

Optimizing Elimination

Liver and Gallbladder Function

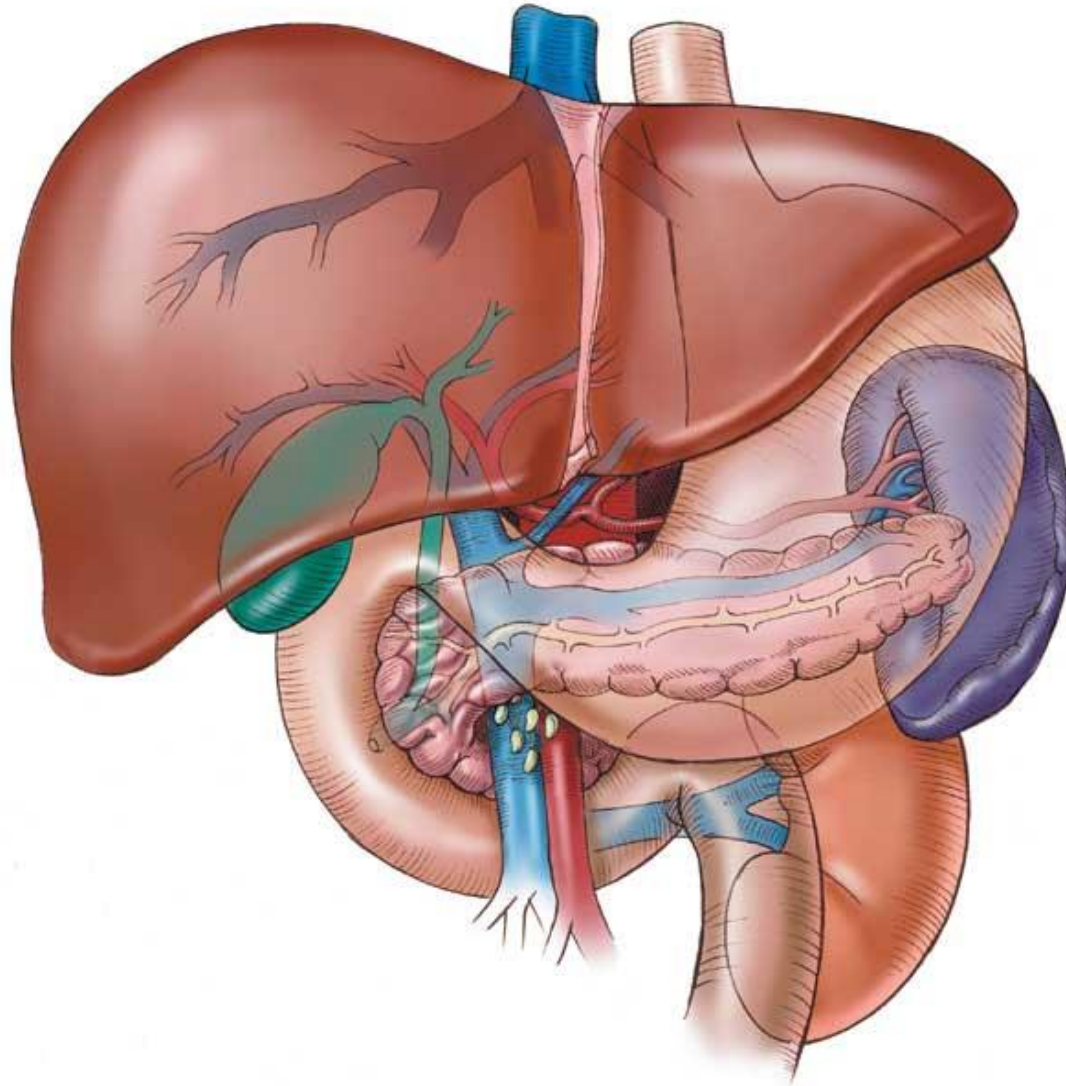
With

Dr. Ritamarie Loscalzo



Medical Disclaimer: The information in this presentation is not intended to replace a one-on-one relationship with a qualified health care professional and is not intended as medical advice. It is intended as a sharing of knowledge and information from the research and experience of Dr. Ritamarie Loscalzo, drritamarie.com, and the experts who have contributed. We encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.

