Lesson One: Dravyguna

6.0 Dravyguna: definition, scope and background

Dravyguna is the limb of Ayurveda that concerns itself with the properties and actions (guna) of medicinal agents (dravya).¹ The first branch of dravyguna is namarupavijnana, a system (vijnana) of mnemonics detailing the various synonyms that describe specific characteristics of a given medicament. These different names (nama) usually refer to morphological characteristics (rupa), but nama might also refer to a medicinal use or another unique characteristic. An example is the variance in synonyms of Turmeric root (Curcuma longa), including Haridra (referring to it’s natural yellow dye), Varna (indicating its usefulness in skin disorders) and Nisha (which explains that the root is best harvested at night, preferably under the light of a full moon). The second branch of dravyguna concerns itself with explaining the properties (guna) and actions (karma) of medicaments, something that modern science might understand as pharmacology, and is known as gunakarmavijnana. Building upon gunakarmavijnana, the third branch of dravyguna is prayogavijnana, describing the therapeutic indications of specific medicines, as well as pharmacy. The fourth and last aspect of dravyguna is bhesajakalpana, referring to the collection and storage of drugs and various methods of processing.

6.1 Dravya and its classification

A substance only becomes a dravya when its specific qualities (guna) are taken into consideration, and thus a dravya is dependent upon the purpose (arthā) and rationale (yukti) of its usage. When viewed as a singular phenomenon, a dravya has no inherent quality: it is the perceptive process, viz. the five senses and the mental impressions that are formed, which give rise to guna. Ayurveda designates a dravya as strictly panchabautika or ‘formed of the elements,’ and is devoid of atma (consciousness) and therefore insentient (Sharma 1976, 9). It is the conscious usage of a substance that makes a dravya.

¹ The other limbs of Ayurveda include (Anatomy) Sarira, Physiology (Praktiti-vijnana) and Pathology (Vikriti-vijnana).

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Drayyas are grouped in several ways depending upon the source within the extant literature of Ayurveda, but both Susruta and Charaka group drayyas according to therapeutic action. Charaka enumerates fifty groups, each group containing ten herbs named according to the general action of that group, such as analgesics (vedanasthapana), diuretics (mutravirechana) and antihelmintics (krimighna). Susruta categorizes each therapeutic group with the name of a notable representative of that group, an example being the pippalyadi group, the suffix “adi” meaning “etc.”, with the herb Pippali (Piper longum) being representative. Susruta also provides therapeutic indications for each of these groups, the drayyas within the pippalyadi group for example are indicated in Vata and Kapha disorders, respiratory ailments, anorexia, poor digestion, flatulence and tumors.

Other methods of drayya classification include whether its activity decreases (doshaprashamana), increases (doshapradusana) or balances (swasthahita) a specific dosha, or whether the drayya can be used to pacify an aggravated dosha (samshamana) or to expel an aggravated dosha by means of purificatory methods (shodhana), e.g. pancha karma. Drayyas can also be classified according to the predominance of any one of the mahabuthas (five elements), described in the following table:

<table>
<thead>
<tr>
<th>Mahabutha</th>
<th>Jnana indriyas</th>
<th>Rasa</th>
<th>Gunas</th>
<th>Karma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prithvi</td>
<td>gandha (smell)</td>
<td>madhura, slightly kashaya</td>
<td>guru, kharā, kathina, manda, shīra, sandra, shtula</td>
<td>condensing (anabolic), downward-moving (e.g. purgation)</td>
</tr>
<tr>
<td>Ap</td>
<td>rasa (taste)</td>
<td>madhura, slightly kashaya, lavana</td>
<td>snigdha, shīta, manda, guru, drava, mrdu, picchila</td>
<td>moistening, binding, oleation, pleasing</td>
</tr>
<tr>
<td>Tejas</td>
<td>rupa (vision)</td>
<td>katu, slightly amla, lavana</td>
<td>ushna, tikshna, sukshma, laghu, vishada</td>
<td>metabolic, digesting, illuminating, tearing, upward movement (e.g. emesis)</td>
</tr>
<tr>
<td>Vayu</td>
<td>sparsha (touch)</td>
<td>kashaya, slightly tikta</td>
<td>sukshma, kharā, shīta, laghu, ruksha, vishada</td>
<td>drying, emaciating, roughening, mobility</td>
</tr>
<tr>
<td>Akasha</td>
<td>shabda (sound)</td>
<td>unmanifest</td>
<td>shlakshna, sukshma, mrdu, vishada</td>
<td>softening, lightening, emptying</td>
</tr>
</tbody>
</table>

Table 1: The mahabutha drayyas
6.2 Rasa: the six tastes

The simplest method by which a dravya can be analyzed is through the tongue, by noticing the specific taste sensations, called rasa. In itself rasa does not provide any definite information but gives possible indications of a medicament's composition, character, property and pharmacological effect. Rasa also has several other meanings in Ayurveda, being another name for mercury (Hg), the expressed juice of a plant, and the product of digestion that circulates within the dhatus.

