### The 5 Hidden Dangers Lurking in Your Coffee Cup



Things you should know before you indulge

### Researched and produced by:





Sponsored by:

Camano Island Coffee Roasters

## Why did Camano Island Coffee Roasters commission a study?



 Many coffee drinkers are unaware of the many risks coffee can pose and what to look for when selecting a quality product.



- We hired an independent research company to investigate both the risks and benefits of coffee and to provide recommendations on selecting the best products available.
- We are pleased to share this study with you!

### Areas Covered



- Food in America . . . the good, the bad, and the ugly!
- Revealing the hidden truths about coffee
- A consumer guide to enjoying the very best coffee



How is food affecting our lives?

## Many of our food choices today are influenced by our fast-paced lives



- The tendency to eat highcalorie, low-value fast foods is on the rise.
- In our troubled economy, more and more people are settling for "cheap and easy" meals over healthier restaurant or home prepared options.
- All of this "fast food" is having a negative impact on our health.



### Obesity rates are climbing



 The number of obese Americans has more than doubled in the past 20 years!

 Obesity greatly increases the risk for other major health concerns, such as diabetes.

Number of states reporting percentage of obese population

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	Less than 10%	10%-14%	15%-19%	20%-24%	25%-29%	30% or more
1990	10	34	0	0	0	0
1995	0	23	27	0	0	0
2000	0	1	27	22	0	0
2005	0	0	4	29	14	3
2010	0	0	0	15	24	12

According to the National Diabetes Fact Sheet, 2011:

"Diabetes affects
25.8 million
people – 8.3% of
the U.S.
population"

### Food safety is a growing concern



Food recalls and reports of foodborne illness are becoming a frequent occurrence.

Over a single one-week period . . .

 Topps (a leading maker of frozen hamburger patties) declared bankruptcy after recalling 22 million pounds of beef contaminated with E. coli.

- Sam's Club recalled 840,000 pounds of beef contaminated with E. coli.
- ConAgra Foods removed its Banquet Chicken and Turkey pot pies from stores after they were linked to 139 cases of salmonella.
- Other **major** food alarms have recently been raised over spinach and peanut butter.
- Difficulties in regulating an increasingly global market and inadequate inspections are leaving consumers wondering where their food came from and if it is even safe for consumption.



Source: ABC News, "Concerns Rise Over U.S. Food Safety," March 23, 2008

## It's becoming more difficult to even know what we're eating



- In an effort to increase crop production, many of the foods being grown today have been genetically altered.
- Because these foods have not been proven safe for human consumption, they have been banned in most developed countries.
- However, they remain unlabeled in the U.S. and Canada and are found in nearly 80% of processed foods.



Source: PR Newswire, "As Concerns About Food Safety and Genetic Engineering Intensify, North America Celebrates Second Annual Non-GMO Month," 10/04/2011

## Chemical contamination is a big concern





- The Organic Trade Commission reports that every day our children are exposed to millions of servings of fresh fruits and vegetables which carry the risk of exposure to pesticide residues, including arsenic.
- Often at levels many times greater than what has been deemed "safe" by the EPA.
- Worse yet, imported foods often carry risks several-fold higher.

Source: Organic Trade Association, "Arsenic's presence reflects a wider problem for all food production," 2/16/2012

### Is it a matter of cost vs. quality?



- Many of the foods purchased today come from sources outside of the U.S.
- These foods are appealing to retailers because they are frequently produced and purchased at prices far below those within our own borders.
- Recent events such as the baby milk contamination catastrophe in China are raising concerns about the safety of foods coming from other countries with less stringent regulations and

oversights.



## One of our beloved beverages has its own concerns





- Statistics show that coffee is the world's most popular beverage, with more than 400 billion cups consumed annually.
- 54% of Americans aged 18 or over drink coffee on a daily basis, averaging 3.1 cups each day.
- If this is our beverage of choice, we really ought to do all we can to know exactly what may be lurking in our daily cup!

Sources: Top 100 Espresso, Coffee Statistics Report – 2012 Edition; Harvard School of Public Health, "Coffee by the Numbers," 2009

## Could your coffee actually be making you sick?



 After drinking coffee, do you ever notice . . .

— An increase in acid reflux?

– Abdominal pain or nausea?

