

---

**title:**  
**author:**  
**publisher:**  
**isbn10 | asin:**  
**print isbn13:**  
**ebook isbn13:**  
**language:**  
**subject**  
**publication date:**  
**lcc:**  
**ddc:**  
**subject:**

# The Gastrointestinal Sourcebook

Other books by M. Sara Rosenthal  
*The Thyroid Sourcebook* 2d ed.  
*The Gynecological Sourcebook* 2d ed.  
*The Pregnancy Sourcebook* 2d ed.  
*The Fertility Sourcebook*  
*The Breastfeeding Sourcebook*  
*The Breast Sourcebook*

# The Gastrointestinal Sourcebook

by M. Sara Rosenthal

*Medical Adviser: Gary May, M.D., F.R.C.P.  
Clinical Assistant Professor of Medicine,  
Department of Medicine, Division of Gastroenterology,  
University of Calgary*



LOWELL HOUSE  
LOS ANGELES  
CONTEMPORARY BOOKS  
CHICAGO

Although every effort has been made to ensure that the information provided here is accurate and up to date at the time of publication, this book is in no way intended to replace the advice of qualified health care professionals.

Library of Congress Cataloging in Publication Data

Rosenthal, M. Sara.

The gastrointestinal sourcebook / by Sara M. Rosenthal

p. cm.

Includes bibliographical references and index.

ISBN 1-56565-854-X

1. Gastrointestinal system-Diseases-Popular works. I. Title.

RC806.ZR67 1997

616.3'3-dc21

97-42116

CIP

Copyright © 1997 by M. Sara Rosenthal. All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying or recording, or by any information storage or retrieval system, except as may be expressly permitted by the 1976 Copyright Act or in writing by the Publisher.

Requests for such permissions should be addressed to:

Lowell House

2020 Avenue of the Stars, Suite 300

Los Angeles, CA 90067

Lowell House books can be purchased at special discounts when ordered in bulk for premiums and special sales.

Publisher: Jack Artenstein

Associate Publisher, Lowell House Adult: Bud Sperry

Director of Publishing Services: Rena Copperman

Managing Editor: Maria Magallanes

Text design: Carolyn Wendt

Illustration on page 3 by Elizabeth Weadon Massari

Author photo by David Leyes

Manufactured in the United States of America

10 9 8 7 6 5 4 3 2 1

*To my husband . . . who says I give him heartburn.*

## Contents

Introduction: Why GI?	xi
Chapter 1: How Readers Digest	1
An Unremarkable Meal	2
Having a Breakdown	8
When the Breakdown Breaks Down	12
Chapter 2: When You Have That Gut Feeling	17
When You're Burning and Bitter	18
When You Have Pain	21
When You Have Cramps	23
Symptoms That Might Indicate "Alarm"	27
What to Tell the Doctor	28
Diagnostic Tests	34
What's the Treatment?	36
Chapter 3: "I've Got an Ulcer"	39
Ulcers 101	41
Ulcer Folklore	45
When Your Doctor Suspects an Ulcer	48
The New Infectious Disease	50
Chapter 4: When the Issue Is NUD and GERD	59
When It Isn't an Ulcer but It Feels Like One	60
Moving Right Along	64
How to Keep GERD from Coming Back	67

Chapter 5: About Those Stomach Medicines	73
Dropping Antacids	73
Drugs for Motility Problems	78
The "Nuclear Weapons"	83
Drugs That Are Hard to Digest	85

Chapter 6: Bowels of the Earth	91
Signs of Intelligent Life	92
Irritable Bowels?	98
Inflammatory Remarks	105
Diverticulosis	115
Screening for Colon Cancer	116
Chapter 7: The Trouble with Abs	119
West Side Story	119
The Lower East Side	127
His and Hernias	129
Chapter 8: People in Special Circumstances	133
When You Have an Eating Disorder	133
"GI Jane"	139
If You Have Diabetes	144
If You Have Thyroid Disease	145
If You're Over Sixty-Five	146
When You're HIV-Positive	147
Chapter 9: Eating Well, Feeling Well	153
What History Teaches Us	154
The Meaning of Low-Fat	156
Fiberspace	162
How to Prevent Colon Cancer Without Really Trying	163
Preventing Common GI Problems	165
Appendix: Where to Go for More Information	169

