# Eating Healthy on a Budget

Sharon Puello MA RD CDN CDCES

# What Do We Think of As Healthy Eating?

Eating a diet of foods in as close to the natural state as possible - in other words, a whole, minimally-processed diet.

# Is Buying Organic Important?

## Diet and food type affect urinary pesticide residue excretion profiles in healthy individuals: results of a randomized controlled dietary intervention trial

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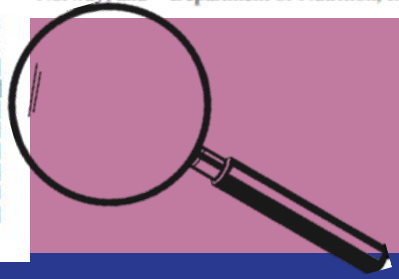
**Effects of diet**

Comparisons of pesticide exposure from a habitual Western diet and a controlled MedDiet (see **Supplemental Tables 14 and 15** for a detailed analysis of the differences in food consumption pattern between the 2 diets) were based on UPRE data from the conventional group collected *1*) in weeks 1 and 5 when participants stayed in an urban work and domestic environment in Newcastle and consumed a Western diet and *2*) in weeks 2 and 3 when participants stayed in a rural environment in Crete, Greece. It is therefore important to point out that the effects of diet change reported here may have been confounded by differences in environmental pesticide exposure between the 2 locations (see "Markers for environmental pesticide exposure" section below).

Consumption of Western and Mediterranean diets based on conventional food resulted in broadly similar urinary pesticide residue profiles, although the proportions of samples testing positive for residues of the chlorpyriphos (TCHP) and the pyrethroid metabolite *t*-CDCA were significantly higher with the conventional MedDiet (Supplemental Table 8).

Diet change was not associated with a significant change in the level of excretion of CCC, herbicides, and Cu (Table 3), but changing from a habitual Western to a conventional food–based MedDiet was associated with significantly (2–4 times) higher insecticide, pyrethroid and organophosphate residue excretion and slightly (17%), but significantly, higher total synthetic chemical residue excretion (Table 3). It is important to note that excretion of pyrethroid insecticide, total insecticide, and OP residues from a conventional food–based Western diet and an organic food–based MedDiet was not significantly different (Table 3, Supplemental Table 10).