 While coffee remains a top beverage choice, there are some hidden dangers which might influence your choice of coffee products.



### Danger #1: Type of coffee





- There are two types of coffee beans . . .
   Robusta and Arabica.
- Robusta beans grow more plentifully and are cheaper.
- Robusta beans also contain nearly DOUBLE the amount of caffeine of Arabica beans.
- In order to lower production costs, many grocery store brands use Robusta beans as an inexpensive "filler."

### Coffee is highly absorbent



- Due to its great absorbency, coffee is frequently used to neutralize odors.
- This quality also affects the taste of the coffee . . .
  - Based on where it is grown, coffee will take on a different flavor.
  - For example, coffee grown in Ethiopia will taste different than coffee grown in Brazil.
- In an effort to maintain consistency in flavor in cheaper brands of coffee, several varieties are frequently mixed together.
- But it also makes it difficult to know just what is in each batch . . . or where it came from.



The way the beans are grown can also make a difference.

# Danger #2: Inferior production techniques



- Americans spend \$40 billion on coffee each year!
- But most coffee is grown in Latin
   America and other less developed countries.
- Because laborers frequently work for extremely low wages in these countries, there is concern over whether imported crops are being fairly traded.



Source: Harvard School of Public Health, "Coffee by the Numbers," 2009

### Sun-grown vs. shade-grown coffee



- During the 1960-70's, many coffee growers began converting naturally shade-growing coffee fields to sun-exposed plantations.
- Sun-grown plants produce about 3 times the amount of beans that shade-grown plants produce, but they are a much lower quality.
- Sun-grown beans contain higher amounts of acid and are more bitter to the taste.
- This higher acidity level frequently leads to heartburn and acid reflux.
- Flavor, quality, and environmental responsibility seem to take a back seat to production and profits!



Let's consider some other practices being used to increase production and profits

Source: Coffee Research Institute, "Benefits of Shade Grown Coffee," undated

# Danger #3: Fertilizer and pesticide usage





- Once the natural shade cover had been removed from coffee plantations, coffee plants became dependent upon supplemental fertilizers.
- Reports show that coffee is sprayed with more chemicals than any other crop except tobacco.

## What about pesticide usage on coffee beans?



- Because of the high absorbency of coffee beans, fertilizers and pesticides are readily absorbed.
- While DDT is not widely used today, there are many other pesticides which ARE used, and the full severity of their impact on humans may not yet be entirely known.



Source: Natural Resources Defense Council, "Coffee, Conservation, and Commerce in the Western Hemisphere; Environmental Dimensions of Coffee Production," undated

### Danger #4: Improper processing



- According to the 2011 National Coffee Drinking Trends Study, 86% of coffee consumers drink coffee at home . . . presumably purchased at a grocery store or other retail outlet.
- By the time coffee is picked, processed, packaged, and finally reaches grocery store shelves, it might already be three months old.
- With age, coffee is susceptible to deterioration and even mold growth . . . which not only tastes bad, but can make you sick.
- Many people think coffee lasts forever or can be stored for longer in the freezer, but coffee actually expires within about 2 months after roasting and should not be consumed after that.



One method of masking the bad taste of old coffee is through heavy roasting.

## Heavy roasting actually "burns" the coffee



- A lot of coffee is intentionally "burned" during the roasting process to create a uniform flavor that is not diminished over time while coffee lingers on store shelves for months.
- The process of roasting coffee at high temperatures causes acrylamide to form.
- When consumed, acrylamide can cause damage to the nervous system, weakness, incoordination in the legs, paralysis, and cancer.
- The concentration of acrylamide found in highly roasted coffee can reach hundreds of times the amount deemed "safe" in drinking water by the EPA.

Safe levels of Acrylamide in drinking water, as recommended by the EPA:

#### 0.5 ppb\*

Average levels of Acrylamide typically found in brewed coffee:

#### 175-350 ppb\*

Which means that the average cup of coffee contains about

#### **400+ times**

the recommended "safe" level of acrylamide!

\*parts per billion

# Decaffeinated coffee is also prone to poor processing techniques



 Most decaf comes from low quality Robusta beans.

 Beings Robusta beans have higher caffeine content to begin with, and because the U.S. only requires that 97% of caffeine be removed, the actual amount of caffeine remaining can be questionable.

