Herbal Teas Used Against Gastrointestinal Disorders

Gastrointestinal Disorders

- A. Anorexia and dyspepsia
- B. Gastritis and peptic ulcer disease
- C. Irritable bowel syndrome
- D. Diarrhea
- E. Constipation
- F. Liver Diseases

Anorexia and Dyspepsia

- Anorexia: Poor appetite / Loss of appetite
 - Physical diseases
 - Psychological problems

A. Anorexia and Dyspepsia

- <u>Dyspepsia:</u> A syndrome characterized by nausea, epigastric pressure, bloating, flatulence, abdominal cramps and pain.
 - Deficiency in gastric secretion and bile production, problems in gastric motility, physicosocial factors, H. pylori infection, diet, alcohol, tobacco etc.
 - Bitter drugs, cholagogue/choleretics, carminatives

1. Bitter Drugs (Eupeptics)

- Used in case of dyspepsia and anorexia
- Stimulation of appetite, promotion of gastric juice secretion and facilitation of digestion, induction of bile secretion
- Should be taken 20-30 min. before meals
- Generally used as infusion (2-4%) or in tincture form
- Consumption in case of gastric and duodenal ulcer is not recommended.

Artemisia absinthium (Wormwood)

- Aerial parts
- Infusion (1-1.5 g drug/150 ml water)/decoction ... 3 times a day (max. daily dose: 2-3 g crude drug)
- Bitter principles (absinthin), essential oil (chamazulene, thujone)
- Used as stomachic, cholagogic, appetite stimulant, antipyretic, diuretic in folk medicine
- Indications: loss of appetite, dyspepsia, biliary dyskinesia
- Stimulates gastric secretion

Artemisia absinthium (Wormwood)

- → 30 min. before meals (for anorexia)/after meals (as cholagogue)
- Shouldn't be used longer than 3-4 weeks
- In case of continuous consumption, vomiting, stomach and intestinal cramps may be encountered due to its thujone content.
- Contraindicated in people with gastric or intestinal ulcer and during pregnancy and lactation period

Gentiana lutea (Gentian)

- Dried roots
- Infusion/decoction (1 g drug/150 ml water, 5 min.)
- 30 min. before meals
- Daily dose: 2-4 g crude drug
- Bitter principles (iridoid glycosides; amarogentin, amoswerin, amaropanin), sugar, alkaloids

Gentiana lutea (Gentian)

- Stimulation of taste buds, increase in the saliva and gastric secretion
- Used as eupeptic, appetite stimulant, against flatulence and bloating
- Contraindicated in patients suffering from gastric and duodenal ulcer

Centaurium erythraea (Centaury)

- Dried aerial parts
- Maceration (1-2 g drug/150 ml cold water, 6-10 h.)/ infusion (2-3 g drug/150 ml water, 15 min)
- Daily dose: 6 g crude drug
- Bitter principles (amarogentin, gentiopicroside, centapricrin, swartiamarin, sweroside)
- Indications: dyspeptic complaints and loss of appetite
- Contraindicated in cases of gastric and duodenal ulcer due to its secretion activating effect

Citrus aurantium var. amara (Bitter orange)

- Dried fruit peel (pericarp)
- Infusion (10 min.) 1 cup 30 min. before meals
- Daily dose: 4-6 g crude drug
- Bitter principles (naringoside, limonoid), essential oil (limonene), furocoumarins, flavonoids
- Mild spasmolytic effect on GI tract, increase in gastric juice secretion
- Indications: appetite loss and dyspeptic complaints

Cnicus benedictus (Blessed/Holy Thistle)

- Dried aerial parts
- Infusion (1.5-2 g drug/150 ml water), 5-10 min.
- Daily dose: 4-6 g crude drug
- Bitter compound (sesquiterpene lactone-cnicin)
- Stimulation of saliva and gastric secretion
- Indications: dyspeptic complaints and loss of appetite

2. Cholagogue/Choleretic Drugs

- Cholagogs stimulate the flow of bile that has been formed, particularly by contracting the gallbladder.
- Choleretics promote bile secretion by hepatocytes.
- Most of choleretic agents have cholagog effect.
- ► Shouldn't be used in case of gallstones, obstruction of bile ducts, gastric inflammation, intestinal infections.
- Recommended administration: 30 min. before meals

Peumus boldus (Boldo)

