

Great Coffee: Craft Your Cup of Joy

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Preface: Why Should You Read This Book?

If you are looking for a quick book that covers the essentials of making not just good coffee- but **great coffee**, you have found the right book. You'll learn the characteristics of great coffee and details about how to make great coffee yourself using inexpensive equipment at home. After covering the fundamentals of making great coffee, I'll provide exact, step-by-step instructions to brew what may be your first truly great cup of coffee.



New ideas and coffee making products come along all the time- check out my blog, [Coffee Maker Journal](#), to get the latest information on making great coffee.

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Great Coffee Every Day

Coffee is truly one of life's luxuries, and yet you can make a world-class cup of coffee [for only 60 cents](#)! I will show you how in this book. Even if you could spend a million dollars on a cup of coffee, it would be hard to find a better cup than you can make yourself at home with the very simple equipment and brewing methods you will learn in this book.

There is a lot of debate and on-going research about the health effects of drinking coffee. As with most things, there are likely some benefits to drinking coffee and some drawbacks as well. Overall, I think drinking coffee is good for you and look forward to it every day. When I drink coffee, it makes me feel alert and thoughtful. It is relaxing and the sensation of drinking great coffee is like nothing else.

There was a time when I drank too much coffee. Now, I find that limiting myself to only one cup of coffee every day helps me to focus on that one cup and make it the best it can be. I would rather have one great cup of coffee than 10 cups of mediocre coffee.

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What Is Great Coffee?

A great cup of coffee is one that is tuned perfectly for your senses. It has great, complex flavors. It is fresh and served at just the right temperature. It smells great. It FEELS great. You know great coffee right away when you have it. Unfortunately, many people have never experienced great coffee.

Characteristics of GREAT Coffee

- * **Complex flavors**- chocolaty, nutty, smoky, citrus notes, even marshmallow flavors.
- * **Fresh**- roasted coffee is very reactive and loses freshness, and therefore flavor, very quickly if you don't handle it correctly.
- * **Not sour or bitter**- coffee should taste good with nothing added to it!
- * **Right temperature**- often coffee is served too hot to fully appreciate the great taste.

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Why Make Great Coffee at Home?

A lot of people get coffee at coffee shops- I used to get at least one cup every day at a great local coffee shop. Now I rarely get coffee at a coffee shop and make my own coffee at home instead. Why? I can think of at least 5 reasons:

Quality. After working at making the best coffee I could at home, I found that I could actually make better coffee than you could buy at a coffee shop. You can get everything you need to make great coffee almost anywhere now, or order them in the mail if you live in a remote area. You can control the entire process to make great coffee every time.

Cost. Coffee at a coffee shop costs around \$2 per cup or more. You can make great coffee at home for around 60 cents for a 16 oz cup. I needed to cut back on my spending, and decided to start making coffee at home. I'm glad I did, because I learned to make great coffee- better than you can get at Starbucks or almost anywhere else.

Freshness. You can make the coffee as fresh as possible, right before you drink it. We'll go over the importance of grinding whole beans just before brewing. I have noticed that coffee shops grind beans in batches, which means the grounds are sitting around for at least a little while- maybe even a day or more- before brewing. Using stale coffee grounds does not enhance the flavor of coffee.

Variety. You can craft great coffee that is adjusted to be just right for you. Unlike at a coffee shop, where you can choose from a few varieties of coffee, at home you can make thousands of different kinds of coffee- even more than that if you make custom blends, as we'll discuss soon. You can also adjust the strength of your brew to be perfect for your taste.

Convenience. Going to a coffee shop once in awhile is fun, but if you do it every day as part of your routine, it consumes a lot of time. You have to drive to the coffee shop, order, pay, pick up your coffee and either drink at the shop, or drink it while you drive if you take it to go. It is so much easier to make coffee at home.

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How to Make Great Coffee

Now it's time to get down to the nuts and bolts of exactly how to make great coffee. I can tell you the mechanics and techniques I use to make great coffee, but it will take experimentation and practice to figure out how to craft the perfect cup of coffee for you.

