The Art and Science of Diabetes Self-Management Education Desk Reference

Fourth Edition

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# TABLE OF CONTENTS

Acknowledgments ............................................................................................................ vii

## SECTION 1

### The Art of Diabetes Self-Management Education

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diabetes Self-Management Education: The Art and Science of Disease Management</td>
<td>Sandra Drozdz Burke, PhD, APN-BC, FAADE, FAAN, and Janet Thorlton, PhD, RN</td>
</tr>
<tr>
<td>2</td>
<td>The Diabetes Self-Management Education Process</td>
<td>Barb Schreiner, PhD, APRN, CPLP, CDE, BC-ADM</td>
</tr>
<tr>
<td>3</td>
<td>Theoretical and Behavioral Approaches to the Self-Management of Health</td>
<td>Gretchen A. Piatt, MPH, PhD, Bob Anderson, EdD, and Martha M. Funnell, MS, RN, CDE</td>
</tr>
<tr>
<td>4</td>
<td>Healthy Eating</td>
<td>Cecilia Sauter, MS, RD, CDE, FAADE</td>
</tr>
<tr>
<td>5</td>
<td>Being Active</td>
<td>Sheri R. Colberg, PhD, FACSM</td>
</tr>
<tr>
<td>6</td>
<td>Taking Medication</td>
<td>Devra K. Dang, PharmD, BCPS, CDE, FNAP</td>
</tr>
<tr>
<td>7</td>
<td>Monitoring</td>
<td>Mary M. Austin, MA, RDN, CDE, FAADE, and Margaret A. Powers, PhD, RD, CDE</td>
</tr>
<tr>
<td>8</td>
<td>Problem Solving</td>
<td>Carolé Mensing, RN, MA, CDE, FAADE</td>
</tr>
<tr>
<td>9</td>
<td>Healthy Coping</td>
<td>Janis Roszler, LMFT, RD, LD/N, CDE, FAND, and Melissa Brail, LMFT</td>
</tr>
<tr>
<td>10</td>
<td>Reducing Risks</td>
<td>Ann Constance, MA, RD, CDE, FAADE</td>
</tr>
<tr>
<td>11</td>
<td>Diabetes Education Program Management</td>
<td>Melinda Maryniuk, MEd, RD, CDE, FADA</td>
</tr>
</tbody>
</table>
The Art and Science of DSME

Chapter 12  Transitional Care. ................................. 321
Amy Hess Fischl, MS, RDN, LDN, BC-ADM, CDE, and
Christie A. Schumacher, PharmD, BCPS, BCACP,
BC-ADM, CDE

SECTION 2
The Science of Diabetes Self-Management Education

Section Overview .................................................. 341
Chapter 13  Pathophysiology of the Metabolic Disorder. ........ 343
Jane K. Dickinson, RN, PhD, CDE
Chapter 14  Type 1 Diabetes Throughout the Life Span. .......... 365
Carolyn Banion, RN, MN, CPNP, CDE, and
Virginia Valentine, APRN, BC-ADM, CDE, FAADE
Chapter 15  Type 2 Diabetes Throughout the Life Span .......... 393
Eva M. Vivian, PharmD, MS, CDE, BC-ADM, FAADE
Chapter 16  Nutrition Therapy ..................................... 411
Alison B. Evert, MS, RDN, CDE
Chapter 17  Exercise Prescription ................................. 437
Sheri R. Colberg, PhD, FACSM
Chapter 18  Pharmacotherapy for Glucose Management .......... 469
Evan M. Sisson, PharmD, MSHA, CDE, FAADE, and
Kristin M. Zimmerman, PharmD, CGP
Chapter 19  Pharmacotherapy: Dyslipidemia and Hypertension
in Persons With Diabetes ........................................ 517
Dave L. Dixon, PharmD, BCPS, CDE, CLS, and
John D. Bucheit, PharmD, BCACP, CDE
Chapter 20  Dietary Supplements for Diabetes: A Focus on
Complementary Health Approaches ............................ 551
Laura Shane-McWhorter, PharmD, BCPS, BC-ADM,
CDE, FASCP, FAADE, Skye McKennon, PharmD, BCPS, and
Alisyn Hansen, PharmD, BCACP, CDE
Chapter 21  Complementary Health Approaches and Diabetes Care .... 597
Diana W. Guthrie, PhD, APRN, BC-ADM, CDE,
FAADE, FAAN, AHN-BC (retired)
Chapter 22  Acute Hyperglycemia ................................ 611
Dace L. Trence, MD, FACE
Chapter 23  Chronic Complications and Comorbidities ............ 637
Connie Hanham-Cain, MSN, RN, CDE, and
Cindi Goldman-Patin, RN, MSN, CDE, BA
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Pregnancy With Diabetes</td>
<td>657</td>
</tr>
<tr>
<td></td>
<td><em>Diane M. Reader, RD, CDE, and Alyce Thomas, RD</em></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Cardiovascular Complications of Diabetes</td>
<td>691</td>
</tr>
<tr>
<td></td>
<td><em>JoAnn Sperl-Hillen, MD</em></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Eye Disease Related to Diabetes</td>
<td>725</td>
</tr>
<tr>
<td></td>
<td><em>Szilard Kiss, MD</em></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Diabetic Kidney Disease</td>
<td>745</td>
</tr>
<tr>
<td></td>
<td><em>Sherry Smith-Osman, MS, ANP, RNCS, RN, CDE</em></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Diabetic Neuropathies</td>
<td>769</td>
</tr>
<tr>
<td></td>
<td><em>Aaron I. Vinik, MD, PhD, FCP, MACP, and Etta J. Vinik, MA (Ed)</em></td>
<td></td>
</tr>
</tbody>
</table>

*Index* ........................................................................................................... 807
ACKNOWLEDGMENTS

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S E C T I O N 1

The Art of Diabetes Self-Management Education

Diabetes self-management education (DSME), training, and support is the cornerstone of optimal care and outcomes. A patient-centered, team-based approach to diabetes care provides the essential components from key healthcare professionals, necessary for patients to receive, learn, comprehend, and implement the self-management education that is imperative to control their disease.

Healthcare professionals sometimes focus on their own agendas in providing education and care for patients. This has proven to be futile. People with diabetes have their own agenda—and often it does not match the healthcare professional’s plan. Therefore, healthcare professionals should not be surprised that patients do not achieve the goals put in place for them or follow the instructions or advice they have been given. Since people with diabetes live most of their lives without input from healthcare professionals, it is imperative that the diabetes management plan include the patient’s input. The goals set must be selected by the patient and fit into his or her daily life in order to be achieved. Patients are experts in their own lives, and diabetes educators need to respect them and work with them to meet their needs.

To this end, the focus of this section of the Desk Reference is on the educator. Information and skills are provided that diabetes educators can use to help patients solve their own problems to self-manage diabetes. Changes and additions have been made to section 1 to better equip the diabetes educator with the tools needed in the continually changing world of diabetes.

Chapter 1 discusses the impact of diabetes as a major public health concern associated with devastating social and economic burdens. The evolving role of the diabetes educator and changes in the practice of DSME and practice levels are discussed. Chapter 2 focuses on the changes that have occurred within the DSME process, and chapter 3 discusses how educators can individualize health behavior change to help people with diabetes improve their overall health. Chapters 4 through 10 address each of the AADE7 Self-Care Behaviors™, while providing practical tips and strategies to aid patients in attaining their health behavior and diabetes goals. Chapter 4 includes a discussion on the latest updates in nutrition. Chapter 7 has been revised to provide more extensive coverage of the various monitoring parameters enmeshed in diabetes management, in addition to glucose monitoring. Chapter 11 provides useful information for diabetes educators in regard to the business management of DSME programs. Finally, chapter 12 focuses on aspects of transitional care for people with diabetes. This includes transitions of care from youth to adolescence to young adult, as well as transitions within residences, such as home, hospital, and rehabilitation and long-term care facilities.

In this section, chapter authors provide practical information and describe real-world application of effective diabetes education, also known as the art of DSME. Through the use of skills and techniques that focus on the patient’s “agenda,” the authors provide approaches that help patients “find it within themselves” to self-manage their diabetes successfully.
Diabetes educators are expected to have a foundation of medical knowledge that encompasses a current understanding of the science of diabetes, its treatment options, and diabetes-related complications. There is a notable difference in the way educators use this information, in comparison with others on the team: The educator not only must understand the science and apply it in decision making, but also must be able to translate such medical concepts and information into messages that can contribute to effective diabetes self-management.

Levels of Learning
As healthcare professionals, diabetes educators develop their expertise in stages, moving from concrete facts to abstract thinking. Competency requires both knowledge and experience, and takes time to acquire. Bloom revised definitions of the levels of abstraction to include remembering, understanding, applying, analyzing, evaluating, and creating. Learning skills progress from remembering, based on simple recall; to understanding, when knowledge is interpreted and translated into a new situation or context; to applying information, concepts, and theories. Analyzing involves the ability to organize and recognize patterns, and evaluating is demonstrated by the ability to assess, discriminate between ideas, and verify the value of theories and evidence. Finally, creating is the ability to relate a body of knowledge into predictions and conclusions.

The chapters in this section show how learning progresses, how information is organized and integrated into problem-solving strategies. While diabetes educators may recognize this progression in themselves, they need to appreciate their patients' need to apply new and sometimes intricate knowledge to new situations, and apply information to become competent in self-management. Bloom's taxonomy not only provides educators with direction in diabetes self-management education (DSME), but also reminds them how complex this new knowledge can be for them and their patients.

From Medicine to Messaging
For the diabetes educator, the focus in this information-rich section of the Desk Reference is on understanding and using medical information to promote behavior change and self-management. These chapters emphasize how this body of scientific and medical knowledge is integrated into the educator's practice setting. In dealing with the constant changes of a chronic progressive disease, the diabetes educator is further challenged to continually modify and adapt self-management education. Case studies are used in many of the chapters to help elucidate the experience of the individual living with the disease and draw out important points for diabetes education. The cases follow the patient through descriptions of the symptoms, explanations of physiology, and treatment options. The authors then discuss how the healthcare team member can use his or her own experience and knowledge to help the individual affected by the disease.
As healthcare professionals, diabetes educators learn about disease by studying the basic science and medical concepts and reading the published literature. As knowledge advances, educators must stay current with the literature and evolution of the practice. Using evidence-based practice, they synthesize the scientific evidence to improve the quality and effectiveness of health care and DSME. The science of medicine is transformed into the art of diabetes education when the educator is able to appropriately incorporate and translate medical concepts into assessments, plans, interventions, and interactions. The educator needs to listen to his or her patients, understand their needs and capacity to understand difficult concepts, and then translate complicated science into actionable information to help them make behavior changes for diabetes self-care.

Diabetes care is a multidisciplinary and interdisciplinary challenge in which healthcare professionals of multiple disciplines collaborate with non-healthcare professionals who all contribute their expertise to provide comprehensive care. The interdisciplinary approach is clearly evident in this section of the book; chapter authors incorporate knowledge from the various health specialties, but frame it in the context of diabetes education. Material is organized into 3 content areas: the disease itself, its therapies and management, and chronic complications. Chapters within each topic area review and summarize current knowledge and relate to points relevant for diabetes education.

