

The latest on meal kits (revised with updated food safety research) By Ellen Schuster, BA, and MS

Call them meal kits, home delivery, or boxed meals, they are all the rage in the U.S. (They started in Sweden in 2007). There are large and increasingly smaller regional companies packaging ingredients for home cooks. You can find many articles with anecdotes about the pros and cons of meal kits but little hard data. Most of the concerns about the meals have focused on excess packaging, food waste, and cost. There's no clear, consistent 'best' choice - it depends what matters to a subscriber. The articles below are representative of what is currently on-line about these services.

OVERVIEW

The \$5 billion dollar battle for the American dinner plate One prediction - in the next 10 years meal kit company sales will grow to \$3 to \$5 billion. This is based on current adoption. Sound like a lot of money? At present, meal kits represent 1/4 of 1% of food sales when compared to restaurant and grocery sales. As this article points out, even if they get to \$5 billion that's, well, peanuts. Millennials living in urban areas were the first group attracted to home delivery because they liked the convenience and may have lacked the time or skills to cook. Also, the meal kit cost, when compared to eating out in cities like New York or San Fran or buying food at places like Whole Foods, may be comparable or cheaper. Companies are now marketing to households with families and other audiences. <https://www.fastcompany.com/3046685/most-creative-people/the-5-billion-battle-for-the-american-dinner-plate> Meal kit customers dine and dash New spending data just out show that most customers who buy these services don't stick with them for long. At Blue Apron, about 50% of customers are still with the service after the 2nd week and about 10% remain after 6 months. Two other meal kit services saw similar patterns of retention. This is in sharp contrast to how the companies portray their customer base although they don't provide any data. Growth in these companies since 2014 has increased more than 500%. For January to September 2016, Blue Apron captured 71% of sales, HelloFresh 23% and Plated 6%. <https://www.fastcompany.com/3064792/app-economy/meal-kit-customers-dine-and-dash>

NEW - FOOD SAFETY CONSIDERATIONS

At the 2017 Food Safety Summit results of a Rutgers-Tennessee State University study meal delivery kits were shared. The researchers found the kits are likely to be left outside for 8 or more hours before they are opened/refrigerated. Only 5% of deliveries ask for a signature when delivered.

Don't expect FedEx, or UPS or the USPS to take any responsibility for the foods they deliver and neither will the companies. What did consumers think about these kits? Over 1,000 interviews with consumers found that 95% thought the foods were safe to eat. Less than 1/2 of the companies (42%) have food safety info on their websites. The researchers ordered 169 meal kits representing entrees: 271 meat, 235 seafood, 133 game, and 39 poultry. Almost half (47%) of 684 items had surface temps registering an unsafe 40+ degrees. And kits with gel coolants often had a surface temp of 75 degrees! Apparently FDA is looking into this. One food safety tip for

consumers noted here - <http://www.thedenverchannel.com/news/local-news/five-things-youneed-to-know-to-make-sure-your-favorite-home-delivery-meal-kits-are-safe> - are good ideas yet the 2nd tip is moot if you don't know how long the box has been sitting on your doorstep. http://www.foodsafetynews.com/2017/05/research-shows-food-safety-gaps-in-home-deliverymeal-kits/#.WSW_suv3arV

WASTE, IMPACT ON THE ENVIRONMENT

The Food Institute Blog

For those concerned about food waste and packaging's impact on the environment, some companies use recyclable, biodegradable materials or options to return ice packs to the company. Of course, you can also recycle shipping boxes locally. A study done by nonprofit BSR for Blue Apron, found that 62% less food was wasted at their food prep facility and by consumers than the same meals cooked with grocery store ingredients. In addition, Blue Apron threw out 5.5% of food, grocery stores threw out 10.5%. Consumers threw out 7.6% of the food in Blue Apron meals, instead of an estimated 23.9% they would throw out to make the same meal. Although there are some caveats about the data, it is the first of its kind shared by a meal kit delivery service. Companies may begin to realize less food waste in their supply chains because they have a better idea of their customers and ingredient needs. Compare this to grocery stores that put items on shelves with the hope they will be bought. Blue Apron is working with farms which may change what is grown in a local food system. Working with regional farms may further decrease waste if less food winds up in landfills. These broader changes may outweigh food packaging concerns. <https://www.foodinstitute.com/blog/meal-kits-packaging-food-waste>

