Dandelion
*Taraxacum officinale*

Other Names: Lion’s tooth
Description: A common plant of the Aster family with single flowering heads full of bright yellow strap-shaped flowers on hollow, unbranched stalks with hairless, large-toothed leaves.

Part Used: Root, Leaf
Action: Cholagogue, Hepatic
Category: Nutritive Tonic, Cleanser
Systems: Liver, Hormonal
Taste: Bitter, Sweet
Energy: Cool
Primary Uses: Anger, Appendicitis, Cirrhosis, Dysmenorrhea, Dysuria, Edema with Venous Stasis, Eye Inflammation (acute), Eyes (to strengthen), Gallbladder Problems, Gallstones (mild), Gout, Gravel, Hangover, Jaundice, Liver Enlargement, Psoriasis (acute), Urine Retention
Secondary Uses: Anorexia (with bitter taste in mouth), High Cholesterol (with bitter taste in mouth), Poor Digestion (with water retention)
Caution: The root is contraindicated in cases of bile duct or intestinal blockage and gallbladder inflammation.
Preparation: Decoction; Tincture
Dose: 1 cup 2-3 x daily; 2-4 droppersful 1-3 x daily
Products: Tincture, Capsule, Tablet, Teabag, Bulk Herb, Powder

Health Benefits: Dandelion root, ubiquitous in lawns and gardens, is widely used for cooling and cleansing the liver; it is excellent in formulas for hepatitis, cirrhosis, and liver toxicity. It increases the flow of bile and has been used for cholecystitis, gallstones, and jaundice. Dandelion has anti-carcinogenic, estrogen lowering, and blood cholesterol-lowering capabilities. It also helps with headaches, emotional swings before or during menstruation, acne, red, irritated eyes, mood swings, and other problems related to "liver heat" and is a strong diuretic. In Chinese medicine dandelion root is taken internally and applied topically for abscesses and nodules. Additionally, it is used to increase lactation and clear liver heat when there are symptoms such as painfully inflamed eyes. Dandelion root tea is also a famous specific for breast cancer but should be taken in conjunction with other blood purifying herbs, such as sarsaparilla, red clover, and burdock root, as well as appropriate immune-strengthening herbal therapy and positive dietary and lifestyle changes.
Oregon Grape
*Mahonia aquifolium*

Other Names: Holly-leaf barberry, Mountain grape, Oregon grapeholly, Oregon barberry

Description: A perennial native plant of the barberry family with stiff prickly leaves, clusters of yellow flowers, and sour bright blue berries.

Part Used: Root
Action: Hepatic, Alterative
Category: Specific
Systems: Immune, Liver, Integumentary
Taste: Bitter
Energy: Cold

Primary Uses: Acne, Chicken Pox, Cholecystitis, Endocarditis, Liver Stimulant, Pimples, Scarlet Fever, Spleen Enlargement,

Caution: Contraindicated during pregnancy. Oregon grape contains berberine, which is a cold, bitter constituent that can suppress digestive activity when used to excess, especially in people with weak, cold digestion. Otherwise, it is probably well tolerated when used as recommended.

Preparation: Tincture; Decoction; Powder
Dose: 1-2 droppersful 3 x daily; 1 cup 3 x daily; 1-2 capsules 2-3 x daily
Products: Tincture; Decoction; Powder

Health Benefits: Oregon grape is used for liver toxicity from drugs or alcohol; low stomach acid (poor protein assimilation); infections; or irritation in the intestines (irritable bowel syndrome). It cools the liver, stimulates bile flow, reduces intestinal inflammation, and benefits symptoms of dermatitis. It is one of the most effective herbs for skin disorders such as acne, psoriasis, or cysts, for which it can be used with burdock seed. Oregon grape root has been recommended for heat in the stomach with such symptoms as tooth and gum pain, inflamed gums, a burning and gnawing feeling in the stomach area, styes, and facial acne. It may also be useful for vaginal yeast infections, especially when the discharge is slightly yellow and strongly smelling.
Milk Thistle
*Silybum marianum*

Other Names: Mary’s thistle

Description: A tall stout, spiny thistle with bright purple flowering heads. The glossy leaves are covered with wavy milky bands, thus the name milk thistle. An Aster family member.