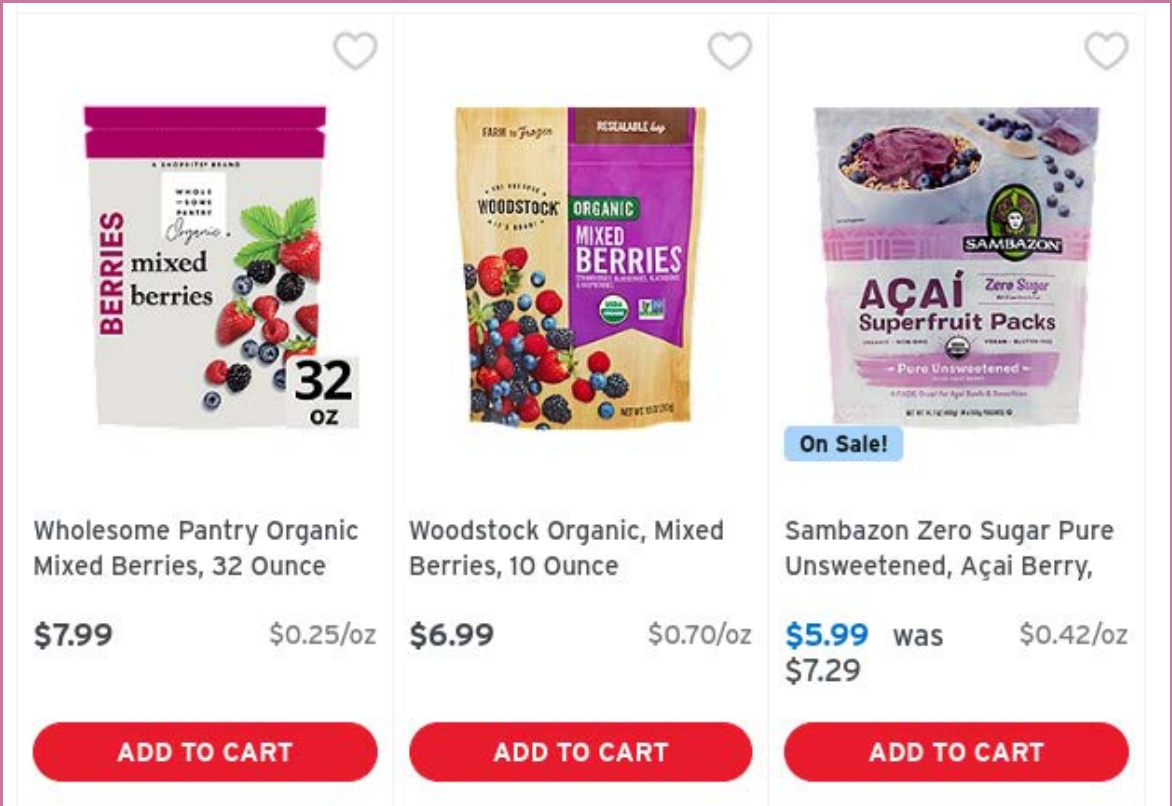


# If I’m Going to Buy Organic, How Do I Decide What to Buy?


How Do I Work with this List?

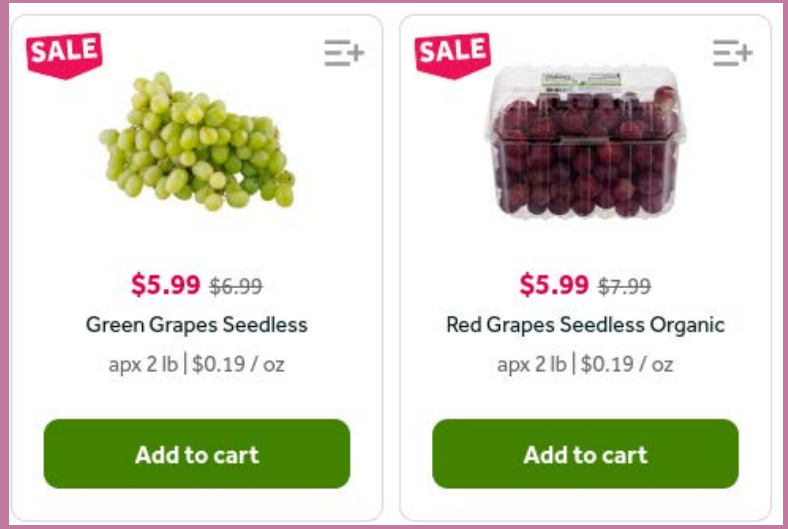
- Choose fresh vs frozen: frozen organic berries are much cheaper than fresh.
- Buy fresh and freeze: Organic spinach and kale tend to already be less expensive organic veggies, but preserve your investment by freezing, or cooking and freezing before they go bad.
- Purchase when in season, and on sale. Ex. summer/ fall is when you’ll get the best price on organic grapes. Freeze on their own, or pre-make and freeze in smoothies.

# Let’s Take a Look at Some Prices




- Store brand is typically cheaper.
- Individually wrapped packages will generally be more expensive.
- Comparing to fresh organic strawberries typically sold at $7 / lb, $8 for 2 lb is a great deal!

# Let’s Look at Some Prices




Shopping online (even if you don’t purchase your foods online) is a great way to compare prices. Stores typically show the price per ounce of food, making it easy to quickly compare value. Here we can see both the non-organic and the organic cost the same - why not get the organic?

# The Dirty Dozen List Continued…


How Do I Work with This List?

- Most importantly, remember there's multiple ways to get the benefits of produce. You don't have to eat fresh/frozen cherries to get the health benefits -> you can add tart cherry juice concentrate to your water instead. You don't have to eat fresh tomatoes, you can use organic strained or pureed tomatoes instead.

# Examples:


**Dynamic Health Certified Organic Tart Cherry Juice Concentrate Unsweetened Description**

**Gluten Free**

**Kosher**

**Vegan**

**Certified Organic Tart Cherry 100% Juice Concentrate**
Dynamic Health Tart Cherry Juice Concentrate has no sweeteners, preservatives o r other additives. Tart cherries contain a nutritional goldmine of phoenolics, which are naturally occurring plant compounds. The main type of phenolic in cherries are anthocyanins.

Directions

Serving Size 2 Tbsp (30mL) of Organic Tart Cherry Juice Concentrate. May be mixed with water, seltzer, juice or a beverage of your choice. To maintain freshness refrigerate after opening.

Nutritious Suggestions. Ideal for tropical smoothies, fruit cocktails and as a mixer. A delicious, natural topping for yogurt, ice cream, fruit, pastry and dessert.

