How much could food prices go up if Hawai'i raises the minimum wage to \$18 by 2026?

Fast Food Meal 45 CENTS	Spam Musubi 9 CENTS	LB of Bananas 5 CENTS	Bag of Chips 16 CENTS
Malasada 7 CENTS	Gallon of Milk 29 CENTS	Chili Bowl 31 CENTS	Hot Dog Pack 23 CENTS

RAISING THE MINIMUM WAGE in Hawai'i to \$18 per hour by 2026 may raise the price of goods and services very slightly. However, the overwhelming majority of research on the topic of price increases due to minimum wage increases suggests that even in industries where labor makes up a significant portion of businesses' costs, and a high percentage of workers make at or near the minimum wage—such as fast food/limited service restaurants—costs to consumers rise by less than 5 percent (typically far less). As such, **any price increase that workers face is more than offset by their increased wages.**

A good amount of research has been done on how much prices increase as a result of an increase in the minimum wage. Some studies focus on average prices across all industries, while others focus on how much the price of food—particularly restaurant meals—increases, because this industry has high labor costs and a high percentage of workers in this industry make minimum wage. As such, prices for fast food are projected to increase by more than are the prices for other goods, such as clothing or food purchased at a grocery store for consumption in the home.

This analysis then extrapolates these studies' results to Hawai'i and provides some examples of how much the price of commonly purchased items might increase if Hawai'i were to increase the minimum wage to \$18 per hour.

For example, the price of a spam musubi would rise by only around 9 cents. A fast food combo meal costs around \$8.29 in Honolulu, and would likely cost around \$8.74 with the proposed minimum wage increase spread out over 4 years. If a Hawai'i worker ate a fast food combo meal every single day for lunch, they would spend about \$9 extra per month on their lunches. They would make up that lost money in just a bit more than an hour of work at their higher wage.

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The overwhelming majority of research on the effects of past minimum wage increases on prices suggests that costs to consumers rise by less than 5 percent—typically far less—over several years, even in industries that employ a lot of workers at or near the minimum wage, such as fast food.

What Does Existing Research Say?

While the employment effects of a minimum wage increase have been studied at length, the effect of a minimum wage increase on prices has not been studied by very many researchers.¹ Recent studies suggest that some minimum wage increases do not lead to higher prices at all, though large minimum wage increases—like the 78 percent increase over 4 years contemplated in Hawai'i—do "have clear positive effects on output prices."²

This is not surprising. For one, "most of the people who work for under \$10 an hour are working as cashiers at grocery and department stores (1.4 million), retail salespeople (1.1 million), cooks (1 million) and janitors, cleaners, waiters or waitresses (1.5 million)." Industries which employ many low-wage workers will see their labor costs go up as the minimum wage rises, and may pass these costs along to customers. 4

A 2016 study made news by claiming that raising the federal minimum wage from \$7.25 to \$15 per hour would increase prices at limited service food restaurants by around 4.3 percent.⁵ However, it is important to note that this amounts to only a 0.4 percent increase in prices at limited service (fast food) restaurants—which is actually lower than the percentage estimated in many other studies—from a 10 percent increase in the minimum wage. Further, the price of other goods and services should rise less than the price increases at fast food restaurants, because fast food restaurants both have high labor costs (30 percent to 50 percent of total costs) and have a high number of minimum wage workers.⁶ The price of groceries, for example, should rise less than the price of fast food, because grocery stores and other retail have lower labor costs as a percentage of their total costs.⁷

The consensus among researchers is that the anticipated price increases from a minimum wage increase are not particularly large. Most studies use observational data to estimate the price effects of actual minimum wage increases (as opposed to, for example, simulations), and so estimate the effects of different sized minimum wage increases.

In addition, while some studies estimate the price effect for all goods and services, others focus on food and beverage prices, or more specifically on fast food. As such, the estimated percent increases in prices following in minimum wage increase can appear quite varied. However, when all estimates adjusted to the same percent increase in the minimum wage for comparison purposes, we can see that the estimates for the increase in prices range from 0.15 percent to 2.7 percent for all goods and services, from 0.58 percent to 1.2 percent for food and beverage, and from 0 percent to 2.1 percent for fast food.

Table 1 presents the results from frequently-cited studies on the topic of a minimum wage increase's effect on prices.