Part Used: Seeds

Action: Hepatic, Galactagogue

Category: Stimulating Tonic

Systems: Liver, Digestive

Taste: Bitter, Sweet

Energy: Cool

Primary Uses: Chemotherapy Side Effects, Cirrhosis, Deafness (slight), Eczema, Hangover, Hepatitis with Jaundice, Liver Enlargement, Liver Protectant, Poisoning, Psoriasis, Radiation Side Effects, Spleen Enlargement, Spleen Tonic, Vitiligo

Caution: Contraindicated for people with liver cancer and other cancers because of its cell-proliferant qualities.

Preparation: Tincture; Extract

Dose: 2-4 droppersful 2-3 x daily; 1-2 capsules or tablets 2-3 x daily

Products: Tincture, Tablets, Bulk seed

Health Benefits: Known for its excellent liver-protectant properties, milk thistle has proven effective in scientific studies for hepatitis, cirrhosis, and jaundice. This herb is used to protect the liver and enhance liver regeneration after exposure to heavy metals, radiation, or toxic chemicals. Milk thistle stimulates the growth of new liver cells and is a strong antioxidant.

The ground seeds can be sprinkled on food; besides the liver-protective compounds (called silymarin), they also contain a substantial quantity of essential fatty acids, starch, and protein. The young greens are among the tastiest of all wild foods; the spiny leaf margins are removed with a scissors before eating.
**Gallbladder problems**

**Recommended Herbs:**

<table>
<thead>
<tr>
<th>Herb</th>
<th>Form</th>
<th>Dose</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artichoke</td>
<td>Tincture</td>
<td>2-3 droppersful</td>
<td>2-3 x daily</td>
</tr>
<tr>
<td>Peppermint</td>
<td>Infusion: 3-12 grams</td>
<td>1 cup 2-3 x daily</td>
<td></td>
</tr>
<tr>
<td>Dandelion</td>
<td>Decoction: 10 grams</td>
<td>1 cup 2-3 x daily</td>
<td></td>
</tr>
<tr>
<td>Boldo</td>
<td>Tincture</td>
<td>20-40 drops</td>
<td>2-3 x daily</td>
</tr>
<tr>
<td>Chicory</td>
<td>Decoction: 10 grams</td>
<td>1 cup 2-3 x daily</td>
<td></td>
</tr>
<tr>
<td>Fumitory</td>
<td>Tincture</td>
<td>30-40 drops</td>
<td>2-3 x daily</td>
</tr>
<tr>
<td>Wormwood</td>
<td>Infusion: 2-4 grams</td>
<td>1 cup 2 x daily</td>
<td></td>
</tr>
<tr>
<td>Yellow Dock</td>
<td>Tincture</td>
<td>2-4 droppersful</td>
<td>2-3 x daily</td>
</tr>
</tbody>
</table>

**Holistic Program:**

Common gallbladder problems include gallstones and gallbladder inflammation (cholecystitis). For the former, use herbs to help relax the gallbladder (antispasmodics like peppermint or fumitory), plus a combination of bile-stimulant or moving herbs (blessed thistle, artichoke leaf, buckthorn bark, mugwort, wormwood—don't take longer than 4 weeks. Herbs or foods to dissolve the stones include lemon juice, apple cider vinegar, unripe apples, blackberries, etc.

For gallbladder inflammation or spasms due to inflammation, use cooling gallbladder herbs (dandelion root, wormwood, mugwort, yarrow).

The diet should be low in fats and high in fiber and organic fruit acids (apples, lemon juices). Avoid spicy foods or liver/gallbladder irritants (alcohol, sugar, coffee, tea).

Liver flushes for a week or 10 days and juice fasting with enemas may be necessary in some cases.
Hepatitis, with jaundice

Recommended Herbs:

<table>
<thead>
<tr>
<th>Herb</th>
<th>Form</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fringe Tree</td>
<td>Tincture</td>
<td>10-30 drops 2-3 x daily</td>
</tr>
<tr>
<td>Milk Thistle</td>
<td>Powdered Extract</td>
<td>140 mg 3 x daily</td>
</tr>
<tr>
<td>Dandelion</td>
<td>Decoction: 10 grams</td>
<td>1 cup 2-3 x daily</td>
</tr>
<tr>
<td>Shiitake</td>
<td>Standardized Extract</td>
<td>2 capsules 2 x daily</td>
</tr>
<tr>
<td>Schisandra</td>
<td>Decoction: 6-9 grams</td>
<td>1 cup 2-3 x daily</td>
</tr>
</tbody>
</table>

Medical Description:
There are several types currently recognized, and more may be added in the future. Symptoms include jaundice, or yellowing of the skin and whites of the eyes, fatigue and loss of appetite. Jaundice results when excess amounts of the bile pigment bilirubin circulate in the blood stream, causing a yellowish appearance of the skin and the whites of the eyes. Hepatitis comes in three types. Type A, or infectious hepatitis, often occurs after infection from food or drink. Type B, serum hepatitis, most often occurs after exposure to infected blood through contaminated needles. Type C, formerly called non-A, non-B hepatitis is being more widely diagnosed in recent years. The symptoms of hepatitis C are often less clear-cut and can best be diagnosed by laboratory tests. If you have or suspect hepatitis, you must consult with your health care practitioner.