**Nutrition Facts**
Serving Size: 2 Tbsp. (29.5 mL)
Servings per Container: About 16

| | Amount Per Serving | % Daily Value |
|---|---|---|
| **Calories** | 45 | |
| **Total Fat** | 0 g | 0% |
| **Sodium** | 0 mg | 0% |
| **Total Carbohydrate** | 11 g | 4% |
| Dietary Fiber | 0 g | 01% |
| Total Sugars | 9 g | |
| Includes 0g Added Sugars | | 0% |
| Protein | 0 g | |
| Potassium | 141 mg | 4% |

*Other Ingredients: OrganicTart Cherry Juice Concentrate.*

# Examples: ALWAYS shop around. This should never cost more than $4 each, and often can find for $3 on sale.



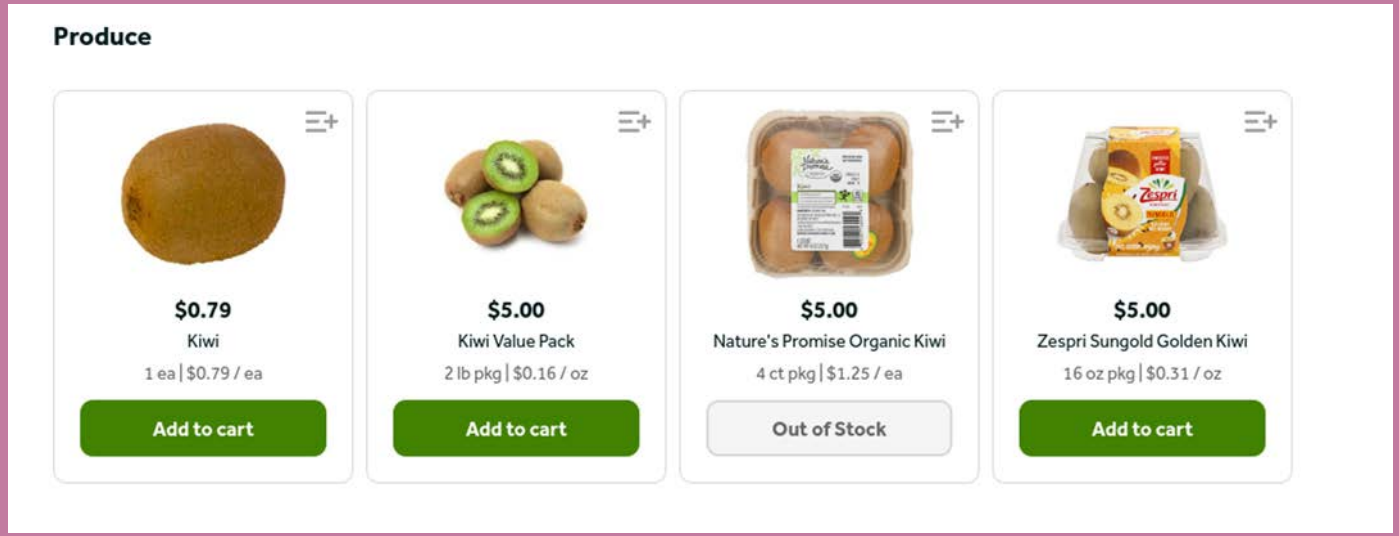
# The Clean 15


These are some great options as they have great versatility and health benefits. Avocado can be used on sandwiches, on smoothies, and in homemade dips. Pineapple can be enjoyed fresh, or in smoothies, or cooked with meat. Peas can replace other starches at meals, and act as both vegetable and starch.

