Academy of Nutrition and Dietetics

Life on Obesity Medications:

Taste Changes, Food Noise and the Behavioral Experience of Eating

Robyn Pashby, PhD, FTOS
Dr Marie Spreckley, PhD, MSc, MBus, RNutr

1

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2

Webinar Archives

2025 Webinar Series

The Impact of Obesity Medications on Chronic Disease Management: From Research to Practice
Considerations for Body Composition, Physical Activity and Nutrition with Use of Obesity Medications
Advance and Enhance the Unique Role of the RDN in Today's and Tomorrow's Obesity Care Continuum

2024 Webinar Series

Pathophysiology of Obesity and Treatment Using New Anti-Obesity Medications
The Role of the RDN to Optimize Short- and Long-term Use of Anti-Obesity Medications
Anti-Obesity Medications: An Interdisciplinary Panel Discusses Cases

www.eatrightpro.org/obesity-medication

3

Today's Speakers

Robyn Pashby, PhD, FTOS

Marie Spreckley, PhD, RNutr (Public Health), MSc, MBus, BA

4

Learning Objectives

After this presentation, attendees will be able to:

- Describe emerging evidence on changes in taste perception, appetite regulation and food reward associated with GLP-1–based therapies. (MS)
- Differentiate between adaptive appetite suppression and clinically meaningful anhedonia or distress related to food. (RP)
- Apply counseling strategies to help patients navigate shifts in food noise, flavor preferences and eating enjoyment. (RP)
- Collaborate effectively with behavioral health professionals when neurobehavioral changes affect quality of life. (MS and RP)

6

6

Obesity medications alter more than appetite.

- Patients report changes in taste preferences, reduced reward from food, shifts in food noise, and, in some cases, diminished enjoyment from eating.
- These effects may support weight reduction, but they also reach identity, social connection, and long-standing relationships with food.
- This session equips RDNs with strategies to help patients adapt without losing enjoyment, autonomy, or socio-cultural connection *AND* to know when and how to refer for additional support.

7

7

1 Case Examples

Patient- Lillian

Age 53

Pre-Treatment BMI 30

Type 2 DM diagnosis

SAHM of 3 kids, ages 12, 14 and 17

Began GLP-1 medication under guidance from endocrinologist

Lost 18% TBW over 11 months

Occasional GI upset but mostly no adverse S/E

A Clinical Success?

No abnormal labs

No concerning vitals

No eating behaviors of concern

Getting plenty of exercise

Eating adequate protein and fiber, hydrating well

Then, she says….

“Food is more like fuel now. I sometimes miss looking forward to going out to dinner but at least I am not constantly thinking about food and worried about overeating.”

10

Patient- Jenny

Age 48

Pre-Treatment BMI 36

Full time job, 1 child age 12

Began GLP-1 medication under guidance from PCP for weight management

Lost 15% TBW over 24 months

No adverse S/E other than a headache occasionally on the day of the injection

A Clinical Success?

No abnormal labs

No concerning vitals

No eating behaviors of concern

Eating adequate protein and fiber, hydrating well

Getting plenty of exercise

Then, she says….

11

"I used to enjoy cooking for my family every night. Now I just...don't. Nothing tastes interesting, and honestly, I just don't care that much about cooking or food in general. I heat something up, we eat, that's it."

12

2 Changes beyond taste preferences

13

Emotional Experience of Eating

Food Noise

The mental chatter around what to eat, when, and how much quiets down or disappears, for better or worse

Anticipation

The looking-forward-to-it feeling that used to precede eating or having a meal: planning it, shopping for food, finding recipes, etc. may diminish

Reward

Meals or eating events that once felt like a highlight of the day start to register as neutral or non-events

14

Loss of food-related identities

The cook

The role of preparing and offering food to loved ones is disrupted when the pleasure or drive behind it fades.

The host

Gathering around food is a cultural and family ritual, not just a meal. Losing the joy in hosting can cause grief.

The guest

The ability to receive hospitality; being fed by someone else, at a holiday table or a friend's dinner, with enjoyment.

15

Same result, divergent lived experiences

Relief

Freedom from preoccupation about food/eating

Quieter food noise offers increased mental space

Often experienced as a relief:

"Is this what 'normal' feels like?"