Glossary.	173
Bibliography	183
Index	199

## Acknowledgments

If it weren't for the commitment, hard work, and guidance of the following people, this book would never have been written:

Gary May, M.D., F.R.C.P., Clinical Assistant Professor of Medicine, Department of Medicine, Division of Gastroenterology, University of Calgary, bravely took on the task of acting as medical adviser for this book. His thoughtful comments and practical approach to gastroenterology is reflected throughout this book. Gillian Arsenault, M.D., M.HSc., F.R.C.P., continuously passed along important articles and "tidbits" that are part of this work. A special thank-you to Janssen-Ortho, Inc., who exposed me to a wealth of hard-to-find resources and experts on GI disorders.

As for my editorial team, Larissa Kostoff is the best editorial assistant I could have hoped for. Bud Sperry, my editor at Lowell House, and Maria Magallanes, managing editor at Lowell House, longtime comrades, are always supportive and very accommodating.

Finally, two special colleagues and friends, Janine Falcon and Gina Hudel, deserve a sincere: "thanks for putting up with me!" They are always there to listen to passages of text and seem to know when it's time to drag me away from my computer into civilization.

## Introduction

### Why G.I.?

The fastest path to wellness is through the stomach. According to the Ayurveda, an ancient Indian approach to holistic health, indigestion or incomplete digestion is the root of all illness. After having completed this book, I believe that's probably true.

It's not possible to research any health topic without accumulating a wealth of material on the digestive tract and general gastrointestinal (GI) problems. When I specifically researched GI disorders as an entity, I was shocked to discover how many people are affected by chronic upper GI symptoms, such as gastroesophageal reflux disease (GERD), as well as lower GI disorders ranging from irritable bowel syndrome to ulcerative colitis. Despite this, surprisingly little material is available to the layperson on GI disorders as a group of diseases, although there are libraries full of books on diet, nutrition, food, and so on. Most books on GI disorders focus on specific diseases, such as ulcerative colitis or Crohn's disease, but there is virtually nothing available on upper GI problems, nor on the GI tract as a whole. As many gastroenterologists (GI specialists) have told me, lower and upper GI symptoms often run together. For myself, understanding the universe of the digestive tract universe of digestive enzymes, muscles, nerves, and hormones led me to truly understand many of my own GI symptoms. Like many people, I had come to accept them as normal. But being armed with the knowledge of how things truly work can make it easier for us to change our eating and life-style habits. The more I read, the more I began to see that persistent GI symptoms, however mild, are the body's way of telling us something's wrong. Food choices, timing of eating, gravity, stress, and sedentary life-styles can all affect

our digestion. The more we ignore our digestive symptoms, the more unhealthy our bodies can become.

We are living amid an epidemic of digestive upset in the Western world. It's no accident that commercials during the national evening news are one of the best vehicles to sell stomach medications. If the news isn't enough to give you heartburn, then perhaps the fast food you "nuked" for dinner, which you're eating while watching the news, will do the trick. Despite the explosion in low-fat foods, we're getting fatter. At least 35 percent of North American men and 27 percent of North American women are obese, meaning that they weigh at least 20 percent more than the ideal weight for their age and height. We all know that obesity can put us at risk for cardiovascular problems or Type II diabetes (noninsulin-dependent diabetes). But obesity can also predispose men to colon (also known as colorectal) cancer and prostate cancer, and women to endometrial, gallbladder, cervical, ovarian, and breast cancer. As far as specific GI disorders go, obesity can trigger gastroesophageal reflux disease, gallbladder disease, and a range of other problems you'll read about in this book. But many lean and fit people also suffer from chronic GI problems ... especially if they smoke.