There are six rasas in Ayurveda, each generated by a specific combination of two different mahabuthas. They are as follows:

1. madhura (sweet)- composed of Prithvi (Earth) and Ap (Water);
2. amla (sour)- composed of Ap (Water) and Tejas (Fire);
3. lavana (salty)- composed of Prithvi (Earth) and Tejas (Fire);
4. katu (pungent)- composed of Tejas (Fire) and Vayu (Wind);
5. tikta (bitter)- composed of Akasha (Ether) and Vayu (Wind);
6. kashaya (astringent)- composed of Prithvi (Earth) and Vayu (Wind).

Knowing that each rasa is composed of a particular combination of the mahabuthas is a process of inference, taking into account the particular qualities that each taste exhibits. Every dravya contains all rasas because each thing contains a combination of all the mahabuthas. It is the predominance however, of one or another mahabutha in a given substance that explains rasa. The rasas that are difficult to ascertain, or are tasted secondarily, are called anurasas. Typically, anurasa adds to the overall activity of the dravya, but are weaker than the primary rasa(s). The classification of rasa is not a static thing however, because changes that occur to the dravya over time, including processing and storage, may alter the original rasa, e.g. an ethanol extract (tincture) will add katu rasa to the overall rasa of the crude dravya.

The characteristics and qualities of rasa is best understood in context with the gunas. A rasa does not have any inherent quality since it is the sense-object of the tongue. However, a guna can be detected by rasa because the gunas are projected from the pancabautik (elemental) composition of the dravya itself. Each rasa is comprised of three gunas:

1. madhura (sweet) is snigdha (oily), followed by shita (cold) and then guru (heavy);
2. *amla* (sour) is *ushna* (hot), followed by *snigdha* (oily), and then *laghu* (light);
3. *lavana* (salty) is *guru* (heavy), followed by *ushna* (hot), and then *snigdha* (oily);
4. *katu* (pungent) is *ushna* (hot), followed by *ruksha* (dry), and then *laghu*;
5. *tikta* (bitter) is *shita* (cold), followed by *ruksha* (dry), and then *laghu* (light);
6. *kashaya* (astringent) is *ruksha* (dry), followed by *shita* (cold) and then *guru* (heavy).

### 6.3 Action of the rasas upon the doshas

Each *rasa* has a specific activity upon the *doshas, dhatus and agni.*

**Madhura rasa (Sweet)**

Dravyas or foods with a predominance of *madhura* (sweet) increase *guru* (heavy) and *snigdha* (oily) due to its composition of *Prithvi* and *Ap,* and thereby vitiates *Kapha* while decreasing *Vata* and *Pitta.* *Madhura dravyas* are often the first choice when treating *Pitta* or *Vata,* although *Vattic* conditions may need the inclusion of a *dravya* that contains *ushna* (hot) to counterbalance the *shita* (cold) nature of *madhura.* *Madhura rasa* is best utilized in the general treatment of debility, aging, and reproductive deficiencies. Although it is never completely avoided, *madhura* is contraindicated in *Kaphaja* conditions such as cough, asthma, diabetes, obesity, fever, and *mandagni.* *Madhura rasa* is also said to promote obesity and parasitic infection. Examples of *madhura dravyas* include the mucilaginous herbs such as *Bala* (*Sida cordifolia*), Marshmallow root (*Althaea officinalis*), and Slippery Elm bark (*Ulmus fulva*), and most grains, fruit, and animal products.

**Amla rasa (Sour)**

*Amla dravyas* (sour) typically increase *Pitta* and decrease *Kapha* and *Vata.* The *ushna* (hot), *snigdha* (oily) and *laghu* (light) *gunas* of *Pitta* resemble that of *amla,* and thus this *dravya* is often one of the best for promoting *agni.* *Amla* may also increase *Kapha* because of the presence of *Ap* in its composition, although once again this is only if used without skill or to excess. *Amla* is best for relieving the *ruksha* (dryness) of *Vata,* an example being its

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2 The suffix used to denote the decrease or pacification of a *dosha* is *hara,* e.g. *Vatahara,* *Vatakaphahara.* The suffix used to denote the increase or vitiation of a *dosha* is *kopa,* e.g. *Pittakopa,* *Vatapittakopa.*
utility to stimulate the appetite in clients receiving chemotherapy, whose throats are often dry and parched. *Amla rasa* is used generally in the treatment of *mandagni*, digestive disorders, and *Vattic* conditions. *Amla* is contraindicated in any kind of hemorrhage, gastrointestinal inflammation, jaundice, and burning sensations. Examples of *amla dravyas* include Amalaki fruit (*Emblica officinalis*), Rosehips (*Rosa spp.*), Shanza fruit (*Crataegus pinnatifida*) and Wu wei zi fruit (*Schizandra chinensis*), as well as fermented foods and beverages.

