# Botany for a Purpose

# Basic Herbs for Wholebody Wellness



#### --unknown

"The greatest medicine of all is to teach people how not to need it"

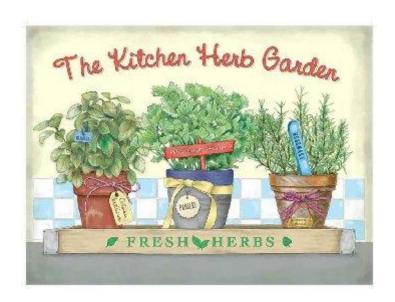
#### --Thomas Edison

"The doctor of the future will give no medicine, but will interest his patients in the care of the human body, in diet, and in the care and prevention of disease."

#### --Voltaire

"The art of medicine consists of amusing the patient while nature cures the disease."

## --Hippocrates



"Let food be thy medicine and medicine be thy food."

#### **Botany**

What is botany?

Here is a definition I found on Wikipedia.

"Botany, also called plant science or plant biology, is the science of plant life and a branch of biology. A botanist or plant scientist is a scientist who specializes in this field of study. The term "botany" comes from the Ancient Greek work Boravn (botane) meaning "pasture", "grass", or "fodder". Boravn is in turn derived from Bookiev (boskein) "to feed" or "to graze". —Wikipedia

Herbalism was how botany began. Studying and using the plants to find out what medicinal properties they had. Now it is the study of plants and plant life. There are over 400,000 different plants or as scientifically called "species" in the plant kingdom, which includes: algae, fungi, lichens, mosses, ferns, conifers and flowering plant.

This is how the kingdom is broken down:

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Division ( -phyto)

Class ( -eae, opsida)

Subclass ( -ae)

Order ( -ales)

Family (- aceae) can also be broken into subfamily and tribe

Genus first part of plant name, (always capitalized)
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Species second part of plant name, (always lowercase), both in italics For our purpose with herbs, we will use only family, genus and species. Here is an example using Stinging Nettle:

**Nettle Family** 

Family: URTICACEAE

Latin: URTICA (genus) dioica (species) L.

Assignment: Look up Carl Linnaeus, Leonhart Fuchs and Valerius Cordus. See what each one contributed to the study of plants.

### **Quick View of Herbal History**

#### Genesis 1:11, 12

11) Then God said, "Let the earth bring forth grass, the herb that yields seed, and the fruit tree that yields fruit according to its kind, whose seed is in itself, on the earth"; and it was so. 12 ) And the earth brought forth grass, the herb that yields seed according to its kind, and the tree that yields fruit, whose seed is in itself according to its kind. And God saw that it was good.

#### **Ezekiel 47:12**

.....Their fruit will be for food, and their leaves for medicine.

#### Proverbs 27:25

When they hay is removed, and the tender grass shows itself, and the herbs of the mountain are gathered in,

To me this is where herbal history began, back in the garden, God's perfect garden.

Plants have been used for thousands of years for medicinal purposes. Ancient civilizations used herbs in some form for medicine, healing, making pills and infusions. Traditional uses of the herbs varied from the different cultures. From the Sumerians, Babylonians, Egyptians, Chinese, India, Greek and Romans each preserved their own

contribution by writing down on clay tablets, papyrus, or some form of scrolls their medicinal and food uses of herbs.

The Sumerians were the actual first civilizations to write down about the herbs they used medicinally. Two Chinese emperors wrote about herbal remedies. Pen Tsao (Classic of Materia Medica) and Huang-ti Nei-ching (The Yellow Emperors classic of Internal Medicine). Those are still used today.

Hippocrates, a Greek physician said that medicine was a science and an art. He is called the "father of modern medicine". He emphasized the importance of diet, exercise, being in the sun and lots of water. Sound familiar? Isn't that what we emphasize today for good health? Hippocrates felt that the four elements (fire, water, earth, air) were in the human body as yellow bile, phlegm, black bile and blood, called the four humors. This is very similar to TCM.

Another Greek, Dioscorides wrote a book "De Materia Medica" it was used for over one thousand years, it was the first true herbal to be written.

The Romans used herbs not only medicinally but also culinary. Two herbalists were Pliny and Galen (a Greek who practiced in Rome). Galen's Theriac a recipe book of antidotes and medicines.