Holistic Program:
Herbal therapy includes liver protective herbs (Liver Digestion Formula, milk thistle, turmeric), liver cooling herbs (artichoke leaf, dandelion, Oregon grape root, burdock), liver tonifying herbs (fringe tree, shiitake), immune stimulants (echinacea), and antiviral herbs (wild indigo, garlic).

With any form of hepatitis, it is important to reduce all liver irritants from the diet. These include alcohol, drugs, and spicy foods.
Liver System Overview

Introduction

The liver is a remarkable organ and is largely unappreciated for the many vital functions it performs. It has been said that it is not called the live-r for nothing; it keeps us living. The importance of keeping the liver healthy, open, and functioning smoothly is understood by doctors and herbalists alike. The liver is the major organ of digestion and assimilation, helping to provide the nutrients that maintain health and repair diseased or damaged tissue. It also provides a vital function in helping to eliminate toxic wastes from the body.

The liver’s job is to make sure that the body absorbs everything it needs and dumps everything it doesn’t. If one were to write a sort of job description for the liver, its list of major duties would look like this:

- Metabolizes proteins, fats, and carbohydrates, thus providing energy and nutrients.
- Stores vitamins, minerals, and sugar.
- Filters the blood and helps remove harmful chemicals and bacteria.
- Creates bile, which breaks down fats.
- Helps assimilate and store fat-soluble vitamins (A, E, D, K).
- Stores extra blood, which can be quickly released when needed.
- Creates serum proteins, which maintain fluid balance and act as carriers.
- Helps maintain electrolyte and water balance.
- Creates immune substances, such as gamma globulin.
- Breaks down and eliminates excess hormones.

The Liver and Detoxification

In order to understand how the liver detoxifies the potentially harmful substances that are either put into or created in the body, we must understand some basic chemistry. Many of the foreign and toxic chemicals that enter the body are called lipid-soluble. This means they dissolve only in fatty or oily solutions, not in water. Lipid-soluble compounds have a special affinity for fat tissues and many other cells of the body that have lipid-soluble membranes, such as liver cells. These cells and tissues can store toxins for months, even years, releasing them during times of exercise, stress, or low food intake. As toxins are released, one may experience unpleasant symptoms such as tiredness, dizziness, nausea, racing pulse, etc.

It is the liver’s job to transform lipid-soluble chemicals into water-soluble compounds so that they can be released via the kidneys and bowels. This transformation is carried out by a complex system of enzymes that are made in the hepatocytes, or liver cells.

Besides having a complex system of enzymes to remove toxic compounds from the blood, the liver also has filtering channels, called sinusoids, that are lined with special cells which engulf and break down foreign debris, bacteria, and
toxic chemicals (this process is called phagocytosis). However, when the liver is burdened with high levels of toxic chemicals or pathogenic organisms, not all of these substances can be processed and eliminated. In fact, many will be stored in the liver, eventually causing irreparable damage.

**Liver Stress**

As you can see, that is a lot of work for a single organ to do even under the best of conditions. Unfortunately, however, the modern lifestyle burdens the liver with many stresses, making its job even more difficult. After the insult of oily, processed foods, one of the major stress-factors the liver must contend with today is human-made chemicals, such as lead from gasoline, countless food additives, preservatives, pesticides, herbicides, and many other new compounds. Other common liver stress-factors are alcohol and recreational drugs which are prevalent in the United States. Furthermore, since drugs administered for therapeutic purposes also affect the liver, 5% of hospital patients in the United States develop significant adverse reactions to drugs administered by doctors. A final stress our livers must contend with is excess hormones, such as adrenaline, which are constantly being created in our bodies in response to our fast-paced modern lifestyle. Under some circumstances, hormones can be stored by the liver for up to a year, adding fuel to emotional imbalances such as depression and anger, as well as stress-related imbalances such as immune-system depression.