Chapter 13 reviews the pathophysiology of diabetes, and understanding the pathophysiology enables the educator to not only interpret the signs and symptoms experienced but be proactive in the way he or she portrays the significance of effective self-management. True to the book's focus, the authors detail how the disease presents in individuals. Chapters 14, 15, and 22 provide an excellent overview of diabetes throughout the life span as well as hyperglycemia as it appears in youths, teenagers, young adults, pregnancy, young adulthood, and later adulthood. Patients often ask why certain things are happening to their bodies, and these chapters provide some answers. With the current interest in and research into alternatives to Western medicine and efforts to blend it with other approaches, chapters 20 and 21 offer valuable insight for healthcare professionals working in DSME for both biologically based practices and nonbiologically based therapies. Whether health professionals use or recommend these therapies is not as relevant in diabetes education as being aware of the alternative remedies people may be using and how those therapies interact with recommended or prescribed treatments. Emerging evidence on the use of such interventions may well change the way DSME is delivered.

Several chapters in this section of the text focus on the core of DSME, integrating food, activity, frequent monitoring, and medication prescription and management. These chapters summarize important technical knowledge pertinent to these self-management issues, and in each chapter, the science is presented, the research is discussed, and implications for diabetes education are highlighted.

The final chapters in this section of the Desk Reference remind us of the impact of diabetes, controlled or not, on the health and quality of life of people affected by this disease. Since comorbid conditions often affect the individual with diabetes, other chronic illnesses, specifically hypertension and dyslipidemia, are included.

Each chapter begins with an overview of the various physical and psychological systems affecting the individual with diabetes. Issues of chronic complications, macrovascular disease, pregnancy with diabetes, eye disease, nephropathy, and neuropathy are then dealt with in individual chapters. Current information on primary, secondary, and tertiary prevention is highlighted. The case study approach helps show how specific conditions can affect an individual and how the individual progresses; the cases consider current treatments and recommended therapies.

The Challenge to Change
As the profession of diabetes education continues to move from a strictly content-driven method of teaching to an approach that is individualized and outcome centered, practitioners are urged to recognize that their own methods of learning must change as well. Personal philosophies and experiences, moral and ethical positions, and understanding and knowledge about science and behavior change all color and enrich the patient-provider interaction. The unique work of diabetes education, and its ultimate goal of positively affecting the person with diabetes, requires taking evolving diabetes knowledge and applying it to individuals and populations.

Competence in the science, theory, and research is an underpinning of diabetes education. With this grounding, those responsible for DSME begin the art of their work: using their talents, personalities, and gifts in a therapeutic manner and integrating personal meaning and values into meaningful interactions with patients and clients. Readers are challenged to recognize how they and their patients learn so that they can best apply complex medical information in their delivery of DSME and collaborate with their patients on making appropriate behavior changes to manage their diabetes. The diabetes educator’s success in translating, explaining, and interpreting difficult information enables those with diabetes to become experts in their own care.
INDEX

Note: Tables and figures are indicated by italicized page numbers.

A

A1C, formation of, 638
A1C levels, 7
  aerobic exercise and, 441
  diabetes diagnosis and levels of, 349, 350
  in gestational diabetes mellitus, 683–684
  goals in type 1 diabetes, 366
  hospital admission assessment of, 329
  long-term monitoring, 214–216
  microvascular complications and, 639
  postprandial glucose levels and, 208
  pregnancy and, 674
  postprandial glucose levels and, 208
  targets, 215–216
  pregnancy and, 674
  postprandial glucose levels and, 208
  targets, 215–216
  testing frequency, 215
  treatment goals, 469, 471
The AADE Guidelines for the Practice of Diabetes Self-Management Education and Training, 79
DSME process steps, 30
  evaluation/monitoring description in, 69
  implementation process description in, 59
  planning process description in, 50
AADE7 Self-Care Behaviors™, 6, 60, 237, 332, 437
  for autoimmune complications, 643
  barriers to, 242
  chronic complications and, 640–641
  depression and diabetes distress management, 649
  documentation organization and, 69
  in gestational diabetes mellitus, 682–684
  Goal Sheet, 208
  goal-setting and, 43–45
  for hyperosmolar hyperglycemic state prevention, 628, 629, 630
  infection management and, 647
  obstructive sleep apnea and, 648
  oral hygiene and, 645
  patient outcome evaluation and, 72, 73, 74–75
  for pregnancy, 670, 671, 672–676
  for severe hyperglycemia prevention, 621, 622–623
  in type 2 diabetes, 405–406
  Abdominal infections, 646
  Abnormal pupillomotor response, 793
  Academy of Clinical Endocrinologists (ACE), 189
  Academy of Nutrition and Dietetics, 5, 30
  Acanthosis nigricans, 403, 643
  Acarbose (Precose®), 174, 205, 480, 488, 488
  Accelerometers, 158
  Acceptance, 265
  ACCORD study, 358, 693, 694, 706–707, 752
  ACCORD-Eye study, 733
  Accountable care organizations (ACOs), 16
  Acetaminophen, 180
  Acetohexamide, 482
  Acquired immune deficiency syndrome (AIDS), 381
  Acrochordons, 643
  Action planning, 48–49
  Active learning, 65
  Active lifestyle, promoting, 441
  Active listening skills, 40–41
  Activities of daily living, assessment and, 37
  Activity Pyramid, 156, 157, 158
  AcT0plus met, 508
  Acute abdomen, 617
  Acute kidney injury (AKI), 747
  Acute sensory neuropathy (ASN), 779
  Adaptation, 265
  Addison's disease, 642–643
  Adenosine triphosphate (ATP), 443
  Administration on Aging, 20
  Adolescents
    anxiety and coping in, 269–270
    blood glucose in, 284–285
    blood pressure management in, 708–709
    cardiovascular risk management issues, 708–709
    coping skills, 184
    developmental characteristics and stages of, 380
    developmental issues, 377
    diabetes management in, 323
    driver safety, 382
    dyslipidemia and, 520
    eating habits, 381
    exercise for, 154
    hypertension in, 532, 533
    lifestyle interventions in, 404
    lipid management for, 709
    medication and, 183, 184, 404–405
    metabolic control in, 323
    metabolism in, 323
    nutrition for, 121
    nutrition therapy and, 427–428
    pharmacologic interventions in, 404–405, 709
    problem solving and, 248
    psychosocial issues in type 1 diabetes, 380–382
    public health interventions and, 403
    reproductive health issues, 381
    risky behaviors, 381
    social support for, 405
    standards of care and cardiovascular disease, 280
    standards of care and lipids, 280
    teaching and, 57
    transitional care for, 323–328
    type 2 diabetes and, 184, 285, 394, 402–405
  Adult learning theory, 65
  Adults. See also Older adults
    anxiety and coping in, 269–270
    blood pressure and standards of care, 280
    cardiovascular disease and standards of care, 280–281
    lipids and standards of care, 280
    medication for type 1 diabetes, 372
    teaching and, 57–58
    type 1 diabetes in, 386–387
  Advanced Carbohydrate Counting, 131
  Advanced glycation end products (AGEs)
    macrovessel disease and, 638–639
    oral complications and, 645
  Aerobic (cardiovascular) exercise, 142–147, 143–144, 441–442
  carbohydrate requirements during, 450
  metabolic adaptations, 440
  for older adults, 153–154
  perceived exertion ratings, 145
  safety precautions, 143
  Affordable Care Act (ACA). See Patient Protection and Affordable Care Act
  Afibercept (Eylea®), 730, 734
  Afrezza®, 502, 502–503
  African Americans, anxiety and coping, 271
  AGE receptors (RAGE), 639
  Agency for Healthcare Research and Quality, 333, 334
  Agile educators, 67–68
  Aging, diabetes and, 401
  Alaska Natives, anxiety and coping, 271
  Albiglutide (Tanzeum®), 178, 179, 205, 491, 492

807
Albumin excretion abnormalities, 219, 219
ACE inhibitor and ARBs for, 707–708
Alcohol
coping and, 257–258
dyslipidemia/cardiovascular disease risk and, 425
glucose and, 420
hypertension and, 426–427
meal planning and, 133
pregnancy and, 660
Alcohol-free products, 180
Alcoholic beverages, 133
Aldose reductase inhibitors (ARIs), 797
Aldosterone, 747
Aldocortin (Praluent®), 525, 525, 704
Aliensken (Tekturna®), 539, 539
Alika-Seltzer® Original, 181
Alternative test sites, 197
Alternative medicine, complementary
Alpha-lipoic acid (ALA), 574, 579, 797
Alpha-glucosidase inhibitors, 174–175, 205
Alpha 1–receptor blockers, 544
Alogliptin (Nesina®), 174, 558, 559, 704
Aloe, 509
Allopurinol, 539
Aloe vera, 509
Amiloride (Midamor®), 509
American Academy of Pediatrics, 323
American Association of Diabetes Educators (AADE), 5, 30, 189, 327, 345, 359, 701, 770
A1C targets, 215–216
accreditation programs, 7
on antihyperglycemic management, 471
Approaches to Glycemic Treatment, 469
aspirin recommendations, 707
blood glucose targets, 197, 200
blood glucose testing recommendations, 200
blood pressure monitoring guidelines, 216–217
clinical practice recommendations, 640
continuous glucose monitoring guide, 212
diabetic neuropathy evidence-grading system, 777
educational support from, 369
exercise prescription guide, 454
gestational diabetes mellitus recommendations, 677
graded exercise test criteria, 458, 459
on injection aids, 177
on inpatient hyperglycemia concerns, 624
insulin information from, 178
medical nutrition therapy goals for prediabetes and diabetes, 118
mental health referral indications, 649
on nonnutritive sweeteners, 418
on obesity management, 471
on psychological and social assessments, 223
self-monitoring of blood glucose frequency recommendations, 201
thyroid screening recommendations, 224
treatment goals, 469
type 1 diabetes diagnosis recommendations, 367
type 2 diabetes management algorithm, 469, 471, 472, 501, 640
American Association of Diabetes Educators (AADE), 5, 30, 327, 412
accreditation programs, 7
on continuous glucose monitoring, 212
insulin information from, 178
American Cancer Society, 359, 701
American College of Cardiology (ACC), 424, 519, 752
American College of Physicians, 323, 327, 624
American College of Sports Medicine, 454, 455
American Diabetes Association (ADA), 5, 30, 189, 327, 345, 359, 701, 770
American Geriatric Society, 640
American Heart Association (AHA), 418, 424, 519, 701, 752
American Sign Language (ASL), 67
American Society of Internal Medicine, 323
Americans with Disabilities Act, 66–67
Amiloride (Midamor®), 535
Amiodipine (Norase®), 542, 706
Amylin, 348
Amylin analogs, 178–179, 205, 495, 495–496
Amyotrophy, 795–796
Anabolic steroids, 509
Androgens, 509
Anemia, in chronic kidney disease, 753
Anger, 265
Angioplasty, patient preparation for, 711–712
Angiotensin, 747
Angiotensin receptor blocker (ARB), 220, 537–538, 538, 706
complication management and, 640
increased urinary albumin excretion and, 707–708
Angiotensin-converting enzyme (ACE), 531
Angiotensin-converting enzyme inhibitor (ACE inhibitor), 220, 536, 536–537, 706
complication management and, 640
increased urinary albumin excretion and, 707–708
Angiotensin-I (AT-I), 531
Angiotensin-II (AT-II), 531
Animals. See Pet therapy
Anion gap, 620
Ankle-brachial index, 714–715
Anorexia nervosa, 258
Anticoagulants, 509, 707
Antidiuretic hormone (ADH), 746
Antifungal products, 182
Anti-VEGF therapy, 727, 729–730, 735, 737
Anxiety, 257, 257, 269–271
hypoglycemia and, 208
needle, 382
Apnea-hypopnea index (AHI), 647
Appreciative coaching, 36
Areas to improve in diabetes education (AIDE), 312
Aromatherapy, 603
Art therapy, 603
Asian Americans, anxiety and coping, 271
Aspart (Novolog®), 205, 497, 497, 502, 674
Aspirin, 181, 510
appropriate use of, 706–707
instruction on use of, 707
standards of care, 281
Assessment
activities of daily living and, 37
annual, for type 1 diabetes, 385
of atherosclerotic cardiovascular disease risk, 518–519
beginning, 33, 35–36
of blood glucose monitoring, 210
of cardiovascular risk, 518–519, 695–697
caregivers and, 36
closing, 42
cognitive, 223
conducting, 33
critical thinking in, 38
cultural considerations in, 37
data for, 34
DSME/S step, 30–42
of education needs and readiness to change, 38, 39
effective, characteristics of, 36–38
family and, 36
goal setting and, 45–46
at hospital admission, 329, 330
of hyperglycemia, 615–618, 626–627
of hypoglycemia risk, 444
initial, 216
nutrition, 126–127
practice setting, 37
self-care behaviors, 643
financial resources and insurance, 264
family system roles and developmental age and stage, 262–264
265
chronic disorders, 264–265, tips for quick, 35
skills for, 38–40
practice setting, 37
nutrition, 126–127
initial, 216
of hypoglycemia risk, 444
of hyperglycemia, 615–618, 626–627
329
at hospital admission,