The next chapters will cover the six fundamentals that you'll need to make great coffee. After those fundamentals are in place, then we'll go through step-by-step and brew some great coffee applying the six fundamentals.

In case you are curious, the six fundamentals of making great coffee are:

1. Coffee Beans
2. Coffee Grinder
3. Filtered Water
4. Coffee Maker
5. Coffee Filter
6. Coffee Mug

These fundamentals may seem pretty simple, but it is mastery of these details that comes together to produce great coffee.

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Fundamental 1. Coffee Beans

Coffee beans are the key to great coffee. The most important component to making coffee is the coffee grounds that you will brew. Where do coffee grounds come from? If you said “From a can”, then you’re doing it wrong!



Choosing Beans

What is Light Roast vs. Dark Roast?

Coffee trees produce a berry called a coffee cherry. Coffee cherries have pits inside- coffee beans. The green coffee beans harvested from coffee cherries are roasted a little to make light roast coffee, or a lot to make dark roast coffee. The amount of roasting makes a big difference in the flavor of the coffee that the grounds will produce.

Green coffee beans are roasted to develop flavor. During roasting, coffee beans will make a cracking sound as they transition from green coffee to light roast coffee (“first crack”). The beans will crack again as they transition from medium roast to dark roast (“second crack”). Light roast coffee tends to be more acidic. Medium roast is sweeter. Dark roast develops spicy flavors, and French roast (or double roast) takes on a smoky flavor. The darker the roast of the coffee beans, the more oily the beans will appear. My current favorite is medium to dark roast. I look for coffee beans that are just slightly oily.

Robusta vs. Arabica

The variety of coffee tree and the conditions where it is growing also make a big difference in the flavor of the coffee. There are only two major species of coffee trees that produce coffee beans that are widely sold: *Coffea Arabica* and *Coffea Canephora* (also known as *Coffea Robusta*).

Arabica beans have better, sweeter flavor and are the way to go for making great coffee. Robusta coffee is easier to produce and have more caffeine, but Robusta is more bitter than Arabica. You may be able to tell the difference between Arabica beans and Robusta beans just by looking at them- Robusta beans are more round and Arabic beans are more elliptical in shape.

Coffee Regions

Just as the specific site and growing conditions where grapes are grown can impact the taste of wine, the local conditions also impact the flavor of coffee. When you buy coffee beans, the region or sometimes the country is given. Coffee trees grow in tropical climates around the world. The best quality coffee beans come from coffee grown in high altitude in rich soil.

Sometimes coffee beans will indicate the country of origin, or sometimes beans will be combined from a number of sources from two or more countries and will simply say the region, such as Central America. I prefer to get what are known as “single origin” coffee beans, which means that all of the coffee beans are from the same country. Estate coffee is a type of single origin coffee where all of it was grown on the same plantation.

Here are some leading coffee producing regions and notable coffee features:

- * **Brazil**- Mild, sweet coffee.
- * **Colombia**- Colombian Supremo is the highest coffee grade.
- * **Costa Rica**- Fruity, hint of citrus flavor.
- * **Ethiopia**- Region where coffee originated, known for bold flavor.
- * **Guatemala**- Known for complex flavors.
- * **Hawaii**- Kona coffee grown in volcanic ash soil.
- * **Kenya**- Kenyan AA is a popular grade. The “AA” refers to a size scale for Kenyan coffee beans- AA is the largest.
- * **Mexico**- Primarily grown in southern Mexico, “Altura” indicates coffee grown at high altitudes.
- * **Sumatra and Java**- These Indonesian island coffee producers are known for aged coffee with lower acidity.

Fair Trade and Shade Grown

Coffee beans may also give information about the growing conditions, such as “shade grown”. With the boom in coffee production, many coffee trees are now grown in full sun conditions. This usually means that a rain forest or other natural area was cleared to plant rows of coffee

trees. I look for shade grown coffee. I think the more natural growing conditions and ecological diversity of shade grown coffee result in better coffee flavor. Plus, I like to support this more sustainable method of producing coffee.

