Contents

Acknowledgments ix

Foreword xiii

Introduction 1

1 Functional Anatomy and Physiology of the Suck/Swallow/Breathe Triad 3
- Anatomy 3
- Sucking 15
- Swallowing 23
- Respiration 35
- Coordination of Sucking, Swallowing, and Breathing 48
- References 54

2 Diagnostic Tests and Procedures 63
- Monitoring Physiologic Functions 64
- Radiologic Procedures 71
- PH Probe 80
- Pediatric Endoscopy 82
- References 84

The Hammill Institute on Disabilities • ORDER # 12520 • ISBN-13: 978-1-60251-005-0
Feeding and Swallowing Disorders in Infancy: Assessment and Management

3 Clinical Feeding Evaluation 85
The Evaluation Process 86
Feeding History 89
Behavior and State 93
Motoric Control 97
Response to Tactile Input 105
Oral-Motor Control 113
Sucking, Swallowing, and Breathing 122
Physiologic Control 138
General Observations 146
References 147

4 Problem-Driven Models for the Comprehensive, Multidisciplinary Assessment of Infant Feeding 159
Team Process 159
Identifying the Feeding Problem 165
Comprehensive Assessment of Infant Feeding 166
Model 1: Feeding-Related Apnea Model 170
Model 2: Feeding Problem Model 180
Model 3: Respiratory Compromise Model 188
Model 4: Poor Weight Gain Model 198
Developing a Treatment/Management Plan 206

5 Therapeutic Treatment Strategies for Infant Feeding Dysfunction 207
General Treatment Considerations 207
State 211
Tone, Posture, and Position 215
Swallowing 222
Oral-Motor Control 233
Oral-Tactile Hypersensitivity 247
Coordination of Sucking, Swallowing, and Breathing 252
Endurance and Respiratory Compromise 257

The Hammill Institute on Disabilities • ORDER # 12520 • ISBN-13: 978-1-60251-005-0
Feeding and Swallowing Disorders in Infancy: Assessment and Management

Non-oral and Supplemental Feeding Methods 266
Transition from Tube to Oral Feeding 276
Carryover of Treatment by Other Caregivers 286
Putting It All Together: Developing the Feeding Plan 288
References 293

6 Special Diagnostic Categories 297
The Premature Infant 297
Bronchopulmonary Dysplasia 319
Gastroesophageal Reflux 336
Congenital Heart Disease 347
Oral-Facial Anomalies 359
Tracheoesophageal Fistula/Esophageal Atresia 378
References 386

7 Tools of the Trade: Nipples, Pacifiers, and Bottles 399
Components of Sucking 400
Characteristics of Nipples 402
Considerations in the Selection of Nipples to Support Feeding Treatment 406
Pacifiers 413
Bottles 415
References 419

8 Breast-Feeding 421
Physiology of Breast-Feeding 421
Sucking Responses during Breast-Feeding 421
Breast-Feeding Problems in the Nonhospitalized Infant . . . 426
Breast-Feeding and the Hospitalized Infant 435
Attitudes and Decision Making regarding Breast-Feeding 443
References 445

Index 449

The Hammill Institute on Disabilities • ORDER # 12520 • ISBN-13: 978-1-60251-005-0
Feeding and Swallowing Disorders in Infancy: Assessment and Management