**Lavana rasa (Salty)**

Lavana dravyas (salty) typically increase *Pitta*, decrease *Vata* and liquefy *Kapha* because of the predominance of *Ap* and *Tejas* in its constitution. Lavana dravyas are considered to be *ushna*, *snigdha* and *guru*, and thus while liquefying *Kapha* it may also promote its congestion because of *guru*, especially if taken in large amounts. Certain kinds of *lavana dravyas* like *saindhava*, or rock salt, apparently possess a cooling *virya*, and thus because *lavana* is also *guru*, it can be used to correct *Pitta*. Lavana dravyas are often used to correct *Vata*, as all of its characteristics seem to counter *Vata’s* basic nature. In *Vatti* conditions where there is *mandagni*, or weak digestion, *lavana dravyas* might not the best choice to correct *Vata* because of the predominance of *guru* in their composition. Lavana dravyas are used generally in the treatment of cough, to restore the electrolyte balance of the body, and to enhance appetite. Contraindications of *lavana* include hypertension, skin diseases, edema, ascites, hemorrhage, and gastrointestinal inflammation. Examples of *lavana dravyas* include herbs such as Kelp (*Fucus vesiculosis*) and Nettle leaf (*Urtica dioica*), and foods such as celery and ocean fish like mackerel, as well as the sodium chloride that is found naturally in and added to the diet. In a broader context, *lavana* refers to the most prominent of the electrolytes, including potassium, chloride and a variety of trace minerals as well as sodium.

**Katu rasa (Pungent)**

*Katu* (pungent) increases *ushna* (*hot*) and *laghu* (*light*), *gunas* that act in opposition to the basic nature of *Kapha*. Thus *katu* is an important *Kaphahara rasa*. *Laghu* and *ushna* are dominant in *Pitta* however, and therefore are avoided in *Paittic* conditions.

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3 Some schools of Ayurveda designate *lavana* as being *laghu* but this does not conform to my experience. Excessive salt (NaCl) intake causes edema and promotes hypertension, both of which are *Kapha* disorders. Thus the *vipaka* of *lavana* is probably more *guru*, despite the fact that it clearly stimulates the appetite and enhances the taste of food. Some kinds of salt such as *saindhava* (rock salt), which contains large amounts of trace minerals and sulfur, clearly display unique healing properties and is quite different from everyday table salt. When applied topically, *lavana* is generally considered to be *ushna* and *laghu*, as it facilitates the removal of *ama*.
Further, the laghu nature of katu will increase Vata, but if used in small amounts and counter-balanced with dravyas that have snigdha and guru in their composition (e.g. ghrita), katu may be used in Vattic conditions. Katu rasa is used in the general treatment of mandagi, dysentery, helminthiasis, colds and flu, asthma, cough, obesity, diabetes, and skin diseases. Katu rasa is contraindicated in gastrointestinal inflammation, hemorrhaging, burning sensations, reproductive deficiency, and urine retention. Examples of katu dravyas include herbs such as Pippali fruit (Piper longum), Shunthi rhizome (Zingiber officinalis), and Cayenne fruit (Capsicum minimum), and solanaceous foods such as tomatoes and peppers, as well as distilled alcohol.

**Tikta rasa (Bitter)**

Tikta rasa (bitter) pacifies Pitta because of shita (cold), decreases Kapha because of laghu (light), but increases Vata because these qualities resemble the overall nature of Vata. For the same reason that tikta decreases Kapha however, tikta may also increase Pitta because of laghu. Whether or not a tikta dravya will increase Pitta depends upon what other tastes are present in a given dravya, how much of the tikta dravya is used, and the nature of the Pittic disorder. Although tikta dravyas are shita in nature, they typically decrease Kapha because of their overall catabolic nature. It may be wise in certain circumstances however, to include katu dravyas along with tikta dravyas when treating Kaphaja conditions. Vattic conditions will often benefit from tikta rasa to assist in the removal of ama, but this approach needs to be balanced with rasas such as amla and madhura. Tikta rasa is used in the general treatment of mandagni, dysentery, helminthiasis, gastrointestinal inflammation, jaundice and diseases of the liver, skin diseases, fever, obesity, diabetes, and excessive secretions. It is contraindicated in debility and reproductive deficiency. Examples of tikta dravyas include herbs such as Nimba leaf (Azadirachta indica), Kiratatikta herb (Swertia chirayita), Gentian root (Gentiana lutea), and Goldenseal root (Hydrastis canadensis), and vegetables such as endive and bitter melon.

**Kashaya rasa (Astringent)**

The gunas of kashaya rasa (astringent) are ruksha (dry), shita (cold) and guru (heavy), and thus kashaya is used therapeutically to decrease Kapha and Pitta, and to promote the firmness and tone of the tissues. Kashaya rasa, although guru, is exceptionally ruksha in nature and will increase Vata. If used to excess this drying quality of kashaya may also increase Pitta, wasting the tissues to promote lightness. Unless used to inhibit secretion or check hemorrhaging, kashaya dravyas are best used along with
botanicals that have a tonic property. Kashaya dravya is used in the general treatment of diarrhea, hemorrhage, wounds, and respiratory catarrh. It is contraindicated in debility and mandagni. Examples of astringent drayyas include herbs such as Vibhitaka fruit (Terminalia belerica), Alum root (Heuchera cylindrica), and Uva ursi leaf (Arctostaphylos uva-ursi), and beverages such as black tea.