The Liver and Gallbladder



3 Main Functions of the Liver

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graph TD; A[3 Main Functions of the Liver] --> B[Blood Filtering<br/>Clean and clear metabolic wastes and toxins]; A --> C[Fat Digestion<br/>Produce bile to emulsify fats for easy absorption]; A --> D[Metabolic<br/>Regulation of nutrients and production of important proteins and immune factors];
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Blood Filtering

Clean and clear
metabolic wastes
and toxins

Fat Digestion

Produce bile
to emulsify fats
for easy absorption

Metabolic

Regulation of
nutrients and
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important proteins
and immune factors

Fat Digestion – What's Involved

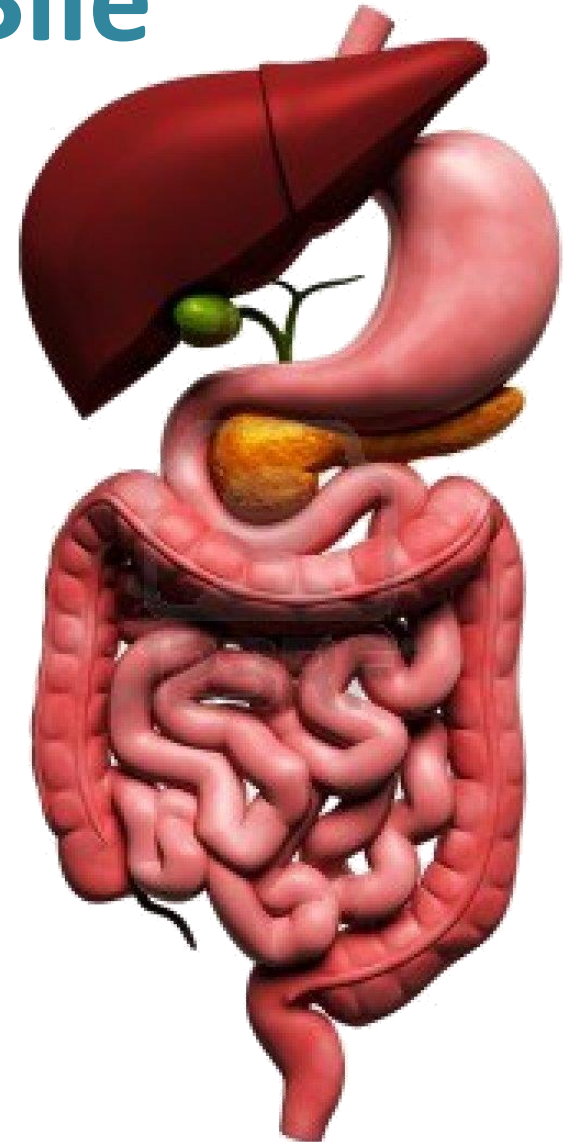
- Fats don't dissolve in water, so they need to be **emulsified**.
- Requires **lipase** from the pancreas, and **bile**, made in the liver, and stored and concentrated in the gallbladder
- Bile inserts itself between fat and water so the fat cells get suspended in water (emulsification)
- Lipase efficiently breaks down emulsified fats – not large globules