Autonomic nervous system (ANS), 771
Autonomic neuropathy (AN), 182, 221–222, 222, 770
bladder dysfunction and, 792
cardiac, 786, 788
clinical features, diagnosis, and treatment, 787
exercise modifications for, 151–152
exercise prescription and, 458–459
exercise response and, 789
gastrointestinal disorders and, 789–791
pupillary and visceral response and, 793–795
sexual dysfunction and, 649–650, 791–792
sudomotor dysfunction and, 792–793
symptoms, 786
treating underlying causes, 789

Autonomy motivation, 96
Autonomy support, 96
Avandamet, 508
Avandaryl, 508
Avoidance coping, 266–267
Ayurvedic medicine, 601
Azathioprine (Imuran®), 796
Azilsartan (Edarbi®), 538

B Background insulin. See Basal insulin
Balance exercises, for older adults, 154
Bargaining, 265
Beck Depression Inventory, 649
Basal insulin, 205, 335, 473, 500
Baseline evaluation, 189
Beck Depression Inventory, 649
Behavior change, 120
applying, 100–101
empowerment-based protocol for, 98–99
for healthy eating, 128–130, 129, 130
motivational interviewing approach to, 103–106
patient empowerment and theories for, 98
theoretical approaches to, 88–97
tips for quick, 35
theory and approach combination for, 88
Behavioral objectives, 48
characteristics of, 47
Behavioral Risk Factor Surveillance System (BRFSS), 15, 56, 645
Behavior-change rules, 161
Benazepril (Lorensin®), 536
Benfotiamine, 575, 579–580
Berberine, 538, 565
Berlin Questionnaire, 226, 647–648
Beta 3–selective receptor blockers, 540
Beta cells, insulin secretory capacity, 355
Beta-adrenergic antagonists, 446, 510
Beta-blockers, 446, 539–541, 540
Betaxolol (Kerlone®), 540
Bethanechol (Urecholine®), 792
Biguanides, 174, 205, 480, 485, 485–486.
See also Metformin
Bile acid resins, 527–528, 528
Bile acid sequestrants, 175
Binge eating disorder (BED), 258
diagnostic criteria, 259
nutrition for, 122
Bio-field therapies, 605–606
Bismuth subsalicylate (Pepto-Bismol®), 181
Bisoprolol (Zebeta®), 540
Bitter melon, 559, 563–566
Bladder dysfunction, 792
Blindness, 725
Blood glucose. See also Self-monitoring of blood glucose
blurring of vision and, 730
cataracts and, 727
in children and adolescents, 284–285, 285
chronic kidney disease and, 751–752, 753
complication reduction and control of, 396
decision tree for monitoring, 247
factors raising or lowering, 207
gestational diabetes mellitus and monitoring, 683
goals during pregnancy, 673
goals in type 1 diabetes, 366
hemodialysis and, 761
hospital admission assessment of, 329
interpreting records, 205
problems solving for monitoring, 205
kidney transplantation and, 762–763
medication effects on, 205
peritoneal dialysis and, 762
physical activity and, 466–468
postprandial, 207–208
prepregnancy, 207–208
preterm birth, 207–208
problem-solving for monitoring, 209
self-monitoring, 207
self-monitoring, 207
blood glucose meters, 369–370
accuracy of, 369
American Association of Diabetes Educators ©
810  The Art and Science of DSME

data logs, 369
 data management systems and, 209–210
 obtaining adequate sample, 196–197
 selecting for self-monitoring, 191–193
 teaching operation of, 194
 Blood glucose monitoring, 369
 assessment of, 210
 physical activity and, 452–453
 Blood pressure. See also Hypertension
 children, 285
 chronic kidney disease and, 752, 753
 cuff sizing, 217
 diabetic retinopathy and, 732–733
 goals for, 705
 management in children and adolescents, 708–709
 measurement technique, 705
 monitoring, 216–217
 procedures and tips for, 217
 self-monitoring of, 287
 standards of care, 280
 support for achieving goals, 706
 Blood tests, for diabetic kidney disease, 751
 Blurring of vision, 730
 Board Certified–Advanced Diabetes Manager (BC-ADM), 8
 Body composition, 438
 Body mass index (BMI), 344
 in pregnancy, 658
 Bulus insulin, 500
 Bone and mineral metabolism abnormalities, 753–754
 Bone integrity, 438
 Bovine serum albumin (BSA), 354
 Bowman’s capsule, 746
 Branch retinal vein occlusion (BRVO), 729
 Breastfeeding, 661, 662
 British Hypertension Society, 217
 Bromocriptine (Cycloset®), 175
 Bromocriptine mesylate (Cycloset®), 481, 489, 490–490
 Bulimia nervosa, 258
 diagnostic criteria, 259
 nutrition for, 122
 Bupropion, 702
 Business plan, self-management education program, 301–302, 302–303
 Buy-in, obtaining from patient, 44

C
Calcitonin, 747
Calcitriol, 224, 759
Calcium, 746–747
Calcium channel blockers, 510, 541–544, 542, 706
Canagliflozin (Invokana®), 175, 205, 481, 490, 490–491, 509
Cancer
 aspirin use and, 707
 diabetes and risk of, 359, 359
 Canadesaratan (Atacand®), 538
 Cannabinoids, 349
 Captopril (Capoten®), 536
 Carbohydrate counting, 131, 374
 Carbohydrates
 aerobic activity requirements, 450
 counting, 131
 gestational diabetes mellitus and, 683
 glyceria and, 415–418
 insulin-to-carbohydrate ratios, 414
 low carbohydrate eating, 124, 125
 physical activity responses and, 443–444
 physical activity strategies and, 450–452
 pregnancy and guidelines for, 672
 Cardiac autonomic neuropathy, 786, 788
 Cardiac catheterization, patient preparation for, 711–712
 Cardiac denervation syndrome, 788–789
 Cardiometabolic risk, 692, 693
 Cardiovascular autonomic reflex tests, 788
 Cardiovascular complications, 691
 Cardiovascular disease (CVD)
 alcohol and, 425
 aspirin use and, 707
 atherosclerotic, 517–519, 696, 696, 752
 chronic kidney disease and, 745
 diabetes and risk for, 217
 diabetes relationship to, 692–695
 epidemiology in diabetes of, 692
 exercise modifications for, 150
 exercise prescription and, 458
 hyperosmolar hyperglycemic state treatment and, 627
 lifestyle management for, 701–702
 modifiable risk factors, 698
 nonmodifiable risk factors, 697–698
 nutrition therapy and, 423–425
 on listeriosis during pregnancy, 660
 on diabetic foot ulcers, 770
 on dystrophy during pregnancy, 660
 on A1C and microvascular complications, 639
 on diabetic foot ulcers, 770
 on Charcot joint deformities, 648
 on Charcot neuropathic arthritis, 778
 on chest infections, 645–646
 Children
 anxiety and coping in, 269–270
 blood glucose in, 284–285
 blood pressure management in, 708–709
 cardiovascular risk management issues, 708–709
 complementary health approaches for, 599–600
 coping skills, 184
 developmental issues, 377
 diabetes management roles, 379
 diagnosis in, 350–351, 402–403, 404
 dyslipidemia and, 520
 exercise for, 154
 exercise prescription, 456–457
 in foster care/residential settings, 328

American Association of Diabetes Educators©
Index  811

American Association of Diabetes Educators ©
of gestational diabetes mellitus, 682
hyperosmolar hyperglycemic state and prevention of, 628
maternal, 668
microvascular, 639
monitoring for, 216
in older adults, 401
oral, 645
pathogenesis in diabetes of, 358
physical activity and, 150–152
of poor glycemic control, 381–382
pregnancy and, 675
rates of, in type 2 diabetes, 638
reducing in type 2 diabetes, 396
reducing risks for, 360
self-care behaviors for managing, 640–641
standards of care and, 639–640
tissue damage mechanisms, 638–639
Conditioning phase, of exercise, 142
Confidence rulers, 161
Congenital malformations, 668–669, 669
Congestive heart failure (CHF), 401, 715
Consensus Statement on Glucose Monitoring, 189
Contact heat-evoked potentials (CHEPs), 774
Continuous ambulatory peritoneal dialysis (CAPD), 761
Continuous cyclic peritoneal dialysis (CCPD), 761
Continuous glucose monitoring (CGM), 193, 211–213, 369–370, 446–447
benefits and risks, 212
data management systems and, 209–210
personal vs professional, 212
in pregnancy, 673
sleep apnea evaluation and, 647
Continuous positive airway pressure (CPAP), 647
Continuous quality improvement (CQI), 70, 307, 315–316
Continuous subcutaneous insulin infusion (CSIID), 373, 445, 501
Control solution, 196
Conventional medicine, delays of, 599
Conversation Maps®, 246
Cooking, 132–133
Cool-down phase, of exercise, 142
Coping, 262
with anxiety, 257, 257
case study, 271
with depression, 255–256, 257
with diabetes, drugs, and alcohol, 257–258
outcomes, 272
relapse prevention strategies, 269
special populations considerations, 269–271
with stress, 257, 257
stress management, 267–269
styles of, 265–267
therapist referral, 256
Coping skills, 51–52, 406
for children and adolescents, 184
for gestational diabetes mellitus, 684
pregnancy and, 675–676
CoQ10, 576, 580–581
Corneal confocal microscopy, 774
Coronary artery disease (CAD)
  aerobic exercise and, 441
  aspirin use in, 707
  presentation, 709
  screening criteria, 709–710
  warning signs, 710
Coronary heart disease (CHD), 518, 519
aspirin use in, 707
Correctional institutions, 337–338
Cortical cataract, 727
Corticosteroids, 510
Cough and cold products, 180
Counseling
cross-cultural, 126
in diabetic retinopathy care, 738
discharge, 333–335, 334
preconception, 660–667
pregnancy, 286–287
counterregulatory hormones, 347
Counting Carbs: Getting Started, 131
Cranial neuropathies, 795
Critical thinking, 38
Cross-cultural counseling, 126
Cultural competence, healthcare service delivery and, 56, 56
Cultural considerations in assessment, 37
education plan and, 55–57
in goal setting, 45
physical activity, 154–155
problem solving and, 248
Culture, nutrition assessment and, 126
Curriculum content, 60
Cystopathy, 792
Cytochrome P450, 182