- Does not grow in Turkey
- Dried leaves
- Infusion (1-2 g drug/150 ml water, 10-15 min.), 2-3 times a day (daily dose: 4-5 g crude drug)
- Essential oil, flavonoids, alkaloids (boldine)
- Boldine increases biliary secretion
- Contraindicated in cases of obstruction of biliary tract, lithiasis and formation of gallstones

Fumaria officinalis (Fumitory)

- Dried aerial parts
- Infusion (0.5%) 20 min. 30 min. before meals
- Daily dose: 6 g crude drug
- Isoquinoline alkaloids, organic acids (fumarin)
- Amphicholeretic, light antispasmodic on biliary ducts and gastrointestinal tract

Cichorium intibus (Chicory)

- Dried roots and leaves
- Infusion (2-4 g drug/150-250 ml water, 10 min.)
- Caffeic acid derivatives (cichoric acid, chlorogenic acid)
- Choleretic
- Indications: loss of appetite, dyspeptic complaints

Cynara scolymus (Artichoke)

- Infusion of leaves
- Daily dose: 6 g crude drug
- Sesquiterpene lactones, caffeic acid derivatives, flavonoids
- Increase of bile secretion, reduction of dyspeptic complaints
- Chologague, choleretic, hepatoprotective
- Indications: Loss of appetite, liver/gallbladder complaints
- Contraindicated in patients with cholelithiasis, bile duct occlusion

Taraxacum officinale (Dandelion)

- Dried roots and aerial parts
- Infusion/decoction (3-5 g drug/150 ml water) 3 times a day
- Triterpenoids (taraxacin, taraxerol), caffeic acid derivatives, inulin, flavonoids
- Roots; liver and digestive disorders, loss of appetite
- Leaves; choleretic and cholagogue
- Cautious use in cases of occlusion of bile ducts, gallbladder empyema, paralytic ileus

Curcuma longa (Turmeric)

- Steamed/boiled and dried rhizomes
- Infusion (0.5-1 g drug, 5 min.)/decoction (3-5%)
- Curcuminoids (curcumin), essential oil
- Cholagogue, choleretic (essential oil), cholekinetic (curcumin)
- Indications: loss of appetite, dyspeptic complaints particularly flatulence and bloating
- Tea of turmeric is seldom used since curcuminoids and essential oil are poorly soluble in water.

Chelidonium majus (Celandine)

- Aerial parts
- Daily dose: 2-3 g crude drug
- Isoquinoline alkaloids (coptisine, berberine, chelidonine), caffeic acid derivatives
- Cholagogue
- Used for improvement of dyspeptic and liver/ gallbladder complaints

Achillea millefolium (Yarrow)

- Dried flower clusters
- Infusion (2 g drug), 3-4 times a day, between meals
- Essential oil (chamazulene, camphor, α-pinene, β-pinene, caryophyllene), flavonoids, sesquiterpene lactones (guanolides, germacranolides)
- Cholagogue, spasmolytic
- Indications: dyspeptic complaints, loss of appetite
- Shouldn't be used during pregnancy and lactation period

3. Carminative Drugs

- ► Flatulence: presence of excessive amount of gas in the stomach or intestine, causing the symptoms such as abdominal bloating and pain, belching.
- Changing diet, reducing the amount of air swallowed, taking digestive enzymes or carminatives may reduce discomfort.
- Carminatives prevent the formation or provide the expulsion of gas in gastrointestinal tract.

Carum carvi (Caraway)

- Culture in Europe (not in Turkey)
- **→** Fruits
- Infusion (daily dose: 1.5-6 g drug)
- Essential oil (carvone, limonene)
- Carminative
- Indications: dyspeptic complaints

Cuminum cyminum (Cumin)

- **→** Fruits
- Average single dose: 300-600 mg drug
- Essential oil (cuminaldehyde)
- Carminative
- Generally essential oil and alcoholic extracts which is obtained from ripe fruits are used.
- Confused with caraway but it doesn't contain carvone

Foeniculum vulgare (Fennel)

- **→** Fruits
- Daily dose: 5-7 g crude drug; single dose of 2.5 g 2-3 times a day
- Essential oil (anethole, fenchone)
- Carminative, mild expectorant
- Indications: dyspeptic complaints, cough, bronchitis

Pimpinella anisum (Anise)

- **→** Fruits
- Infusion (0.5-1 g drug), before meals (daily dose: 3 g)
- Essential oil (anethole), caffeic acid derivatives, flavonoids
- Carminative, appetite stimulant, digestive stimulant, expectorant
- Indication: dyspeptic complaints, loss of appetite, respiratory tract disorders
- Shouldn't be used during pregnancy