<table>
<thead>
<tr>
<th>Rasa</th>
<th>Mahabuthas</th>
<th>Gunas</th>
<th>Effect on Doshas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madhura (sweet)</td>
<td>Prithvi (Earth)</td>
<td>gur (heavy), snigdha (oily), shita (cold)</td>
<td>Vatapittahara, Kaphakopa</td>
</tr>
<tr>
<td>Amla (sour)</td>
<td>Ap (Water)</td>
<td>ushna (hot), snigdha (oily), laghu (light)</td>
<td>Vatakaphahara, Pittakopa</td>
</tr>
<tr>
<td>Lavana (salty)</td>
<td>Prithvi (Earth)</td>
<td>ushna (hot), snigdha (oily), gur (heavy)</td>
<td>Vatakaphahara, Kaphakopa (int.), Kaphahara (ext.)</td>
</tr>
<tr>
<td>Katu (pungent)</td>
<td>Vayu (Wind)</td>
<td>ushna (hot), ruksha (dry), laghu (light)</td>
<td>Kaphahara, Pittakopa</td>
</tr>
<tr>
<td>Tikta (bitter)</td>
<td>Vayu (Wind)</td>
<td>shita (cold), ruksha (dry), laghu (light)</td>
<td>Pittakaphahara, Vatakopa</td>
</tr>
<tr>
<td>Kashaya (astringent)</td>
<td>Prithvi (Earth)</td>
<td>ruksha (dry), shita (cold), gur (heavy)</td>
<td>Pittakaphahara, Vatakopa</td>
</tr>
</tbody>
</table>

Table 2: Rasas in association with the mahabuthas, gunas, and doshas

6.4 Action of the rasas upon the dhatus

The activity of the rasas upon the dhatus can be divided into either an anabolic (vriddhi) or catabolic (kashaya) activity. Broadly speaking, only madhura can be considered anabolic (brimhana), by increasing and nourishing all the dhatus. Amla and lavana rasa could be considered brimhana because of their stimulant effect upon the jatharagni, but they are not nourishing or vitalizing, and even deplete shukla/andaru when used to excess. Lavana rasa causes water retention and in excess promotes congestion, but this cannot be considered to be nourishing as such. Tikta, katu and kashaya rasas all have a dehydrating and decreasing (langhana) effect on the body.
6.5 Action of the rasas upon agni

Based upon the ancient Vedic concept of agni-somiya (agni and soma) Ayurveda classifies the rasas according their ability to enhance the solar (agni) or lunar (soma) aspects of the body. Within the tridosha theory, agni relates to Pitta, Kapha relates to soma, and Vata stands between them as the catalyst (prana). Those rasas that contain agni are agneya, whilst those that contain soma are saumya. The following table describes their differences and relative degrees of hot or cold, first degree being the strongest action:

<table>
<thead>
<tr>
<th>Degree of Agni</th>
<th>Agneya rasas</th>
</tr>
</thead>
<tbody>
<tr>
<td>hot in the first degree</td>
<td>Katu (pungent)</td>
</tr>
<tr>
<td>hot in the second degree</td>
<td>Amla (sour)</td>
</tr>
<tr>
<td>hot in the third degree</td>
<td>Lavana (salty)</td>
</tr>
</tbody>
</table>

Table 3: The agneya rasas

<table>
<thead>
<tr>
<th>Degree of Soma</th>
<th>Saumya rasas</th>
</tr>
</thead>
<tbody>
<tr>
<td>cold in the first degree</td>
<td>Tikta (bitter)</td>
</tr>
<tr>
<td>cold in the second degree</td>
<td>Madhura (sweet)</td>
</tr>
<tr>
<td>cold in the third degree</td>
<td>Kashaya (astringent)</td>
</tr>
</tbody>
</table>

Table 4: The saumya rasas

The agneya rasas (katu, amla and lavana) stimulate the appetite and promote digestion. Although tikta belongs to the saumya group it promotes digestion by clearing away Kapha and ama, and promotes the activity of samana vayu. The guru and shita qualities of madhura and kashaya have an adverse effect upon the jatharagni. Thus, while the most nourishing foods contain a madhura rasa, they may have a detrimental effect upon the jatharagni, or if the jatharagni is already impaired, facilitate the production of ama.

6.6 Vipaka: post-digestive effect

Vipaka is a controversial subject in some respects, because the process it claims to describe cannot be observed, but only inferred from the substance ingested and the final result (karma). Vipaka is the process whereby the rasa of the ingested dravya is modified by the differing activities of the digestive process. When a substance is ingested, digestion begins in the mouth with salivary secretion (madhura and lavana), followed by the secretions of the stomach...
(katu), small intestine (amla) and liver (tikta), and ending with bacterial fermentation (katu) and water resorption (kashaya) in the colon. Thus, vipaka describes where in the gastrointestinal tract the rasa of a given dravya will exert its activity, and how it might affect the state of the doshas within their seats (see 2.3 Sthana: residence of the doshas).

The Sushruta and Charaka samhitas differ in some respects in describing vipaka. According to Sushruta, vipaka is only of two types: guru (heavy) or laghu (light). Charaka however details three vipakas: madhura (sweet), amla (hot) and katu (pungent).