Loss

Diminished pleasure

Eating experienced as flattened, mechanical, or disconnected from previous enjoyment

Can be experienced as grief, loss, anhedonia

Jensen SD, Gualano B, Andreassen P, Scagliusi FB, SturtzSreetharan C, Brewis A. Beyond the prescription: Global observations on the social implications of GLP-1 receptor agonists for weight loss. *PLOS Glob Public Health*. 2025;5(12):e0005516. Published 2025 Dec 26. doi:10.1371/journal.pgph.0005516; Nadolsky, Spencer et al. "Resolution of anhedonia-like symptoms in patients treated for obesity with tirzepatide: A three-case series." *Obesity Pillars* 19 (2026):n. pag.

16

3 Clinical Differentiation

17

How to tell the difference?

Adaptive appetite suppression

Clinically meaningful anhedonia

18

Definitions/descriptions

Adaptive Suppression

GLP-1 users often report being less influenced by emotional or external cues, more responsive to internal hunger and fullness signals, and a tendency to slower eating rates and greater portion control

Anhedonia

Changes for motivation to engage in everyday activities; the loss of pleasure in previously rewarding experiences; a reduction in “wanting” of a previously appealing item or activity not due to organic or biological causes

Nadolsky, Spencer et al. “Resolution of anhedonia-like symptoms in patients treated for obesity with tirzepatide: A three-case series.” *Obesity Pillars* 19 (2026): Cheney, C.; Hunter, K.; Klein, M. Impact of GLP-1 Receptor Agonists on Perceived Eating Behaviors in Response to Stimuli. *Diabetes Metab. Syndr. Obes.* **2025**, *18*, 1411–1418.

19

19

How to know the difference? The DBI approach

Depth	Breadth	Impact
How pronounced is the change?	*Is it contained to food, or does it extend further?*	*What is it actually costing the patient?*
A mild dulling of enjoyment is different than complete disengagement from food as a source of pleasure. Has something been turned down, or turned off?	Flattened affect that shows up only around food is a different picture than flattened affect that shows up everywhere. Loss of interest in favorite sports team? Not interested in reading or music?	Distress, withdrawal from people or routines, significant disruption to identity or role (the cook, the host, the guest).

20

20

Patient- Lillian

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"Food is more like fuel now. I sometimes miss looking forward to going out to dinner but at least I am not constantly thinking about food and worried about overeating."

Further assessment (DBI):

***D:* I was never a "foodie," so it isn't a big deal to me.**

***B:* I actually suggested a group hike last weekend! I don't know, guess I've had more headspace for other stuff and I feel so much healthier.**

***I:* I am so much happier now that I can take my kid out for ice cream and not worry about it.**

21

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Further assessment (DBI):

***D:* I am Latina and food is important to my family. My mom made dinner the other night and it's just not there anymore. It's not that I didn't like it. It was just meh.**

***B:* I used to love my garden but I haven't touched it in months. Nothing really pulls me in the way it used to.**

***I:* My book club meets every month, rain or shine and I haven't missed one in 3 years. I skipped the last one. I told them I was tired, but honestly, I just didn't want to go and deal with all of the food stuff.**

22

4 Tools for clinical practice

23

What to do- Counseling strategies for adaptive suppression

❑ **Screen proactively:**

Build food noise, taste changes, and enjoyment questions into routine follow-up

❑ **Reframe flexibility:**
Position the person's changed sensory preferences as something to work with, not a deficit to correct

❑ **Rebuild meaning:**
Focus conversations on the meaning of eating events, not only nutrient adequacy

❑ **Support experimentation:**
As flavor, texture, and preparation preferences shift, treat this as an active discovery process

❑ **Encourage connection explicitly in the treatment plan:**
Name and protect social eating occasions and cultural food practices as care-plan items, not afterthoughts (e.g., If a person hosts a weekly family dinner, that's a documented goal, not incidental)

24

24

What to do- Counseling strategies for anhedonia

❑ **Validate first:**

Before jumping in to offer solutions or referrals, simply validate the experience

❑ **Continue nutrition work:**
Keep the food and nutrition conversation going, gently, in parallel, to ensure nutritional adequacy.

❑ **Resist the urge to reassure:**
We don't know much about how the anhedonia process on GLP-1s works yet. Some data suggest reducing dose can help, but everyone has their own experience. It is safer to simply validate, support and refer.

❑ **Revisit your own assumptions about what "doing well" looks like:**
A person who follows the plan, is polite, and hits their weight goals can still be the one who needs this conversation most

❑ **Know what's not yours to carry**
An appointment with a person experiencing anhedonia can be challenging; it is easy to feel helpless or insecure about how to help

25

25

5 Referrals and Support

26

When and how to refer?