Dehydration
diabetic ketoacidosis and, 617
hyperosmolar hyperglycemic state and, 625
profound, 626
Delivery, diabetes care during, 676
Denial, 265
Dental care
preventive care services, 286
products, 182–183
Dental disease, 645
Department of Health and Human Services, US, 19, 20–21
Dependent rubor, 714
Depression, 223, 257, 265, 648–649
coping with, 255–256
Dermatologic products, 182
Dermatologic conditions, of diabetes, 643–644
Description, theory and, 87
Designated health providers, 18
Detemir (Levemir®), 205, 445, 497, 498, 499, 502, 674
Deviation review, 38
DEX implant, 735
Dexamethasone, 729, 735
DiaBEATers®, 246
Diabetes and Healthy Eyes Toolkit, 90
Diabetes Care Program of Nova Scotia, transition recommendations/ guidelines, 327
Diabetes distress, 648–649
Diabetes education, 5–6
barriers and facilitators to access to, 14–15
diabetic neuropathy and, 770–771, 776, 778
diabetic neuropathy mimics and, 778
in first week after type 1 diagnosis, 368–369
for healthy eating, 125–128
problem solving in, 242–244
in promoting healthy eating, 125–128
theory application in, 86–88
Diabetes educators, 7–12
Affordable Care Act and, 16–22
blood glucose monitoring assessment tool for, 210
changing paradigms for, 22–23
clinical problem solving by, 243
competencies, 13–14, 14
complication risk reduction and, 360
continuous glucose monitoring role of, 213
coping role of, 262
discharge counseling and, 333–335, 334
healthy eating and, 116, 117–118
levels of practice, 9, 10–11, 12
patient conflict with, 244

American Association of Diabetes Educators®
role at diagnosis of type 1 diabetes, 367–368
self-monitoring of blood glucose and, 191, 208–209
sexual dysfunction role, 650
Diabetes mellitus, 3
aging and, 401
baseline evaluation of, 189
preconception care and education, 662–664
postpartum care and, 676–677
physical activity effect on, 441–442
parent and child roles in medical nutrition therapy for, 118
maternal complications, 668
labor and delivery and, 676
global impact, 4
financial burden, 4–5
fetal complications, 668–670
dietary supplements, 551–586
685
diagnostic criteria, 349–351, 539
classification of, 351–353
diagnostic criteria, 349–351, 685
dietary supplements, 551–586
epidemiology, 344, 344–345
fetal complications, 668–670
financial burden, 4–5
global impact, 4
lab and delivery and, 676
maternal complications, 668
medical nutrition therapy for, 118
parent and child roles in management, 379
physical activity effect on, 441–442
postpartum care and, 676–677
preconception care and education, 662–664
screening and diagnostic testing, 352
stress and, 359
treatment goals, 469–470
Diabetes paraprofessionals
competencies, 13–14, 14
provider levels, 13
Diabetes Prevention Program (DPP), 19, 356, 439, 685
Diabetes Report Card, 19, 21
Diabetes scleroderma-like syndrome, 643–644
Diabetes self-management education (DSME), 297, 299
advisory group for, 304
assessment, 298
behavior change, 128–130, 129, 130
budget, 304, 305
business plan, 301–302, 302–303
communication, 307–308
community needs, 299–300
curriculum content, 306
curriculum for, 304
evaluation, monitoring, and documentation, 311–317, 312, 314, 315–316
expectations and guidelines, 298
front-end operations, 308
goal setting, 301–302
for healthy eating, 125–128
IT needs, 306
marketing for growth, 309–310
metrics and data, 308–309, 314
NSDSMES standards, 310, 310
ongoing support resources, 300–301
planning, 302, 304
in promoting healthy eating, 125–128
resource availability, 298–299, 300
space needs, 304, 306
staff, 306, 307
Diabetes self-management education and support (DSME/S), 5, 6, 22, 189, 297
addressing barriers, 67, 68
algorithm of care, 31
assessment step, 30–42
barriers to behaviors, 242
treatment goals, 519–520
content at critical time points, 32
cost-benefit, 7–8
documentation, 69–70, 70
evaluation/monitoring step, 69–79
goal-setting step, 42–49
implementation step, 59–69
objectives of, 29
outcomes continuum, 71
outcomes measurement standards, 7
planning step, 49–58
principles, 30
problem solving in, 237, 238–242
process, 30, 33
tradition and empowerment-based approaches, 99
Diabetes self-management education/training (DSME/T), 6
Diabetes self-management support (DSMS), 86
for healthy eating, 125–128
treatment of, 618
traditional and empowerment-based approaches, 99
Diabetic autonomic neuropathy (DAN), 222–222, 222, 770
Diabetic ketoacidosis (DKA), 37, 350, 381–382, 449, 617
Diabetic nerve damage, 646
Diabetic retinopathy, 218–219, 219, 461, 726, 730
care process, 736–738
cataract treatment and, 727
counseling and referral, 738
natural history, 733
pathogenic mechanisms, 731

American Association of Diabetes Educators®
Diabetes

Diabetes is a chronic condition that affects millions of people worldwide. It is characterized by high blood sugar levels, which can be managed through lifestyle changes, medications, and regular medical care.

Diabetes mellitus, type 1

Type 1 diabetes is an autoimmune disease in which the body's immune system attacks and destroys the beta cells in the pancreas that produce insulin. Without insulin, glucose cannot enter cells to be used as energy, and it builds up in the bloodstream instead.

Diabetes mellitus, type 2

Type 2 diabetes is a chronic condition in which the body is resistant to insulin or does not produce enough insulin to maintain normal blood glucose levels. Most people with type 2 diabetes are overweight or obese.

Prediabetes

Prediabetes is a condition in which blood sugar levels are high enough to increase the risk of developing type 2 diabetes or cardiovascular disease but not high enough to be diagnosed as diabetes. It is often referred to as impaired glucose regulation.

Diabetes complications

Diabetes can lead to a number of serious complications, including heart disease, stroke, kidney disease, nerve damage, vision loss, and amputations.

Diabetes management

Diabetes management involves a combination of lifestyle changes, medication, and regular medical care. This may include eating a healthy diet, engaging in regular physical activity, taking medications as prescribed, and monitoring blood sugar levels regularly.

American Association of Diabetes Educators

Diabetes education is an important component of diabetes management. Diabetes educators help people with diabetes learn the skills they need to manage their condition effectively, reduce their risk of complications, and improve their quality of life.

Education programs

Education programs can be offered in a variety of settings, including clinics, hospitals, schools, and community centers. They may be provided by healthcare professionals, diabetes educators, or other qualified individuals.

Education materials

Education materials can include books, brochures, websites, and mobile apps. These resources provide information on diabetes management, lifestyle changes, and treatment options.

American Association of Diabetes Educators

The American Association of Diabetes Educators (AADE) is a professional organization that supports and promotes the delivery of high-quality diabetes education and care.

AADE resources

The AADE offers a wide range of resources for diabetes educators, including continuing education programs, guidelines, and publications.

AADE certification

The AADE offers certification for diabetes educators, which recognizes their expertise and provides a standard of excellence in the field.

Diabetes education programs

Diabetes education programs are designed to help people with diabetes learn the skills they need to manage their condition, reduce their risk of complications, and improve their quality of life.

Eating Healthy With Diabetes: Easy Reading Guide

This book provides easy-to-understand information on diabetes management, including nutrition, physical activity, and medication use.

Eating out

Eating out with diabetes can be challenging, but it is possible with the right planning and preparation.

Education

Education is a key component of diabetes management. Diabetes educators help people with diabetes learn the skills they need to manage their condition effectively, reduce their risk of complications, and improve their quality of life.

Eating disorders

Eating disorders are mental health conditions that involve abnormal attitudes and behaviors related to eating.

Diabetes care

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American Association of Diabetes Educators©
Glucose pattern management (GPM), 204, Glucose control, in gestational diabetes
Glucose, 345–346, 347
Glucometers, 337
Glucagon-like peptide-1 (GLP-1), 348, Glucagon, 347, 348, 445
Glomerular filtration rate (GFR), 747
Glomerular filtration, 746
Glutas, 746
Glucagon, 347, 383, 444
dosage recommendations, 383
Glucagon-like peptide-1 (GLP-1), 348, 349, 694
Glucagon-like peptide-1 (GLP-1) agonists, 178–179
Glucagon-like peptide-1 (GLP-1) receptor agonists, 205, 330, 335, 471, 473, 491–493, 492, 695, 790
Glucosetters, 337
Glucose, 345–346, 347
diabetes diagnosis and levels of, 349
diabetic ketoacidosis treatment and, 620
diabetic retinopathy and, 732
hepatic, 614
ingested, 612
Glucose control, in gestational diabetes mellitus, 682
Glucose pattern management (GPM), 204,
Glucose self-management, 614
Glucose-dependent insulin secretagogues, 790
Glucose-dependent insulin-releasing polypeptide, 348
Glucovance, 508
Glulines (Apidra®), 205, 497, 497, 502, 674
Glut-free diet, 642
Gluten-sensitive enteropathy (GSE), 122–123
Glyburide (Diabetes®; Micronase®; Glynase®, PresTab®), 173, 205, 479, 482, 483, 508, 511, 674, 684
Glycemia
alcohol and, 420
carbohydrate and, 415–418
fat and, 418–419
physical activity and, 419–420
protein and, 418–419
vitamin and mineral supplementation and, 419
Glycemic control, 414–420
Cardiovascular event prevention and, 693–694
conditions associated with poor, 381–382
continuous subcutaneous insulin infusion and, 373
diabetic neuropathy treatment and, 796
flexibility exercise and, 442
hypoglycemia fear and, 382
risk reduction, 276, 278
Glycemic index (GI), 416–417
medical nutrition therapy and, 125
Glycemic load (GL), 416
Glycemic targets, 624, 624
Glycogen, 347, 440
during physical activity, 443–444
Glycosylated HDL, 639
Glycosylation, 214
Glyxambi, 509
Goal setting, 155–156
AADE7 Self-Care Behaviors™ for guiding, 43–45
collaborating on education, 43
considerations in, 43
criteria for, 42
patient skill assessment for, 45–46
self-monitoring and, 46
SMART for, 47
strategies for, 45
tools for, 49
Graded exercise test, 458, 459, 462
Graves’ disease, 641
Group education, 62, 63, 64
Guided imagery, 603
Gut microbiome, 349
Gymnema, 562, 570–571
H
H1N1 (Swine flu), 670
Hamilton Depression rating scale, 649
Handouts, evaluating, 207–208
Hemoglobin, chronic kidney disease and, 641
Hemodialysis (HD), 760–761
Hepatitis B virus (HBV), 646
Hepatitis B vaccine, 226, 646
Hepatitis B virus, 646
Hepatitis C virus, 646
Hepatitis C virus, 646
High-density lipoproteins (HDL-C), 459
Hearing-impaired patients, 67
Heart rate reserve (HRR), 455
Healthy Food Choices pamphlet, 131
Healthy People 2020, 15, 56
Healthy People 2020, 15, 56
Heart rate reserve (HRR), 455
Helping the Student With Diabetes Succeed: A Guide for School Personnel (NDEP), 379
Hemodialysis (HD), 760–761
Hemoglobin, chronic kidney disease and, 752–753
Hepatic glucose, 614
Hepatitis B vaccine, 226, 646
Hepatitis B virus (HBV), 646
Hepatitis C virus, 646
Hepatitis C virus, 646
High-density lipoproteins (HDL-C), 517–518
Hispanic Americans, anxiety and coping, 271
Histamine-2 receptor blockers, 181–182
HMG-CoA reductase inhibitors (statins), 522–524, 522, 524
reverse effects, 523
dosage, 522, 523
drug interactions, 523, 524
instructions, 524
mechanism of action, 522–523
monitoring, 524
Homeopathy, 602