One could rationalize that Sushruta's scheme is a classification according to the dhatus (anabolic vs. catabolic), whereas Charaka's method is based on the three doshas of Kapha, Pitta and Vata (i.e. madhura, amla and katu, respectively). This is understandable if we remember that Sushruta, as a surgeon, was concerned with structure and Charaka, as a physician, was concerned with function. Both methods however, can be understood in relation to tridosha:

1. According to Sushruta
   • guru vipaka will increase Kapha and decrease Pitta and Vata,
   • laghu vipaka will increase Pitta and Vata, but decrease Kapha;

2. According to Charaka
   • madhura vipaka will increase Kapha and decrease Pitta,
   • amla vipaka will tend to aggravate Pitta but pacify Vata,
   • katu vipaka will increase Vata and decrease Kapha.

A guru vipaka is the result of madhura and lavana rasas, whereas a laghu vipaka is the result of the remaining four rasas. A madhura vipaka is the result of madhura and lavana rasas, an amla vipaka is the result of amla rasa, and katu vipaka is the result of katu, tikta, and kashaya rasas. While most dravyas adhere to this scheme, some do not. The rasa of Vibhitaka (Terminalia belerica) for example, is primarily kashaya, but the vipaka is madhura. This type of exception exists for many of the more important dravyas used in Ayurvedic medicine.

The significant differences between rasa and vipaka relate to their effects: rasa has an immediate, localized effect on the gastrointestinal tract, whereas vipaka has a delayed, systemic effect on the organism. Thus vipaka can be seen to an extension of the effect that the rasas have on the body, rather than existing as an entirely different process.
6.7 **Virya:** energetic qualities

Virya is the specific potency by which a dravya acts, based primarily on whether it is *shita* or *ushna*. This concept borrows heavily from the ancient *Vedic agni-somiya* principle, the primordial division of heat and cold, of light and darkness, and male and female. Although *ushna* and *shita* are the primordial energetic attributes, in practice we can see that any number of qualities can be utilized to differentiate the energetic quality of one particular *dravya* from another. *Charaka* however lists only six essential energetic attributes, and in practice, this six for the most part adequately describe the energetic possibilities. The following lists the activity of these six *viryas*, their effect upon the *doshas*, their general effect and their respective *panchabhutic* combination.

<table>
<thead>
<tr>
<th>Virya</th>
<th>Effect upon the Doshas</th>
<th>General effect</th>
<th>Tejas</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ushna</em> (hot)</td>
<td>Vatakaphahara Pittakopa</td>
<td>swedana (heating)</td>
<td><em>Ap</em></td>
</tr>
<tr>
<td><em>shita</em> (cold)</td>
<td>Pittahara Vatakaphahara</td>
<td>stambhana (cooling)</td>
<td><em>Prithvi, Ap</em></td>
</tr>
<tr>
<td><em>gura</em> (heavy)</td>
<td>Vatakaphahara</td>
<td>brimhana (anabolic)</td>
<td><em>Tejas, Vayu</em></td>
</tr>
<tr>
<td><em>laghu</em> (light)</td>
<td>Kaphahara</td>
<td>langhana (catabolic)</td>
<td><em>Ap</em></td>
</tr>
<tr>
<td><em>snigdha</em> (oily)</td>
<td>Vatakaphahara</td>
<td>kledana (moistening)</td>
<td><em>Vayu, Prithvi</em></td>
</tr>
<tr>
<td><em>ruksha</em> (dry)</td>
<td>Vatakaphahara Kaphahara</td>
<td>soshana (absorbing)</td>
<td></td>
</tr>
</tbody>
</table>

**Table 5: The composition and effect of virya**

As *ushna* and *shita* are the primary energetic qualities, most *drayyas* will display either of them, usually in concord with secondary attributes. Sometimes however, a *dravya* will be neutral in temperament, which is to say, neither *ushna* nor *shita* seem especially predominant. In this case, the secondary energetic attribute(s) would become the primary one(s).

In every respect *virya* supercedes the actions of *rasa* and *vipaka*, although more often than not the relationship between them is congruent:

<table>
<thead>
<tr>
<th>Rasa</th>
<th>Vipaka</th>
<th>Virya</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>madhura</td>
<td>guru</td>
<td>shita</td>
<td>Marshmallow root (<em>Althaea officinalis</em>), decreases Pitta &amp; Vata</td>
</tr>
<tr>
<td>lavana</td>
<td>guru</td>
<td><em>ushna</em></td>
<td>Kelp (<em>Fucus vesiculosus</em>), decreases Vata</td>
</tr>
<tr>
<td>amla</td>
<td>laghu</td>
<td><em>ushna</em></td>
<td>Shan za fruit (<em>Crataegus pinnatifida</em>), decreases Kapha &amp; Vata</td>
</tr>
</tbody>
</table>
### Table 6: Relationship of virya with rasa and vipaka, with examples

<table>
<thead>
<tr>
<th>Katu Laghu Ushna</th>
<th>Tikta Laghu Shita</th>
<th>Kashaya Laghu Shita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cayenne fruit (Capsicum minimum)</td>
<td>decreases Kapha</td>
<td>Goldenseal root (Hydrastis canadensis)</td>
</tr>
</tbody>
</table>

There are however, enough contradictions to this rule that one cannot substitute theory for an intimate knowledge of the dravya in question. For example, although meat has a madhura rasa, its virya is ushna. Amalaki fruit (Emblica officinalis) has a definite amla rasa, but its virya is shita. Haritaki fruit (Terminalia chebula) has a kashaya rasa, but its virya is ushna. The degree of exceptional characteristics that a given dravya displays is often proportionate to its usefulness, and such herbs that contain contradictory qualities are often a better choice in the treatment of complex disease states.