Table 1. Projected Price Increase from a 10% Increase in the Minimum Wage⁸

Study Authors (Year)	Industries	Projected Price Increase
Wilson (1998)	All	0.15%
Wolf & Nadiri (1981)	All	0.3%
O'Brien-Strain & McCurdy (2000)	All	0.3-2.6%
Lee & O'Roark (1999)	Food & Beverage	0.74%
McCurdy & McIntyre (2001)	Food & Beverage	1.2% (restaurants), 0.8% (groceries)
Aaronson (2001)	Food & Beverage (Away From Home)	0.7%
Macdolan & Aaronson (2002)	Food & Beverage	0.72-0.74%
Aaronson, French & MacDonald (2008)	Food & Beverage	0.7%
Allegretto & Reich (2016)	Food & Beverage	0.58%
Card & Krueger (1994)	Fast Food	2.1%
Basker & Khan (2016)	Fast Food	0.9% (burgers); 0.8% (pizza); no effect on the price of chicken
Ma & Ghiselli (2016)	Fast Food	0.4%

This means that, for Hawai'i's proposed 78 percent increase in the minimum wage, prices for goods and services are likely to rise between **1.17 percent and 2.34 percent**.

Even if the price of fast food were to rise 2.1 percent with a 10 percent increase in the minimum wage (an estimate from 1994, which is much higher than recent estimates of 0.4 percent to 0.9 percent), this would mean about a 16 percent rise in fast food prices in Hawai'i spread out over 4 years.

In addition, this study's outcome is the outlier. At least six studies estimate that prices for food and beverage will rise between 0.6 percent and 0.9 percent, with two others estimating 0.4 percent and 1.2 percent price increases for a 10 percent increase of the minimum wage. Even at the high end of this range, Hawai'i's food and beverage prices are expected to increase by only 6.7 percent.

What Does this Mean for Hawai'i's Prices?

Hawai'i's increase in the minimum wage to \$18 in 2026 (from \$10.10), is about a 78 percent increase in the minimum wage. At the high end, this means that fast food prices may increase between 7.9 percent and 15.9 percent over 4 years. However, the median study suggests that price increases of around 5.4 percent over 4 years are far more likely.

Even if all food prices increased as much as fast food, the prices of individual food items would not rise



significantly as a result of minimum wage increases. Here are the projected price increases over 4 years of some common food items in Hawai'i due to a minimum wage increase, if it were to rise to \$18 by 2026:

- A spam musubi's price at 7-11 may increase from \$1.59 to \$1.68 (9 cents)
- A pack of 10 hot dogs at Walmart might go from costing \$4.24 to \$4.47 (23 cents)
- The price of a Big Mac meal may increase from \$8.29 to \$8.74 (45 cents)
- The price of an 8 oz bag of Lays potato chips might go up from \$2.98 to \$3.14 (16 cents)
- A pound of bananas may go from costing \$0.98 to \$1.03 (5 cents)
- The price of a gallon of milk may go up from \$5.39 to \$5.68 (29 cents)

Of course, these price estimates are just that—estimates. However, they may be helpful in underscoring the point that even with "full pass-through" of higher labor costs to consumers, "from a consumer's standpoint, the price increases are small." ¹⁰

A 2008 overview of the literature on this topic summarizes the overwhelming majority of the literature well, and recent studies have not changed the overarching theme: "the minimum wage increases the wages of the poor, does not destroy too many jobs, and does not raise prices by too much."¹¹

Endnotes

- 1. MacDonald, D. and E. Nilsson (2016): "The Effects of Increasing the Minimum Wage on Prices: Analyzing the Incidence of Policy Design and Context," Upjohn Institute working paper, 16–260; Basker, E. and M. T. Khan (2016): "Does the Minimum Wage Bite into Fast-Food Prices?," *Journal of Labor Research*, 37(2), 129–148
- 2. MacDonald and Nilsson (2016)
- 3. Komlos, John, "Why Raising the Minimum Wage is Good Economics," *PBS*, Dec. 15, 2015, http://www.pbs.org/newshour/making-sense/why-raising-the-minimum-wage-is-good-economics
- 4. MacDonald and Nilsson (2016)
- 5. Ma, J. and R. Ghiselli (2016): "The minimum wage, a competitive wage, and the price of a burger: Can competitive wages be offered in limited-service restaurants?," *Journal of Foodservice Business Research*, 19, 131–146

- 6. Allegretto, S. and M. Reich (2016): "Are Local Minimum Wages Absorbed by Price Increases? Estimates from Internet-based Restaurant Menus," Institute for Research on Labor and Employment, Working Paper # 124–15
- 7. Allegretto and Reich (2016); Lemos, S. (2008): "A Survey of the Effects of the Minimum Wage on Prices," *Journal of Economic Surveys*, 22, 187–212 ("most studies reviewed above found that a 10% US minimum wage increase raises food prices by no more than 4% and overall prices by no more than 0.4%")
- 8. Lemos provides an even more detailed table of all studies on this topic conducted through 2008, including studies conducted about other countries
- 9. Food prices from stores in the Honolulu metro area, 2021
- 10. Basker and Khan (2016)
- 11. Lemos (2008)