American Association of Diabetes Educators®
Index  817

American Association of Diabetes Educators

Honey, 562, 571–572
Hormone Health Network, 327
Hormones. See also specific hormones
counterregulatory, 347
fuel metabolism role, 347–349
incretin (intestinal), 348
pancreatic (glucoregulatory), 347–348
physical activity responses, 440
Hospital admission
A1C and blood glucose assessment, 329
assessment at, 330
transitional care, 329, 329–331
Hospital discharge, 332–338
Human leukocyte antigen (HLA),
353–354, 386
Humulin®, 502
Huntley's Papules, 644
Hydration, 451–452
Hydrochlorothiazide (HydroDIURIL®; Microzide®), 534, 534
Hyperbilirubinemia, 670
Hypercholesterolemia, 620
Hyperglycemia, 216, 446
advanced glycation end products and, 638
assessing, 615–618, 626–627
cardiometabolic risk and, 692
cardiovascular disease pathogenesis and, 358
defining, 611
detecting, 239
diabetic ketoacidosis and, 616–617
diabetic kidney disease and, 748
education for, 631
infection susceptibility and, 644
inpatient concerns, 624, 624–625
interpreting, 449
microvascular disease and, 218
neurologic changes in, 626–627
physical activity and, 449
in pregnancy, 667
preventing, 239, 631
self-care behaviors in prevention of, 621, 621–622
severe, 626
treatment, 631
Hyperglycemia and Adverse Pregnancy
Outcome (HAPO) study, 120
Hyperlipidemia, diabetic retinopathy and, 733
Hyperlipoproteinemia, cardiometabolic risk and, 692
Hyperosmolar hyperglycemic nonketotic syndrome, 625–626
Hyperosmolar hyperglycemic state (HHS),
185, 350
case study, 626
complication prevention in, 628
high-risk individual identification, 630
Icodextran, 762
Icosapent ethyl (Vascepa®), 527, 527
Illness adjustment, 262
IIMB model, 706
Immunizations, 225–226
preventive care services, 285–286
Immunomodulatory therapy, 796
Immunosuppressive therapy, 796
Impaired fasting glucose (IFG), 347, 349
Impaired glucose tolerance (IGT), 347, 349
Impaired insulin secretion, 355–356
Implanted spinal cord stimulation, 797
Implementation
DSME team, 60
standards of practice, 60
strategies for, 60–62
Importance rules, 161
Incentives to Prevent Chronic Disease Program, 16
Incidence, vs prevalence, 4
Incretin effect, 348
Incretin (intestinal) hormones, 348
Incretin mimetics, 205
Incretin-based therapies, 491–496
Indapamide (Lozol®), 534
Independence at Home Demonstration Program, 16, 18–19
Indian Health Service, 345
Individual education, 62
Individual evaluation, 72
Individualized treatment plans, 396–398
Individualizing goals, 44
Infants and toddlers, 322
developmental issues, 377
medications, 371
psychosocial issues in type 1 diabetes, 376
Infections, 644–647
Influenza, 645–646
Influenza vaccine, 225
Information technology (IT), 306
Information-seeking coping, 266
Infrared light, 797
Ingested glucose, 612
Inhalation devices, 502–503
Insulin, 205, 347, 473
administration in children, 184
alcohol and, 180
children and adolescent use of, 405
children and teens considerations for injection of, 371
children and types of, 183
Index  817

American Association of Diabetes Educators

Icodextran, 762
Icosapent ethyl (Vascepa®), 527, 527
Illness adjustment, 262
IIMB model, 706
Immunizations, 225–226
preventive care services, 285–286
Immunomodulatory therapy, 796
Immunosuppressive therapy, 796
Impaired fasting glucose (IFG), 347, 349
Impaired glucose tolerance (IGT), 347, 349
Impaired insulin secretion, 355–356
Implanted spinal cord stimulation, 797
Implementation
DSME team, 60
standards of practice, 60
strategies for, 60–62
Importance rules, 161
Incentives to Prevent Chronic Disease Program, 16
Incidence, vs prevalence, 4
Incretin effect, 348
Incretin (intestinal) hormones, 348
Incretin mimetics, 205
Incretin-based therapies, 491–496
Indapamide (Lozol®), 534
Independence at Home Demonstration Program, 16, 18–19
Indian Health Service, 345
Individual education, 62
Individual evaluation, 72
Individualized treatment plans, 396–398
Individualizing goals, 44
Infants and toddlers, 322
developmental issues, 377
medications, 371
psychosocial issues in type 1 diabetes, 376
Infections, 644–647
Influenza, 645–646
Influenza vaccine, 225
Information technology (IT), 306
Information-seeking coping, 266
Infrared light, 797
Ingested glucose, 612
Inhalation devices, 502–503
Initial assessment, 216
Injections
children and teen considerations, 371
tips for, 477
Inpatient education, 63
Institute of Medicine (IOM), 21–22
Food and Nutrition Board, 415
on nutrition therapy, 412
on pregnancy weight gain, 658
Instructional strategies, in DSME, 52–54, 53, 54
Insulin, 205, 347, 473
administration in children, 184
alcohol and, 180
children and adolescent use of, 405
children and teens considerations for injection of, 371
children and types of, 183

American Association of Diabetes Educators
Insulin secretagogues, 205
Insulins, premixed, 175, 205, 372–373, 497, 498
Insulin-to-carbohydrate ratios (ICRs), 414, 415
Integrated delivery networks (IDNs), 16
Integrative medicine, complementary and alternative vs, 598
Intensive insulin therapy, 200
Intermediate-acting insulin, 497, 498
Intermittent claudication, 714, 778
Intermittent peritoneal dialysis (IPD), 761
International Association of Diabetes and Pregnancy Study Group (IADPSG), 677
International Diabetes Federation (IDF), 3, 4, 642
International Federation of Clinical Chemistry (IFCC), 214
International for the Validation of Automated BP Measurement Devices, 217
International Society for Pediatric and Adolescent Diabetes (ISPAD), 327, 417, 640, 642
transition recommendations/guidelines, 326
Internet-based exercise programs, 158
Intervention, nutrition, 127
Intima-media thickness (IMT), 692
Intraocular pressure (IOP), 726, 728, 735
Intraepidermal nerve fiber density (IENFD), 781–782
Large-fiber neuropathy, 780
Large-fiber neuropathy, 780, 781–782, 782, 784
Laser eye surgery, 737
Latent autoimmune diabetes in adults (LADA), 357, 386, 400
Learning, generational differences in, 58, 59
Learning objectives, 46, 47, 48
Learning theory, 65
Leptin, 349
Levels of practice, 9, 10–11, 12
Levothyroxine, 224
Lifestyle, for physical activity, 156–158
Lifestyle interventions in children and adolescents, 404
hypertension treatment with, 533, 705–706
for type 2 diabetes, 396
Lifestyle issues, 36
education plan and, 55–57
family changes, 441

American Association of Diabetes Educators
Lifestyle management, 701–702
Light therapy, 606
Linaclootide (Linzess®), 790
Linaclotide (Linzess®), 790
Liraglutide (Saxenda®; Victoza®), 178, 205, 423, 445, 475, 491, 492, 493, 695, 790
Lipoproteins, 517–518, 639
Lipids
chronic kidney disease and, 752, 753
diabetic retinopathy and, 733
monitoring, 217–218
standards of care, 280–281
transport of, 517, 518
Lipoproteins, 517–518, 639
Liraglutide (Saxenda®; Victoza®), 178, 205, 423, 445, 475, 491, 492, 493, 695, 790
Lisinopril (Prinivil®; Zestril®), 172
Lipase inhibitors, 478–479
Lipid management, 702–704
for children and adolescents, 709
Lifestyle management, 701–702
Light therapy, 606
Linaclootide (Linzess®), 790
Linaclotide (Linzess®), 790
Liraglutide (Saxenda®; Victoza®), 178, 205, 423, 445, 475, 491, 492, 493, 695, 790
Lipoproteins, 517–518, 639
Liraglutide (Saxenda®; Victoza®), 178, 205, 423, 445, 475, 491, 492, 493, 695, 790
Lisinopril (Prinivil®; Zestril®), 536, 706
Lispro (Humalog®), 205, 497, 497, 502, 674
Lispro u200, 205
Listeriosis, 660
Lixisenatide, 695, 790
Light therapy, 606
Lifestyle management, 701–702
Low-fat eating, 123, 205
Lubiprostone (Amitiza®), 314, 374
124
Lower intestinal tract dysfunction, 790–791
Low-fat eating, 123, 124
Lubiprostone (Amitiza®), 790