# The Clean 15

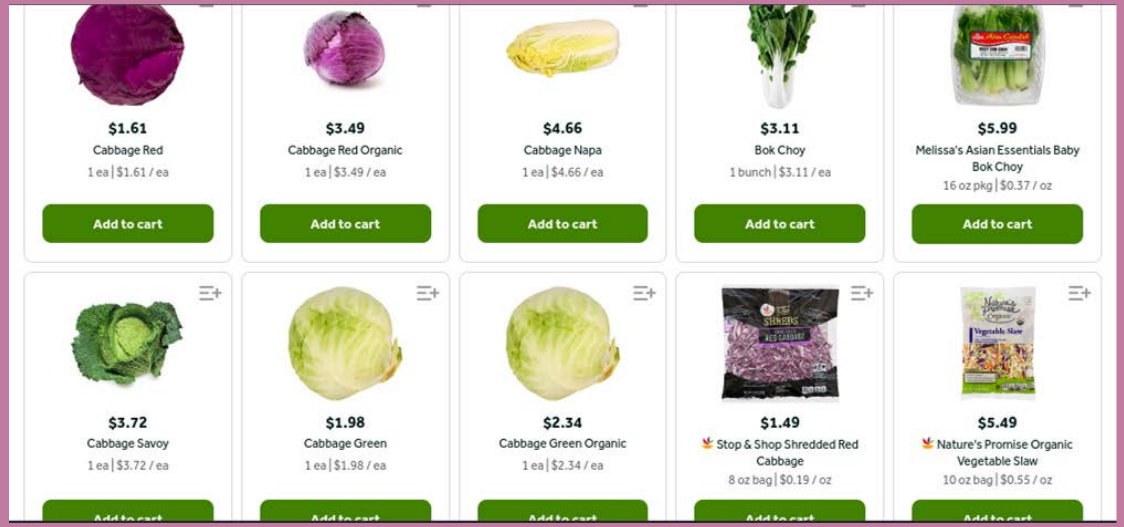

Regardless of organic or conventional, out of season melon will cost a lot - this is one fruit that you want to enjoy primarily when it's in season.

# Let’s Take a Look At Prices:

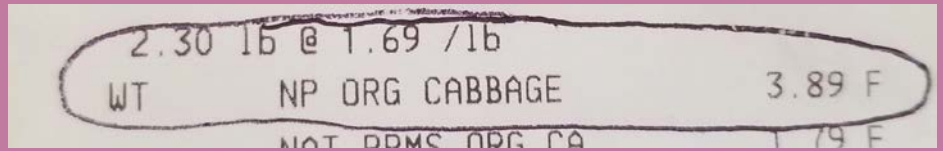



Here, we can see that buying conventional kiwi you get double the quantity of fruit as if you had purchased organic. This is one area where you definitely want to go conventional….unless you eat the skin.

# Let’s Take a Look at Prices

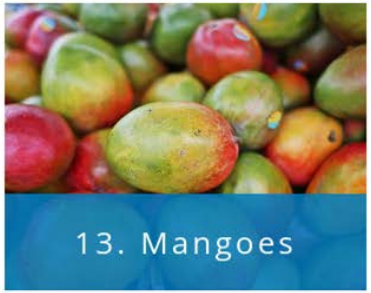







Even though sometimes shopping online can be more expensive, occasionally you find a deal. In the store they charge per lb for organic cabbage, but online it states it charges per head. It says for the organic red cabbage the price is $3.49 each. If a typical head is 2.3 lb (approx. 25 ounces), that comes to $0.14 per ounce. For the green cabbage it would come to $0.09 per ounce…both cheaper than the conventional shredded cabbage.

# The Clean 15 Continued



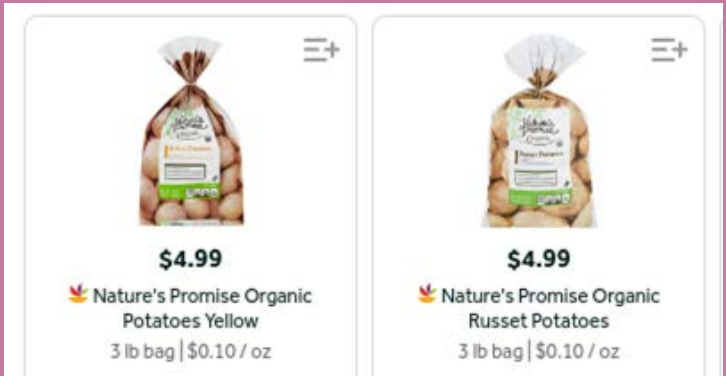
13. Mangoes

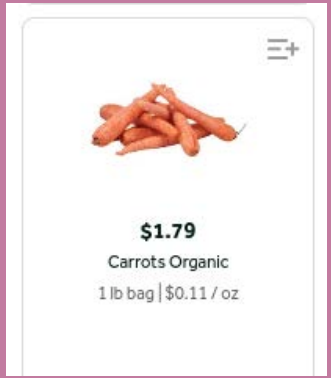
14. Watermelon

15. Sweet Potatoes

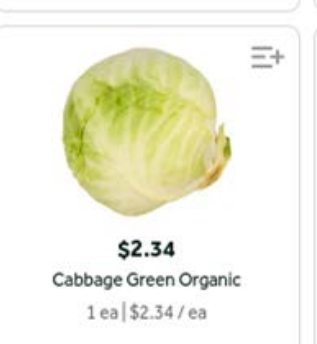
** A small amount of sweet corn, papaya and summer squash sold in the United States is produced from genetically modified seeds. Buy organic varieties of these crops if you want to avoid genetically modified produce.*