### 6.8 Karma: therapeutic action

*Karma* refers to the specific therapeutic activity of a given *dravya*, a concept that in many ways resembles that of Western medicine. In fact, the entire terminology of therapeutic action commonly used in Western herbal medicine, such as ‘stomachic,’ ‘carminative,’ and ‘purgative’ may be used in *Ayurveda* without contradiction. *Karma* literally means “action,” and the therapeutic activity of a given *dravya* is an effect (*karma*) based upon the collective activities of *rasa*, *vipaka* and *virya*.

Broadly speaking, *karma* is of two basic types: *shodhana* (purificatory) and *shamana* (pacificatory). *Shodhana karmas* are most commonly referred to as the *pancha karmas*, and are *vamana* (vomiting), *virechana* (purgation), *vasti* (enemata), *nasya* (nasal irrigation, errhines), and *rakta mosham* (blood letting). *Shamana* therapies are *brimhana* (anabolics, nutritives), *langhana* (catabolics, cleansing), *svedana* (heating, diaphoretics), *stambhana* (cooling, supression), *rukshana* (drying, roughening), and *snehana* (oleation).

The *Sharngadhara samhita* (c. 13th CE) lists several types of *karmas* that are commonly used within *Ayurveda* and their elucidation here will give the reader a good understanding of the basic therapeutic approaches. I have included several other *karmas* not included in the *Sharngadhara samhita*, organized according to that part of the body they act upon, with an example of each.
**Digestion**

Dipana- dravyas that enkindle agni, e.g. Guduchi (Tinospora cordifolia)

Pachana- dravyas that ‘cook’ or denature the food that has been consumed, e.g. Maricha (Piper nigrum); many dravyas in fact contain both the activities of dipana and pachana, e.g. Haritaki (Terminalia chebula), and are called dipanapachana

Anulomana- dravyas that assist in digestion and promotes normal bowel movement, e.g. Ajamoda (Trachyspermum roxiburghianum)

Asyasravana- dravyas that promote the flow of saliva, e.g. Tumburu (Zanthoxylum alatum)

Vamana- dravyas that promote emesis, e.g. Madanaphala (Randia dumetorum)

Chardinigrahana- dravyas that act as anti-emetics, e.g. Mishi (Foenicum vulgare)

Bhedana- dravyas that forcibly expel the contents of the bowel, e.g. Katuki (Piccrorrhiza kurroa)

Rechana- dravyas that forcibly expel the contents of the bowel in liquid form, e.g. Trivrita (Ipomea terpethum)

Shulaprashamana- dravyas that act as intestinal antispasmodics, e.g. Shunthi (Zingiber officinalis)

Purishasangrahaniya- dravyas that act as intestinal astringents, e.g. Kutaja (Holarrhena antidysenterica)

Krimighna- dravyas that act as antihelminthics, e.g. Vidanga (Embelia ribes)

**Circulatory system**

Hrdaya- dravyas that treat diseases of the heart, e.g. Arjuna (Terminalia arjuna)

Raktasthambhana- dravyas that stop bleeding, e.g. Nagakeshara (Mesura ferrea)

Raktaprasadana- dravyas that purify the blood, e.g. Manjishta (Rubia cordifolia)

**Respiratory system**

Kasahara- dravyas that act as antitussives or bronchial sedatives, e.g. Khakhasa (Papaver somniferum)

Svasahara- dravyas that alleviate bronchial constriction, e.g. Vibhitaki (Terminalia chebula)

Chedana- dravyas that act as expectorants, e.g. Vasaka (Adhatoda vasica)

Svarya- dravyas that promote the voice, e.g. Guggulu (Commiphora mukul)

Hikkanigrahana- treatments that stop hiccoughs, e.g. pranayama
Urinary system

Mutavirechana - dravyas that act as diuretics, e.g. Gokshura (Tribulus terrestris)
Ashmaribhedana - dravyas that act to remove stones, e.g. Agnimanthaka (Premna integrifolia)
Mutravishodhana - dravyas that act as anti-infectives in the urinary tract, e.g. Chandana (Santalum album)
Shothahara - dravyas that relieve edema, e.g. Bilva (Aegle marmelos)

Nervous system, brain and sense organs

Medhya - dravyas that promote buddhi, e.g. Mandukaparni (Centella asiatica)
Chakshushya - dravyas that enhance eyesight, e.g. Amalaki (Emblica officinalis)
Nasya - dravyas that restore the sense of smell, e.g. Katphala (Myrica nagi)
Madakari - dravyas that intoxicate, e.g. Parasikayavani (Hyocymus niger)
Samjnjasthapana - dravyas used to restore consciousness, e.g. Vacha (Acorus calamus)
Nidrajanana - dravyas that promote sleep, e.g. Sarpagandha (Rauwolfia serpentina)
Vedanasthapana - dravyas that relieve pain, e.g. Guggulu (Commiphora mukul)
Vyavayi - dravyas that act very quickly first by spreading all over the body, e.g. Bhanga (Cannabis indica)

Reproductive system

Vajikarana - dravyas that enhance fertility, e.g. Ashvagandha (Withania somnifera)
Prajasthapana - dravyas that prevent miscarriage, e.g. Shatavari (Asparagus racemosus seed)
Stanyajanana - dravyas that promote milk production, e.g. Nilotpala (Monochoria hastata)
Artavajanana - dravyas that promote menstruation, e.g. Kumari (Aloe spp.)

