

# What to Eat Before, During, and After Pregnancy

Tips for losing weight  
and keeping it off  
after pregnancy

Plus recipes, menus,  
and food guides

Judith E. Brown,  
R.D., M.P.H., Ph.D.

Foreword by Howard N. Jacobson, M.D.



**What to Eat**  

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**Before, During,**  

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**After Pregnancy**  

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Judith E. Brown,  
R.D., M.P.H., Ph.D.



New York Chicago San Francisco Lisbon London Madrid Mexico City  
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*Behind every advance in knowledge that leads to improvements in quality of life are individuals who, without benefit to themselves, volunteer to take part in research studies. Here's to the women who participate in research that advances our knowledge about nutrition and fertility, pregnancy, and breast-feeding. You benefit our children and all of us. This book is dedicated to you.*

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# Foreword

**P**regnant women have always accepted the importance of good nutrition, and health professionals are finally realizing just how important it is for pregnancy, as well as fertility and breast-feeding. In the last ten years, there has been a veritable explosion of books, pamphlets, and guides for pregnant women. In most cases, information prepared by professionals has been either too technical or too impersonal for the general public. At the other extreme, popular books prepared for the layperson have tended to lack enough scientific credibility.

In *What to Eat Before, During, and After Pregnancy*, Judith Brown fulfills her intention of writing a readable, useful, and accurate guide that is both upbeat and supportive in tone. Essential topics are covered with sufficient detail, helping women make the right choices about diet, supplement use, weight gain, and infant feeding.

With its combination of impeccable accuracy and positive emphasis, this book will be a major influence in helping women become nutritionally prepared for conception, pregnancy, and breast-feeding.

Howard N. Jacobson, M.D.  
Professor, Dept. of Community and Family Health  
College of Public Health, University of South Florida

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# ☾ Preface ☽

**L**ooking for reliable information about preparing your body for pregnancy? Is it taking longer than you had hoped to become pregnant? Are you pregnant and concerned that you may be gaining too much weight, or are you unsure about which foods and supplements you should consume and which you should avoid? Do you need to know about nutrition for twin pregnancy? Are you anticipating a need for facts about breast-feeding or getting your body back into shape after your baby is born? If questions and concerns like these brought you to the bookstore or library, you have found the right book.

Plenty of sources of information about nutrition and fertility, pregnancy, and breast-feeding are available, but the quality of the information varies from outlandish to great stuff. *What to Eat Before, During, and After Pregnancy* presents science-based information that is as reliable as it gets. This feature qualified past editions for reference use by physicians, nutritionists, midwives, nurses, and journalists. Updated information printed here delivers the same quality of information and practical advice.

Chapter 1 first provides an overview of the benefits of good nutrition for pregnancy, then addresses the role of nutrition in fertility and how changes in diet and exercise can increase your chances of becoming pregnant. Chapter 2 covers basic information on nutrition, including facts about vitamins and minerals and their leading food sources. Specific nutrition tables presented here are referred to throughout the book.

Perhaps the greatest advances in our knowledge about nutrition and reproduction in the past ten years have been made in the areas of preconceptional and early pregnancy nutrition. Chapter 3 highlights these advances, giving specific recommendations on optimal nutrition for early fetal development and growth and providing instructions on how to evaluate your diet.

Chapter 4 describes “the right diet for pregnancy” and answers questions about diet during this time. The pros and cons of using vitamin, mineral, and herbal supplements during pregnancy and indications for their use are covered in Chapter 5.

Weight gain during pregnancy has important influences on fetal growth and development and on body weight after pregnancy. Chapter 6 covers this topic and includes a weight-gain graph that can be used to monitor progress. Nutritional recommendations for women “eating for three” are also covered. Notes to women bearing triplets are also given, but this information is quite tentative because appropriate studies are yet to be done. Closely aligned with weight gain is the topic of exercise, so Chapter 7 explains the whys, hows, and benefits of exercising during pregnancy.

