

Колеги, задачата за 4 та седмица е следната: Прочетете текста **Herbal medicine** и направете кратко резюме 1 страница без да преписвате цели изречения, само основна информация, ключови думи.

Лека работа и не излизайте.

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Herbal medicine



An antique selection of herbal medicines.

Herbal medicine (also **herbalism**) is the study of **botany** and the use of **medicinal plants**. Plants have been the basis for medical treatments through much of human history, and such **traditional medicine** is still widely practiced today.^[1] Modern medicine makes use of many plant-derived compounds as the basis for evidence-based **pharmaceutical drugs**. Although herbalism may apply modern standards of effectiveness testing to herbs and medicines derived from natural sources, few high-quality **clinical trials** and standards for purity or dosage exist.^[2] The scope of herbal medicine is sometimes extended to include **fungal** and **bee** products, as well as **minerals**, **shells** and certain animal parts.

Herbal medicine is also called **phytomedicine** or **phytotherapy**.^[3] **Paraherbalism**^[4] describes **alternative** and **pseudoscientific** practices of using unrefined plant or animal **extracts** as unproven medicines or health-promoting agents.^{[1][2][4][5]} Paraherbalism differs from plant-derived medicines in standard **pharmacology** because it does not isolate or **standardize** biologically active compounds, but rather relies on the belief that preserving various substances from a given source with less processing is safer or more effective – for which there is no evidence.^[4] Herbal **dietary supplements** most often fall under the phytotherapy category.[!]

Herbal preparations^[edit]

There are many forms in which herbs can be administered, the most common of which is in the form of a liquid that is drunk by the patient—either an herbal tea or a (possibly diluted) plant extract.^[31]

Several methods of standardization may be determining the amount of herbs used. One is the ratio of raw materials to solvent. However different specimens of even the same plant species may vary in chemical content. For this reason, [thin layer chromatography](#) is sometimes used by growers to assess the content of their products before use. Another method is standardization on a signal chemical.^[citation needed]



Leaves of *Eucalyptus olida* being packed into a steam [distillation](#) unit to gather its [essential oil](#).

[Herbal teas](#), or tisanes, are the resultant liquid of extracting herbs into water, though they are made in a few different ways. [Infusions](#) are hot water extracts of herbs, such as [chamomile](#) or [mint](#), through [steeping](#). [Decoctions](#) are the long-term boiled extracts, usually of harder substances like roots or bark. [Maceration](#) is the cold infusion of plants with high [mucilage](#)-content, such as [sage](#) or [thyme](#). To make macerates, plants are chopped and added to cold water. They are then left to stand for 7 to 12 hours (depending on herb used). For most macerates, 10 hours is used.^[32]

[Tinctures](#) are alcoholic extracts of herbs, which are generally stronger than herbal teas.^[33] Tinctures are usually obtained by combining 100% pure ethanol (or a mixture of 100% ethanol with water) with the herb. A completed tincture has an ethanol percentage of at least 25% (sometimes up to 90%).^[32] Herbal wine and [elixirs](#) are alcoholic extract of herbs, usually with an ethanol percentage of 12–38%.^[32] [Extracts](#) include liquid extracts, dry extracts, and nebulisates. Liquid extracts are liquids with a lower ethanol percentage than tinctures. They are usually made by vacuum [distilling](#) tinctures. Dry extracts are extracts of plant material that are [evaporated](#) into a dry mass. They can then be further refined to a capsule or tablet.^[32]

The exact composition of an herbal product is influenced by the method of extraction. A tea will be rich in [polar](#) components because [water](#) is a [polar solvent](#). Oil on the other hand is a [non-polar](#) solvent and it will absorb non-polar compounds. Alcohol lies somewhere in between.^[31]



A herb shop in the souk of Marrakesh, Morocco

Many herbs are applied topically to the skin in a variety of forms. **Essential oil** extracts can be applied to the skin, usually diluted in a carrier oil. Many essential oils can burn the skin or are simply too high dose used straight; diluting them in olive oil or another food grade oil such as almond oil can allow these to be used safely as a topical. **Salves**, oils, **balms**, creams and lotions are other forms of topical delivery mechanisms. Most topical applications are oil extractions of herbs. Taking a food grade oil and soaking herbs in it for anywhere from weeks to months allows certain phytochemicals to be extracted into the oil. This oil can then be made into salves, creams, lotions, or simply used as an oil for topical application. Many massage oils, antibacterial salves, and wound healing compounds are made this way.^[34]

Inhalation, as in **aromatherapy**, can be used as a treatment.^{[35][36][37]}

Scientific criticism^[edit]

Herbalism has been criticized as a potential "**minefield**" of unreliable product quality, safety hazards, and potential for misleading health advice.^{[1][5]} Globally, there are no standards across various herbal products to authenticate their contents, safety or efficacy,^[43] and there is generally an absence of high-quality scientific research on product composition or effectiveness for anti-disease activity.^{[5][71]} Presumed claims of therapeutic benefit from herbal products, without rigorous evidence of efficacy and safety, receive skeptical views by scientists.^[1]

Unethical practices by some herbalists and manufacturers, which may include false advertising about health benefits on product labels or literature,^[5] and contamination or use of fillers during product preparation,^{[43][72]} may erode **consumer confidence** about services and products.^{[73][74]}