Speaking of sustainable growing of coffee, you can also find coffee beans marked “Fair Trade”. This program promotes better trading conditions for coffee farmers and promotes sustainable coffee growing practices as well. I look forward to buying high quality coffee beans for a long time, so buying “Fair Trade” coffee beans makes sense to me. The prices for “Fair Trade” coffee are often no higher than the regular coffee beans, and it seems like the quality is likely to be better if the producers are compensated better and people are paying attention to sustainable growing practices.

Where to Buy Coffee Beans



I usually get my coffee beans at a grocery store. Sometimes I buy from the bulk bins, and fill a bag with 12 to 16 ounces of coffee beans to buy. Here in eastern Iowa, I can find Verena Street coffee selling in bulk bins which is roasted locally in Dubuque.

Sometimes I get prepackaged bags of whole bean coffee. I look for coffee beans roasted at a local roaster to ensure the highest freshness. Look for the date roasted, and find the freshest beans available. Cafe del Sol Roasting is a local roaster only a few miles from home that stamps

the date roasted on each bag. The last bag I bought was roasted only two days before I bought it- now that's fresh!

I can find coffee beans roasted in a local coffee roaster in my grocery store, and I am in Iowa. If I can find locally roasted coffee beans here in Iowa, you can probably find some near you!

With the rise in popularity of Keurig and other very profitable single cup brewing pods, there is less shelf space available for whole bean coffee in some stores. If you are not happy with the selection of coffee beans at your grocery store, you can always order coffee beans online and have them shipped to you.

You can check out some of the most popular whole bean coffees at the [Coffee Maker Journal Store coffee bean section](#). I like to look at lists of popular coffee beans like this to get ideas for varieties I would like to try.

Handling Beans

Freshness

As you may have gathered from my comments so far, freshness of coffee grounds is one of the biggest factors in making great coffee. You can buy the freshest coffee beans you can find, and wait to grind them until just before brewing. There is no reason to leave coffee grounds sitting around getting stale. Grind only enough to make the pot you are brewing so you are always using the freshest coffee grounds.

Bean Storage

Coffee grounds, and even roasted whole coffee beans, are very reactive with the environment. They will pick up odors and flavors from the air, and they go stale quickly and lose flavor. Don't let this ruin your coffee!

Keep your whole coffee beans in a cool, dry place. I use a glass jar to store my coffee beans. I don't store my coffee beans for long before using them- I buy coffee beans in small quantities of 12 ounces to two pounds at a time.

Another tip for maximum coffee bean freshness- do not store coffee beans in a refrigerator or freezer- there are too many stray flavors that could be picked up there. I store my coffee beans in a dark cabinet away from other food.

Make Your Own Custom Bean Blends!

Years ago when I was ordering a cup of coffee at a coffee shop, I was offered dark roast or light roast coffee. I asked if they had a medium roast. The barista said no, but she could make a medium roast for me. She served me a cup that was 1/2 dark roast coffee and 1/2 light roast coffee mixed together. The result was not medium roast. This cup of coffee had the floral, nutty, and citrus notes of a light roast with the smoky sweet flavor of a dark roast. It was like having the treble and the bass at the same time!

Since then, I have been interested in making my own custom coffee blends. I like to mix coffee beans together, some dark roast and some light roast. This is a good way to adjust the flavor to make your perfect cup of coffee. Try mixing half light roast beans with half dark roast beans to make a custom blend.

~ Get Your Beans ~

What kind of coffee beans should you buy for your first attempt at great coffee? If you don't know what you like, start with a fresh bag of medium roast Arabica bean. Get shade grown, fair trade if available. Try to find some with the date roasted stamped on the bag, and get the freshest ones available. If you want to try custom blends, get some light roast, medium roast, and dark roast beans for making custom blends.

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Fundamental 2. Your Coffee Grinder

The best way to get fresh coffee grounds just before brewing is to use your own coffee grinder at home. Fortunately, you can get an inexpensive coffee grinder for less than \$20 that will allow you to make great coffee whenever you want.