M

Macronutrients, 414–415
Macrosomia, 670
Macrovacular disease, 637
advanced glycation end products and, 638–643
monitoring for, 216–218
Macular edema, See Diabetic macular edema
Magnesium, 628
Magnet therapy, 606
Mail Order Program for Diabetes Testing Supplies, 192
Maladaptive coping strategy, 271
Male sexual dysfunction, 791–792
Malignant external otitis, 645
Massage, 604
Master certified health education specialist (MCHES), 8
Maturity-onset diabetes of the young (MODY), 357–358
Meal plans, 374
Meal-planning, skills, 132
Meal-planning resources
cholesterol counting, 131
Choose My Plate, 130–131, 131
Mealtime insulin. See Bolus insulin
Medicaid, 17
Affordable Care Act and, 18, 19, 20
Incentives to Prevent Chronic Disease Program, 16
Medicaid Health Homes, 16
Medical evaluation, for being active, 226
Medication-taking behavior
regimen changes and adjustments, 172
relationships and communication to improve, 171–172
warning signs, 170–172
Meditation, during pump therapy, 599
Mediterranean-style eating, 123, 124, 424–425
Meglitinides, 173–174, 185, 205, 335, 452, 479, 483–485, 484
Memory, 65
Men, anxiety and coping in, 269–270
Mercury-contaminated fish, 660
Metabolic abnormalities, in chronic kidney disease, 753–754
Metabolic adaptations, to aerobic activity, 440
Metabolic control
in adolescence, 323
diabetic neuropathy treatment and, 796
long-term monitoring of, 214–216
thyroid testing and, 641
in type 1 diabetes, 372
Metabolic fitness, 438
Metabolic syndrome, obstructive sleep apnea and, 226
Metaglip, 508
Metformin (Glucophage®; Glucophage XR®, Fortamet®, Riomet®, Glumetza®), 174, 205, 335, 356, 401, 473, 480, 485, 485–486, 674, 675
before cardiac catheterization and angioplasty, 711
in children and adolescents, 404–405
in combination medications, 508, 509
diabetic kidney disease and, 755
in gestational diabetes mellitus, 684
heart failure and, 715
interactions, 511
renal function monitoring and, 185
vitamin B12 deficiency and, 642
Methylodopa (Aldomet®), 545
Metoclopramide (Reglan®), 790
Metolazone (Zaroxolyn®), 124
Metoprolol succinate (Toprol XL®), 540
Metoprolol tartrate (Lopressor®), 540

Index  819

American Association of Diabetes Educators©
Microalbuminuria, 639, 640
Microvascular disease, 637
A1C levels and, 639
monitoring for, 218–223
Miglitol (Glyset®), 173, 205, 480, 488, 488
Milk thistle, 562–563, 572
Mind and body practices, 551
Mind and body-based health approaches, 604–605
Mind-body interventions, 603–604
Mindfulness, 603–604
Mineral supplementation, 419
Minimal encouragers, as active listening skill, 40–41
Mini-Nutritional Assessment, 428
Mixed neuropathy, 784
Mobile apps, 245, 245
Model
definition of, 86
Health Belief Model, 88, 89–91
Transtheoretical Model, 94–96, 95
Moexipril (Univasc®), 536
Monitor talk, 208
Monitoring, 406. See also Blood glucose meters; Continuous glucose monitoring baseline evaluation and, 189
checklist for, 190, 227–229
for complications and comorbidities, 216
comprehensive approach, 216–227
data management systems for, 209–210
depression/cognitive assessment, 223
diabetic ketoacidosis and, 612
diuretics, 536
gestational diabetes mellitus, 683–684
initial assessment for, 216
insulin use and, 503
long-term, 214–216
for macrovascular disease, 216–218
noninvasive, 213
other methods for, 213–214
physical activity and, 450
in pregnancy, 672–674
renal function, 185
situations requiring more frequent, 199
statin therapy and, 524
for type 1 diabetes, 369–371
weight, 223–224
Monoamine oxidase inhibitors, 511, 545
Mononeuropathies, 795, 795
Monounsaturated fatty acids (MUFA), 424
Morphological fitness, 438
Morton’s neuroma, 778
Motivational interviewing (MI), 103
evidence base, 105–106
patient empowerment and, 106, 106
for physical activity, 160–161
principles of, 104–105, 105
Multifocal neuropathies, 795–796
Multiple daily insulin (MDI), 200, 369, 445
Muscular endurance, 439
Muscular strength, 439
Music therapy, 606
Myocardial infarction (MI), 517, 691
patient education after, 711
treatment of acute, 710–711
Nadolol (Corgard®), 540
Naltrexone/bupropion ER, 423
Naltrexone/bupropion HCI (Contrave®), 475
Nateglinide (Starlix®), 173, 205, 479, 483–484, 484
National Alliance to Advance Adolescent Health, 327
National Center for Complementary and Integrative Health (NCCIH), 597
National Center for Telehealth & Technology, 245
National Center on Elder Abuse, 20
National Diabetes Education Program (NDEP), 56, 345, 379
National Diabetes Prevention Program (NDPP), 16, 20
National Diabetes Statistics Report, 394
National Glycohemoglobin Standardization Program (NGSP), 214
National Health Care Workforce Commission, 20
National Heart, Lung, and Blood Institute, 696, 709, 752
National Institute for Health and Clinical Excellence (NICE), transition recommendations/guidelines, 326
National Kidney Foundation, 751
National Kidney Foundation–Kidney Disease Outcomes Quality Initiative (NKF-KDOQI), 747
National Lipid Association, 520, 530
National Quality Forum, 624, 698
National Standards for Diabetes Education, 5
National Standards for Diabetes Self-Management Education, 30, 68, 69, 79
planning process description in, 50
National Standards for Diabetes Self-Management Education and Support (NSDSMES), 86, 87, 299
curriculum content requirements, 306
standards, 310, 310
Native American medicine, 602
Native Americans, anxiety and coping, 271
Natural medicines
effectiveness categories, 556
safety categories, 557
Natural Medicines databases, 182
Natural products, 551
Naturopathy, 602
Nebivolol (Bystolic®), 540
Necrotizing fasciitis (NF), 644
Needle anxiety, 382
Neonatal hypocalcemia, 670
Neonatal hypoglycemia, 670
Neostigmine (Prostigmin®), 790
Neovascular glaucoma (NVG), 728–729
Neovascularization elsewhere (NVE), 733
Neovascularization in the optic disc (NVD), 733
Neopatthy, 219–220, 637, 745
physical activity and, 461, 461
in pregnancy, 668
Nephrotic syndrome, 747–748
Nerve conduction studies (NCS), 774
Nerve conduction velocity (NCV), 776
Neuritis, 781
Neuropathic pain, 771–772, 775
combinations of large- and small-fiber damage, 784
defining, 782–783
laboratory tests for evaluating, 783
nociceptive and non-nociceptive, 783
pharmacologic therapies for, 783–784
Neuropathy, 220–222, 637, 730. See also Autonomic neuropathy
controversies in management of, 797–798
exercise prescription and, 458–459
focal limb, 795–796
ischemic optic, 730
large-fiber, 780, 781–782, 782, 784
mixed, 784
monitoring for, 220–222
mononeuropathies, 795, 795
multifocal, 795–796
painful diabetic peripheral, 782
peripheral, 151, 220–221, 459, 782
peripheral arterial disease differentiation from, 714
physical activity and, 458–459, 460
proximal-motor, 795–796
rapidly reversible hyperglycemic, 779
small-fiber, 779, 780, 780–781, 781, 784
standards of care, 283
surgical treatment of, 798
Neutral protamine hagedorn (NPH), 205, 445, 497, 498, 502
Newest Vital Sign, 54
Niacin, 511, 528–529, 529, 703
Nicardipine sustained release (Cardene SR®), 542
Nicotine replacement therapy, 702
Nifedipine long-acting (Adalat® CC; Procardia XL®), 542
Nisoldipine (Sular®), 542
Nocturnal penile tumescence (NPT), 791
Noninvasive monitoring, 213
Nonischemic CRVO, 729
Nonnutritive sweeteners, 418
pregnancy and, 660
Nonprescription medications, 180–183
Nonproliferative diabetic retinopathy (NPDR), 461, 733
Nutrition therapy, 411, 414–420
Nutrition Practice Guidelines (NPGs), 128
Nutrition Practice Guidelines, 128
Nutrition intervention, 127
Nutrition care process, 412
Nutrition care process and model (NCPM), 412
Nutrition care process and model (NCPM) care process, 412
Nutrition care process and model (NCPM) cross-cultural counseling, 126
Nutrition care process and model (NCPM) education, 126–127
Nutrition care process and model (NCPM) nutrition assessment, 126
Nutrition care process and model (NCPM) nutrition diagnosis, 127
Nutrition care process and model (NCPM) nutrition intervention, 127
Nutrition care process and model (NCPM) nutrition practice guidelines, 128
Nutrition care process and model (NCPM) nutrition practice guidelines, 128
Nutrition care process and model (NCPM) nutrition practice guidelines (NPGs), 128
Nutrition intervention, 127
OARS communication skills, 104
Obesity, 344, 345, 423
exercise modifications for, 152
management approaches, 471
medications for management of, 471, 473, 474–475, 476–479
pregnancy complications and, 668
Obstructive sleep apnea (OSA), 226, 226, 647–648
Ocular palsies, 730
Office of Minority Health and Health Disparities, 56
Olanzapine (Zyprexa®), 180
older adults
anxiety and coping in, 269–270
aspirin use in, 707
clinical practice guidelines and, 640
complications in, 401
education strategies and, 401–402
exercise modifications for, 153, 153–154
exercise prescription, 457
hyperosmolar hyperglycemic state treatment and, 627
hypoglycemia risk in, 401
medications and, 185
nutrition for, 121–122
nutrition therapy in, 413
nutrition therapy in, 428–429
problem solving and, 248
screening and diagnosis in, 400
self-monitoring of blood glucose needs, 198
teaching and, 58
type 2 diabetes in, 400–402
vitamin D and, 428
Omesartan (Benicar®), 538
Omega carboxylic acids (Epanova®), 527, 527
Omega-3 fatty acids, 424, 527, 527
Omega-3 fatty acids, 424, 527, 527, See also Fish oil
Omega-3-acid ethyl esters 90 (Lovaza®), 213
Onychomycosis, 644–645
Ophthalmologic products, 183
Optical coherence tomography, 738
oral disease, 645
oral glucose tolerance test (OGTT), 349, 367, 677–678
oral glucose-lowering agents, 675
lactation and, 677
oral glucose-lowering combinations, 172
oral hygiene products, 182–183
Orlistat (Xenical®; Alli®), 423, 475, 478–479
orthostatic hypotension, 217
Osmolality, 617
Osteoarthritis, 778
Osteopathic medicine, 602
Osteoporosis, 224–225, 225
Outpatient care, transitioning to, 332–333, 332–338
Pen devices, 502
Over-the-counter drugs (OTC drugs), 180
Oxidative stress, 796–797
Ozurdex, 729, 735
Pacific Islanders, anxiety and coping, 271
Pain and fever products, 180–181
Pain intensity scales, 782, 783
Pain questionnaires, 782, 783
Pain screening tools, 782
Painful diabetic peripheral neuropathy (PDPN), 782
Pancreas, insulin secretion, 355
Pancreas transplantation, 763
Pancreatic (glucoregulatory) hormones, 347–348
Pancrerpase, 511
Pandemic, 3
Panretinal photocoagulation (PRP), 729, 735, 737
Paraphrasing, as active listening skill, 40
Parathyroid hormone (PTH), 746, 759
Parents, diabetes management roles, 379
Parties, meal planning and, 133
Patient centered medical homes (PCMHs), 8, 16
Patient education for insulin, 176–177
for medications, 173–179
after myocardial infarction, 711
Patient empowerment approach, 88, 97
behavior-change theories and, 98
DSME and DSMS in, 98
evidence base for, 102–103
motivational interviewing and, 106, 106
Patient Health Questionnaire-2 (PHQ-2), 223
Patient Protection and Affordable Care Act (ACA), 5, 16–22
Patients
agenda of, 44
buy-in from, 44
diabetes educator conflict with, 244
with disabilities, 60–67
hearing impaired, 67
observing behavior of, 46
problem-solving empowering for, 244–245
skill assessment, for goal planning, 45–46
understanding and respecting as individual, 44
Pediatric care, 322
Pediatric Endocrine Society, 327
Pedometers, 158
Pelvic infections, 647
Pelvic infections, 647
American Association of Diabetes Educators ©
**Phentermine/topiramate (PHEN/TPM; Qsymia™), 540**