Mentha spicata (Spearmint)

- Leaves
- Essential oil (carvone)
- Carminative, antispasmodic
- → M. piperita ... crossbred of M. spicata and M. aquatica

Illicium verum (Star anise)

- **→** Fruits
- Infusion (0.5-1 g crude drug), daily dose: 3 g drug
- Essential oil (anethole, estragole, limonene, fenchone, anisaldehyde)
- Carminative, expectorant, antispasmodic for GI tract
- Indications: Loss of appetite, cough and bronchitis

Coriandrum sativum (Coriander)

- **→** Fruits
- Infusion (1 g crude drug), daily dose: 3 g
- **■** Essential oil (linalool)
- Stimulates secretion of gastric juice, carminative, spasmolytic
- Indications: dyspeptic conditions and loss of appetite

Austuria Pharmacopoeia

Herba Absinthi	20
H. Centaurea	20
R. Gentiana	15
Menyanthes trifoliata (Folium)	15
P. Aurantii amara	20
C. Cinnamomi	20

- Appetite stimulant bitter tea
- → 30 min. before meals, 1 teaspoonfull in 1 cup (infusion)

R. Gentianae 20

P. Aurantii amara 20

H. Centaurii 25

H. Absinthii 25

C. Cinnamomi 10

■ Stomach tea

R.	Angelica	25
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H. Achillea 25

H. Centaurea 15

H. Absinthii 15

Fr. Anisi 5

Cornflower 5

Orange blossoms 5

F. Rosmarini 5

■ Stomach tea

R.	Gentianae	20
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R. Taraxaci cum F. Taraxaci 35

H. Centaurea 30

Fl. Calendula 5

F. Salviae

H. Basilici 5

■ Stomach tea

R. Taraxaci & F. Taraxaci 30

R. Curcuma 20

F. Menthae 20

Fr. Cardui mariae 20

Fr. Carvi 10

- Bile tea infusion (1 teaspoonful/150 ml water), 3-4 times/day, 30 min. before meals
- Gastrointestinal complaints such as bloating and digestive problems, supportive treatment of noninflammatory gallbladder complaints

H. Absinthi 3

R. Calami 2

R. Taraxaci 2

H. Millefolii 2

R. Gentianae 2

H. Absinthi 2

F. Menyanthes 1

H. Millefolii 1

H. Centaurii 1

Fr. Cardui mariae 20
F. Menthae 10
R. Taraxaci & H. Taraxaci 10

H. Absinthi * 10

F. Melissae 10

H. Fumariae 10

* Dose should be considered

Fl. Chamomillae 10

F. Menthae 10

F. Melissae 10

H. Chelidonii * 5

H. Fumariae* 5

R. Taraxaci & H. Taraxaci	30
R. Curcumae	20
F. Menthae	20
Fr. Cardui Mariae	20
Fr. Carvi	20

R. Valerianae 25

Fr. Carvi 25

F. Menthae 25

Fl. Chamomillae 25

- Gastrointestinal tea
- 1-2 teaspoons of mixture/150 ml boiling water, steeped for10 min., to be consumed after every meal

Gastrointestinal Çay

- Fr. Foeniculi 30
- Fr. Coriandri 30
- Fl. Calendulae 5
- Fl. Maydis 5
- Gastrointestinal tea
- 1-2 teaspoons of mixture/150 ml boiling water, steeped for 10 min., to be consumed after every meal

Fr. Anisi 20

Fr. Foeniculi 20

Fr. Carvi 20

Fl. Chamomillae 20

Fl. Achillae 20

- Gastrointestinal tea
- 1-2 teaspoons of mixture/150 ml boiling water, steeped for10 min., to be consumed after every meal

Fl. Chamomillae 30

R. Liquiritae 30

Fl. Achillae 20

F. Malvae 5

F. Melissae 5

Fl. Calendula 5

C. Cinnamomi 5

- Gastrointestinal tea
- 1-2 teaspoons of mixture/150 ml boiling water, steeped for 10 min., to be consumed after every meal

R. Valerianae 20

Fr. Carvi 20

F. Menthae 20

Fl. Chamomillae 20

Fr. Anisi 20

- Carminative tea
- 1-2 teaspoons of mixture/150 ml boiling water, steeped for 10 min., to be consumed after every meal

Fr. Carvi 20

Fr. Coriandri 20

Fl. Chamomillae 20

F. Melissae 20

F. Menthae 20

F. Salviae 2

F. Cooriandri 2

H. Absithi 1

R. Liquiritae 1