



April 2025 Grand Rounds: Hindbrain Contributions to the Neurologically Distributed Control of Feeding, Body Weight, and the actions of GLP1R Obesity Medication

Credit for this course may not exceed 1 credit when both the live and enduring material activity format credits are combined.

Live Course Accreditation and Credit for Physicians

The Obesity Society is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Obesity Society designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACCME Activity ID 202923688

On-Demand Course Accreditation and Credit for Physicians

The Obesity Society is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Obesity Society designates this enduring material for a maximum of 1 *AMA PRA Category 1 Credit™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACCME Activity ID 202923689

Important Dates for On-Demand Course (Enduring Material)

Date of Release: May 1, 2025

Date of Termination: December 31, 2027

Learning Objectives

After participating in the webinar, attendees will learn that the neural control of food intake is anatomically distributed involving cells, circuits, and neurons from many levels of the brain and the periphery, rather than centered in one location as many textbooks state.

Attendees will also learn that hindbrain neurons are critical for the cessation of meals (satiety), in triggering the visceral malaise accompanying GLP-1 and other drug therapies, and projections from hindbrain neurons also contribute to motivated feeding behavior.

Learners will be able to apply this knowledge to identify opportunities for interventions around hunger and satiety in patients with obesity or those who are on medications for obesity.

Commercial Support

No commercial support was received for this activity.

Faculty and Planning Committee Disclosure Information

The Obesity Society adheres to the ACCME's Standards for Integrity and Independence in Accredited Continuing Education. Any individuals in a position to control the content of a CE activity, including faculty, planners, reviewers or others are required to disclose all relevant financial relationships with ineligible entities¹ (commercial interests). All relevant conflicts of interest have been mitigated prior to the commencement of the activity.

The Obesity Society asks all individuals involved in the development and presentation of Continuing Medical Education (CME) activities to disclose all relevant relationships with ineligible companies. This information is disclosed to CME activity participants. The Obesity Society has procedures to mitigate all conflicts of interest. In addition, faculty members are asked to disclose when any unapproved use of pharmaceuticals or devices is being discussed. In the list below, the nature of the relationship and company are followed by the industry of that company.

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Chairs:

At TOS activities, course/session chairs are responsible for timekeeping, introductions, housekeeping announcements, and presenting audience questions to speakers. TOS has determined that chairs do not have the ability to influence content. Accordingly, TOS does not collect, mitigate, or disclose relevant financial relationships of chairs (unless they have a dual role as a planner or speaker).

Panelists and Speakers:

Panelists are speakers who speak without presenting slides in a portion of a session or course. As speakers, they are required to disclose, and their relevant financial relationships are listed below. All speakers - with or without relevant financial relationships, with or without slides - are advised, and subsequently attest that “The content and/or presentation of the information with which I am involved will promote quality or improvements in health care and will not promote a specific proprietary business interest or a commercial interest (including ACCME-defined ineligible companies). Content for this activity, including any presentation of therapeutic options, will be balanced, evidence-based and commercially unbiased.”

Speaker Disclosures:

Harvey Grill, PhD, FTOS	Consultant relationship with Twist Bioscience (Pharmaceuticals) and Gila Pharmaceuticals (Pharmaceuticals). Independent Contractor relationship with Novo Nordisk (Pharmaceuticals).
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Planner Disclosures:

Jonathan Purnell, MD, FTOS	Consultation Relationship with Novo Nordisk (Pharmaceuticals), Boehringer Ingelheim (Pharmaceuticals), and Luciole (Pharmaceuticals).
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Reviewer Disclosures: No members of the TOS CME Oversight Committee, charged with the resolution of all relevant conflicts of interest, had any relevant financial relationships while serving on the committee.

Bibliography

1. Hayes MR, Bradley L, Grill HJ. Endogenous hindbrain glucagon-like peptide-1 receptor activation contributes to the control of food intake by mediating gastric satiation signaling. *Endocrinology*. 2009 Jun;150(6):2654-9. doi: 10.1210/en.2008-1479. Epub 2009 Mar 5. PMID: 19264875; PMCID: PMC2689794.
2. Grill HJ. Distributed neural control of energy balance: contributions from hindbrain and hypothalamus. *Obesity (Silver Spring)* 14: 216S–221S, 2006. doi: 10.1038/oby.2006.312.
3. Grill HJ, Hayes MR. Hindbrain neurons as an essential hub in the neuroanatomically distributed control of energy balance. *Cell Metab* 16: 296–309, 2012

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This document was last updated January 25, 2025.