

## The role of the gallbladder

Q: What's the harm in having your gallbladder removed if you can live without it?

Dr. Wright: While it's true that you can live without your gallbladder, having it removed sets your body up for all sorts of future problems. The gallbladder plays a critical role in generating the bile your body needs to break down and absorb many essential nutrients.

You might ask why this is, since bile is made in your liver and the liver is still completely intact after gallbladder removal. To understand the relationship between the two, you need to know a bit about how your gallbladder works.

When your liver secretes bile, a relatively large quantity is "captured" by your gallbladder and stored there for use. When you eat certain fatty or oily meals -- a fish dinner, perhaps, with lots of heart-healthy omega-3 fatty acids -- and all the incompletely digested oils and fats are passed from your stomach into your duodenum (the uppermost portion of your small intestine), the fats and oils trigger the release of the hormone "cholecystokinin" (CCK).

CCK travels to your gallbladder, telling it "oil's coming, fat's coming!" In response to CCK, your gallbladder contracts, pushing out just the right quantity of stored bile. The bile arrives in your intestines at the exact time it's needed, in the exact quantity needed. Working with your pancreatic fat- and oil-digesting enzymes, the bile digests and emulsifies those oils, making them "just right" to be absorbed.

Marvelous how it all works together, isn't it?

But without your gallbladder, most of that marvelous coordination is lost. The small, steady trickle of bile from the liver is still there, but it's no longer "matched" to the amount of fat or oil you've eaten in either quantity or timing. The resulting "mismatch" inevitably affects your digestion and absorption and puts your fat-soluble nutrient status at risk.