27

When to refer/reach out for more support

- ✓ Pronounced change in food-related enjoyment and pleasure
- ✓ Feeling spreads across several food and non-food related experiences
- ✓ Moderate to serious functional impact
- ✓ Experience worsens or persists over time
- ✓ Patient reports concern, not just relief

28

28

What to do- Referral strategies

❑ **Openly discuss interdisciplinary approach:**

Frame behavioral health as part of a team approach early and often, before things can escalate

❑ **Name it in plain language:**
You do not have to give a diagnosis, just document what you observed; you can use the DBI framework to help (what's changed, how far it reaches, what is the impact)

❑ **Make it a warm handoff, not a cold referral:**
Whenever possible, a direct introduction (not just a website) increases follow-through

❑ **Close the loop:**
Ask to be looped back in, even briefly. You're well-positioned to notice if and when things shift again

29

29

RDNs play an important role:

Weight change and psychological change happen together and you're often the only one positioned to see both.

30

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ACADEMY OF NUTRITION AND DIETETICS

Life on Obesity Medications: Taste Changes, Food Noise and the Behavioral Experience of Eating

Dr Marie Spreckley, PhD, MSc, MBus, RNutr · University of Cambridge

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31

Disclosures

Marie Spreckley, PhD, RNutr (Public Health), MSc, MBus, BA

No financial relationships with pharmaceutical or other commercial organisations and have received no industry funding for the research presented.

32

Today's Roadmap

PART 1

The Science

Taste, appetite regulation, reward pathways and food noise: what's actually happening, mechanistically

PART 2

Adaptive or Concerning?

The clinical distinction that matters, plus a live case discussion

PART 3

Supporting Patients

Counseling scripts, behavioral health collaboration, and a second case discussion

DISCUSSION

Q&A

Open floor: bring your own clinical questions and scenarios

33

More Than an Appetite Suppressant

Obesity medications alter more than appetite.

- Many patients report changes in taste preferences, reduced reward from food, shifts in food noise, and, in some cases, diminished enjoyment of eating.

- These effects may support weight reduction. But they also touch identity, social connection and long-standing relationships with food.

34

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The Science: Taste, Reward and Food Noise

35

What's Happening to Taste?

THE SCIENCE

- **Some patients describe:** a metallic taste, altered sweetness, or previously craved foods tasting different or becoming less appealing.
- **What might contribute:** Preclinical studies have identified GLP-1 receptors in taste-related pathways. A small clinical study of semaglutide also found changes in taste sensitivity, tongue gene expression and neural responses to sweet taste. Gastrointestinal symptoms, delayed gastric emptying and changes in smell may additionally influence the experience of food.
- **The evidence is still emerging:** Direct clinical evidence remains limited, and reported experiences vary considerably between individuals.

In practice: Acknowledge and explore taste changes rather than assuming a single cause. Consider gastrointestinal symptoms, oral health, other medicines and whether the changes are compromising dietary intake or quality of life.

36

36

Beyond Taste: Appetite Regulation Itself

THE SCIENCE

- **Delayed gastric emptying:** GLP-1-based therapies can slow gastric emptying, particularly early in treatment and during dose escalation. Patients may feel full sooner or for longer, although the magnitude and persistence of this effect vary.
- **Central appetite pathways:** Preclinical evidence indicates that GLP-1 receptor signalling engages hypothalamic and other neural pathways involved in hunger, satiation and energy balance.
- **GI symptoms may contribute:** Nausea, early satiation and reflux can independently reduce interest in food or create food aversion. Several mechanisms may therefore contribute to the same reported experience.

Clinically: Ask what appears to be driving the change for the individual patient. This helps determine whether to prioritise meal pattern, symptom management, dietary adequacy or enjoyment of food.

37

37

Food Reward, Not Just Appetite

THE SCIENCE

- GLP-1 signalling influences neural circuits involved in food motivation and reward, as well as pathways regulating hunger and satiation.
- Human neuroimaging studies suggest that GLP-1-based therapies can alter responses to highly palatable food cues, although the clinical evidence remains limited and findings vary across studies.
- A 2026 Nature study in mice identified a central-amygdala-to-reward circuit through which GLP-1 receptor agonists reduced reward-driven consumption of palatable food. The findings have potential implications for binge eating and substance-use disorders, but require confirmation in humans.