Trashy consequences of Blue Apron

Data aside, pictures tell one story about many meal kits - there's a lot of packaging! Check out the photo of the ingredients and packaging from a 2-person Blue Apron plan. The article does highlight some problems with recycling ingredients not accepted in some locales. Also mentioned are the environmental costs of shipping/transportation 'costs' of meal delivery. https://www.buzzfeed.com/ellencushing/these-are-the-trashy-consequences-ofblueaprondelivery?utm_term=.gfWQ2kKoe#.cm6K5gpB4

Are meal kits really more wasteful than groceries?

One company claims they will cut packaging waste by 50% - likely because this is important to many customers. Some companies compost unused food to address food waste. <http://www.thekitchn.com/are-meal-kits-really-more-wasteful-than-groceries-229687> Meal kit's delivery packaging problem Blue Apron has a recycling option for their boxes (picked up by the company) but this will be ending when the company suggests local recycling. Another delivery company uses cold-packs made from 100% recycled materials. Disposable utensils, if used, may be more biodegradable but they are still wasteful. Local delivery services may be able to manage waste easier than larger companies by charging a deposit for packaging. As meal kit companies age, they will begin to see what their customers want - less packaging? Healthy or local ingredients? Other?

This will likely drive how they adapt to concerns about packaging, waste and other issues. <http://www.ediblemanhattan.com/foodshed-2/meal-kit-delivery-packagingproblem/>

OTHER MEAL KIT CONSIDERATIONS

Dinner at your doorstep - are meal kits worth it?

There are many different reasons someone may choose meal delivery. Fresh, healthy, locally sourced ingredients. Help with cooking skills. No time to shop and cook. Meals that meet a special diet or eating style. New, tested recipes. Meal kit meals can be a way to introduce foods to children they wouldn't have tried at home. According to the article, prices vary but here are examples cited - Blue Apron offers 2 meals a week for a family of 4 (\$69.92), \$59.95 at HelloFresh. Three meals a week for two is available from Plated (about \$72 per week). Dr. Tim Harlan, Tulane University in New Orleans, found that using meal kits is like paying someone \$70/hour to shop for you (this number is NOT based on a rigorous study). He also advises that meals are high in sodium, fat or both and portion sizes may be large. Some companies provide nutrition info with meal ingredients, others provide this online. And if food allergies are a concern, some identify what's in their food. It's likely that some people use these services initially and then, armed with

confidence and new recipes, drop their use and return to preparing foods at home. (See 'Meal kit customers dine and dash' under OVERVIEW above)

<http://www.webmd.com/foodrecipes/news/20160601/meal-kit-delivery#1>

Meal kits vs. Groceries - a dollar-to-dollar investigation

One person's attempt at a cost comparison of 3 meal kit plans to the cost of purchased groceries from April 2016. The result? Two of the 3 plans were not wildly more expensive for the meal kit options when compared to buying groceries. <http://www.thekitchn.com/are-meal-kits-more-expensive-than-groceries-230031> The ultimate guide to the best meal kit delivery services One person's experience with 9 national services including costs. Photos show shipping and packaging and a plated meal.

<http://www.forbes.com/sites/katiebell/2016/03/21/the-ultimate-guide-to-the-best-meal-kit-delivery-services/#22a714083d86>

Diabetes meal delivery services

An overview of which services are available depending on where you live: Blue Apron, Hello Fresh, Plated, and Chef'd are national delivery services; regional services include, but aren't limited to Metabolic Meals which serves most of

Wisconsin, SunBasket - the West Coast, and Real Meal - the Atlanta area. Looking for a specialized diet? Purple Carrot serves vegans and those seeking gluten-free can go to Freshly, Healthy Chef Creations, and 22 Days Nutrition. Of course, these options will likely change over time. The article identifies home delivery meal sources for those with diabetes - this includes looking at nutritional content to help guide choices if you have diabetes. And how's this for customer service? Hello Fresh will decrease portion sizes or omit ingredients if

asked. <http://www.diabetesselfmanagement.com/nutrition-exercise/meal-planning/diabetesmealdeliveryservices/>