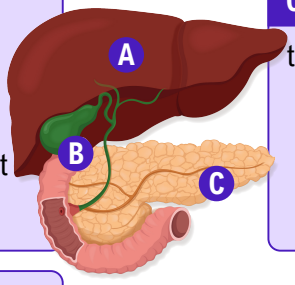
TOPIC: ACCESSORY ORGANS

Accessory Organs

◆ Much of the digestion that happens in the small intestine is due to the products of _____ organs.

A. Liver: largest internal organ.

- Processes _____ nutrients.
- Stores certain nutrients & glucose.
- Produces **Bile:** yellow/green fluid that aids in the digestion of _____.



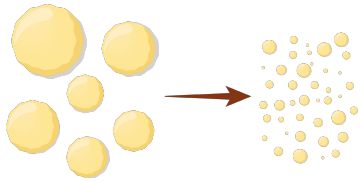
C. Pancreas: releases pancreatic juice into the small intestine.

- Amylase: _____ → simple sugars.
- Lipase: _____ → fatty acids.
- Protease: _____ → amino acids.

B. Gallbladder: _____ bile from the liver until it's needed in the small intestine.

◆ Bile works by _____ fat → breaking it into small droplets.

- Emulsified fats can be digested by enzymes.
- Bile salts are _____ at the end of the small intestine & brought back to the liver.



EXAMPLE

The table below lists the three macronutrients. Fill in the table with what chemicals aid in digestion of each macronutrient in the small intestine and which accessory organs produces those chemicals.

	Proteins	Fats	Carbohydrates
What chemical(s) digests this macronutrient?			
What *accessory organs* are those chemicals associated with?			

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PRACTICE

Which organ is a major source of digestive enzymes in the small intestine?

a) Duodenum. b) Liver. c) Pancreas. d) Gall bladder.

PRACTICE

How does bile aid in the digestion of fats and lipids?

a) Bile breaks the bonds between fatty acids so that they may be absorbed.

b) Bile makes fats fully water soluble so that they can be directly absorbed into the lymph.

c) Bile digests fats into individual fatty acids so that lipases can convert them into an absorbable form.

d) Bile allows fat to spread out in the liquid of the chyme so that lipases can act upon it.