There are several types of coffee grinders available. The least expensive type is a blade grinder that uses a thin steel blade to grind the beans. This is considered the least desirable type of grinder for several reasons. The small surface of the blade can heat up, causing scorching of the coffee grounds. This results in an undesirable burned flavor. Another issue with blade grinders is that they slice the beans rather than crushing them, resulting in a range of fine and course grounds. It is harder to control the coarseness of the grounds using a blade grinder. But you still get fresh grounds using a blade grinder, and they are cheap and simple.

The next step up is a disc burr grinder. Disc burr grinders are the most affordable of the burr grinders and produce good results. The disc burr grinder mechanism uses a disc with raised surfaces that are used to slice the beans. The pitch of the raised surfaces can be used to control the coarseness of the grounds.

The most expensive type of coffee bean grinder is a conical burr grinder. High quality conical burr grinders cost several hundred dollars. This grinding mechanism uses a cone shaped burr for the surface to crush the coffee beans into grounds. Conical burr grinders produce consistent grind coarseness without scorching.

Another option for coffee grinders is a hand cranked grinder. I used one of these when I had infants in the house- using an electric coffee grinder early in the morning would have resulted in crying babies and an angry wife! In addition to being quiet, hand grinders can be inexpensive as well.

Grind Adjustment: Coarse or Fine?

When grinding coffee beans to use in an automatic drip coffee maker, medium coarseness is the optimal grind. If you use grounds that are too fine, the grounds will get packed together in the coffee filter and will not allow enough water to pass through efficiently. Espresso makers use a finer grind since the high temperature and pressure in the small brewing chamber produces the maximum flavor with fine grounds. But for making great coffee, we will be using an automatic drip coffee maker- so go for medium coarseness for maximum flavor extraction.

*****~ Get Your Grinder ~*****

What kind of coffee grinder should you get for your first attempt at great coffee? I am cheap by nature, so I would start with a simple blade grinder which can be found for under \$20. If you decide to get a [better grinder later](#), you can always give your starter grinder away or use it for grinding spices in the kitchen.

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Fundamental 3. Filtered Water

Most people don't seem to worry about the water when they make coffee at home. They just grab some tap water and pour it in the coffee maker. Since coffee is mostly water, the quality of the water you use can greatly affect your coffee's outcome.



Even though I have well water at my house, I filter it using the water filter built into my refrigerator. Filtering removes contaminants such as minerals and bacteria from the water and improves its taste. I also have a water softener at my house to condition the water to remove iron and minerals.

There are claims on the internet that Starbucks uses “triple filtered” water in their coffee. I have never tried filtering my water more than once, but I am starting with pretty good water

quality, so filtering once is adequate. I would not be surprised that triple filtering may be necessary in some areas depending on water quality.

If you are planning to make coffee at home often, you will want to establish a convenient and cost-effective way to get filtered water to use for making coffee. Hook up a water line to your refrigerator with a water filter, or get a small pitcher with a filter that you can keep in your refrigerator to have filtered water to make coffee.

*****~ Get Your Water ~*****

What kind of water should you use for your first attempt at great coffee? Don't use bottled water- it is way too expensive! Filtered water from your refrigerator should be fine if you have it and have changed your filter within the last 6 months. Otherwise, you could use a Britta filter pitcher to filter one pitcher of water at a time and keep it in your refrigerator. If you don't have a way to filter water at home, you can buy a gallon jug of reverse osmosis filtered drinking water at the grocery store for less than \$1.

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Fundamental 4. The Coffee Maker

When you are talking about making coffee, eventually you have to talk about the coffee maker. There are many types of coffee makers- I will talk about using an automatic drip coffee maker to make great coffee. The function of the coffee maker is to heat water to ideal brewing temperature and apply this heated water to the coffee grounds to extract the flavor and greatness from them.



Coffee makers have a filter basket that holds a paper filter to keep coffee grounds out of the coffee and allow flavor to come through. Another feature of the automatic drip coffee maker is a pot, also known as a carafe, to collect and hold the brewed coffee until you are ready to pour it into your cup.

The design elements of an automatic coffee maker can be optimized to extract the maximum flavor from our fresh coffee grounds. The temperature of the water, the shape of the filter

basket, using a thermal carafe vs. a glass carafe, and the temperature of the heating plate for the carafe are factors that impact the outcome of your coffee.