Food allergies and food poisoning are also major sources of GI upset. As our food supply grows more "technological," we're seeing an increasing number of food sensitivities and an increase in food-borne infections. But the most recent infectious disease news has to do with one of the most common GI disorders: stomach ulcers. Long thought to be related to stress, stomach ulcers have now been shown to be caused by the bacteria *Helicobacter pylori* (*H. pylori*).

This book is designed as a life companion. Most of you will be buying it because you currently have a particular symptom or disease. But much of the information in these pages is timeless.

Chapter 1, "How Readers Digest," discusses exactly that: how your digestive system works. Chapter 2, "When You Have That Gut Feeling," will help you sort out whether your symptoms point to an upper or lower GI problem (it's not always obvious). More important, chapter 2 will help you report your symptoms accurately to your doctor and discuss appropriate diagnostic tests. For example, upper GI symptoms can mimic cardiovascular symptoms. Chapter 3 should be read by anyone who thinks she or he has an ulcer, who has been recently diagnosed with an ulcer, or has been diagnosed with an ulcer in the past ten years. Ulcers can recur unless the underlying bacterial infection is treated. I'll also tell you some things I bet you didn't know about taking antibiotics.

Chapter 4, "When the Issue Is NUD and GERD" (as in non-ulcer dyspepsia and gastroesophageal reflux disease), should be read by anyone who has experienced heartburn or abdominal pain that is not linked to an ulcer. This chapter will explain the many causes of heartburn as well as the treatments. Ever taken an antacid or an acid-controlling drug? Or a drug that irritates your stomach? Then let me tell you "About Those Stomach Medicines" in chapter 5.

Moving on down, chapter 6, "Bowels of the Earth," is written for anyone who experiences irregular bowel movements or bowel habits, as well as for those who have been diagnosed with irritable bowel syndrome (IBS) or an inflammatory bowel disease (IBD), such as ulcerative colitis or Crohn's disease. This chapter will help you obtain the right diagnosis or help to explain what's going on if you've been living with these disorders for some time. The latest treatments are discussed, including the use of nicotine patches for controlling ulcerative colitis symptoms. Chapter 6 also discusses who should be screened for colon cancer and some signs to watch for.

Chapter 7, "The Trouble with Abs," covers all of those disorders that are "in between" by virtue of biological geography. Whether you're curious about cirrhosis of the liver, have a hiatal hernia or gallbladder disease, or are worried about appendicitis, this is the chapter to read. Chapter 8, "People in Special Circumstances," addresses other diseases that, while not considered GI disorders per se, cause a host of GI problems. This chapter devotes significant space to eating disorders, people living with HIV/AIDS, as well as female reproductive problems, ranging from endometriosis to symptoms of ovarian cancer-symptoms that are GI in nature.

The last chapter, "Eating Well, Feeling Well," discusses a range of wellness issues from understanding fat and fiber (increase the latter, decrease the former), phytochemicals, and how to reduce the odds of developing colon cancer and other cancers through diet.

This book also includes a glossary of terms and a comprehensive resource list with Internet instructions to help you find out more. And as you read through this edition, I'll be busy researching a complete chapter on GI cancers for future editions. In the meantime, feel free to contact me care of my publisher or via e-mail at [MSara2@aol.com](mailto:MSara2@aol.com) if you need more information. I have lots of other material I'm happy to share with you.

## Chapter 1

### How Readers Digest

It's difficult to understand the range of gastrointestinal ailments that can affect us if we don't understand how the digestive tract works. In fact, it's amazing that anyone feels well after eating, considering how complicated the act of digesting food really is. The term *digesting* refers to the process by which food is converted into the nutrients we need to live and the excess waste we don't need. Nutrients are the by-product created when food and drink are broken down into their smallest parts to provide energy to our cells.