 There are three methods decaffeinators use for removing the caffeine

- Over 50% use a chemical method
- 20%+ use a water method
- About 20% use a CO2 extraction method

Sources: U.S. Dept. of Health and Human Services, "Report on Carcinogens," 2011; U.S. Environmental Protection Agency, "Methylene Chloride;" Tea and Coffee, "Market Update 2010 Delving into Decaf," by Barbara DuFrene and Alexis Rubinstein



# Decaffeinated coffee is also prone to poor processing techniques



- Most people are unaware that the chemical method involves "washing" these highly absorbent beans in methylene chloride . . . a know human carcinogen frequently used in paint strippers and dry cleaning solutions.
- Not to worry though, the FDA has approved this process because "burning" the beans removes most of the residue.

Sources: U.S. Dept. of Health and Human Services, "Report on Carcinogens," 2011; U.S. Environmental Protection Agency, "Methylene Chloride;" Tea and Coffee, "Market Update 2010 Delving into Decaf," by Barbara DuFrene and Alexis Rubinstein



### Danger #5: World impact





- The destruction of rainforests to make way for sun-grown coffee plantations has been linked to a 20% reduction in migratory bird populations.
- Removal of these trees also leaves soil vulnerable to erosion, run-off, and depleted natural nutrients.
- Experts indicate that the burning and clearing of forests produces about 16% of global greenhouse gas emissions . . .
- More than the total amount produced by ALL cars, trucks, SUVs and trains on the entire planet!

## Whether or not coffee is "fairly traded" is another hot topic





- Because the majority of coffee is produced in underprivileged countries, many of the workers are not paid fairly for their time.
- While many organizations are trying to improve this situation, it still remains a controversial topic of concern.

## What are the results of these challenges?



- Many coffee drinkers are being exposed to problems and health risks that they aren't even aware of.
- This doesn't mean that coffee drinkers have no other choice than to give up their beloved beverage.
- Let's consider some steps which will enable consumers to continue to enjoy their coffee without all of the negative side-effects.



## Consumer Guide to Coffee

### Step #1: Select single origin coffee



- Single origin coffee means that all of the beans in your coffee were grown in the same area, under the same circumstances.
- It is a guarantee that there are no "cheap fillers" which will alter the taste or make-up of your coffee.



## Single origin coffee offers superior flavor





- The fact that coffee is so highly absorbent is also one of its great qualities.
- It is what gives coffees their distinct flavors, based on the region where they are grown.
- The best way to ensure that you will always get that same great taste you have come to enjoy is by selecting only coffees of single origin.

### Step #2: Ensure quality processing



- When coffee beans are only lightly roasted, they are able to maintain their unique flavors.
- Coffee which is heavily roasted forms an "ash" which creates "food intolerance" issues for many people.
- Although caffeine frequently gets the blame, many people are surprised by the relief they get by simply moving to a more lightly roasted coffee.



## Micro-roasting produces a higher quality of coffee





- Micro roasted coffee is produced in small batches using exact specifications to bring out the very best of the coffee bean.
- After beans are roasted to perfection, they are cooled by air, rather than water, which
  - Allows the beans to retain more of their full body of flavor, and
  - Prevents added weight which consumers end up paying for.

### Fresher is better



- "Best by" dates which are stamped on bags are not a good way to judge the age of coffee.
- The only way to know that you are getting fresh quality is by knowing the date the coffee was roasted.



### Fresher is better



- Once the original packaging is opened, coffee begins to lose freshness quickly.
- After opening, coffee should be quickly transferred to an airtight container and stored at room temperature.
- Whole beans should be consumed within 8-12 weeks of roasting.
- Ground coffee is best if consumed within 7-10 days.
- To be at its height of taste, coffee should not be ground more than 2 minutes before brewing.



### Step #3: Choose only organic



- According to the 2011 U.S. Families' Organic Attitudes and Beliefs Study, 78% of U.S. families are buying organic food.
- The number of farmers markets grew by 17% between 2010 and 2011.
- Community or backyard gardens and home-raised chickens are becoming commonplace.
- Simply put, organic foods which are produced without using pesticides or chemical fertilizers are better for us and the environment.