Pregnancy has a number of “side effects” that would be considered abnormal in women who are not pregnant. These common and bothersome problems can sometimes be effectively prevented or managed with changes in diet, exercise, or the use of supplements. Chapter 8 covers nutritional aids for nausea and vomiting, heartburn, and constipation. Background information and nutritional recommendations for conditions that arise during pregnancy, such as gestational diabetes, preeclampsia, and iron deficiency anemia, are also covered in this chapter.

The next two chapters address postpregnancy topics. Chapter 9 includes infant nutrition and feeding recommendations. Chapter 10 is devoted to the topic of breast-feeding.

I encourage readers to peruse Chapter 11. The recipes for healthy eating have been created specifically to help women meet nutritional needs before, during, and after pregnancy. Nutrition information is provided for each recipe.

Literally thousands of research reports and other sources of dependable information about nutrition and fertility, pregnancy, and breast-feeding were used during the development of this book. Because space considerations preclude listing them all, only key references and those to which women may wish to refer for additional information are included. Particularly good Internet and other resources related to topics covered appear at the end of the book, listed by chapter.

Throughout this book, women are referred to as the primary audience. This is because women are in the best position to act upon the information. Clearly, spouses, partners, in-laws, and grandparents-to-be may be interested in these topics and provide much valued support. Reference to women is not meant to exclude other interested or involved individuals.

*Knowledge* about maternal nutrition is continuously expanding, and new, important developments may not be addressed here. For this reason, and because new information may affect the type of health care you receive, you are urged to keep your health-care provider informed about your understanding of new developments and about your concerns and actions related to diet, supplement use, and weight. It is entirely possible that your inquiries will help update your health-care provider on important developments in nutrition.

Best wishes for good humor, happiness, and a bundle of joy.

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# Acknowledgments

I feel a deep indebtedness to those who have directed my interest toward producing that ounce of prevention worth a pound of cure. My daughter Amanda and my son Max piqued my interest in this area. I have learned many lessons about the nutritional ounce of prevention from Agnes Higgins, the former director of the Montreal Diet Dispensary; Howard Jacobson and Charles Mahan, obstetricians who promote prevention; and Sally Lederman of Columbia University, who is a crystal-clear thinker about evidence related to nutrition and pregnancy outcome. I have been given the opportunity to learn about nutrition and pregnancy and to write, teach, and consult about what I learned by grants from the National Institute of Child Health and Human Development, the Centers for Disease Control, and the Maternal and Child Health Bureau of the Public Health Service. My primary instructors, however, have been and will remain those wonderful women who volunteered to participate in our research studies.

This edition of *What to Eat Before, During, and After Pregnancy* (previously titled *Nutrition and Pregnancy*) includes a new group of recipes that are nutrient based. They're dishes I make frequently but hadn't written down before. Hugs and kisses to family and friends who tested the recipes and provided valuable feedback: Amanda Cross, Doug Wickman, Dr. Susan Brown, Don Hildebrand, Barbara Ellington, Helen Martens, and Bonnie Bernstein. Dr. Bea Krinke, a longtime friend, colleague, and expert cook, provided a large measure of helpful advice and analyzed many of the recipes for nutrient content.

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# Giving You and Your Baby the Nutritional Advantage

*“Enormous amounts of information are barreling down the information highway, but they are not arriving at the doorsteps of our patients.”*

—Claude Lenfant,  
National Institutes of Health Director

**T**oday we are experiencing an explosion in new information about nutrition and fertility, pregnancy, and breast-feeding. A renaissance in research is underway, and it is redefining what nutritional advice should be given to women who are attempting to conceive or who are pregnant or breast-feeding. Advice previously based on clinical assumptions or personal biases is being replaced with recommendations supported by solid evidence. There are important advantages to the scientifically supported recommendations that are emerging from today’s studies: They have been demonstrated to benefit health and they hold up over time.

It wasn’t that long ago that nutritional factors were regarded as being unrelated to fertility. We now know that antioxidant intake; body fat stores; supplement use; and conditions such as insulin resistance, polycystic ovary syndrome (PCOS), and celiac disease all