**Peripheral arterial disease (PAD), 226–227**

**Periodontal disease, 226–227**

**Perindopril (Aceon®), 536**

**Physical activity, 120, 139–140, 405, 406, 486, 486–487, 508**

**Phosphorus, 628**

**Phosphate, 620, 627**

**Phenylephrine, 180**

**Phenylpropanolamine, 180**

**Phenytoin, 511**

**Phosphate, 620**

**Phosphorus, 628**

**PHQ-9, 649**

**Physical activity, 120, 139–140, 405, 437, 585**

**adoption and maintenance of, 155–161**

**blood glucose and, 446–448**

**blood glucose monitoring and, 452–453**

**carbohydrate requirements during, 450**

**cardiovascular disease management and, 702**

**case study, 140**

**children and adolescent modifications, 154**

**cultural considerations, 154–155**

**developing structured program of, 142–155**

**diabetes complications modifications, 150–152**

**diabetes management and, 441–442**

**diabetic autonomic neuropathy and, 789**

**diabetic neuropathy and, 785–786**

**dyslipidemia/cardiovascular disease risk and, 425**

**energy systems during, 443**

**equivalent steps per activity, 159**

**exercise (training) vs, 439**

**for gestational diabetes mellitus, 683**

**glicemia and, 419–420**

**hormonal responses, 440**

**hyperglycemia and, 449**

**hypertension and, 426**

**insulin adjustments and, 452–453**

**insulin administration and, 453**

**insulin pump therapy and, 453**

**lifestyle promoting for, 156–158**

**medication adjustments and, 452**

**metabolic effects, 440**

**monitoring and, 450**

**motivational interviewing, 160–161**

**nephropathy and, 461, 461**

**neuropathy and, 458–459, 460**

**obesity modifications, 152**

**older adult modifications, 153, 153–154**

**overcoming barriers to, 437**

**physiological responses to, 443–444**

**during pregnancy, 661, 661, 661, 672, 673**

**pregnancy modifications, 152–153**

**problem solving and, 452–453**

**program-design considerations, 141–142**

**regimen adjustment for, 447–448**

**resistance (strength) training, 147–149, 154**

**retinopathy and, 461, 462**

**role in type 2 diabetes prevention and treatment, 439–441**

**self-management strategies for, 450–453**

**snacking during, 450–451**

**stage-matched interventions, 158–160**

**standards of care, 279**

**states of change in behavior, 159**

**subcategories, 439**

**type 1 diabetes and, 374–375**

**weight management and, 422**

**Physical fitness, 438**

**defining, 438**

**health-related, 438–439**

**terminology, 438, 438–439**

**Physiological fitness, 438**

**Pindolol (Visken®), 540**

**Pioglitazone (Actos®), 174, 205, 335, 480, 486, 486–487, 508**

**Pitavastatin (Livalo®), 522, 523**

**Planning, 49–58**

**education plan components, 50**

**education plan content, 50–57**

**Plant stanols, 424**

**Plant sterols, 424**

**Plantar fasciitis, 778**

**Pneumococcal pneumonia, 646**

**Pneumococcal vaccine, 226, 646**

**Polycystic ovarian syndrome (PCOS), 403, 675**

**Polycythemia, 670**

**Polythyma, 401, 406**

**Polyunsaturated fatty acids, 424**

**Polyuria, 182**

**Pooled Cohort Equation, 696, 696**

**Portion sizes, 132**

**Positive glucose questioning, 211**

**Postpartum care, 676–677**

**Postpartum thyroiditis, 224**

**Postprandial monitoring, 207–208**

**Postural hypotension, 789**

**Potassium, 620, 627**

**Potassium-sparing diuretics, 535, 535**

**PowerPoint, 64**

**Pramlintide (Symlin®), 178, 205, 445, 495, 495–496**

**Prandimex, 508**

**Pravastatin (Pravachol®), 522, 523**

**Prazosin (Minipress®), 544**

**Preeclampsia care, 662–666**

**counseling, 666–667**

**Prediabetes, 349, 351, 351**

**medical nutrition therapy for, 118**

**Pre-dialysis, 747**

**Prediction, theory and, 87**

**Pre-ESRD, 747**

**Pre-exercise medical clearance, 143**

**Pre-exercise testing, 458, 459**

**Pregabalin, 784**

**Pregnancy, 657**

**AADE7 Self-Care Behaviors™ for, 670, 671, 672–676**

**alcohol and, 660**

**blood glucose goals during, 673**

**calcium channel blockers and, 542**

**clonidine and, 545**

**continuous glucose monitoring in, 673**

**diabetes complications, 668–670**

**diabetes in, 662**

**dietary reference intakes for, 661**

**diuretics and, 535**

**exercise modifications for, 152–153**

**exercise prescription and, 457**

**gestational diabetes mellitus during, 120**

**healthy coping in, 675–676**

**hypertension in, 668, 668**

**insulin production in, 658, 658**

---

**American Association of Diabetes Educators©**
Index 823

insulin pump therapy and, 674–675
insulin requirements during, 674, 674
insulin therapy in, 501
labor and delivery, 676
medications and, 674–675
methylxyloda and, 545
monitoring in, 672–674
nonnutritive sweeteners and, 660
normal, 658–662
nutrition during, 120, 658–660, 659, 660
pathophysiology of diabetes in, 667
physical activity during, 661, 661, 672, 673
physical activity modifications, 152–153
preexisting diabetes during, 120
problem solving and, 675
safe eating during, 660–661
self-monitoring of blood glucose in, 672
standards of care, 282
weight gain in, 658, 659
Premeal insulin, 205
Premixed insulins, 175, 205, 372–373, 497, 498
Prepregnancy counseling, preventive care services, 286–287
Preschoolers, 322–323
Preterm babies, 321
Pregnancy
barriers, 239–241
components of, 238
defining, 237
in diabetes education, 242–244
in diabetes self-management, 238–242
direct knowledge vs, 238
environment encouraging, 241–242
in group settings, 245–246
identifying and assessing problems and barriers, 239–241
individual options, 245
physical activity and, 452–453
pregnancy and, 675
for sick days, 624
special considerations, 247–248
theoretical model for, 237–238
Problem-based learning (PBL), 62
Problem-focused coping, 266
Problems
common areas, 240–241
types of, 239
Profound dehydration, 626
Proliferative diabetic retinopathy (PDR), 733, 735
Proliferative retinopathy, 731
Promotora, 37
Propanolol (Inderal®), 511
Propanolol extended release (Inderal LA®), 540
Proprotein convertase subtilisin/kexin type 9 inhibitors (PCSK9 inhibitors), 525, 525–526, 704
Proximal-motor neuropathy (amyotrophy), 795–796
Prosthetic limbs, 338
Psychosocial issues
adolescents, 380–382
infants and toddlers, 376
preschoolers, 376, 378
school-aged children, 378–379
type 1 diabetes, 376, 378–382
Psychosocial assessment and care, standards of care, 279
Psychosocial issues
for older adults, 154
precautions, 148
Respiratory distress syndrome (RDS), 670
Retina, 725
Retinopathy, 218–219, 219, 637
case study, 219, 637
exercise and, 461, 462
exercise modifications for, 150
standards of care, 281–282
Reynolds Risk Score, 519
Rhizopus spp., 645
Rifampin, 511
Risk reduction, 275, 360, 406
barriers, 288–289
case study, 289–291
personal care record, 288
preventive care services, 285–287
skills, 287–288
standards of care, 276, 277, 278–283
therapeutic goals, 283–285, 286, 285
in type 2 diabetes, 356–357
Rosiglitazone (Avandia®), 174, 205, 480, 508, 695
Rosuvastatin (Crestor®), 522, 523, 703

Q

Qigong, 605
Quality of life (QOL), 770
neuropathic pain and, 782
neuropathy and measures of, 776
Quantitative sensory testing (QST), 772–773
Quinapril (Accupril®), 536

R

Radicalopathy, 778
Ramipril (Altace®), 536
Ranibizumab (Lucentis®), 729, 735
Rapid-acting insulin, 497, 497–498
Rapidly reversible hyperglycemic neuropathy, 779
Rapport, establishing with patient, 45
Ratings of perceived exertion (RPEs), 455
Readiness to change, 38, 39
Red yeast rice, 577–578, 583
Reflecting feelings, as active listening skill, 40
Reflexology, 605
Regimen adherence, obstacles to, 40
Regimen review, 38
Registered dietitian (RD), 116–117
Registered dietitian nutritionist (RDN), 116–117, 412
Rehabilitation facilities, 338
Rehydration, 618, 627
Relapse prevention strategies, for coping, 269
Relationships, medication-taking behavior and, 171–172
Relaxation, 604
ReliOn, 502
Renal impairment, 185
Renal insufficiency, 627
Renal pathophysiology, 747–748
Renal physiology, 746–747
Renal replacement therapies (RRTs), 745, 760
Renin, 747
Renin-angiotensin-aldosterone system (RAAS), 530–531, 531
Repaglinide (Prandin®), 173, 205, 479, 483–484, 484
Resistance exercise, 442
Resistance (strength) training, 147–149
for older adults, 154
precautions, 148
Rheumatoid arthritis, 338
Rheumatoid factor, 780
Rhizopus spp., 645
Rifampin, 511
Risk reduction, 275, 360, 406
barriers, 288–289
case study, 289–291
personal care record, 288
preventive care services, 285–287
skills, 287–288
standards of care, 276, 277, 278–283
therapeutic goals, 283–285, 286, 285
in type 2 diabetes, 356–357
Rosiglitazone (Avandia®), 174, 205, 480, 508, 695
Rosuvastatin (Crestor®), 522, 523, 703

S

Satisfaction survey, 76,Satisfaction survey, 76, 76
Salicylates, 511
Salmonella, 660–661

