

HERBAL TEAS

HERBAL PRODUCTS

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Herbal Products

- Tea
 - Tablet
 - Capsule
 - Dragee
- The most common used constituent to prepare herbal products using herbal drugs is water and the most frequent formulation is tea.

Herbal Tea

A type of formulation,

- prepared using plants/plant parts
- include bioactive substances
- daily used
 - for prophylaxis
 - as remedy
 - as supplement to the treatment

Herbal Teas

- The most favorable and safest way to utilize herbs
- Neither ineffective nor a miracle
- Beneficials depend on the period and frequency of consumption.
- Not only beneficial effects but also adverse effects
- Different parts of a plant contain different types of compounds, so root/flower/fruit/leaf of a plant may possess different activities.

Types of Herbal Teas

- **According to the number of constituents**

- Single herb tea

- (chamomile tea, linden tea, rose hip tea etc.)

- Mixtures (blend tea)

- The principle of phytotherapy in Europe; max 4-7 herbs

Types of Herbal Teas

- **According to the form of herbs**
 - Coarsely/fine cut herbs
 - Tea-bag teas
 - Soluble teas

Tea-Bag Teas

- Herbal material/mixture is placed in a bag which functions as a filter.
- 80% of herbal teas are sold in this form.
- Using tea-bags is an advantage in terms of adjustment of the dosage.

Tea-Bag Teas

- Disadvantages of tea-bag teas;
 - The area of the particule surface is larger leading to the higher risk of oxidation
 - Volatile and aromatic compounds can be lost
 - Quality control problems

Soluble Teas

- Dried plant extract is covered with an excipient such as lactose and cellulose.
- Ratio of plant extract ranges between 8-50%.
- Cautiously use in diabetics and infants due to its carbohydrate content

Preparation of Herbal Teas

- **Infusion**

- Add hot water ($\approx 80^{\circ}\text{C}$) onto crushed drug and stir
- Steep for 5-10 min. then filter
- Prepare freshly before each use
- Dosage: ≈ 100 ml water for 2 g drug

1 tsp. chamomile ≈ 1.5 g

1 tsp. root/bark ≈ 4.5 g

Preparation of Herbal Teas

- **Decoction**
 - Add cold water on to crushed drug
 - Heat until boiling
 - Simmer for 5-10 min. then filter when hot
 - Prepare freshly before each use
 - Dosage: \approx 100 ml water for 2 g drug

Preparation of Herbal Teas

- **Cold Maceration**

- Cover drug using tap water
- Leave for 6-8 hours at room temperature then filter
- Prone to contamination
- Especially applied for the drugs with high mucilage content, such as marsh mallow, linseed and Iceland moss)

Utilization of Herbal Teas

- Generally advised to drink 1 cup of tea 3 times a day
- May be consumed in the morning with an empty stomach and before sleep
- Laxative and sedative teas should be drunk at night.
- Teas used for the stimulation of digestion should be consumed right after meals or when needed.
- Appetite-stimulant teas should be drunk about 30 min. before mealtime.
- Diaphoretic teas should be taken hot and when the patient is in bed to see the effect.
- Diuretic teas should be drunk in the morning.

Warnings

- Doctor consultancy should be provided to use teas which will be consumed to support the treatment of diabetes, hipertansion, cancer and heart diseases.
- Patients should pay attention to dosage and consumption period.
- Attention should be paid for the utilization of infants and children as well as consumption during pregnancy and lactation periods.

Warnings

- It should be kept in mind that herbal preparations may possess some adverse or toxic effects.
- Possible interactions with synthetic drugs should be concerned.
- All plants can not be consumed as tea, solubility of the compound should be considered.

Adverse Effects and Risks

- Allergic response; *Arnica* flowers, *Viscum album*, *Psyllium*
- Gastrointestinal disorders; *Folia Uva-ursi*, *Alchemilla*, *Tormentilla* – due to tannin content; *Gentiana*, *Taraxacum*, *Herba Absinthii* – due to bitter compound content
- Electrolyte loss and potassium deficiency; Anthraquinone containing and laxative drugs

Drug Interactions

- Teas containing tannin;
 - may retard the absorption of sedative, hypnotic and tranquilizer drugs
 - may decrease the bioavailability of antidiabetic drugs
 - may hinder the absorption of Fe, Ca and Mg.
- Herbs containing pyrrolizidine alkaloids (such as *Tussilago*, *Symphytum*, *Petasites*, *Senecio*) are not allowed due to their hepatotoxic and hepatocarcinogenic effects.

Preparation of Herbal Teas

- Determination of the formula
 - Personal parameters (allergies, chronic diseases, drugs used etc.)
 - Herbs with moderate activity is preferred to be used for tea preparation.
 - FORTE GROUP (Strong effective) - not used
 - MEZZO FORTE GROUP (medium-strong effective) – carefully used
- Using herbal material in pharmaceutical quality
- Accuracy of weight

Preparation of Herbal Teas

- Shred/crush/grind herbal material
 - Fruits/seeds containing essential oil should be crushed prior to preparation.
 - Drugs containing saponin should be in form of fine powder.
- Mix the components appropriately
- Appropriate package and label

E.g. Anxiety and Sleep Disorders

- *Valeriana officinalis* (Valerian)
 - Valepotriates, essential oil, sesquiterpenes
 - Anxiety and sleep disorders due to anxiety
 - Infusion prepared using 2-3 g drug/600 mg extract, 2 hours before sleep
- *Passiflora incarnata* (Passion flower)
 - Flavonoids
 - 4-8 g flower/150-300 mg extract/ 5ml/700 mg syrup

E.g. Anxiety and Sleep Disorders

- *Melissa officinalis* (Balm leaf)
 - Essential oil
 - 1.4-4.5 g (½ tsp.) as infusion 3 times a day
- *Lavandula* sp. (Lavander)
 - Essential oil
 - ½ tsp. or 2-4 drops essential oil, on a cube of sugar

Sleep Disorders

Radix Valerianae	15 g
Flos Citri	15 g
Folia Melissa	15 g
Lupuli Strobuli	15 g

- 12 tea-bags (5 g in an tea-bag)
- Preparation and usage:
 - 250 ml hot water for 5 g of blend
 - before sleep

Cold and Flu

Matricariae flos	20
Salviae Triloba folium	20
Origani herba	20