I use a non-contact thermometer to check the temperature of my coffee. Although some places serve coffee that is very hot, around 200 degrees F, I think the ideal serving temperature for coffee is about 158 degrees F. This temperature is a good balance that makes the coffee hot and steamy, yet allows you to really taste the flavor. Brewing at 158 degrees F is also a good temperature to get the most flavor from your coffee.

My preference is to use a coffee maker with a cone filter basket to maximize flavor extraction. These coffee makers take cone filters instead of basket filters which have a flat bottom. I also prefer to use a coffee maker with a thermal carafe, and even with a thermal carafe I don't leave the coffee sitting on the burner very long.

*****~ Get Your Coffee Maker ~*****

If you already have a coffee maker, go ahead and use that for your first attempt at making great coffee. Plan to upgrade to a coffee maker that uses cone filters and has a thermal carafe if you want to step up to the even more flavor extraction. Here is an article I wrote about the [Melitta thermal coffee maker with cone filter and thermal carafe](#) that I bought for under \$50 several years ago and still use every day.

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Fundamental 5. Coffee Filters

I mentioned coffee filters when discussing coffee makers, because the design of the coffee maker determines what kind of filters it uses- cone filters or basket filters. Cone filters are preferred because this shape provides more contact between the hot water and the coffee grounds to allow more flavor extraction during brewing with an automatic coffee machine.



In addition to the shape of the coffee filter, you can also choose the material of the coffee filter. The choices for paper filters include bleached or natural paper. I look for natural paper since less chemical processing is involved in producing them.

Another filter option is to use a filter basket with a built-in plastic mesh or metal mesh filter. An advantage of this is that this type of filter is reusable, but there are significant drawbacks to reusable coffee filters. Paper coffee filters actually remove cholesterol that is present in coffee; reusable filters allow the cholesterol to pass through into your coffee. I don't want to worry about cholesterol when I am drinking my coffee, so I use paper filters. Also, I think reusable filters could hang on to flavors and negatively impact the flavor of your coffee over time. Since paper coffee filters are biodegradable and renewable, I don't feel bad about using a new paper filter every day.

~ Get Your Coffee Filters ~

I always use paper filters-they provide fresh flavor every time, and I don't want to worry about getting cholesterol from my coffee. I use unbleached #4 cone filters. You can pick up coffee filters at any grocery store or order on-line.

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Fundamental 6. Your Coffee Cup

I bet you didn't even think about the cup you would use to drink your great coffee. Does the cup matter? For me the cup makes a difference. If you make great coffee, you might as well maximize the experience by using a cup that enhances the experience of drinking it.



How can one mug make coffee taste different than another? I can think of a couple reasons. One is that the shape of the mug can really accentuate the smell of the coffee. My favorite large brown mug has space at the top when filled with 16 oz of coffee so my nose is right near the coffee and that wonderful flavor is focused right on my face each time I take a sip. Having a large mug makes it easier to smell the coffee and feel the warm steam rising from the mug with every sip.

Another way the mug can affect the taste of coffee is residual flavors. I have had old plastic mugs that provided some "plastic" flavor and really held on to stale coffee flavors. Even ceramic mugs can hold stale flavors depending on the glaze. My new mugs have really slick glaze and are easy to clean completely so the only flavor you get is fresh coffee.

Another reason I prefer large mugs because they can keep the coffee warmer due to a larger thermal mass. I pour my entire 16 ounces into the cup all at once and this stays warm longer than pouring a smaller amount of coffee into a smaller mug.

Even though I prefer drinking my coffee from a large ceramic mug, I normally drink my coffee while driving on weekdays. I have a nice stainless steel thermal mug for this purpose. I have a travel mug with a spring-loaded mechanism that does not leak, even if you turn the mug upside down when full. This mug has a trigger in the handle that you press when you take a sip. A good travel mug is essential if you plan to drink coffee while driving. A mug that can spill while you are driving is dangerous.

~ Get Your Coffee Cup ~

Use a large ceramic coffee mug that has a wide opening so you can feel the warmth from the coffee on your face and can easily enjoy the smell your coffee. If you are planning to drink coffee while driving, get a travel mug so that coffee will not spill while you are driving.