In the middle ages, Charlemagne had herbs planted on his estates. The monks planted physic gardens filled with herbs for healing and translated herbals of old civilizations. Herbs became very popular when during the black plague the thieves who robbed the bodies did not get the plague. They made herbal vinegar and rubbed all over themselves for protection. There are many renditions todays, some using essential

oils. Gerad wrote "The Herball", and Nicholas Culpepper wrote his "Complete Herbal".

TCM uses yin and yang (opposites, eg dark-light). They also use the elements fire, earth, metal, water and wood. These elements relate to a part of the body. For example wood/liver, metal/lung, earth/spleen, fire/heart, water/kidney, also to affinities, emotions and symptoms.

The Doctrine of Signatures was a way old herbalists identified the qualities of the plant and also the medicinal uses, by observing if it looked like a particular organ or disease. The shape of the leaves, flowers and color influenced that part of the body that it resembled and healing function. For example, if the plant had heart shaped leaves, violet, it would benefit the heart.

During the 16<sup>th</sup> century, herbal knowledge was at its peak, and in the 17<sup>th</sup> century herbal medicine and botany separated into two areas, with botany taking on a scientific approach.

Native Indian tribes each had herbs that they used, some were the same herb some different, depending on what grew in the area in which they lived. The medicine man of the tribe held the knowledge of the herbs. The Indians shared their knowledge of herbs with the early settlers in America. Herb gardens were planted along with the new vegetable seeds in the settlements to use for medicinal purposes and some of the herbs were used for dyes.

With all of this knowledge that was passed down and brought over as immigrants came to America, traditional folk medicine developed in the hills and mountains, and is still used today by the modern herbalists.

The Eclectics were America's first "alternative doctors". During the late  $19^{th}$  century America had around 8000 doctors who called themselves Eclectics . They left us with a vast arena of books and journals that modern herbalists still refer to and use today.

Jethro Kloss in the early nineteen hundreds (1907) opened a comprehensive health and medical center in the state of Minnesota, and also opened a factory to make canned health foods.

Mrs. M. Grieve wrote a book called "A modern herbal" in the 1930 that combined both traditional and scientific views. Dr. John Christopher, doctor and herbalist used herbs for medicine for his patients, until he was forbidden by the law. Then he began to teach about herbs in his" School of Natural Healing". The school today is still operating and educating students. In America as new laws came about and lobbying was bent towards allopathic medicine, herbal medicine it seemed was on its way out by those pushing the American Medical Association. But herbalist stilled continued to practice quietly, and it has been revived. Today we have many herbalists doing research and writing books, as the technology and research makes for more advancement in herbal studies and preserving what God started in the beginning, using herbs for food and medicine.



### **Tea and Tisane**

What is the difference?

**Tea** (Thea Sinesis) comes from the tea plant and is black, green, white, oolong or orange pekoe. First discovered by the Chinese and called "the gift of heaven". Oswego tea used by early Americans was made from dried flowers of American Wild Bergamot (Bee Balm), so it was actually a tisane.

Tisane (Tee-Greek barley or to mean an or fresh zahn) from the Latin ptisane and ptisane, originally meant pearl barley water. Over time has come herbal infusion, made from dried plant material.



Infusion

For an infusion you add leaves, stems or flowers, or a combination into hot or cold water. The plant material infuses their therapeutic properties into the water. Properties like vitamins, enzymes and volatile oils.

To make a hot infusion use 1-3T of dried herb, double if it is fresh to 1 cup of hot water. Allow it to steep for 10-20 minutes. The longer the infusion steeps the stronger it will be. Use only glass, porcelain or enamel teapot or cup. Cover to keep the oils from evaporating.

Precaution: Do not use aluminum pots. It is a reactive metal and will make the infusion toxic.

To make a cold infusion, use two times the amount of plant as with a hot infusion. Use a glass quart mason jar or a larger jar, add herbs 4-8T, cover with spring or purified water. Allow to stand 8-12 hours. Then strain using cheesecloth or a bamboo strainer. With a large jar you can drink the infusion throughout the day. The cold infusion preserves most of the volatile oils. It is good for herbs that have mucilage properties (slimy), marshmallow or slippery elm.