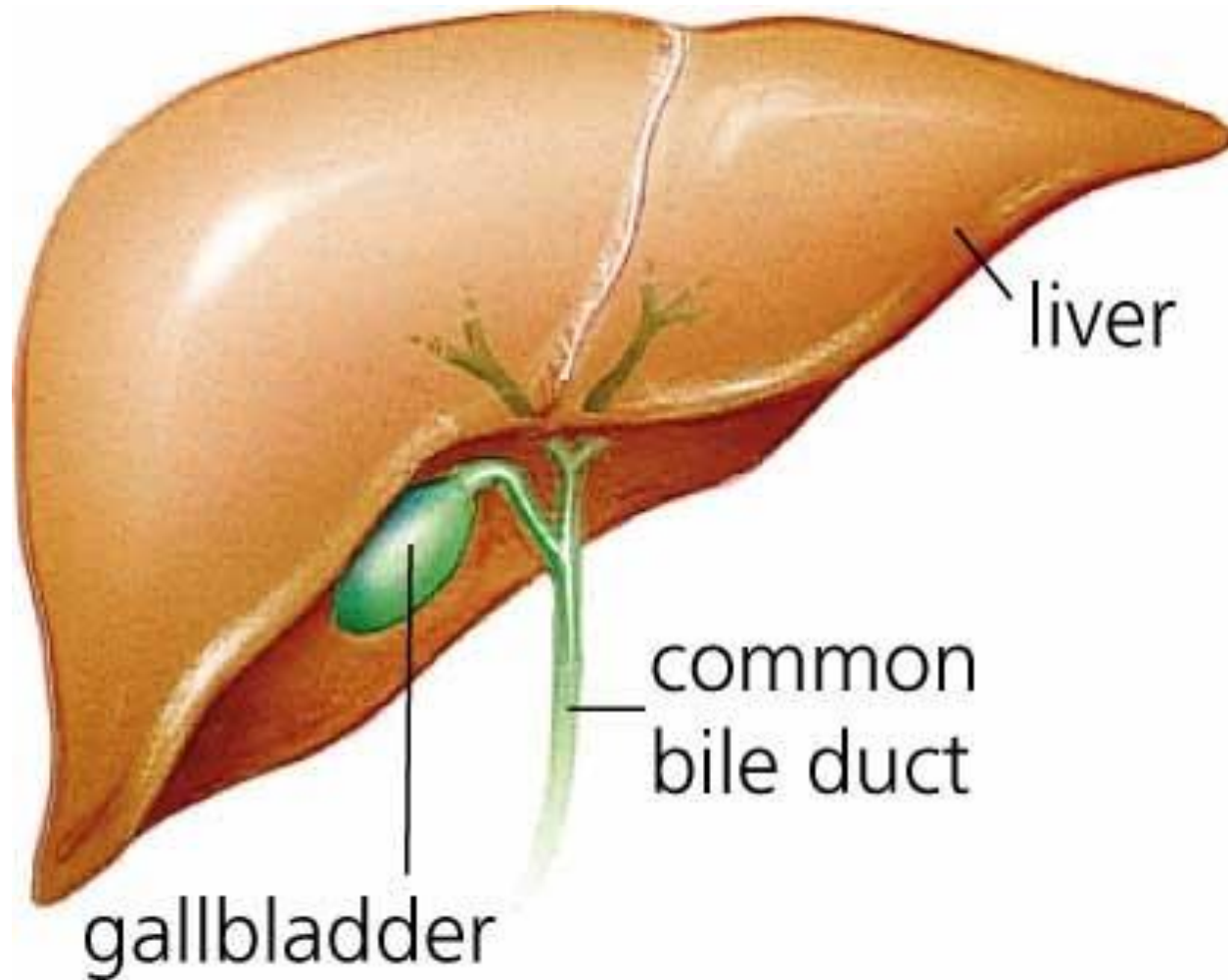
Liver and Digestion:

The Role of Bile

- Bitter-tasting, dark green to yellowish brown fluid
- **Emulsifies fat:** breaks into tiny globules
- 97% water, 0.7% bile salts, 0.2% bilirubin, 0.51% fats (cholesterol, fatty acids and lecithin), small amount of inorganic salts
- **95% reabsorbed in ileum**
- Eliminates cholesterol
- Mixed with sodium bicarbonate pH 11, to **neutralizes “chyme”**

