looking dish. A high carbonation and bitter beer helps lift the intense flavours of the meat, sauce and accompanying crispy fries. The IPA with its higher alcohol content and malt sweet body matches well with the intensities of the smoke and sauce. IPA, with more resinous and piny accents, pairs far better than a more citrus and fruit forward beer, due to the undertones of smoke that sit within the meat and vinegar based hot sauce that usually accompanies it.

McCain Staycrisp Skin on Fries:

- ✓ Stay Crispy and Hot (Even for Take-home)
- ✓ Longer Chips for Better Plate Coverage
- ✓ Finest British Potatoes
- ✓ Gluten Free

INSPIRED BY

BILLY-SMOKES
Barbecue



GLOBAL PAIRINGS

Southern Indian Dishes & Saisons

Spicy light food, such as Southern Indian curries and snacks with spices such as tamarind, curry leaves, fenugreek and turmeric pair well with a light refreshing beer. Many dishes from the region are vegetarian and there is a dominance of spice that is absorbed by the starchy ingredients such as potatoes and chickpeas. This gives a great depth and purity of flavour, and these flavours pair brilliantly with Saisons, a light-bodied beer with high carbonation and a lot of aroma (white pepper, clove, phenols) all coming from the yeast during fermentation.





SPICES & BEER


Regardless of the specific dishes on your menu there are some general spice and beer pairings that can be applied to many global flavours that may feature in wraps, burgers, dips or sauces. The pairings can be used to complement Mexican, Indian, Japanese, Argentinian, Mediterranean and Middle Eastern inspired dishes. Chips/fries are a great way for customers to experiment with new flavours for dipping and sharing. The NEW 'McCain StayCrisp' range has a unique coating that keeps them hotter and crispier for longer, so the customer's experience is enhanced.

Chimichurri & Pilsner – This spice mix comes in a green and red version and originates from Argentina and Uruguay. It is made of finely chopped parsley, minced garlic, vegetable oil, oregano and white vinegar. The dominant flavouring is parsley, garlic, red pepper flakes and fresh oregano. A great pairing is Pilsner with the Saaz hop herbal overtones of this beer blending well with the herbal and spicy notes of the chimichurri.



Harissa & Pale Ales/IPAs – A hot, aromatic paste made from chilli and assorted spices and herbs is both spicy and fragrant. Hoppy beers such as Pale Ales and IPAs pair well, with the aromatic nature of the beer accentuated by the chilli, spice and herbs. The harissa increases the bitterness perceived from the beer, while the beer also increases the intensity of the chilli flavour - everything is heightened and highlighted.





Chilli & Czech Dark Lager – This spice can bring another dimension to a beer. A Czech Dark Lager with its complex malt character of caramel, dark dried fruit and chocolate with moderate sweetness can provide a great base for chilli to invigorate the senses. The comparably low bitterness levels and clean body of the beer allows the capsaicin spice of the chilli to bring a warming sensation to the beer much in the same way chilli can to chocolate.

Sumac & Witbier – This tangy, lemony spice is often used in Mediterranean and Middle Eastern cooking. A refreshing Witbier made primarily from malted and unmalted wheat which includes the use of coriander and orange peels along with yeast that provides clove and spice to the beer can be a great match. The lemon tang of the sumac also accentuates the zestiness of the Witbier.

Teriyaki & Stout – A technique used in Japanese cuisine in which foods are broiled or grilled with a glaze of soy sauce, mirin and sugar. Here a beer such as Stout is complemented by the food whereby the dryness is countered by the rich sauce and sweetness. The soy sauce nature also introduces into the beer wonderful savoury characterises of an aged bottle-conditioned stout. Both also have a comparatively strong intensity in flavour and impact ensuring they marry together rather than dominate one another.

TELL YOUR STORY

Don't worry if you don't have the exact beer brands we have shown – it is the type of beer (e.g. an IPA or a Bocks beer) that is important when pairing, not necessarily the brand.

You will be able to tell what type of beer it is from the bottle

Pair up an exciting starter on your specials board with a guest beer – for those who want to experiment.

Today's Specials!

