

Endocrinology Made Easy (EME)

Introduction and Rationale

The **Endocrinology Made Easy (EME)** is a 3-month online program designed to equip family physicians, general practitioners, and medical officers with practical knowledge and skills to confidently manage common endocrine disorders. This program addresses the critical need for enhanced endocrine training in primary care, with a special focus on diagnosis, management, and evidence-based practices, particularly in resource-limited settings. It bridges the gap between primary care and specialist care, empowering participants to manage uncomplicated cases effectively and recognize when timely referral to an endocrinologist is necessary.

Length of Program

Duration: 3 Months

Structure: 6 Modules (2 weeks each)

Total CME Hours

30 CPD/CME Hours

(Asynchronous: 24 hours | Synchronous: 6 hours)

Who Should Join?

- Family Physicians & General Practitioners
- Medical Officers & Residents
- Undergraduate & Postgraduate Medical Students
- Anyone interested in learning practical endocrinology

Teaching Strategies

- Interactive, pre-recorded video lectures (asynchronous)
- Guided reading materials and clinical practice guidelines
- Self-assessment quizzes to reinforce learning
- Live, case-based discussion sessions (synchronous)
- Discussion forums for peer interaction and faculty support

Mode of Delivery

- **Online asynchronous sessions:** Pre-recorded lectures, reading materials, and quizzes released in two-week modules. All materials will be accessible 24/7 via the learning management system.
- **Online synchronous sessions:** Six live, faculty-led case discussion sessions (1 hour each) held every two weeks to apply module knowledge to real-world patient scenarios.
- All live sessions are recorded and made available for the duration of the course.

Program Outcomes

Participants completing the Endo-Made-Easy program will be able to:

1. Describe the basic physiology of the endocrine system and recognize common clinical presentations of endocrine disorders encountered in primary care.
2. Apply current diagnostic criteria and formulate evidence-based management plans for patients with diabetes mellitus, including pharmacological and lifestyle interventions.
3. Interpret thyroid function tests and manage common thyroid disorders such as hypothyroidism, hyperthyroidism, and thyroid nodules in primary care settings.
4. Identify the key clinical features of adrenal and pituitary disorders and determine appropriate initial investigations and referral pathways.
5. Assess and manage patients with obesity, polycystic ovary syndrome (PCOS), and metabolic syndrome using guideline-based approaches.
6. Evaluate disorders of calcium metabolism, bone health, and vitamin D deficiency, and implement appropriate prevention and treatment strategies.

Program Content Overview

Module	Code	Title	CME Hours
1	ENDO-101	Introduction to Endocrinology & Common Clinical Presentations	5
2	ENDO-102	Diabetes Mellitus – Diagnosis and Management	5

3	ENDO-103	Thyroid Disorders in Primary Care	5
4	ENDO-104	Adrenal & Pituitary Disorders – What a Physician Should Know	5
5	ENDO-105	Obesity, PCOS & Metabolic Syndrome	5
6	ENDO-106	Calcium, Bone & Vitamin D Disorders	5

Module 1 - ENDO-101

Introduction to Endocrinology & Common Clinical Presentations

CME Hours: 5

Contents:

- Foundations of the endocrine system: feedback loops and hormonal action.
- Approach to the patient with endocrine complaints.
- Recognizing common endocrine presentations: fatigue, weight changes, hirsutism, and hypertension.
- Red flags and when to suspect an endocrine disorder.
- Overview of diagnostic tests in endocrinology.

Module 2 - ENDO-102

Diabetes Mellitus – Diagnosis and Management

CME Hours: 5

Contents:

- Classification and diagnostic criteria for diabetes and pre-diabetes.
- Evidence-based pharmacological management: oral agents and GLP-1 agonists.
- Insulin initiation and titration in primary care.
- Lifestyle interventions: medical nutrition therapy and physical activity.
- Monitoring complications and cardiovascular risk reduction.

Module 3 - ENDO-103

Thyroid Disorders in Primary Care

CME Hours: 5

Contents:

- Physiology of the hypothalamic-pituitary-thyroid axis.
- Approach to the patient with abnormal thyroid function tests.
- Management of hypothyroidism and hyperthyroidism.
- Evaluation of thyroid nodules and when to refer.
- Thyroid disease in pregnancy and postpartum.

Module 4 - ENDO-104

Adrenal & Pituitary Disorders

CME Hours: 5

Contents:

- Overview of adrenal and pituitary function.
- Recognizing Cushing's syndrome, adrenal insufficiency, and incidentalomas.
- Initial investigations for suspected pituitary tumors (prolactinoma, acromegaly).
- Sick day rules for adrenal insufficiency.
- Determining the need and urgency for specialist referral.

Module 5 - ENDO-105

Obesity, PCOS & Metabolic Syndrome

CME Hours: 5

Contents:

- Pathophysiology and health risks of obesity and metabolic syndrome.
- Guideline-based approach to weight management: behavioral, pharmacological, and surgical options.
- Diagnosis and long-term management of Polycystic Ovary Syndrome (PCOS).
- Addressing fertility, menstrual irregularities, and metabolic concerns in PCOS.

- Cardiovascular risk stratification and management.

Module 6 - ENDO-106

Calcium, Bone & Vitamin D Disorders

CME Hours: 5

Contents:

- Physiology of calcium and vitamin D metabolism.
 - Approach to hypercalcemia and hypocalcemia.
 - Screening, diagnosis, and management of osteoporosis.
 - Vitamin D deficiency: prevention and treatment strategies.
 - Evaluation of bone health in at-risk populations.
-

Assessments

To receive the Certificate of Completion, participants must successfully meet all requirements for the program. Each module's activities will contribute to the final grade. The assessment is designed to reinforce learning through application and reflection.

- **Knowledge and Understanding:** 30%
- **Application and Analysis:** 40%
- **Reflection and Integration:** 30%

The course assessment includes 6 module-end quizzes (MCQs), participation in 4 out of 6 live case discussions or viewing the recordings and submitting a summary, and one final, comprehensive case-based assessment. A minimum overall score of 60% is required to pass the program and receive the certificate.

Course Director

- **Dr. Musarrat Riaz**
FCPS (Med), FCPS (Endo)
Director, National Institute of Diabetes & Endocrinology
Dow University of Health Sciences

Faculty

- **Dr. Saima Askari**
FCPS (Med), FCPS (Endo)
Assistant Professor, Baqai Institute of Diabetes & Endocrinology
Baqai Medical University
 - **Dr. Uzma Khan**
Professor of Endocrinology
American Board of Internal Medicine - Endocrinology, Diabetes & Metabolism
University of Missouri Health Care-Columbia
-

Fee Structure

Pakistan Participants:

- PKR 50,000 / participant

International Participants:

- \$230 / participant
-

Certificate

Khyber Medical University

<https://www.corteach.com/product/eme/>