**Purpose of the exam**

The exam is designed to evaluate the knowledge, diagnostic reasoning, and clinical judgment skills expected of the certified endocrinologist in the broad domain of the discipline. The ability to make appropriate diagnostic and management decisions that have important consequences for patients will be assessed. The exam may require recognition of common as well as rare clinical problems for which patients may consult a certified endocrinologist.

**Exam content**

Exam content is determined by a pre-established blueprint, or table of specifications. The blueprint is developed by ABIM and is reviewed annually and updated as needed for currency. Trainees, training program directors, and certified practitioners in the discipline are surveyed periodically to provide feedback and inform the blueprinting process.

The primary medical content categories of the blueprint are shown below, with the percentage assigned to each for a typical exam:

<table>
<thead>
<tr>
<th>Medical Content Category</th>
<th>% of Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenal Disorders</td>
<td>10%</td>
</tr>
<tr>
<td>Pituitary Disorders</td>
<td>10%</td>
</tr>
<tr>
<td>Lipids, Obesity, and Nutrition</td>
<td>12%</td>
</tr>
<tr>
<td>Female Reproduction</td>
<td>7%</td>
</tr>
<tr>
<td>Male Reproduction</td>
<td>7%</td>
</tr>
<tr>
<td>Diabetes Mellitus and Hypoglycemia</td>
<td>24%</td>
</tr>
<tr>
<td>Calcium and Bone Disorders</td>
<td>15%</td>
</tr>
<tr>
<td>Thyroid Disorders</td>
<td>15%</td>
</tr>
</tbody>
</table>

100%

Exam questions in the content areas above may also address clinical topics in internal medicine, including some general pediatrics with an emphasis on adolescent medicine, that are important to the practice of endocrinology.
ABIM is committed to working toward health equity and believes that board-certified physicians should have an understanding of health care disparities. Therefore, health equity content that is clinically important to each discipline will be included in assessments, and the use of gender, race, and ethnicity identifiers will be re-evaluated.

**Exam format**

The exam is composed of up to 240 single-best-answer multiple-choice questions, of which approximately 40 are new questions that do not count in the examinee’s score. Most questions describe patient scenarios and ask about the work done (that is, tasks performed) by physicians in the course of practice:

- Making a diagnosis
- Ordering and interpreting results of tests
- Recommending treatment or other patient care
- Assessing risk, determining prognosis, and applying principles from epidemiologic studies
- Understanding the underlying pathophysiology of disease and basic science knowledge applicable to patient care

Clinical information presented may include various media illustrating relevant findings, such as diagnostic imaging studies, continuous glucose monitoring tracings, radiographic studies, or patient photographs. The certification exam may include the following adrenal imaging studies and procedures:

- Differentiate among imaging techniques for adrenal disease, including computed tomography, magnetic resonance imaging, meta-iodobenzylguanidine scintigraphy, indium-labeled pentetreotide scintigraphy, fludrodeoxyglucose positron emission tomography, and 68-Ga-DOTATATE positron emission tomography.
- Interpret imaging phenotype to predict the histologic type of adrenal disease—including: benign adenoma, pheochromocytoma, adrenocortical carcinoma, and adrenal metastases.
- Identify indications for computed tomography–guided adrenal fine-needle aspiration biopsy.
- Identify indications for adrenal venous sampling for aldosterone.
- Interpret results from adrenal venous sampling (with or without cosyntropin stimulation).
The following pituitary imaging studies and procedures may be included on the exam:

- Interpret typical imaging phenotypes on magnetic resonance imaging for primary pituitary tumors, pituitary cysts, pituitary hyperplasia, metastatic lesions to the pituitary, pituitary stalk lesions, and hypothalamic masses.
- Identify indications for inferior petrosal sinus sampling for corticotropin.
- Interpret results from inferior petrosal sinus sampling.

Learn more information on how exams are developed. A tutorial including examples of ABIM exam question format can be found at http://www.abim.org/certification/exam-information/endocrinology-diabetes-metabolism/exam-tutorial.aspx.

The blueprint can be expanded for additional detail as shown below. Each of the medical content categories is listed there, and below each major category are the content subsections and specific topics that may appear in the exam. Please note: actual exam content may vary.