Smoked '3 Joint' Chicken Wings with skin on fries. Enjoy with a strong malt-flavoured Sierra Nevada beer, high bitterness, and aroma

Add beer recommendations to some of your classic dishes on your main menu to drive sales and enhance the meal.

DAILY SPECIAL

Gammon, free-range egg & chips
Enjoy with a grainy sweet, malt flavoured Bock beer such as Berliner Kindl.

£8.99



THE EXPERTS



Shane McNamara
Beer sommelier for the
Beer & Cider Academy



Jonathon Taylor
McCain Foodservice
Development Chef



Robert Beckett
Longstanding McCain Potato
Grower and his dog Stanley



Matt Stubbings
McCain Field Person and all-round
potato expert



Lee Byers
Food Operations Manager at
McManus Managed Pub Co Limited

Menu Classic	Beer & Cider Academy recommends	Example of beer options	McCain recommends...
Fillet steak with blue cheese	Abbey/Dubbel	<ul style="list-style-type: none"> Westmalle Dubbel La Trappe Dubbel Trappistes Rochefort 8 	Menu Signatures Gastro Chunky
Fillet steak with mushroom sauce	American Brown Ale	<ul style="list-style-type: none"> Brooklyn Brown Ale 	Menu Signatures Gastro Chunky
Fillet steak with Diane sauce	Altbier	<ul style="list-style-type: none"> Gatz Altbier Schlösser Altbier 	Menu Signatures Gastro Chunky
Fillet steak with peppercorn sauce	Porter	<ul style="list-style-type: none"> Fuller's London Porter Guinness Dublin Porter 	Menu Signatures Gastro Chunky
Fillet steak with Béarnaise sauce	Scotch Ale	<ul style="list-style-type: none"> McEwan's Scotch Ale Orkney Skull Splitter 	Menu Signatures Gastro Chunky
Burger with North African relish	American Style Pale Ale	<ul style="list-style-type: none"> Sierra Nevada Pale Ale BrewDog Dead Pony Oskar Blues Dale's Pale Ale Beavertown Gamma Ray 	Menu Signatures Sweet Potato Fries
Sunday roast chicken	Bitter	<ul style="list-style-type: none"> Fuller's London Pride Harvey's Sussex Best Bitter Westerham Brewery Scotney Bitter 	Menu Signatures Roast Potatoes
Gammon, egg & chips	Bock	<ul style="list-style-type: none"> Berliner Kindl Bock Hell Mönchshof Bock Bier 	Original Choice Thick Cut
Steak & ale pie	Old Ale	<ul style="list-style-type: none"> Theakston's Old Peculiar Harvey's Brewery – Old Ale Jennings Sneek Lifter 	Menu Signatures Gourmet Chips
Smoked '3 joint' chicken wings	IPA	<ul style="list-style-type: none"> Stone IPA Sierra Nevada Torpedo Dogfish Head 90 minute IPA 	Menu Signatures Staycrisp Skin on Fries
Southern Indian spiced vegetarian snacks	Saison	<ul style="list-style-type: none"> Saison Dupont Saison à la Provision Brew By Numbers Saison 	
Chilli influenced dishes	Pilsner	<ul style="list-style-type: none"> Pilsner Urquell Budweiser Budvar B:Original 	
Brazilian inspired dishes with chimichurri	Dark Lager	<ul style="list-style-type: none"> Baltika #4 San Miguel Dark 	
Japanese influenced dishes with teriyaki	Witbier	<ul style="list-style-type: none"> Hoegaarden Wit Blanche Camden Brewery Gentleman's Wit 	
Mediterranean inspired flavour with sumac	Stout	<ul style="list-style-type: none"> Dragon Stout Coopers Stout Guinness Original Stout 	
Middle Eastern influenced dishes with harissa	American Style Pale Ale/IPA	<ul style="list-style-type: none"> Sierra Nevada Pale Ale BrewDog Dead Pony Oskar Blues Dale's Pale Ale Beavertown Gamma Ray Sierra Nevada Torpedo Dogfishhead 90min IPA 	



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Please drink responsibly. For the facts, visit drinkaware.co.uk