American Association of Diabetes Educators®
Saturated fats, 424
Saxagliptin (Onglyza®), 174, 205, 445, 481, 493–495, 494, 509, 694
School settings, diabetes care in, 379, 380
School Walk for Diabetes, 69
School-aged children, 322–323
developmental issues, 377
psychosocial issues in type 1 diabetes, 378–379
Scope and Standards of Practice, 8
Screen for early eating disorder signs
(SEEDS), 260–261
Second sight, 727
Selective intestinal absorption inhibitors, 525, 529
Selective-serotonergic agents, 477–478
Self-care, dietary supplements, 585–586
Self-care devices, 402
Self-care skills, 51, 94
Self-Determination Theory (SDT), 96–97, 97
Self-directed behavior change, approaches to facilitate, 98–99, 99, 102–103
Self-efficacy, 93, 155
self-monitoring of blood glucose and, 208
Self-management education program. See Diabetes self-management education (DSME)
Self-management skills, 51, 95
physical activity and, 450–453
Self-monitoring, 46
checklist for, 190
Self-monitoring of blood glucose (SMBG), 190–214, 396
adherence to, 208–209
alternative sites, 197
barriers to, 193, 195, 196–199
blood glucose targets, 199, 200
diabetes educators and, 191, 208
documenting results, 197–198
education checklist, 192
educator’s role in adherence, 208–209
example regimens, 203–204
frequency of monitoring, 199–202, 201
individual needs for operational or interpretation skills, 198–199
interpretation skills, 199–209
interpreting records, 205–206
interpreting results, 204, 207–208
meter accuracy, 193
meter selection for, 191–193
operational skills, 191–193, 194
in pregnancy, 672
sample record, 207
situations requiring more frequent, 199
timing of checks, 206
uses of, 191
Semmes-Weinstein monofilament exam, 220–221
Serum markers, for abnormal bone and mineral metabolism, 753–754
Sexual dysfunction, 649–650, 650, 791–792
Sexually transmitted diseases (STDs), 381
Skin spots, 643
Short-acting insulin, 497, 497–498
Sick-day management, 614, 615, 647
Sildenafil (Viagra®), 790
Simultaneous kidney-pancreas transplantation, 763
Simvastatin (Zocor®), 522, 523, 530, 703
Sitagliptin (Januvia®), 174, 205, 445, 481, 493–494, 494, 509, 695
Skilled nursing facilities, 330, 490–491, 473, 490–491, 490–491, 491
Sleep apnea, 226
Sleep-disordered breathing (SDB), 647
Small-fiber neuropathy, 781, 780–781, 781, 784
SMART goal setting, 47, 155–156
Smartphone applications, 245, 245
Smoking
cardiometabolic risk and, 692
diabetic retinopathy and, 733
Smoking cessation, 208–209
standards of care, 281
Snacking, 133
during physical activity, 450–451
Social Cognitive Theory (SCT), 91–93, 92
Social-environmental support, 156
Society of Hospital Medicine, 624
Socioeconomic factors, health disparities linked to, 56
Sodium, 627–628
hypertension and, 426
in pain reliever products, 181
Sodium bicarbonate, 620
Sodium-glucose co-transporter 2 inhibitors (SGLT2 inhibitors), 175, 205, 330, 471, 473, 481, 490, 490–491, 694, 695
Sorbitol, 797
Special needs patients, self-monitoring of blood glucose needs, 198–199
Special populations
assessment and, 36–37
coping considerations, 269–271
diabetes supplements and implications for, 585–586
Specific examples, in assessment, 38–39
Splanchnolactone (Aldactone®), 535
Sports, continuous subcutaneous insulin infusion and, 373
Sports drinks, 447
St John’s wort, 578, 583–584
Standards of care
blood glucose testing recommendations, 200
complications and, 639–640
promoting, 68–69
Standards of Care complications, 279–283
implementation resources, 283
preventive care services, 285–287
risk reduction, 276, 277, 278–283
Standards of Medical Care, 97, 189, 703, 709
Standards of practice, 8, 60
Standards of Professional Performance, 8
Stanford Diabetes Self-Management Program (DSMP), 93
Staphylococcus spp., 644
Starches, 416
Starvation ketosis, 446
Steroids, 446
pretreatment for cardiac catheterization and angioplasty with, 712
STOP-Bang questionnaire, 648
Story catalogs, 57
Storytelling, as teaching strategy, 56–57
Strength training. See Resistance (strength) training
Streptococcus spp., 644
Stress
assessment, 267–268
coping with, 257, 257
diabetes and, 359
gestational diabetes mellitus and, 684
identifying and managing, 268–269
physiologic reaction to, 268
Stress management, for coping, 267–269
Stretching, 442
Stretching exercises, 149
Strokes
early-warning symptoms, 713
prevention of, 712
recognizing signs of, 712–713
Structured testing, 202
Substance abuse, 381
Sudomotor dysfunction, 792–793
Sudomotor function, 792–793
SUDOSCAN™, 774
Sugar-free products, 180
Sugars, 415–416
Sugar-sweetened beverages (SSBs), 417
American Association of Diabetes Educators®
Index  825

Sulfonamides, 512
Sulfonylureas, 173–174, 185, 205, 330, 335, 401, 473, 479, 482, 482–483, 711. See also specific drugs
Summarizing, as assessment-closing technique, 42
Summative evaluation, 71, 72
Survival skills. See Self-care skills
Sympathomimetic agents, 476, 476–477
Tarsal tunnel syndrome, 778
Tarsal tunnel entrapment syndrome
Thioctic acid, 797
Tadalafil (Cialis®), 790
Tacrolimus, 512
Tadalafil (Cialis®), 790
Tadalafil (Brevuden®), 540
Teva pedis, 182
Tissue damage mechanisms, 638–639
Toxocytic agents, 675
Tolazamide, 205, 482
Tolbutamide, 205, 482
Topical products, 182
Topiramate, 476–477
Traditional Chinese medicine (TCM), 602–603
Trandolapril (Mavik®), 536
Tubular secretion, 746
T-score, 225
Tubular secretion, 746
Turmeric, 564, 574
TurningPoint®, 246
Type 1 diabetes and pregnancy (T1DP), 657
Type 1 diabetes mellitus (T1DM), 4
Type 1 diabetes mellitus (T1DM), 4
A1C goals, 368–369
in adults, 386–387
aerobic exercise and, 441–442
autoimmune disorders associated with, 384, 386, 641
autoimmunity and, 354–355
children and adolescents with, 121
classification of, 351–352
developmental issues, 377
diabetic ketoacidosis and, 383–384, 611
diagnosis, 366–368, 367, 386–387
education in first week after diagnosis, 368–369
exercise prescription for, 443
eye examinations and, 736
generic propensity for, 353–354
Health Belief Model applications, 90
healthy coping, 375–382
healthy eating in, 373–374
hypoglycemia and, 382–383, 444, 445
hypoglycemia prevention, 375
medication regimen and dosage, 371–372
medications, 371–373
monitoring, 369–371
monitoring frequency, 200, 201–202
nutrition for management, 119
nutrition therapy and, 427
ongoing care, 385–386
overview of, 365–366
oxidative stress and, 354
pathophysiology, 333, 353–355
physical activity and, 374–375
plasma blood glucose goals, 366
pregnancy and, 667
prevalence and incidence, 365, 708
quarterly follow-ups, 385
self-monitoring of blood glucose and, 200–202
self-monitoring of blood glucose frequency recommendations, 201
Social Cognitive Theory applications, 91
standards of care and retinopathy, 281–282
transition to adult care, 386
TRA-TPB applications, 93
treatment in adults, 387
triggers for, 354
type 2 overlap with, 357
vaccinations and, 386
yearly assessments and screenings, 385
Type 2 diabetes and pregnancy (T2DP), 638, 657
Type 2 diabetes mellitus (T2DM), 3, 4, 691
AACE management algorithm, 469, 471, 472, 500, 640
aerobic exercise and, 441
cardiovascular disease and, 396
in children and adolescents, 121, 184, 285, 394, 402–405
classification of, 352
clinical presentation, 393–394, 400
combination oral medications for, 507, 508–509
complication reduction, 396

American Association of Diabetes Educators©
diabetic ketoacidosis and, 612
diagnosis, 395, 395
exercise prescription for, 143
eye examinations and, 736
family member lifestyle changes and, 441
Health Belief Model applications, 90
heredity role in, 356
hypoglycemia risk and, 444
hypoglycemia treatment in, 507
incidence and prevalence, 394
individualized plans for, 396–398
latent autoimmune diabetes in adults
and, 357
lifestyle interventions, 396
management of, 470–471
maturity-onset diabetes of the young
and, 357–358
monitoring frequency, 200–201
nutrition for management, 119–120
nutrition therapy and, 427–428
in older adults, 400–402
pathophysiology, 355–358
pharmacologic interventions, 396–398
physical activity role in prevention and
treatment, 439–441
pregnancy and, 667
prevalence of, 708
risk factors, 394–395
risk reduction and intervention, 356–357
self-care behaviors for, 405–406
self-monitoring of blood glucose and,
200–202, 201
sleep apnea and, 226
Social Cognitive Theory applications,
91–92
standards of care and retinopathy,
281–282
TRA-TPB applications, 94
Transtheoretical Model applications, 95
treatment, 395–398
type 1 overlap with, 357
weight loss and, 223–224

U
Ultrafiltration, 762
Ultralente, 205
Ultrasoundography, 738

United States, healthcare systems in, 16
Unsaturated fats, 424
Upper gastrointestinal dysfunction,
789–790
Urinary albumin excretion, ACE inhibitor
and ARBs for, 707–708
Urine testing, 213–214
for diabetic kidney disease/chronic
kidney disease, 751
US Pharmacopeia (USP), 182
US Preventive Services Task Force
(USPSTF), 677–678
cardiovascular risk management
recommendations, 708
glaucoma screening recommendation, 728
US Renal Data System (USRDS), 750
USDA Choose My Plate, 130–131, 131

V
Vaccinations, 386
VADT study, 358
Valsartan (Diovan®), 538
Vardenafil HCl (Levitra®), 790
Varenicline (Chantix), 702
Vascular endothelial growth factor (VEGF),
728–729
Vegan eating, 123, 124
Vegetarian eating, 123, 124
Verapamil extended release (Covera-HS®;
Verelan PM®), 542
Verapamil immediate release (Calan®), 542
Verapamil sustained release (Calan SR®), 542
Very low-density lipoproteins (VLDL),
517–518
Veterans, anxiety and coping in, 269–270
Visualization, 132
Visual impairments, 323–328
Visualized portion size, 132
Vision loss, self-care and, 726
Visual foot inspection, 220, 220, 221
Visual impairment, exercise modifications
for, 151
Visualizing portion size, 132
Visually impaired persons, self-monitoring
of blood glucose needs, 198

W
Warm-up phase, of exercise, 142
Weight gain, in pregnancy, 658, 659
Weight loss, 120, 223–224
cardiovascular disease management
and, 701
effectiveness of, 421–422
hypertension and, 425
medications for, 423
Weight management, 421–423
standards of care, 278–279
Weight monitoring, 223–224
Whole-body medical systems,
complementary health approaches,
601–603
Women. See also Pregnancy
anxiety and coping in, 269–270
standards of care for pregnancy, 282
World Health Organization (WHO), 394
IMB model and, 706
Written agreement, 44–45

X
Xigduo XR, 509

Y
Yeast infections, 182
Yoga, 442, 605
Young adulthood, transitional care in,
323–328

Z
Zika virus, 670
Zinc, 498
Zygomycosis, 645

American Association of Diabetes Educators®