# A guide to HOSTING A chocolate tasting PARTY

Chocolate provides us with one of the most fulfilling sensory experiences that can be derived from food.

During this Guided Chocolate Tasting, you will notice that the focus is beyond simply eating or "tasting" chocolate; instead we will concentrate on the whole sensory experience.

So what does that mean?

When we experience chocolate, we need be aware of our five senses (and process in this order):

sight smell sound feel taste

# chocolate tasting how-to guide

# materials needed

- · Plain sparkling water (or still water) at room temperature
- Green apple slices or unsalted plain crackers to cleanse your palate
- Variety of chocolates
- Plates, napkins or tasting mat for the chocolate pieces
- Glossary of chocolate terms

# tasting tips

# sight

- Is it light brown in color to suggest a milk chocolate or a darker shade to suggest a dark chocolate?
- The origin of the cocoa beans can also affect the color. For example, West African cocoa beans tend to produce lighter chocolate than cocoa beans from Ecuador.
- A very dark brown may suggest alkalized or "dutched" components present in the chocolate. This is a special process that neutralizes the natural acid from the cocoa bean and produces unique flavors.
- If chocolate has a "greyish" cast, it's possible that it was exposed to some temperature fluctuations. This is not harmful and is caused from the cocoa butter or sugar that has risen to the surface. Commonly known as "bloom," this process should not affect the overall flavor of the chocolate as it melts in your mouth.

## smell

- The chocolate aroma entices the olfactory system, which is responsible for about 70% of our overall chocolate tasting experience.
- Smelling the chocolate first sets the expectation for the flavors you may experience when you taste it.

# sound

- When you bite into a piece of chocolate or break off a piece with your hands, listen to the sound it makes.
- Milk softens chocolate so it'll make a soft and quiet sound the more milk in the chocolate, the quieter the chocolate.
- A sharp "snap" sound is typical of well tempered dark chocolate.

## feel

- First, place the chocolate on your tongue and feel the smoothness as it melts in your mouth.
- Use your tongue to push the chocolate against the roof of your mouth and feel it melt there.
- Generally speaking, the smoother it feels, the finer and more luxurious the chocolate.

## taste

- Now pay attention to the individual flavors in the chocolate.
- Does it taste like caramel, dried fruits, malt or have nutty flavors?
- The nuances that can be tasted are almost endless.
- The cocoa beans' origin and how they are processed and blended with the other ingredients, such as the milk, help determine the components of the overall flavor experience.

# other tips

- Always taste mild (milk) chocolates first and then progress to more intense chocolates like dark, similar to how wines are tasted white to red.
- If you're tasting a series of dark chocolates, start with the lower cacao percentages and move your way up (e.g. start with a 50% and end with a 75%).
- Our senses fatigue when tasting, therefore it is best to do no more than three pieces of chocolate per "flight" and no more than three "flights" at one time.

# Remember to have fun and happy tasting!

# **Tasting Notes**

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# flight 1

# milk chocolates

creamy milk

dark milk

www.ChocolateUSA.org

# **Tasting Notes**

# flight 2

# dark chocolates

50% Cacao

85% Cacao

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# **Tasting Notes**

# flight 3

# single origin chocolates

Madagascar Criollo 65% Cacao

Ecuador Nacional 65% Cacao

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# Common DESCRIPTIVE Chocolate Terms

# Astringent

Alum, decreases with fermentation time, felt all-over mouth

# **Baked Brownie**

Soft, chewy under baked center indicates a "deep, dark, chocolate"

# **Bitter**

Taste occurs from caffeine but decreases with fermentation time

# **Burlap**

Takes on flavor of a burlap bag which typically stores cocoa beans

Burnt Burnt toast, espresso coffee

Caramel Caramel flavor is from the interaction of milk and sugar

Cardboard Bland flavor, e.g. cocoa butter

Chocolate Essence Intense chocolate liquor, increases with proper fermentation and degree of roast

Cocoay Cocoa powder flavor which is less intense

Cooked Milk Tastes like "skin" on cooked pudding

**Coriander** Unique flavor from seed of cilantro plant that rounds out flavors

## Earthy

Aroma/flavor similar to potting soil or greenhouse due to improper bean cleaning

**Fruity** Tastes like processed fruit, such as cherry or raspberry

# Green

Raw vegetables (green beans, peas, etc) flavor and is caused by "under-roasted" beans

# Hammy/Smokey

Tastes like smoked cured meats and is from the fire drying of cocoa beans

# Medicinal

Menthol-like or bandage aroma/flavor and occurs during finished product storage

# **Milk Crumb**

Made from chocolate liquor, sugar and milk with flavors varying due to recipe or process