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Brewing Your First Great Coffee

At this point, you have everything you need to attempt to brew your first pot of great coffee. You have picked out one, or perhaps several, whole bean varieties to try. You have a coffee grinder ready to grind the beans just before brewing. You have filtered water available and have selected a coffee maker and appropriate paper coffee filters. Finally, you have a coffee cup picked out that will amplify the experience of drinking great coffee.

But you are still missing something. Look closely at your coffee cup, do you see the problem? It's empty!

Now it is time to put together everything we have learned and actually brew some great coffee to fill your cup.

Steps to Make a Great 16 oz Cup of Coffee:

1. Make sure the carafe on your coffee maker is rinsed out, and make sure the filter basket of your coffee is rinsed out.
2. Place a paper coffee filter in your filter basket
3. Fill your coffee maker's water reservoir with 16 oz of fresh filtered water
4. Take 4.5 (four and a half) level tablespoons of fresh whole coffee beans and put them in your coffee grinder.
5. Set your grinder's coarseness adjustment to medium coarseness and grind for approximately 10 seconds
6. Transfer the fresh coffee grounds into your coffee maker's filter basket on top of the paper filter
7. Press brew to start brewing
8. After your coffee has finished brewing and no more is dripping from the filter basket, allow it to warm up in the carafe on the heating plate for approximately 1 or 2 minutes. The ideal serving temperature is about 160 degrees F.
9. Pour the coffee into your cup. Fill your cup full, ideally pouring the entire 16 oz into the cup.
10. Take a small sip to check the temperature. You want the coffee to be hot, but not too hot to take a big drink to fully experience the maximum flavor. If it is too hot, wait a minute and try again.
11. Enjoy your coffee drinking experience! This is the most important part.

After you have finished drinking is a great time to clean up to keep your equipment in shape for making great coffee. Empty the used grounds from your filter basket and rinse the filter basket. Rinse your carafe as well. I like to leave the lid on my coffee maker open to let it dry each day to prevent mold or mildew from growing. Keeping your equipment clean is important to be able to make great tasting coffee every time. You'll want to use descaler or coffee maker cleaner in your coffee maker once per month to remove mineral build-up and maintain good water flow through the filter basket.

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The Pursuit of Coffee Greatness

I hope the information and advice in this book will help you on your journey to find great coffee. As I mentioned in the beginning, you will need to explore a bit to find coffee that is great for you. There are so many different kinds of coffee beans you can try. As with anything else, your tastes will change over time.

One of the first, and easiest, things to change about your coffee is the strength. Simply change the amount of coffee beans that you use. Did you know that Beethoven hand counted 60 coffee beans for every cup he made? Precisely measuring the amount of coffee beans that you use is important to making great coffee. I had originally planned to have you start with 5 scoops of coffee beans, but backed off to 4.5 scoops since I may like mine a bit stronger than most coffee drinkers.

Another easy thing to change is the roast of the coffee beans that you use. Some people like the citrus, nutty, and floral flavors of light roast, while others prefer the sweeter, smoky flavor of darker roasts. Try mixing some dark and light roast beans together to make your own custom blends each day.

As you seek out new kinds of coffee beans to try, keep learning about the latest coffee making techniques and tips. Check out my coffee blog, [Coffee Maker Journal](#), to keep up on the latest tips and [coffee making equipment](#).

If you enjoyed this book, please consider leaving a review- this will help others discover this book and the joy of great coffee!

Cheers!

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About the Author

Dr. Penny Pincher has a Ph.D. in engineering and lives and works in eastern Iowa with his wife and two sons. In 2013, Dr. Penny Pincher founded [Penny Pincher Journal](#), a blog about saving money every day. His hobbies include [drinking great coffee](#), annoying his family, riding his cheapcycle (cheap bicycle), and saving money every day.



Free Bonus Offer!

For a limited time, get this bonus report from Dr. Penny Pincher for free:

[Uncommon Cents: Weird Ways to Save A LOT of Money](#)

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