Key distinction: Reduced craving or motivation for highly palatable food is not necessarily the same as losing the capacity to experience pleasure more broadly. That distinction is central to learning objective two.

38

38

Not Everyone Experiences This the Same Way

THE SCIENCE

Dose & titration speed

Rapid dose escalation can increase gastrointestinal adverse effects, which may indirectly affect eating experience and food enjoyment.

GI symptom burden

Nausea, reflux, constipation or early satiation may produce food avoidance or aversion, even when taste perception itself has not changed.

Baseline relationship with food

A history of repeated dieting, restriction or disordered eating may shape how appetite and reward changes are experienced and interpreted.

Individual circumstances

Nutritional vulnerability, comorbidities, culture, social context and treatment expectations may all influence what a change means for a particular patient.

These domains help identify which conversation and form of support should come first.

39

39

Food Noise, Quantified

THE SCIENCE

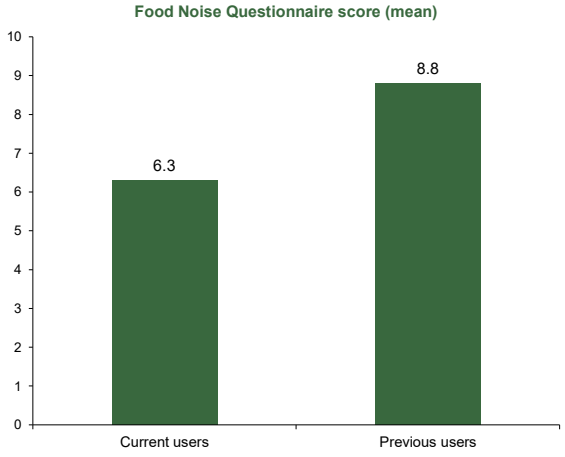
AMPLIFY survey

n = 509 UK adults, current and previous users of GLP-1 or dual GIP-GLP-1 therapy

Current users reported substantially lower food-related cognitive burden on the Food Noise Questionnaire than previous users.

d = -0.49 (95% CI -0.68 to -0.32), p < 0.001

Current treatment was associated with a lower food-related cognitive burden, although this cross-sectional comparison cannot establish causality.



40

40

“It literally feels like you have space inside your own mind to actually think of other things because you're not consumed with thoughts of food.”

- Female, 55, AMPLIFY focus group participant

41

Live Poll

LIVE POLL

In your practice, how often have patients spontaneously mentioned reduced “food noise” without you asking about it directly?

Never | **Rarely** | **Sometimes** | **Often**

Drop your answer in the chat: we'll take a moment to see what's coming through.

42

02 Adaptive Suppression or Something More?

43

Two Very Different Experiences

ADAPTIVE OR CONCERNING?

Adaptive Appetite Suppression

- Reduced hunger and fewer intrusive food thoughts
- Stops eating comfortably full, without distress
- Continued enjoyment of favorite foods, in smaller amounts
- Relief described as freeing, not restrictive
- General mood and social functioning unaffected

Clinically Meaningful Anhedonia / Distress

- Loss of pleasure extending beyond food, into other domains
- Food aversion causing inadequate intake
- Marked low mood or social withdrawal
- Grief or distress about losing eating as a source of joy

Warrants further assessment and, where appropriate, referral to a behavioural health professional

44

Case 1: Sarah

ADAPTIVE OR CONCERNING? · CASE DISCUSSION

(Illustrative case, not a real patient)

Sarah, 34, six weeks into tirzepatide

Reports significantly reduced appetite and less enjoyment of favorite meals. Occasionally skips meals because she's just “not that interested” in food. Says her mood is good, she's still seeing friends and going out for dinner: she just eats less when she does.

Discussion

1. Is this adaptive suppression or something more concerning? What's your reasoning?
2. What would you ask Sarah next, specifically?
3. What would change your assessment if she said she'd stopped seeing friends?

45

Benefit and Burden, Together

ADAPTIVE OR CONCERNING?

“It changed everything in my life... It was like a miracle drug for me.”

- Female, 35, AMPLIFY focus group participant

“I feel there is a stigma about being on the medication... I'm having to really pick and choose who I tell.”

- Female, 55, AMPLIFY focus group participant

Treatment experiences are rarely uniformly positive or negative. This coexistence of relief and burden is normal: not a sign of ambivalence that needs to be resolved.