The digestive tract is a long tube that twists and turns from the mouth to the anus. It is made up of two layers of muscle lined by cells and glands. The cells and glands digest and absorb the nutrients and water from food; the muscles coordinate movement along the system. Two other organs needed for digestion are beside but not part of this tract: the liver and the pancreas. Both these organs are responsible for key digestive juices that reach the small intestine through small connecting tubes.

Essentially, the entire digestive tract (aka gut) is made up of a series of muscles that are triggered at different stages of digestion. The job of these muscles is to coordinate how and when food is moved along the tract. However, many outside factors can interfere with the muscle coordination of the digestive tract. And when that

happens, you may not feel well. In fact, more people are hospitalized for gastrointestinal disorders than any other type of disorder.

### An Unremarkable Meal

The food you eat is not in a usable form for your body. Anything you eat or drink has to be broken down into smaller molecules, nutrients that can be absorbed into the blood and carried to cells throughout the body.

Imagine that your digestive tract is one long subway tunnel with different stops. If you were to look at the GI "subway map," the first stop is your mouth. The next stop is your pharynx, and the third stop is your esophagus. The stomach is a major "connecting stop." This is where the train stops for a while before switching tracks and moving on to the more active parts of your gut: the duodenum, which connects to your small intestine, which connects to the last stop on the line, your large intestine. (See Figure 1.1.)

### *Chewing Food*

The act of chewing actually begins as soon as you smell food. Your salivary glands will begin to secrete saliva, making your mouth water. When you actually taste the food, the saliva really begins to flow. Chewing the food will allow the saliva to mix well with an enzyme called ptyalin, produced by the salivary glands. Ptyalin starts the process of carbohydrate digestion, and the conversion to glucose occurs at the lining of the small intestine.

Carbohydrates not digested generally reach the colon, where they ferment. Chewing your food well will help you digest carbohydrates more efficiently.