## Musty

Moldy, damp basement aroma/flavor due to low quality beans

Nutty

Tastes like nuts roasted in the shell

## Rubbery

Similar to chewing on a balloon and is a cocoa bean drying method

# Sour

Tastes like lemons but peaks and levels out during bean fermentation

Sour Milk Aroma/flavor like yogurt or sour cream

## Straw

Mostly pertaining to cocoa butter, tastes bland and smells like wet clean straw

Toasted Grain Toasted oats aroma/flavor

## Tobacco

Chewing tobacco aroma that's determined by bean source

## Vanillin/Vanilla

Unique aroma/flavor of vanilla but too much vanillin can cause "vanillin burn" aftertaste

## Winey

Aroma/flavor similar to red wine and is determined by bean source

# Woody

Aroma/flavor of dry wood or popsicle sticks

# DECIPHERING Cacao Percentages

# **Overview of "% Cacao"**

- The term '% cacao' refers to the total percentage of ingredients (by weight) which come from the cacao bean (or cocoa bean) such as chocolate liquor, cocoa butter, and cocoa powder found in a chocolate product.
- The term is being increasingly used in connection with premium chocolates including dark chocolate.
- In general, the '% cacao' number is a guide to milder or deeper chocolate flavor intensity, depending on your taste preferences or the needs of your recipe.
- Some products in the U.S. use the term '% cocoa' interchangeably with '% cacao.'
- The '% cocoa' on these products is intended to refer to the total content of ingredients from the cacao bean, not just the amount of cocoa powder.
- The use of '% cacao' originates in Europe where chocolates must be labeled to indicate the minimum total cocoa solids. 'Cocoa solids' are often stated as '% Cacao' (France, Spain), '% Kakao' (Germany), or '% Cocoa' (UK).

# **Characteristics of Chocolate**

The Higher the Cacao Percentage, the Greater the Flavor Intensity

- In general, a higher '% cacao' means a more intense chocolate flavor.
- The U.S. cacao standards require a milk chocolate to contain at least 10% chocolate liquor.
- Semisweet or bittersweet chocolate must contain at least 35% chocolate liquor, resulting in a higher '% cacao' and a more intense chocolate flavor.
- White chocolate has a very different flavor profile because it is derived only from cocoa butter.

# Higher Percentage Equals Less Sweetness

- A higher '% cacao' means less added sugar.
- For example, a 72% cacao dark chocolate has less sugar than a 60% cacao dark chocolate.
- Unsweetened baking chocolate is a 100% cacao product with no sugar.

Cacao Percentage and Flavanol Content - Not Always Related

- While certain flavanol compounds in chocolate and cocoa products are associated with non-fat cocoa solids, actual levels of flavanol content may fluctuate widely depending upon formula, cacao bean selection, subsequent processing practices, and storage and handling conditions.
- '% cacao' may not necessarily indicate the flavanol content of chocolate.

# **Chocolate** GLOSSARY

#### Antioxidants

Compounds that protect cells against the damaging effects of reactive oxygen species by "quenching" the oxygen appetite of free radicals – unstable oxygen molecules that cause damage to cells, DNA and tissues. Research suggests that consumption of antioxidant-rich foods, including cocoa and dark chocolate, reduces damage to cells from free radicals. This may slow down, prevent, and even reverse certain diseases that result from cellular damage, and perhaps even slow down the natural aging process.

#### Blending

The process which occurs after roasting and before grinding. Crushed beans are blended, determining the flavor of the chocolate.

### Bittersweet (or Semisweet) Chocolate

The darkest of eating chocolate with the highest percentage of chocolate liquor that contains extra cocoa butter to make it melt easily. Years ago, "bittersweet" referred to European dark chocolate, with "semisweet" attached to American dark chocolate. According to US regulations called the Standards of Identity (SOI), both bittersweet and semisweet must contain at least 35% chocolate liquor. Generally, bittersweet chocolate, which is primarily used for baking, has a cocoa content of 50% or more.

#### Cacao

Refers to the bean, which is the source of the cacao components of chocolate liquor, cocoa butter, and cocoa powder.

#### Catechin

A powerful, water soluble polyphenol and antioxidant that is easily oxidized. It is believed to have some value in fighting tumors as well as enhancing immune system function. Cocoa nibs are an excellent source of catechins.

#### **Chocolate Liquor**

Produced by grinding the cacao bean nib (or center) to a smooth, liquid state. In the U.S., chocolate liquor is also called unsweetened chocolate, baking chocolate, or bitter chocolate. In Canada and Europe, other names include cocoa (cacao) mass and cocoa liquor. It does not contain alcohol.

#### Cocoa Beans

Seeds from the pod of Theobroma cacao, a tree native to the tropical Amazon forests. Commercially grown worldwide in tropical rainforests within 20° latitude of the equator.

#### Cocoa Butter

The fat naturally present in cacao beans that melts at body temperature and gives chocolate its unique mouth feel. The amount of cocoa butter in cacao beans typically ranges from 50 to 60%. Cocoa Butter is not a dairy product.

#### Cocoa or Cocoa Powder

The product made by removing part of the fat (i.e., cocoa butter) from the cocoa bean and grinding the remaining material to a powder. Under U.S. regulations, "cocoa" and "cocoa powder" can be used synonymously.