# Organic Produce That Generally Isn't Super Expensive and Is Very Versatile:

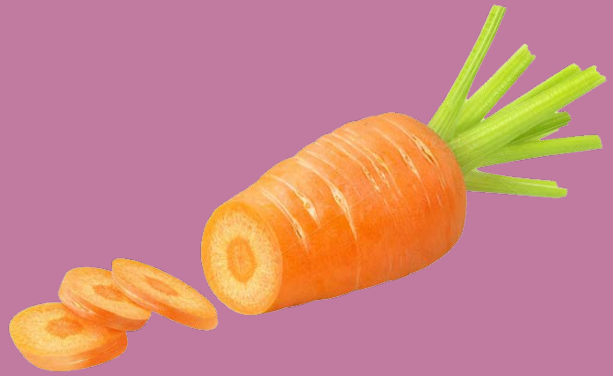







# Ideas for Using This Produce:



- ★ Roasted carrots, onions and fennel -> Cut in big chunks, place in a Pyrex dish, season with ½ tsp onion powder, ¼ tsp garam masala, ½ tsp garlic powder, salt, and fresh ground nutmeg. Drizzle w/ olive oil. Place in the oven at 350 degrees. After ~ 30 min, pour over the veggies a mixture of 1 Tbsp maple syrup w/ 1 Tbsp balsamic vinegar. Toss to coat. Drizzle a little extra maple syrup + an extra sprinkle of garam masala on top, and place in over for ~15-20 minutes more.
- ★ Roasted cabbage, onions, and potatoes -> Cut each into larger pieces, place in a Pyrex dish. Season with onion powder, garlic powder, salt and Chinese 5 spice. Drizzle with olive oil. Place in oven at 350. Cook x 30 min. Mix 2 Tbsp apple cider vinegar w/ 2 Tbsp maple syrup and 2 tsp balsamic vinegar. Pour over veggies, toss to coat, and place in over for ~15-20 more minutes.

# Ideas Continued:

## Coleslaw with Fresh Dill

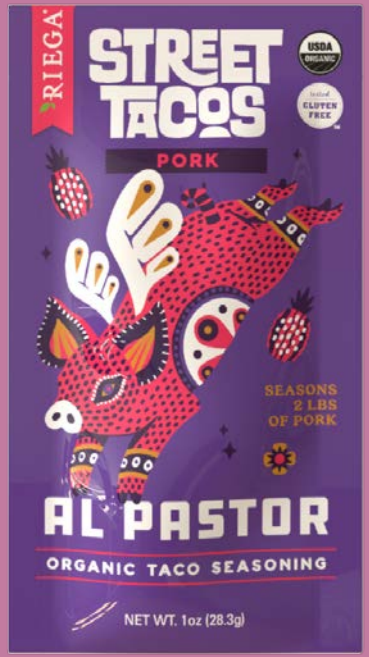
Adapted from Fairway Market
Serves 6

2 tablespoon chopped **fresh dill**
1/2 head **white cabbage** {thinly sliced}
1/2 head **red cabbage** {thinly sliced}
1 cup shredded **carrots**
1 cup **mayonnaise**
1/4 cup **sugar**
1/3 cup **cider vinegar**
**kosher salt** & **freshly ground black pepper** {to taste}

Combine the cabbage, carrots and dill in a mixing bowl; toss well. In a separate mixing bowl, whisk together the mayonnaise, sugar and vinegar. Pour the dressing over the slaw and toss to evenly combine. Season with salt and pepper, to taste. If possible, let the slaw sit for 15 minutes before serving.

From: theparselythief.com

When options are limited due to affordability, they can result in dietary boredom. Seasonings are the answer!  You don't have to have a huge spice rack, these seasoning mixes give you plenty of options to switch up flavors at a low cost.