46

Stigma and the Disclosure Decision

ADAPTIVE OR CONCERNING?

- Public narratives portraying these medications as “taking the easy way out” or “cheating” can create a real disclosure burden. Some patients selectively disclose their treatment, perhaps telling close family but not colleagues or avoiding the subject at social meals where reduced intake might attract comment.
- This is a rational coping strategy, not secrecy to be corrected. Your role isn't to encourage disclosure: it's to make sure the patient has a nonjudgmental space regardless of what they've told anyone else.

Try asking:

“How are you handling questions from people about how you're eating or how much weight you've lost?”

47

Food Is Never Just Food

ADAPTIVE OR CONCERNING?

- Eating carries identity, culture and social connection: family meals, cultural food traditions, celebration, comfort.

- When appetite and reward shift, patients may grieve a changed relationship with food even while losing weight successfully.

In practice:

Ask explicitly about these losses: what mealtimes with family feel like now, what cultural dishes no longer appeal, whether social eating still feels comfortable, rather than only tracking intake and weight.

48

03 Supporting Patients Through the Transition

49

Practical Counseling Strategies

SUPPORTING PATIENTS

1. **Acknowledge**
   Changes in appetite, food-related thoughts or taste may occur. Explore their nature, severity and effect on dietary intake and quality of life.

2. **Protect enjoyment**
   encourage mindful, unhurried eating to preserve pleasure despite smaller portions.

3. **Ask beyond intake**
   explicitly ask about cultural and social eating losses, not just nutrients and calories.

4. **Revisit regularly**
   food preferences can keep shifting over the treatment course: reassess, don't assume.

50

Language You Can Use Today

SUPPORTING PATIENTS

1. “Some people find that food tastes different on this medication: how has that been for you?”

2. “Some people find they need to be more intentional about protein and fluids even when they're not that hungry: what's that been like for you?”

3. “I want to check in: are you still finding some enjoyment in eating, even if it's less than before?”

4. “If you ever stop this medication, we'll want to plan for that together: it's a transition, not just a stopping point.”

51

When to Bring in Behavioral Health

SUPPORTING PATIENTS

Red flags: persistent low mood or anhedonia extending beyond food; significant food avoidance or restrictive intake; disordered eating patterns emerging or worsening; distress about lost eating pleasure affecting quality of life.

Screening tools for primary / non-specialist care: SCOFF and the Eating Disorder Screen for Primary Care are brief screening instruments. A positive screen is not diagnostic, but indicates the need for a fuller clinical assessment and, where appropriate, specialist referral.

The preferred model: coordinated, ongoing care between the RDN, prescriber and behavioural health professionals when clinically indicated.

52

Case 2: Michael

SUPPORTING PATIENTS · CASE DISCUSSION

(Illustrative case, not a real patient)

Michael, 58, stopped semaglutide 3 weeks ago

His insurance coverage changed and he couldn't afford to continue. He reports rapidly returning hunger and intrusive food thoughts, and tells you he feels “like he's failed”: he'd expected the changes in his eating to stick.

Discussion

1. What would you say to Michael about “failure” framing?
2. Who else might you loop in, and how soon?
3. What would you have done differently if you'd known his coverage was at risk in advance?

53

What Happens at Discontinuation

SUPPORTING PATIENTS

Many AMPLIFY participants described a rapid return of appetite, food noise and intrusive food-related thoughts after stopping treatment.

> *"Three weeks later, I'd started to put back half a stone, then a stone, and then really struggled since: not to eat because I was starving all the time."*
>
> - Male, 69, AMPLIFY focus group participant

Discuss the possibility of these changes and plan for treatment transitions before discontinuation wherever possible.

Key Takeaways

1. Changes in appetite, food reward and sometimes taste are reported, but their nature and clinical impact vary.
2. Careful assessment helps distinguish adaptive appetite suppression from broader anhedonia, nutritional risk or clinically meaningful distress.
3. Lower food-related cognitive burden is measurable during treatment, while appetite and food-related thoughts may return following discontinuation.
4. Supporting patients means addressing dietary adequacy, identity and social connection to food, not simply intake and weight.

Discussion & Q&A

OVER TO YOU

1. How do you currently screen for food-related distress in your own practice?
2. What's been your experience discussing taste changes with patients: has it come up unprompted?
3. Where do you see the biggest gap between today's guidance and what you're actually able to do day-to-day?

56

Thank You

Questions & Discussion

57

58