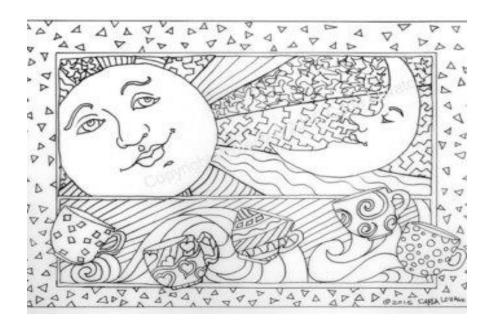


#### **Decoction**

A decoction is a simmered infusion of hard plant material, roots, barks, seeds and dried berries. The therapeutic properties that are extracted from the material are bitters and mineral salts.

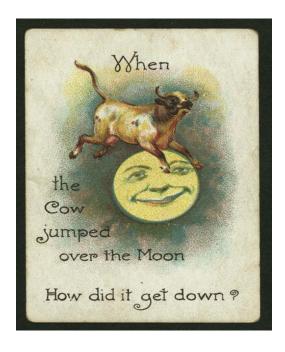
To make a decoction, add 3T of hard part of plant material into a small saucepan and cover with 3 cups of cold spring or purified water. Bring the water to a boil using low heat and then simmer for 20-45 minutes. Strain using cheesecloth or bamboo strainer, into a quart jar. Pour extra hot water over strained decoction to fill up jar. This is for immediate use or within 72 hours.

Assignment: make an infusion with nettle and a decoction with the dandelion root. Write about them both as you did with the herbs you tasted in class today.



#### **Sun and Moon Tea**

To make sun or moon tea, please follow the instructions for making a cold infusion. Only with sun tea use a lid on the jar and with moon tea do not use a lid. Put the jar directly in the light and let sit for 6-8 hours. Then strain and enjoy.



### **Blending**

The art of blending is important if you will be using more than one herb to your tea. When you first make a blend use only 2-3 different herbs and make a small batch. Start with a base of 1 or 2 herbs and add to them. You taste as you go to see if you like it. Less is always more.

Use 1-3T to 1 ½ c boiling water for two cups of tea.

Use 4-8T per quart of water.

Always remember if you are using fresh herbs to use twice as much.

When blending herbs we use the word "part" for the amount used.

Here is an example:

2 parts - can equal 2 cups or 2T or 2t, etc.

1part - can equal 1 cup or 1T or 1t, etc.

½ part - can equal ½ cup or ½ t

1/4 part - can equal 1/4 cup or 1/4 t

Pinch is a pinch



## **Peppermint**

Family: Labiatae

Latin: Mentha piperita

Common names: lamb mint, curled mint, balm mint brandy mint.

Parts used: Leaves and flowers.

Growing/harvesting: it is grown in partial shade or sun. Plant seeds 12" apart. It can be grown in pots indoors. Pick the leaves just before the plant flowers. Dry or freeze the leaves. Fresh leaves can be infused in vinegars or oils.

Properties/uses: cooling, soothing and refreshing. The tea and oil can be used for nausea, headaches, migraine, digestion issues, vomiting, abdominal pains and flatulence. Good tea for colds and the flu. Not to forget the culinary uses.

Actions: anodyne, antispasmodic, aromatic, carminative, cholagogue, refrigerant, stimulant, stomachic, tonic.

Vitamins/minerals: magnesium, manganese, potassium.

Precautions/contraindications: The tea should not be ingested when using homeopathic medicine as it can antidote it.



### **Stinging Nettle**

Family: Urticaceae

Latin: Urtica dioica L.

Common name: common nettle, great stinging nettle.

Part used: leaves, seeds, roots, (whole herb), tops and shoots when

young.

Growing/harvesting: Is easy to grow. Plant the seeds in spring. Likes rich soil, grows near streams in wild. Plant seeds in full sun to partial shade. Harvest the plant in late summer, cut and dry the leaves. Dig the roots in autumn and dry. When nettle is grown in the garden with other plants, it enriches the soil with minerals. Yellow dock is usually found growing by nettles. Old folk saying "Nettle in, dock out", means if you get stung by the nettle you use the leaves of yellow dock and bruise them and rub where you were stung and it helps rid irritation and sting. Urtication is when nettle stings are applied to inflamed areas of skin, to help bring blood flow to the area and reduce the inflammation. Nettle stalk was used to make a fabric similar to linen and to make rope. It is known as the textile plant. It is also a dye plant. A green dye is made from the upper plant, while the roots make a yellow dye.

Properties/uses: cool and dry, tastes bitter. It is a blood cleanser, helps with anemia because of the high iron content. The leaves when powered and also fresh juice from leaves help to stop bleeding. Nettle also stimulates circulation in the body.