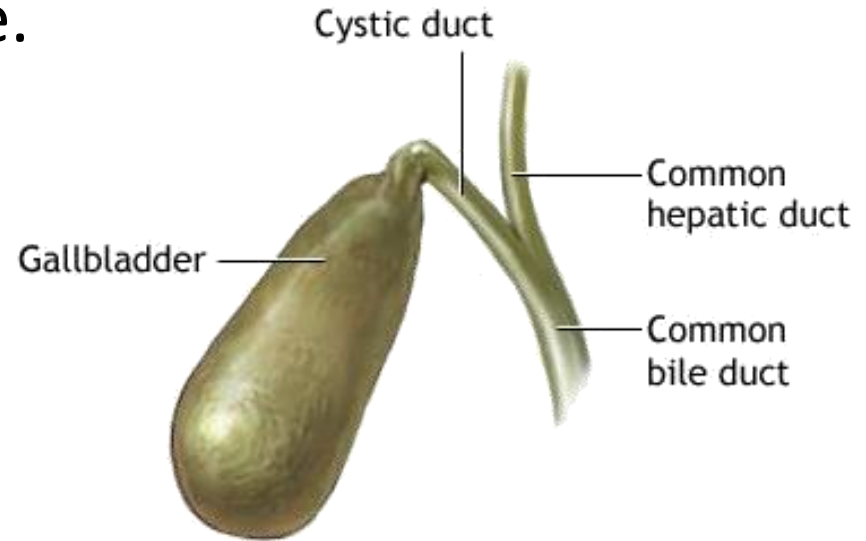


Gallbladder



Your Gallbladder's Job Description

- ✓ Stores and concentrates bile.
- ✓ Secretes bile when needed.
- ✓ Secretes bicarbonate into the small intestine to alkalize the food bolus that has become acid from the stomach's actions.



- An alkaline environment is needed in the beginning of the small intestine so that starchy foods can be digested.
- An alkaline environment helps maintain a healthy intestinal lining.

Biggest Cause of...

Liver Disease

- Overexposure to toxins like alcohol or environmental pollutants
- Poor diet
- High fructose corn syrup and fatty liver syndrome
- Sedentary/junk food lifestyle
- Viruses like Hepatitis A, B, C
- Parasites



Gallbladder Issues

- Food allergies – especially eggs, wheat, coffee, pork, and onions
- Inadequate stomach acid
- Lack of exercise
- Weight gain
- Risk increases with more childbirth
- Rapid weight loss
- Excess refined sugars
- Birth control pills, synthetic hormones
- Constipation
- Parasites

Liver/Gallbladder Testing

Exam

- Tenderness between 6th and 7th ribs on the right
- Tenderness over 3rd rib, 3 inches to the right of mid line
- Tenderness beneath the right rib cage



Testing

- Increased SGOT, SGPT
- Increased LDH
- Increased GGTP
- Increased alkaline phosphatase
- Decreased uric acid suggestive of phase 2 liver detox insufficiency
- Liver detoxification panel
- Cholesterol, HDL, and LDL decreased-bile insufficiency

Liver and Gallbladder Support

Diet and Lifestyle

- Breathe and relax before eating
- Chew thoroughly
- Avoid sugar, refined carbohydrates, gluten and alcohol
- Avoid trans and bad fats
- Identify and eliminate food allergies
- Essential fatty acid-rich foods and supplements (chia, flax, hemp, and pumpkin seeds)
- Chlorophyll-rich foods
- Lots of water
- Don't overeat
- Don't skip meals



Supplements

- Bitters to stimulate bile production
- Lipase
- Taurine
- Vitamin C
- Liver cleansing herbs: milk thistle, dandelion, yellow dock, burdock root
- Liver stimulating herbs: fennel, anise, and cayenne
- Lecithin
- Peppermint oil
- B vitamins

Keeping Your Gallbladder...