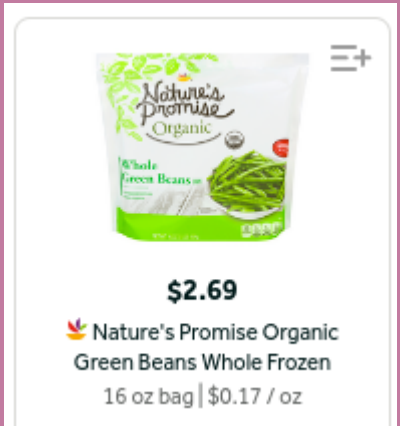


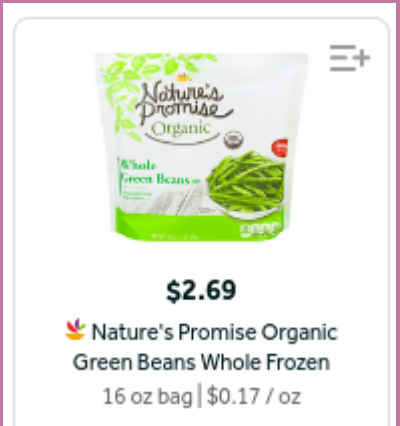



These packets go for ~$1.79 each, which can be much cheaper than buying multiple full bottles of spices which can range from ~$5-8 each.

# Most Important!

The most money is lost when produce (and really any fresh food purchased) goes bad.  Freezing pre-cooked veggies, or buying them frozen is a great way to preserve your investment.



# Making Sure Your Have The Right Tools:

Share

Libbey Small Glass Bowls with Lids, 6.25 ounce, Set of 8, Clear, 3.45-inch -

Visit the Libbey Store

4.8 out of 5 stars 8,062 ratings

$22.39 ($2.80 / Count)

prime

FREE Returns

**Get a $100 Amazon Gift Card instantly upon approval** for the Amazon Prime Rewards Visa Card. No annual fee. Open offer

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Pyrex Freshlock 10-Piece Airtight Glass Food Storage Container Set with Microban, Non Toxic, BPA-Free Locking Lids with 4 Tabs for Antimicrobial Protection

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4.8 out of 5 stars 19,064 ratings

Amazon's Choice for "pyrex food storage containers with loc…

-37% $25.14 ($5.03 / Count)

List Price: $39.99

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FREE Returns

# Lastly, You're More Inclined to Use Your Salad Greens if Your Dressing is Ready


Healthy, store-bought dressings are VERY expensive. Making your own is much cheaper and can be done ahead if you have a good way to store it.

# Ideas for Salad Dressing Recipes:

**Kale Salad with Basil Vinaigrette (Adapted from Food and Wine recipe)**
½ c + 2 Tbsp Olive Oil
3 ½ Tbsp Apple Cider Vinegar
3 Cloves of Garlic
½ tsp Red Pepper Flakes
1 tsp Salt
1 tsp Fresh Ground Black Pepper
1 tsp Dried Oregano
1 tsp Dried Basil
1 ½ Fennel Stalks w/ Fronds, Sliced
¼ Sweet Onion Chopped
1 c Fresh Basil Leaves, packed

Instructions: Add ingredients to blender. Blend until smooth. Prepare salad w/ chopped kale and romaine, tomatoes, cucumber, and onion. Pour dressing over salad and toss to coat.

**Italian Dressing**
¼ c Apple Cider or Rice Wine Vinegar
½ c Olive Oil
½ tsp Garlic Powder
¼ tsp Onion Powder
½ tsp Black Pepper
¼ tsp Salt
¼ tsp Dried Oregano
¾ tsp Dried Basil
Pinch of Red Pepper Flakes

Combine all ingredients in a bottle or bowl and shake or whisk to combine. Pour over salad.

**Caesar-Like Salad Dressing**
Makes approximately ½ cup
2 Tbsp Full-fat (Whole Milk) Plain Greek Yogurt
1 Tbsp unsalted Sunflower Seeds Kernels
1 Garlic Clove Chopped
1 tsp Dijon mustard
1 tsp Rice Wine Vinegar
1 Tbsp Olive Oil
Salt and Black Pepper to Taste

Combine all ingredients in a bowl and whisk to combine. Pour over salad, and toss.

**Balsamic Vinaigrette**
¼ c Balsamic Vinegar
½ c Olive Oil
1 tsp Honey
1 tsp Dijon Mustard
1 clove Garlic Chopped
½ tsp Fresh Minced Onion
½ tsp Garlic Powder
¼ tsp Onion Powder
½ tsp Black Pepper
¼ tsp Salt
½ tsp Dried Oregano
¼ tsp Dried Basil
Pinch of Red Pepper Flakes

Combine all ingredients in a bottle or bowl and shake or whisk to combine. Pour over salad.