<table>
<thead>
<tr>
<th>Adrenal Disorders</th>
<th>10% of Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Glucocorticoids</strong></td>
<td>4%</td>
</tr>
<tr>
<td>Cushing syndrome</td>
<td></td>
</tr>
<tr>
<td>Management of glucocorticoid therapy</td>
<td></td>
</tr>
<tr>
<td>Adrenal insufficiency</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
</tr>
<tr>
<td><strong>Mineralocorticoids</strong></td>
<td>2%</td>
</tr>
<tr>
<td>Hyperaldosteronism</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td></td>
</tr>
<tr>
<td>Secondary</td>
<td></td>
</tr>
<tr>
<td><strong>Adrenal androgens</strong></td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Congenital adrenal hyperplasia</td>
<td></td>
</tr>
<tr>
<td><strong>Adrenal incidentaloma</strong></td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Pheochromocytoma and paraganglioma</td>
<td></td>
</tr>
<tr>
<td><strong>Adrenal medulla</strong></td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Pheochromocytoma and paraganglioma</td>
<td></td>
</tr>
<tr>
<td>Neurofibromatosis type 1</td>
<td></td>
</tr>
<tr>
<td>von Hippel-Lindau syndrome</td>
<td></td>
</tr>
</tbody>
</table>
Multiple endocrine neoplasia (MEN) types 2A and 2B
Familial paraganglioma syndromes
Familial paraganglioma-pheochromocytoma syndromes

Adrenal cancer <2%

<table>
<thead>
<tr>
<th>Pituitary Disorders</th>
<th>10% of Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prolactin</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Hyperprolactinemia</td>
<td></td>
</tr>
<tr>
<td>Prolactinomas</td>
<td></td>
</tr>
<tr>
<td>Normoprolactinemic galactorrhea</td>
<td></td>
</tr>
<tr>
<td>Growth hormone</td>
<td>2%</td>
</tr>
<tr>
<td>Acromegaly</td>
<td></td>
</tr>
<tr>
<td>Treatment of growth hormone excess</td>
<td></td>
</tr>
<tr>
<td>Deficiency</td>
<td></td>
</tr>
<tr>
<td>Childhood onset</td>
<td></td>
</tr>
<tr>
<td>Adult onset</td>
<td></td>
</tr>
<tr>
<td>Treatment indications</td>
<td></td>
</tr>
<tr>
<td>Thyroid-stimulating hormone (TSH)</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>TSH-secreting adenoma</td>
<td></td>
</tr>
<tr>
<td>Hyperplasia secondary to longstanding primary hypothyroidism</td>
<td></td>
</tr>
<tr>
<td>TSH deficiency</td>
<td></td>
</tr>
<tr>
<td>Gonadotropins</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Gonadotroph pituitary tumors</td>
<td></td>
</tr>
<tr>
<td>Hypogonadotropic hypogonadism</td>
<td></td>
</tr>
<tr>
<td>Congenital</td>
<td></td>
</tr>
<tr>
<td>Acquired</td>
<td></td>
</tr>
<tr>
<td>Gonadotropins (LH and FSH)</td>
<td></td>
</tr>
<tr>
<td>Nonsecreting pituitary tumors</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Adrenocorticotropic hormone (ACTH)</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Cushing disease</td>
<td></td>
</tr>
<tr>
<td>ACTH deficiency</td>
<td></td>
</tr>
<tr>
<td>Hypopituitarism</td>
<td>&lt;2%</td>
</tr>
<tr>
<td>Empty sella syndrome</td>
<td>&lt;2%</td>
</tr>
</tbody>
</table>
Antidiuretic hormone (ADH)  
Argenin Vasopressin Deficiency/Argenin Vasopressin resistance  
Psychogenic polydipsia  

Craniopharyngioma  <2%  
Pituitary incidentaloma  <2%  

**Lipids, Obesity, and Nutrition**  
**12% of Exam**  

Hypercholesterolemia  <2%  
Primary disorders  
Secondary disorders  

Hypertriglyceridemia  <2%  

Elevated triglycerides and low-density lipoprotein cholesterol  2.5%  
Primary disorders  
Secondary disorders  

Hypolipidemia  <2%  
Primary disorders  
Hypobetalipoproteinemia (Low LDL-c)  
Secondary disorders  

Treatment of lipid disorders  2.5%  
Diet  
Drugs  
Lifestyle  
Indications for treatment  

Obesity and nutrition  3%  
Genetic disorders  
Secondary disorders  
Comorbidities  
Treatment of obesity  
Diet  
Drugs  
Lifestyle  
Surgery and endoscopic treatments  
Indications for treatment
General nutrition
- Energy requirements
- Vitamin deficiency
- Enteral nutrition

