



# A Feast for the Eyes

## How Augmented Reality Can Influence Product Desirability

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### What we found

Many marketers see tremendous potential in Augmented Reality (AR) technology. But questions remain around how AR affects consumer behaviour. Research from the Oxford Future of Marketing Initiative shows that viewing certain types of products (in this case, food items) in AR can improve 'mental simulation' — i.e., a consumer's ability to imagine consuming the product. This experience heightens the senses, and in turn, can make the product seem more desirable, consumption more enjoyable, and increase consumer spending.

### What we did

We conducted three experiments to explore how presenting a food item in AR impacts consumer behaviour.

In *study 1*, we divided 101 diners at a restaurant into two groups: One received an AR menu on an iPad that displayed dessert items as three-dimensional AR objects. The other received a menu (also on an iPad) featuring two-dimensional pictures of the same dessert items. We found that when participants received the AR menu, they were more likely to rate the food as desirable and more likely to actually order a dessert.

In *study 2*, we conducted a similar menu experiment with 130 diners at the Oxford Saïd cafeteria. Once again, presenting the dessert options in AR increased the desirability of the food. In addition, diners in the AR group reported higher levels of satisfaction with their meal afterwards. Why? Because viewing a dessert in AR was found to improve 'mental simulation' — i.e., the ability to imagine eating the dessert before it arrives — which heightened the senses and made consumers more inclined to savour their dining experience.

In *study 3*, we ran a controlled lab experiment with 205 participants. We found AR presentations (versus non-AR) made a variety of foods — from salty snacks to healthy fruits and salad — seem more desirable. However, there was a notable exception: When nutrition information (e.g., calories, fat) was displayed at the same time as the food item, desirability did not increase.

### Why it matters

AR technology is growing in popularity and becoming more widely accessible to consumers. This trend is expected to continue, as each of the major tech companies — including Apple, Amazon, Facebook, Microsoft, and Google — are either rumoured or confirmed to be developing new AR software and hardware. In this environment, marketers that understand how to harness the power of AR will have a competitive advantage.

Our research focuses on how food and beverage companies can best put AR into practice. Below, we include actionable recommendations for corporate chains, restaurants and caterers, online food delivery services, and online grocers.

### Actions

- **In restaurant:** Upgrade to digital menus and present food items in AR. This small change has the potential to improve food-quality perceptions, make meals more enjoyable and increase sales.
- **Personalised offerings:** Use AR technology to help customers visualise how custom items (e.g., wedding cakes) will look without going through production.
- **Online ordering:** Go beyond simply showing food items in AR. Present food in context (e.g., depict a pizza in a pizzeria) or ready-to-eat settings (e.g., place silverware near the user's dominant hand). These added details increase food craving and purchase intent.
- **Catering:** Allow consumers to view entertaining offerings (e.g., holiday meals) in their own homes — or even at their own dining room tables — before placing orders.
- **Moments of receptivity:** Do not present practical information (e.g., nutrition labels) at the same time you are trying to appeal to your customer's imagination or senses. The two work at cross-purposes and reduce the overall effectiveness of AR technology.

### Further reading

Alarcón, Claudia (2019), "How An AR Startup Is Changing The Way We See Restaurant Menus," Forbes, <https://www.forbes.com/sites/claudiaalarcon/2019/02/07/how-an-ar-startup-is-changing-the-way-we-see-restaurant-menus/#1d43d4f3a880>.

Fink, Charlie (2018), "The World Will Be Painted With Data," Forbes, <https://www.forbes.com/sites/chariefink/2018/05/19/the-world-will-be-painted-with-data/#204829e95721>.