Skin

Svedana - treatments that promote sweating, e.g. steam bath
Snehana - dravyas that smooth the skin, e.g. fat, oil
Rukshana - dravyas that roughen the skin, e.g. Yava (Barley)
Varnya - dravyas that promote complexion, e.g. Haridra (Curcuma longa)
Kandughna - dravyas that stop itching, e.g. Nimba (Azadirachta indica)
**Kushtagha** — dravyas that relieve skin diseases, e.g. *Kushta* (Saussurea lappa)

**Romasanjanana** — dravyas that promote hair growth, e.g. *Nirgundi* (Vitex negundo)

**Metabolism**

**Jvaraghna** — dravyas that reduce fever, e.g. *Kiratatika* (Swertia chiretta)

**Dahaprasamana** — dravyas that reduce heat and burning sensations, e.g. cool milk

**Vishaghna** — dravyas that alleviate poisons, e.g. *Shirisha* (Albizzia lebbeck)

**Sandhaniya** — dravyas that promote healing, e.g. *Madhuka* (Glycyrrhiza glabra)

**Medohara** — dravyas that reduce fat, e.g. *Guggulu* (Commiphora mukul)

**Lekhana** — dravyas that dry up excessive moisture in the body, e.g. *Yava* (Barley)

**Grahi** — dravyas that dry up the excessive moisture in the body and are dipanapachana, e.g. *Jiraka* (Nigella sativa)

**Rasayana** — dravyas that ward off old age and disease, e.g. *Punarnava* (Boerhavia diffusa)

**Balya** — dravyas that increase strength, e.g. *Bala* (Sida cordifolia)

**Jivaniya** — dravyas that energize the body, e.g. *Jivanti* (Leptadenia reticulata)

**Srotas**

**Pramathi** — dravyas that remove the accumulated doshas from the srotas, e.g. *Maricha* (Piper nigrum)

**Abhirshyandi** — dravyas that block the srotas because of their guru and picchila nature, causing heaviness and congestion, e.g. *dadhi* (yogurt, taken internally)

**Sukshma** — dravyas that enter into even the most minute channel of the body, e.g. *Saindhava* (rock salt)

**Doshas**

**Vatahara, Vataghna** — dravyas that decrease Vata

**Vatakopa** — dravyas that increase Vata

**Pittahara, Pittaghna** — dravyas that decrease Pitta

**Pittakopa** — dravyas that increase Pitta

**Kaphahara, Kaphaghna** — dravyas that decrease Kapha

**Kaphakopa** — dravyas that increase Kapha

**Tridoshahara, Tridoshaghna** — dravyas that reduce all three doshas
6.9 **Prabhava:** spiritual potency

*Prabhava* refers to the activity of a *dravya* that cannot be rationalized within the conceptual framework of *dravyguna*. Whereas *rasa*, *vipaka* and *virya* are described as *chintya* (explicable), *prabhava* is said to be *achintya* (unexplicable). An illustration of *prabhava* can be found when we compare *Chitraka* (*Plumbago zeylanica*) with *Danti* (*Baliospermum montanum*). Both of these *dravyas* have the identical *rasa*, *vipaka* and *virya*, but the latter is a strong purgative whilst the former is not. Thus, *prabhava* describes how certain *dravyas* seem to display a specificity in action that cannot be matched by another herb which otherwise exhibits the same qualities. More often than not, *prabhava* refers to the tropism of a *dravya* to a specific ailment, such as *Arjuna* (*Terminalia arjuna*) for diseases of the heart.

*Prabhava* is also representative of the spiritual basis of Ayurvedic medicine. In regard to medicinal plants, *prabhava* is the Teacher (*guru*), the healing wisdom of the plant that cannot be rationalized but only understood only through the experience of spiritual insight. This approach finds resonance in other traditions, such as Native American spirituality. Furthermore, *prabhava* explains how a *dravya* can be used in such small amounts that its action cannot be explained by its biochemical constituents, as is the case with flower essences. The usage of herbal remedies in an almost homeopathic fashion by the Eclectic-physiomedicalist tradition of the late 19th century very much resonates with the concept of *prabhava*.

Finally, *prabhava* also refers to techniques used in processing the *dravya*, such as the addition of crushed semi-precious and precious metals and gems, and the chanting of mantras for specific periods of time during different stages of processing. Although such techniques may seem alien and superstitious to the rational practitioner, they have their basis in scientific fact. Such traditional methods used in the processing crude aconite for example, resulted in a preparation that was assessed to be non-toxic, even at dosages eight times greater than the *LD*₁₀₀ for the crude drug (Thorat and Dahanukar 1991).