Strategies for counseling

Female Reproduction 7% of Exam

Amenorrhea <2%
- Primary
  - Androgen insensitivity syndrome
  - Turner syndrome
- Secondary
  - Primary ovarian insufficiency
  - Hypogonadotropic hypogonadism (hypothalamic)
  - Hyperprolactinemia
  - Pregnancy

Hyperandrogenism <2%
- Polycystic ovary syndrome
- Non-polycystic ovary syndromes
  - Nonclassic congenital adrenal hyperplasia
  - Pregnancy-associated
  - Anabolic steroids

Premenstrual syndrome and premenstrual dysphoric disorder <2%

Endocrine causes of infertility <2%
- Anovulation
- Age-associated infertility (diminished ovarian reserve)

Hormonal contraception <2%
- Combined estrogen–progestin contraceptives
- Progestin-only contraception

Perimenopause and menopause <2%
- Perimenopause
- Menopause
- Estrogen–progestin therapy

Sexual differentiation <2%
- Gender dysphoria
- Female-to-male transition management
<table>
<thead>
<tr>
<th>Male Reproduction</th>
<th>7% of Exam</th>
</tr>
</thead>
</table>

**Hypogonadism**  
2%
- Testosterone in hypogonadism
- Sex hormone binding globulin (SHBG)–dependent changes in testosterone
- Primary hypogonadism
- Secondary hypogonadism
- Genetic disorders of androgen production and action
- Testosterone therapy
- Gonadotropins

**Infertility**  
<2%
- Causes
  - Cryptorchidism
  - Klinefelter syndrome
  - Cystic fibrosis and cystic fibrosis gene mutations
  - Drug-induced infertility
  - Obstructive azoospermia
  - Idiopathic oligozoospermia
  - Y-chromosome microdeletions
- Treatment
  - Gonadotropins
  - Testicular sperm extraction
  - Intracytoplasmic sperm injection

**Gynecomastia**  
<2%
- Causes
  - Drug-induced gynecomastia
  - Testicular tumors (Sertoli and Leydig cell tumors)
  - Extratesticular tumors
  - Androgen deprivation therapy for prostate cancer
  - Hyperthyroidism
  - Pubertal gynecomastia
  - Idiopathic and other rare causes of gynecomastia
- Treatment
  - Tamoxifen
  - Aromatase inhibitors
  - Mammoplasty and mastectomy
Erectile dysfunction <2%

Causes
- Smoking
- Diabetes mellitus
- Hypertension
- Hyperlipidemia
- Peyronie disease
- Pelvic and prostate surgery
- Obesity

Diagnostic tests

Treatment
- Phosphodiesterase-5 and nonspecific phosphodiesterase inhibitors
- Prostaglandin E1, intraurethral and intracavernosal
- Alpha-adrenergic blockers
- Penis pump (penile vacuum device)
- Penile implant

Testosterone in aging men <2%

Abuse of androgens and anabolic steroids <2%

Sexual differentiation <2%
- Gender dysphoria
- Male-to-female transition management

Ejaculatory dysfunctions <2%
- Premature ejaculation

---

Diabetes Mellitus and Hypoglycemia 24% of Exam

Prediabetes 2%
- Impaired fasting glucose
- Impaired glucose tolerance

Screening
- Diabetes prevention

Monitoring glycemic control 2%
- Hemoglobin A1c
- Fructosamine and 1,5-anhydroglucitol
- Conventional glucose monitoring
- Ketone testing
- Continuous glucose monitoring (CGM)
Type 1 diabetes mellitus 3.5%
- Ketoacidosis
- Recent-onset type 1 diabetes
- Latent autoimmune diabetes of the adult (LADA)
- Hyperglycemia in type 1 diabetes
- Hypoglycemia due to insulin management
- Hypoglycemia unawareness
- Pathogenesis of type 1 diabetes

Type 2 diabetes mellitus 4.5%
- Hyperosmolar nonketotic state
- Hyperglycemia in type 2 diabetes
- Hypoglycemia due to oral agents and insulin management
- Pathogenesis of type 2 diabetes

Additional types of diabetes <2%
- Monogenic diabetes
- Ketosis-prone diabetes (KPD)
- New-onset diabetes after transplant (NODAT)
- [post-transplant diabetes mellitus (PTDM)]
- Pancreatic diabetes
- Cystic fibrosis–related diabetes
- Drug-induced diabetes

Recognition and management of associated conditions <2%
- Hypertension
- Dyslipidemia
- Obesity
- Sleep apnea
- Fatty liver
- Thyroid disease
- Celiac disease
- Polycystic ovary syndrome
- Eating disorders