Sources: Organic Trade Association, June 2011; InOrganicWeTrust, Facts 'n Stats; USDA, National Directory of Farmers Markets

### Is it worth it?





- While organic coffee does cost more, the benefits may be well worth it.
- We are as yet to fully understand the impact harmful chemicals and pesticides may have on our longterm health, but the best way to avoid high-risk exposure is through buying certified organic products.

# It is also important to ensure decaf is 100% organic



- Although the FDA approves chemical processing as a safe means of removing caffeine, there are safer methods which do not risk introducing chemicals into the finished product.
- Its creation process should involve nothing more than organic coffee beans and pure water.



# Choosing organic can create a "world of change"



- As the public comes to demand organic foods and products, growers will automatically step up to meet those demands or lose business.
- Organically grown coffee leads to:

Healthier people

Healthier rainforests

Healthier planet

## Step #4: How it is grown matters



- Coffee that is grown under cover of shade grows more slowly, allowing the natural flavors and sugars to more fully develop.
- This produces a coffee which is sweeter, has a fuller flavor, and is less acidic and bitter.
- Which ultimately means it is easier on your stomach and more enjoyable to the taste.



Source: Coffee Research Institute, "Bird Friendly and Shade Grown Coffee," undated

# Shade-grown coffee practices are "responsible growing"





- Allowing coffee trees to grow in their natural habitat is the best option for preserving our rainforests and wildlife species.
- In shade-grown coffee plantations, as many as 150 species of birds have been identified.
- Sun-grown plantations support only 20-50 species.

### Additional benefits to the world



- Leaving healthy forests intact helps combat climate change, as they actually extract carbon from the atmosphere.
- As consumers come to understand and support this concept, the coffee farmers and workers will also be benefitted by producing the highest quality and most desirable coffee products available.

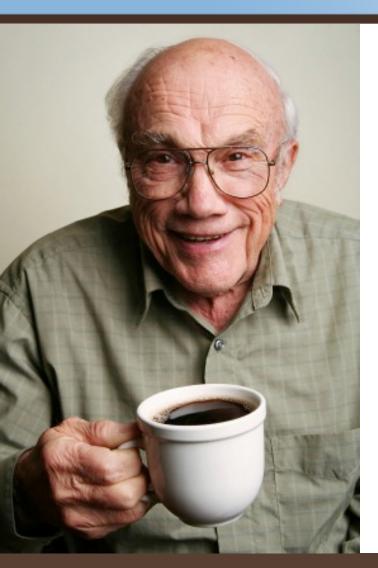
"Coffee is turning out to be quite a cosmic issue, and the way it's grown, marketed, and consumed has implications for the environmental health of the world."

Russell Greenberg
 Smithsonian Migratory Bird

Center

## Step #5: Consider the health benefits of coffee



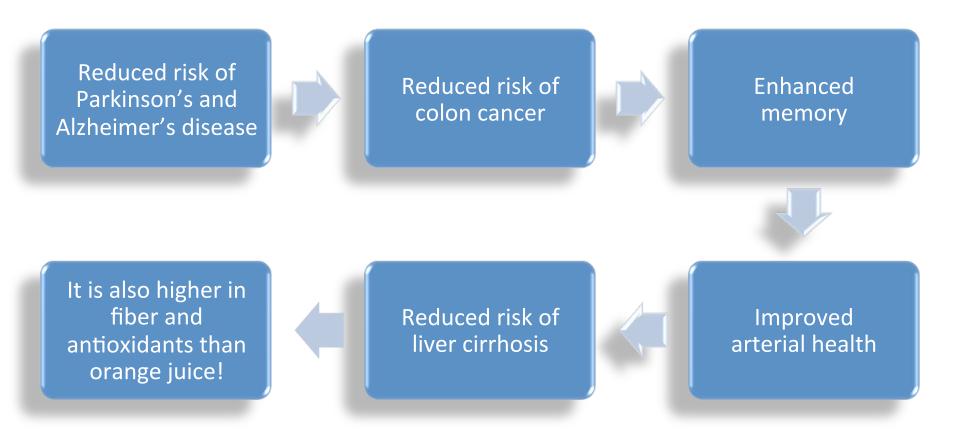


Recent studies have shown . . .

- Regular, moderate consumption of coffee can reduce the risk of type 2 diabetes.
- Drinking 3-4 cups of coffee each day has been shown to lower the risk by 25%.