# What Might You Want to Splurge On?

- ★ High Quality Meat/ Poultry/ Fish/ Eggs
- ★ Purchasing products in glass as opposed to plastic or cans - especially if they are high in fat or acidic (ex. Mayonnaise, tomato sauce/ puree, juices).
- ★ Wheat Products

# For High-Quality Meat/Poultry, Buy When On Sale and Freeze

- ★ Also, go for cheaper cuts of meat/ poultry -> ex. Chicken wings, legs, and thighs. They are very nutritious and the bones can be used for broth/stock.


**How long can you freeze chicken?**

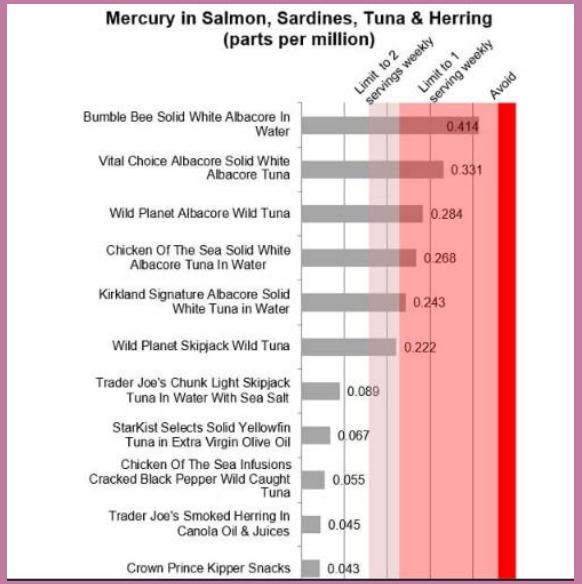
Jun 22, 2022

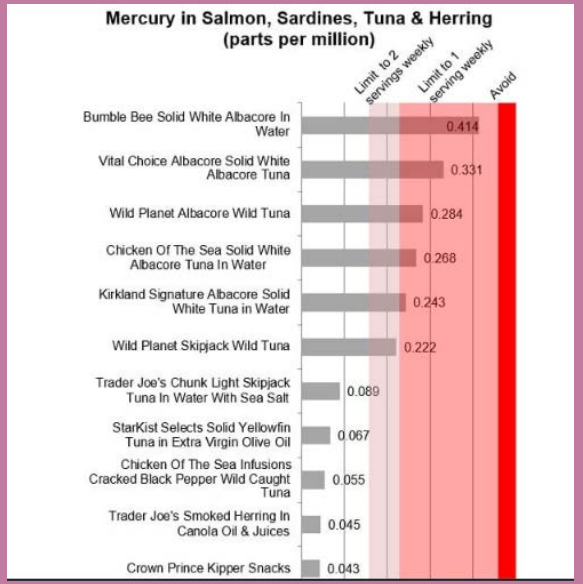
**KNOWLEDGE ARTICLE**

If kept frozen continuously, chicken will be safe indefinitely, so after freezing, it's not important if any package dates expire. For best quality, taste and texture, keep whole raw chicken in the freezer up to one year; parts, 9 months; and giblets or ground chicken, 3 to 4 months. Cooked chicken will taste best if kept frozen up to 4 months; cooked poultry casseroles or pieces covered with broth or gravy, 6 months; and chicken nuggets or patties, 1 to 3 months. For more information about the safe handling of chicken, see Chicken from Farm to Table.

From: ask.USDA.gov

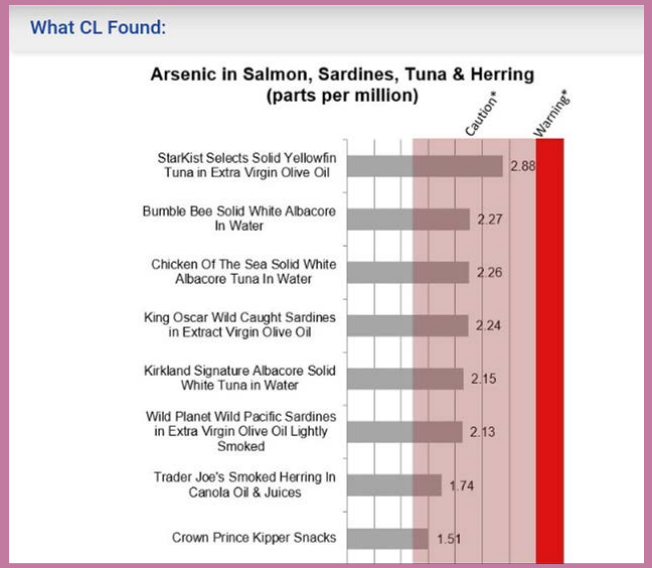
# Price Doesn’t Always Equal Quality:




Having a membership to something like Consumerlabs can help you make informed decisions about whether spending the extra money is worth it.