### **Dark Chocolate**

Also known as "sweet chocolate." A general term for chocolates containing 15 - 35% chocolate liquor and less than 12% milk solids, as well as sweeteners and cocoa butter.

### **Dutch (or Dutched) Process**

A treatment used during the making of cocoa powder in which cocoa solids are treated with an alkaline solution to neutralize acidity. This process darkens the color of the cocoa and develops a milder chocolate flavor.

#### Enrobing

The act of coating a candy center by pouring chocolate over it, usually by mechanical means.

#### Epicatechin

A smaller, simple flavanol that is found in red wine, tea and in abundant quantities in cocoa beans. May have potential heart health benefits, and has been found to have insulin-like effects.

#### **Fat Bloom**

The result of inadequate tempering or temperature abuse of a properly tempered chocolate. Visible as a dull white film on the surface of the chocolate with the possibility of a soft or crumbling texture on the interior. While visually undesirable, the product is fine and safe to eat.

#### Fermentation

A natural process by which bacteria, yeast and molds modify the composition of cocoa bean, so that when the beans are roasted, they yield characteristic chocolate flavor.

#### **Flavanols**

Flavanols are a distinct group of compounds within the flavonoids family – plant compounds that can be found in a variety of foods and beverages, such as cocoa, red wine, green tea and certain fruits and vegetables. The predominant flavonoids in cocoa are flavanols.

#### Flavonoids

A class of plant secondary metabolites based around a phenylbenzopyrone structure. Flavonoids are most commonly known for their antioxidant properties, protecting against oxidative and free radical damage. Flavonoids are part of a broader class of compounds known as polyphenols.

#### **Free Radicals**

Unstable oxygen molecules that cause damage to cells, DNA and other biological entities. Imbalance between antioxidants and free radicals causes "oxidative stress." Free radicals have been linked to cancer, aging, atherosclerosis, neurodegenerative diseases (Parkinson's & Alzheimer's).

#### Grinding

Mechanical process of pulverizing the roasted cocoa bean nib to a smooth liquid known as chocolate liquor.

#### Lecithin

A natural food additive which acts as an emulsifier and surface active agent. Virtually all commercial lecithin products are derived from soybean. In chocolate manufacture lecithin controls flow properties by reducing viscosity. Typical usage levels range from 0.1 - 0.5%.

#### **Milk Chocolate**

The most common kind of eating chocolate, it is made by combining chocolate liquid, cocoa butter, milk or cream, sweetening, and flavorings. All milk chocolate made in the U.S. contains at least 10% chocolate liquor and at least 12% milk solids.

#### **Natural Process**

Non-alkalized chocolate liquor or cocoa processed without an alkaline treatment.

#### Nib

The center (meat) of the cocoa bean. Roasted or unroasted cocoa beans are mechanically cracked, allowing the separation of the cocoa bean shell from the cocoa nib.

Oxygen Radical Absorbance Capacity (ORAC) The measure of a food's antioxidant power.

### Polyphenol

A broad class of naturally occurring compounds found in plants, characterized by the presence of more than one phenol group per molecule. Over 8,000 polyphenols have been identified in plants.

### **Press Cake**

Product remaining after most of the cocoa butter has been pressed from the chocolate liquor. Press cake is pulverized to make cocoa powder.

#### Procyanidin

A subclass of flavonoids.

#### Roasting

Cooking or heating process using high temperature or dry heat which fully develops the chocolate flavor of the cocoa beans.

#### Semisweet Chocolate

Like bittersweet chocolate, semisweet chocolate is required by the US Standards of Identity to contain at least 35% chocolate liquor. Generally, semisweet chocolate contains 35 - 45% chocolate liquor.

#### Sugar Bloom

Visible as a dull white film on the surface of the chocolate, usually dry and hard to the touch, the result of surface moisture dissolving sugar in the chocolate and subsequent re-crystallization of the sugar on the chocolate surface. Typically caused by cold chocolate being exposed to a warm humid environment with resultant condensation forming on the product. A visual and textural defect only; the product is fine to eat.

#### Tempering

A process of preparing chocolate that involves cooling and heating so that it will solidify with a stable cocoa butter crystal form. This process is used to prepare chocolate for coating and dipping. Proper tempering, followed by good cooling, is required for good surface gloss and to prevent "fat" bloom.

#### **Unsweetened Chocolate**

Same as "chocolate liquor." The chocolate liquor is cooled and molded into blocks that can be used for baking.

#### White Chocolate

A blend of cocoa butter, milk, sugar, and flavor. No chocolate solids other than cocoa butter are present, which explains the lack of brown color. In the US, since 2004, white chocolate needs to be at least 20% (by weight) cocoa butter, at least 14% total milk solids, and less than 55% sweeteners (such as sugar).

#### Winnowing

Process of cracking and removing the cocoa bean shell, which reveals the inner part of the bean (the nib).