## Other health benefits may include...





Sources: National Coffee Association of U.S.A., "Little Known Facts About Coffee," coffeescience.org; "Why a coffee break helps you live longer by warding off heart disease," Daily Mail. 9/1/10

## Step #6: Find the right coffee provider





- To provide the best experience

   high-quality flavor and health
   benefits—coffee should be:
  - Triple-certified
    - Organic
    - Shade-grown
    - Fairly traded

## Look for convenient purchase options



- Some online providers are making their products available through subscription plans.
- This is a nice way to ensure your coffee is
  - made to order, exactly how you like it,
  - always fresh, and that
  - your supply never runs dry
- And what a great benefit in having it delivered right to your door!



### It should be fresh and affordable



- For optimum freshness, it should be roasted and shipped within 24 hours.
- Many grocery store coffees are sold as a "pound" of coffee, but closer inspection may reveal a lesser quantity.
- Pound for pound, fresh roasted coffee should ideally be priced similarly to grocery store brands.



# Find a responsible-minded provider





- The best coffee providers are not only concerned about offering the highest quality coffee available . . .
- They are also finding ways to do so while giving back to our planet and those individuals who work so hard to grow environmentally friendly coffee as well!

# Small, everyday choices can make a big difference



- Every time you pick up your cup, you can also have an impact . . .
  - By choosing only shadegrown, organic coffees,
  - And by only purchasing coffees which have been fairly traded.
- Who knew it could be so easy?



# We hope you've learned valuable information today



- Although there are many controversial challenges facing coffee drinkers today, enjoying a daily cup or two can still bring moments of satisfaction and pleasure when one is well informed.
- This study was sponsored by Camano Island Coffee Roasters.
- We would like to share a 3-minute overview of how we are making people's coffee-drinking experience more fulfilling.



# Introducing... Camano Island Coffee Roasters

#### Who we are



- Camano Island Coffee Roasters isn't just about coffee; we've built a business around giving back – especially to those who grow our coffee.
- We believe every person is able to make a difference in the lives of others by simply purchasing responsibly.

 We've built a company that allows us to both enjoy our coffee AND sleep at night.



### What we do





- We start by only using the top 1% of the world's coffee beans.
- They are triple-certified, high-quality Arabica coffee beans which are
  - Shade grown
  - Certified organic
  - Fairly traded

### What we do





- These high quality coffee beans are then
  - Custom roasted, from light to dark roast
  - Packed as whole beans, or custom ground to preference
  - Shipped within hours of roasting
  - Shipped as frequently as desired, with no delivery charges
- Our **price per ounce** is the same as, or lower than, many lesser quality coffees in stores.

### What sets us apart



- Our Coffee Lover's Club allows customers to:
  - Automatically receive a new shipment on the intervals you select.
  - Get a discount on our everyday price.
  - Free shipping on every Coffee Lover's Club shipment.
  - Pay for each order only when the order is shipped
  - Have the option to cancel any time.







### What sets us apart



- We partner with Agros International to help poor, rural farmers own their own land and break out of the generational poverty cycle.
- Our customers are the reason positive change is happening in the lives of the families who grow the coffee we sell . . .
  - From clean water to educational centers for children.



### What sets us apart



- In addition to the fair wage we pay the farmers for their coffee, we send them \$1.00 from every order to assist with health care, land ownership, and education.
- Our customers find great satisfaction in both the finest quality coffee available and the ability this little self indulgence gives them to make a difference in the world around them!



## What people are saying...



"I love the idea of organic, fairly traded and shade grown. Camano Island Coffee Roasters gives me ALL that AND the taste is incredible". Susan B.

"The best coffee I've ever tasted". Kim Y.

"Its so fresh you can taste all the nuances of the coffee instead of 1 over arching burnt taste". Grant S.

"It's like Christmas when my order comes!" Jennifer V.



### Our offer to you





For a limited time only Jeff, our founder, is putting his money where his, or your, mouth is. He is so sure that you are going to love the coffee that he is willing to send you a pound of organic, fairly traded, shade grown and fresh roasted coffee, right to your door for FREE- all you have to pay is the shipping and handling. That's an amazing deal.

## Let us help you



**Call Us Today** 

866-387-JAVA

(866-387-5282)

**Or Visit** 

www.camanoislandcoffee.com