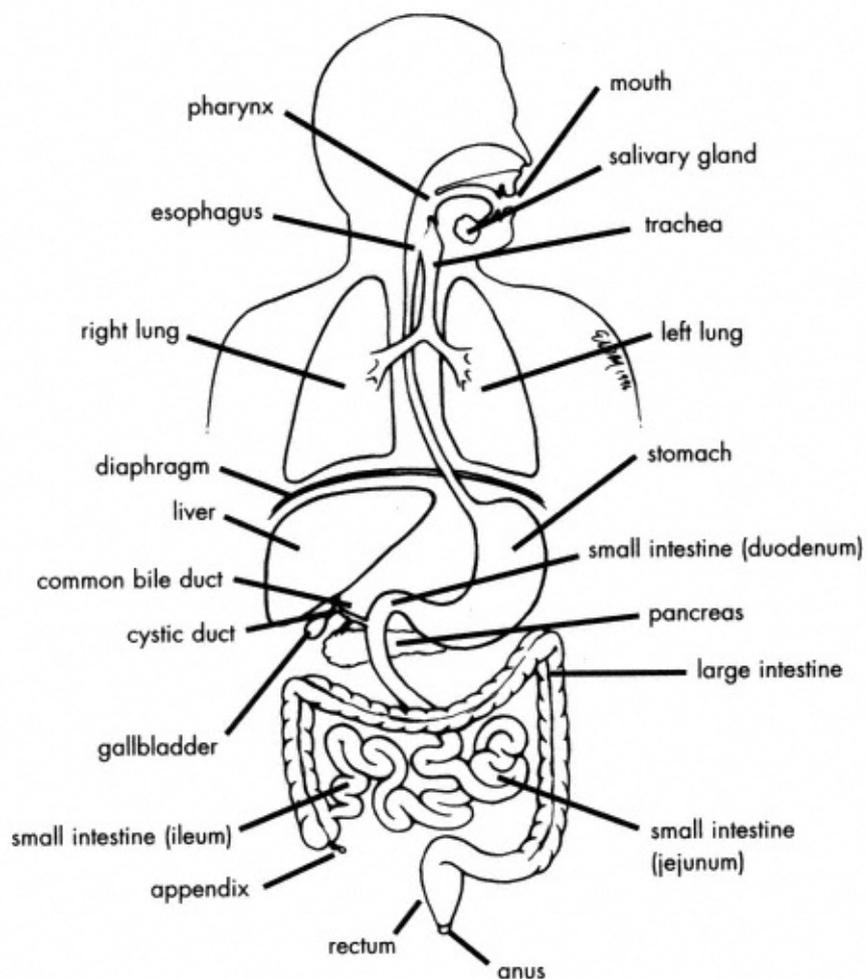


Figure 1.1  
The Gastrointestinal Tract  
Illustration by Elizabeth Weadon Massari © 1996.

The more you chew, the more saliva you make. You have three pairs of salivary glands: the parotid glands are under the ear-lobes, the submaxillary glands are along the side of the lower jaw-bone, while the submental glands are at the bottom of the mouth. Each of the salivary glands is triggered by the taste of food, which is sensed by taste buds on the tongue. Your molars stimulate the parotid glands to produce the most potent saliva, the saliva containing ptyalin. Salty or bitter foods will also stimulate the parotid glands. The submaxillary glands are triggered by sour or oily/fatty foods, and are also necessary for chewing meat. The submental glands are triggered by sweet foods as well as natural sugars in fruits and vegetables. A thinner saliva is produced by the submental glands to dilute the sweetness.

When you chew your food well (we're supposed to chew about thirty-two times per bite!), you should detect three distinct tastes, known as the beginning, middle, and end tastes. Chewing stimulates your digestive tract to produce digestive juices; the act of chewing also relaxes your nervous system one reason why eating is so enjoyable.

Chewing well also helps to strengthen the teeth and gums. The parotid glands excrete the hormone parotin, which helps maintain the teeth. Parotin also has other functions, such as stimulating cell metabolism and even increasing T-cell function in the immune system.

### *Swallowing Food*

Swallowing food triggers all the muscles in the digestive tract to begin contracting in wavelike motions known as peristalsis. The act of swallowing is voluntary, but once the food is down the throat, the rest of the movement through the digestive tract is involuntary, or beyond our control. Our nervous system takes over. The food goes down the throat into the pharynx and

into the esophagus. The esophagus connects the throat to the stomach.

In order for food to get from the esophagus to the stomach, it must go through a crucial tunnel known as the lower esophageal (pronounced *eso-FA-jeel*) sphincter (LES). The lower esophageal sphincter acts as a valve to prevent stomach contents from regurgitating back into the esophagus. This sphincter opens and shuts through a series of contractions known as *peristalsis*, similar to the contractions that occur when you have a bowel movement. There are two peristaltic waves—primary and secondary—which occur in the esophagus. The LES has to be coordinated so that it relaxes when food passes down and then closes at other times.

The LES opens to allow food to pass. It remains closed at all other times and thus prevents reflux, or "back up." When the LES doesn't work properly, you'll suffer from symptoms of gastroesophageal reflux disease (GERD), which include heartburn, pain, and regurgitation (the feeling of food coming back up).

### *Digesting Food*

The stomach is an accordionlike bag of muscle and other tissue near the center of the abdomen just below the rib cage. The bag expands to accommodate food and shrinks when it is empty. The stomach itself is a "holding tank" for food until it can be distributed into more distant parts of the gastrointestinal tract.

To appreciate what the stomach does, imagine what happens when you make coffee from the whole bean. First, you grind the bean in a coffee grinder. Your stomach does the same thing with the food particles it gets, combining the chewed food with gastric secretions, forming chyme (pronounced *kime*), a semifluid mixture. In the same way that hot water will turn ground coffee into a beverage, three substances (mucus, hydrochloric acid, and