Pregnancy <2%
- Gestational diabetes
- Pre-gestational diabetes
Diabetes mellitus complications

- Microvascular
  - Retinopathy
  - Nephropathy
  - Neuropathy
- Macular edema
- Mononeuropathies
- Macrovacular
  - Coronary artery disease
  - Heart failure
  - Peripheral vascular disease
- Diabetic foot
- Skin disorders
  - Lipohypertrophy
  - Lipoatrophy
  - Necrobiosis lipoidica
  - Acanthosis nigricans

Neuropsychiatric

Pancreas transplantation <2%

Hypoglycemia independent of diabetes mellitus 2%
- Insulinoma
- Noninsulinoma

Inpatient diabetes mellitus management <2%
- Intensive care unit
- Non-intensive care unit

Calcium and Bone Disorders 15% of Exam

Hypercalcemia 3%

- Parathyroid hormone–mediated
  - Primary hyperparathyroidism
  - Familial hypocalciuric hypercalcemia
  - Lithium-induced

- Non-parathyroid hormone–mediated
  - Hypercalcemia of malignancy
  - Milk-alkali syndrome
  - Sarcoidosis, tuberculosis, and other granulomatous diseases
Vitamin D intoxication
Post-rhabdomyolysis
Adynamic bone disease
Myeloma
Acute adrenal insufficiency
Vitamin A

**Hypocalcemia**
- Hypoparathyroidism
- Parathyroid hormone (PTH) resistance
- Hypomagnesemia
- Hyperphosphatemia
- Celiac disease
- Hypocalcemia (general)

2.5%

**Osteoporosis**
- In female
- In male
- Post-transplantation and glucocorticoid-induced
- Renal, hepatic, and gastrointestinal disease–related

4%

**Paget disease of bone**

<2%

**Hypovitaminosis D**
- Dietary deficiency
- Limited sun exposure
- Malabsorption
- Liver failure
- Renal insufficiency
- Vitamin D–dependent rickets types I and II
- Vitamin D–resistant rickets
- Drug-induced
- Bone disease
- Nonskeletal disorders

<2%

**Osteomalacia and rickets**
- Chronic hypophosphatemia
- Inhibitors of mineralization

<2%

**Renal osteodystrophy**

<2%

**Nephrolithiasis**

<2%

**Osteogenesis imperfecta and bone dysplasias**

<2%

**Fibrous dysplasia and other dysplastic syndromes**

<2%
Calciphylaxis <2%
Hypophosphatemia <2%
  Renal losses
  Gastrointestinal malabsorption
  Internal redistribution
Rare bone diseases <2%
  Hypophosphatasia
  Fibrodysplasia ossificans progressiva
  Osteopetrosis

<table>
<thead>
<tr>
<th>Thyroid Disorders</th>
<th>15% of Exam</th>
</tr>
</thead>
</table>

Hyperthyroidism 3.5%
  Graves disease
  Toxic adenoma and multinodular goiter
  Inappropriate thyroid-stimulating hormone (TSH) syndromes
    TSH-secreting tumor
    Resistance to thyroid hormone and thyroid hormone action
    Artifactual TSH “derangements”
  Thyrotoxicosis with low radioactive iodine uptake
    Thyroiditis
    Factitious, accidental, and iatrogenic thyrotoxicosis
    Iodine-induced
    Struma ovarii
  Complicated thyrotoxicosis
  Subclinical hyperthyroidism

Hypothyroidism 2.5%
  Primary
  Secondary
  Subclinical hypothyroidism
  Complicated hypothyroidism
  TSH resistance
  Therapy

Nontoxic solitary nodules and multinodular goiter 3%
  Fine-needle aspiration/cytology and genetic test interpretation
  Roles of ultrasonography and radionuclide scanning
Treatment
   Surgery
   Radioactive iodine
   Minimally invasive and noninvasive treatments

Thyroid cancer
   3.5%
   Well-differentiated epithelial cancers
   Hürthle cell cancer
   Anaplastic cancer
   Lymphoma
   Medullary cancer

Thyroid test abnormalities without thyroid disease
   <2%
   Euthyroid hypothyroxinemia
   Euthyroid hyperthyroxinemia
   Effect of drugs on thyroid function tests
   Euthyroid sick syndrome
   Thyroid hormone antibodies
   Antibody interferences with TSH measurement

Thyroid diseases in pregnancy
   <2%
   Hypothyroidism
   Hyperthyroidism
   Thyroid nodule and cancer

January 2024