

Treating metabolic syndrome, type 2 diabetes, and obesity with therapeutic carbohydrate restriction

MODULE 1: Introduction, background and definitions

Module 1 covers the background and history of carbohydrate restriction, reviews nutrition physiology and the principles of adequate essential nutrition, and defines the three different levels of therapeutic carbohydrate restriction.

1.1 Introduction

1.2 Nutrition physiology and adequacy

1.3 Different levels of carbohydrate reduction

1.4 Module 1 case studies

MODULE 2: Physiological and metabolic effects of carbohydrate-restricted diets

Module 2 examines the physiological and metabolic rationale for using therapeutic carbohydrate restriction to treat the features of metabolic syndrome, type 2 diabetes, and obesity. This module discusses evidence from the medical literature that supports the use of therapeutic carbohydrate restriction for these conditions.

2.1 Glucose, insulin, ketones

2.2 Nutritional ketosis vs. ketoacidosis

2.3 Effect of therapeutic carbohydrate restriction on metabolic syndrome, diabetes, and weight loss

2.4 Module 2 case studies

MODULE 3: Initiating the intervention

Module 3 covers how to initiate therapeutic carbohydrate restriction in a patient population. It discusses which patients are candidates for therapeutic carbohydrate restriction and which ones require caution when implementing this dietary intervention. It also explains what baseline assessments are needed and briefly covers pre-diet evaluation and counseling.

3.1 Patient selection

3.2 Baseline assessments

3.3 Pre-diet evaluation and counseling

3.4 Module 3 case studies

MODULE 4: Administering therapeutic carbohydrate restriction

Module 4 covers how to administer and manage therapeutic carbohydrate restriction in a clinical setting. It covers supporting behavior change, educating patients about the principles of therapeutic carbohydrate restriction, adjusting medications during initial stages of the intervention, and anticipating and treating common side effects. Module 4 closes with a brief discussion of other lifestyle factors that may impact health besides diet.

4.1 Supporting behavior change

4.2 Patient education

4.3 Initial medication adjustments

4.4 Side effects, adverse outcomes, and treatment

4.5 Additional lifestyle considerations

4.6 Module 4 case studies

MODULE 5: Follow-up care

Module 5 covers long-term considerations of therapeutic carbohydrate restriction, including monitoring and evaluation, troubleshooting weight loss, reimbursement, and evaluation.

5.1 Monitoring and evaluation

5.2 Maintenance and discontinuation

5.3 Module 5 case studies

5.4 Summary