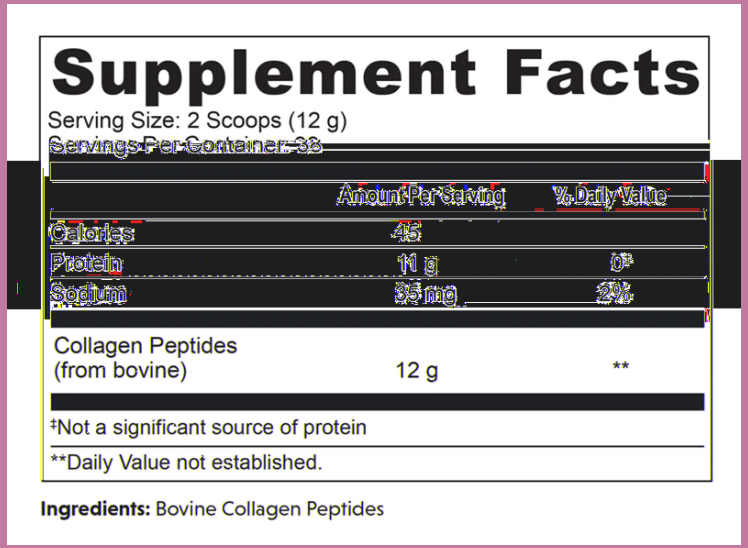
# Price Doesn’t Always Equal Quality, Continued…





Here, we can see that for both mercury and arsenic Seasons sardines have less of both than the more expensive Wild Planet.

# Another Cost Saving Protein Option - Collagen

**Supplement Facts**

Serving Size: 2 Scoops (12 g)

Servings Per Container: 38

| | Amount Per Serving | % Daily Value |
|---|---|---|
| Calories | 45 | |
| Protein | 11 g | 0‡ |
| Sodium | 35 mg | 2% |
| Collagen Peptides (from bovine) | 12 g | ** |

‡Not a significant source of protein

**Daily Value not established.

**Ingredients:** Bovine Collagen Peptides

If this collagen powder costs $25…given there are 38 servings per container, that means, each 12 g serving of protein is only $0.66, which makes it a great, affordable protein option.

# Lastly, Don’t Be Afraid of Pork

It’s often a cheaper option, is healthy as well.


Dietary Approaches to Stop Hypertension diet retains effectiveness to reduce blood pressure when lean pork is substituted for chicken and fish as the predominant source of protein[1–3]

*R Drew Sayer,[4] Amy J Wright,[4] Ningning Chen,[5] and Wayne W Campbell[4]**

Departments of [4]Nutrition Science and [5]Statistics, Purdue University, West Lafayette, IN

**Results:** Preintervention manual BP (DASH-P: 130/84 ± 2/1 mm Hg; DASH-CF: 129/84 ± 2/1 mg Hg) and postintervention manual BP (DASH-P: 122/79 ± 2/1 mm Hg; DASH-CF: 123/78 ± 3/1) were not different between the DASH-P and DASH-CF. Consumption of these DASH-style diets for 6 wk reduced all measures of BP ($P < 0.05$) with no differences in responses between the DASH-CF and DASH-P.

**Conclusion:** The results indicate that adults with elevated BP may effectively incorporate lean pork into a DASH-style diet for BP reduction. This trial was registered at clinicaltrials.gov as NCT01696097. *Am J Clin Nutr* 2015;102:302–8.

Pork tenderloin would be your leanest cut of pork.

# Healthy, Affordable Pre-Packaged Meals


**Ingredients :** Basmati Rice (Water, Rice), Boneless Dark Meat Chicken, Onions, Water, Lowfat Yogurt (Whole Milk, Nonfat Milk, Cultures), Tomato Puree. Contains 2% or Less of: Expeller Pressed Sunflower Oil, Garlic, Ginger, Spices, Sea Salt, Native Rice Starch, Chicken Broth Concentrate, Turmeric, Unsalted Butter, Red Chili Peppers, Fenugreek Leaves, Paprika.

# Fast Food is Quicker and Cheaper…NOT!



1 Big Mac ~$5.81

# Takeaways

- ★ Don’t be focused on eating EVERY fruit/vegetable; having some in regular rotation is good.
- ★ Shop smartly -> look at prices online and compare to in store.  Always check the price per ounce.
- ★ Buy when on sale and freeze.
- ★ Don’t let food go bad.  Cook and freeze, freeze, freeze.