Preventing gallstones and flushing out congested bile

- Fasting and juicing
- Regular cleansing
- Bitters
- Herbs and foods that thin bile: Beets, especially fermented, turmeric, milk thistle, artichoke, dandelion
- Apple cider vinegar contains malic acid which softens bile
- Anti-inflammatory herbs
- Anti-spasmodic herbs
- Liver/gallbladder formulas



WARNING: Do not attempt to treat yourself for gallstones without the help of an experienced practitioner. Ultrasound is important to diagnose the size and location of the stones, and follow-up assessment is critical.

Living Without a Gallbladder: Special Considerations

- **Avoid** fried foods, trans fats
- **Minimize or avoid** dairy
- **Avoid** fats cooked with sugar
- **Reduce grains** – inefficient digestion of starch without gallbladder's bicarbonate
- **Use bitters** before meals to stimulate bile production and movement
- **Supplement with lipase**, the fat digesting enzyme
- **Supplement with bile salts**, 2 with all fatty meals - 5 days on, 2 days off until feeling well. Cycle on and off.



General Diet and Lifestyle

Support for Liver

- **Avoid late night snacking**
- **Bed by midnight** (liver regenerates between 1:00 am and 3:00 am)
- **Decrease toxic load:** water, organic food, fiber to bind toxins
- **Oil Change:**
 - ✓ No fried, no oxidized oils,
 - ✓ EFAs: Hemp, chia, algae, flax, walnuts
- **Protein: Ample, high quality**
 - ✓ Individual variances
 - ✓ Protein powder if needed
 - ✓ Spirulina and other green powders



Liver Supportive Foods

- Brassicas – indole-3-carbinol
 - ✓ **Especially broccoli sprouts and seeds**
- Citrus peels: limonene
- Caraway: limonene
- Turmeric
- Avocado
- Basil
- Beets
- Leafy bitter greens
- Mushrooms
- Cardamom
- Cayenne
- Chlorella
- Cilantro
- Cinnamon
- Dandelion

- Dill
- Fennel
- Garlic
- Ginger
- Grapefruit
- Green juices
- Jerusalem artichoke
- Onion
- Peppermint
- Rosemary
- Sea vegetables
- Thyme
- Radishes
- Wheat grass



Superfoods for Liver

- ✓ Spirulina
- ✓ Chlorella
- ✓ Green macha tea
- ✓ Chlorophyll
- ✓ Sea weeds
- ✓ Milk thistle
- ✓ Burdock
- ✓ Dandelion
- ✓ Hawthorn



Cholagogue Herbs

What they do:

- Stimulate flow of bile from liver
- Stimulate bile secretion from gall bladder
- Strengthen liver
- Enhance detoxification



Who they are:

- Artichoke
- Barberry
- Blue flag
- Boneset
- Dandelion root
- Fringetree bark
- Gentian
- Goldenseal
- Greater celandine
- Rosemary
- Sage
- Wild indigo
- Wild yam
- Yellow dock



Gentle 5-Day Liver/Gallbladder Cleanse

■ Take Herbs for Liver and Gallbladder

- ✓ **HealthForce Nutritionals Liver Rescue**: 1 capsule 3 times daily
- ✓ Any favorite formula

■ Daily Diet

- ✓ Continue *Gut Rejuvenator Drink* in the morning
- ✓ Continue green drinks – 1 quart or more each day
- ✓ Eat simple-to-digest foods
- ✓ Bitters with each meal
- ✓ Incorporate as many liver support foods as possible



■ Daily Drink – 3x/day – Natural Gentle Cholagogue

- ✓ 1 tablespoon lemon juice
- ✓ 1 tablespoon organic olive oil
- ✓ 1 tablespoon apple cider vinegar

■ Maintenance

- ✓ Take the liver formula 2 times a day for 1 month
- ✓ Consume probiotics daily
- ✓ Continue following Daily Diet list above