Actions: Antiemetic, astringent, diuretic, digestive, emollient, galactogen (increases milk in nursing mothers), hemostatic (stops hemorrhaging), hypoglycemic, tonic and vasoconstrictor (contracts blood vessels).

Vitamins/minerals: Vitamin A & C, Calcium, chromium, chlorophyll, iron, magnesium, manganese, potassium, protein, silica and trace elements.

Precautions/contraindications: Has no side effects. The dried leaves do not sting. If you brush by the nettle plant and feel sting, it leaves not stings in you but you will feel pain.

## Stinging nettle



#### **White Pine Bark**

Family: Pinaceae

Latin: Pinus strobus L.

Common name: deal pine, soft pine.

Parts used: Inner bark and needles.

Growing/Harvesting: Grows in North America and parts of Canada. Seeds of the tree come from the mature cone. Sometimes are planted by squirrels. Early growth of the tree is slow. It can live up to two hundred years if the tree is left untouched. From the wood a white pine tar is produced. To harvest, a fresh tree of 3-4 years is cut down. The outer bark is removed and the inner bark is used, cut into strips and dried. The needles can be used fresh, or also dried for medicinal purposes. This tree was used for building British ship masts and unpainted furniture in early America. Earliest records are from the Native American Indians.

Properties/uses: warming, increases circulation, strengthens the immune system, and combining other expectorants with it is helpful to treat colds and flu.

Actions: Antifungal, antiseptic, aromatic, astringent, diuretic, expectorant, purgative (decoction of the buds), circulatory stimulant.

Vitamins/minerals: Vitamin C, the needles have 5x the amount of vitamin C of lemons, resveratrol (lowers LDL-bad & higher HDL-good).

Precautions/contraindications: Not to be used by women who are pregnant or nursing.

Recipe: I found this in several books with similar versions for chest issues, including coughing, tonsillitis, congestion, bronchitis.

Combine 1tsp of white pine bark, 1T of wild cherry bark, sassafras and spikenard to 1 pint (2 c) of boiling water and let steep for 30 minutes. Sweeten and take ½ t every hour by mouth.

Precaution: if taking other medications, consult your physician first before using.



Inner Pine bark that will be cut and dried.



Dried Pine bark.



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#### **Dandelion**

Family: Composite

Latin: Taraxacum officinale Weber

Common name: Pissabed, Priest's-crown, telltime, blowball, lions tooth

(from French dent de lion), wild endive.

Parts used: Whole plant.

Growing/harvesting: It can be found growing everywhere in the world. Most people think of it as a weed. The seeds are sown by the wind or children blowing the pretty white ball of seeds. The leaves can be harvested in the spring for salads. The roots are dug up and harvested in the fall, then cut and dried. It combines well with other herbs for the liver.

Properties/uses: It promotes bile formation, removes excess water from the body and is used to treat issues of the liver. It can be used as a tonic to help strengthen the kidneys as it does not deplete the body of potassium. The root is the official part of the plant. The roots are cut up, dried and roasted to be used as a coffee substitute and to put in hot chocolate. The mineral filled leaves are used in salads, the flowers can be eaten in salads also but make sure they are organic. The leaves can be juiced to help detoxify the body system. Flowers from the plant can be used in herbal vinegars and butters to add yellow color. The flowers can be used to make a yellow dye, if you use the whole plant the color will be magenta. The milky fluid in the stems of the plant can be used to get rid of warts, put on the wart daily for a week, it should dry it up.

Actions: aperient, astringent, alterative, bitter, cholagogue, diuretic, hepatic, nutritive, stimulant, stomachic, tonic.

Vitamins/minerals: Very high in vitamins A (7,000 units per ounce) and C, calcium, potassium, organic sodium 28% (purifies the blood), balances the electrolytes in the blood, very nutritive plant high in minerals.

Precautions/contraindications: Generally safe to use, but if you are pregnant or nursing do not use. Also if you are allergic to ragweed, you could possibly be allergic to dandelion.





An old herbal.

Assignment: make your own herbal.

#### What is an herbal?

It is a book that describes how herbal plants are used medicinally, but also includes the culinary and cosmetic uses. It was of great use to the housewife who would make the remedies, and in an age where there were few doctors, were of great value.

Include in your herbal a picture, drawing or pressed plant, description of plant and its uses.