6.10 **Shodhana and rasashala:** Ayurvedic pharmacy

It is rare that a *dravya* can be taken in its natural or raw state as a medicament without first preparing it in a certain fashion, to either
remove impurities and toxins, or make the medicament bioavailable. The following techniques are utilized in the processing dravyas of vegetable origin, but are not representative of all the techniques used in Ayurvedic pharmacy:

1. Pancha kashaya- Water extracts
   a) svarasa- expressed juice, prepared by taking the fresh plant, wrapping it in cloth and pounding and squeezing it to express the juice. If the fresh plant is not available, one may also take one part of the dried powder and mix it with twice the amount of water. This is allowed to sit overnight before being squeezed out through a cloth. Svarasa is considered to be the heaviest to digest and most potent of the pancha kashaya, and is typically dosed at 25 mL.
   b) kalka- bolus, is prepared by grinding the dravya in a mortar and pestle and adding just enough water to make a paste. Honey and/or ghrita are often added to the preparation. It is typically dosed at 10-15 g.
   c) kvatha- decoction, prepared by boiling one part (by weight) of the coarsely powdered dravya in 16 parts water (by volume) in a covered earthenware pot, over a medium-low heat until it is reduced to one quarter of its original volume. Kvatha is typically dosed at two palas, or about 100 mL.
   d) hima- cold infusion, prepared by allowing one part (by weight) of the coarsely ground dravya infuse in eight parts (by volume) of water overnight. Hima is dosed at 100 mL.
   e) phanta- warm infusion, prepared by infusing one part (by weight) of the coarsely powder dravya in 4 parts (by volume) of hot water for 8-10 minutes. The resultant preparation is then filtered out through a cloth or sieve. Phanta is typically dosed at 100 mL.

2. Churna- Powdered dravya
   Churna are the finely powdered dravyas. They are typically dosed at one karsha (10-15 g) and administered alone or in some combination of honey, ghrita, sugar or fried Hingu (Asafoetida ferula). If taken with liquid it should be four times the volume of the churna.

3. Gulika- Pill
   Prepared by either cooking the powdered dravya with jaggery, sugar or Guggulu or macerating it uncooked with a liquid, honey and Guggulu, and rolling it into pills. Gulika is used according to the strength of the patient based on the potency of the dravyas used, as well as the actual size of the gulika itself. The dosage for
gulika typically ranges between 250 mg to 4 g, twice to three times daily.

4. **Avaleha- Confection**
Prepared by reducing a kwatha over a very low heat until all the water has evaporated, after which the resultant tarry residue is collected and mixed with ghee, jaggery or honey. Avaleha is dosed at one pala (50 g) once to twice daily, with four times the volume of any such liquid that is appropriate. Many avaleha recipes are extremely complex in nature and this simple rendering does not account for the preparation of all avalehas, and thus dosages may be different.

5. **Sneha- Medicated fats and oils**
Prepared by taking one part (by volume) of dravya to four parts fat or oil to 16 parts water. This preparation is then brought to a boil and simmered over a low heat until all of the water has evaporated. The resultant preparation is then cooled and strained through a fine cloth. There is some variation of proportion between the various parts in specific preparations and the above is a general rule of thumb. Sneha are typically used as needed in topical procedures, but are also taken internally, usually anywhere from 6 to 12 grams. Some sneha however, such as Tuvuraka taila and Baladhatryadi taila, are used in much smaller dosages (10 – 20 gtt.). Further, when a sneha such as Anu taila is used for nasya (nasal administration), the dosages are between 1 and 10 gtt. per nostril.

6. **Sandhana- Galenicals and fermented liquids**
Are of two types: asava and arishta, the difference between is the use of cold water and boiled water, respectively. One part (by weight) of the dried herb is mixed with 5 parts (by weight) honey, 10 parts (by weight) jaggery and 25 parts (by volume) water. In the case of asavas the above ingredients are mixed together without heat, poured into a earthenware vessel, sealed well, wrapped in cloth and buried for a period of one month. Arishta are prepared in a similar manner, except that the dravya is boiled in the water first, and when cool, the honey and jaggery are added later.

### 6.11 Shodhana and rasashala: anupana

A special category of pharmacy called anupana relates to the usage of certain dravyas to assist in the metabolism of the medication, or to enhance its medicinal activity. Anupana literally refers to
drinking water (*pana*) after (*anu*) the medicament has been consumed, but in a broader context, has come to mean any substance taken with or after the medicament. Commonly used *anupana* include water, milk, honey, *ghrita*, sesame oil, jaggery, treacle, rice, and meat broth. Hot water should be taken after the consumption of any fat taken as an *anupana*.

Even the same *dravya* can be used in different ways when it is combined with a different *anupana*. Dr. Nadkarni for example, mentions that the daily consumption of *Haritaki* fruit (*Terminalia chebula*) as a tonic alterative is affected by the season in which it is consumed. In his book, *Indian Materia Medica*, Dr. Nadkarni details that *Haritaki* fruit (*Terminalia chebula*) is traditionally taken every morning with salt during the monsoon (*varsha*), with jaggery in autumn (*sharat*), with *Shunthi* rhizome (*Zingiber officinalis*) in the first half of winter (*hemanta*) and *Pippali* fruit (*Piper longum*) in the second (*shishira*), with honey in the spring (*vasanta*), and with treacle during the summer (*grishma*) (1208).