The Role of the RDN in Optimizing the Short-and Long-term Use of Anti-Obesity Medications

Mary Lou Perry, MS, RDN, CDCES

Beth Czerwony, MS, RD, CSOWM, LD

Jeanne Blankenship, MS, RDN

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Welcome

Today's Moderators

Laura Russell, MA, RDN, LD, CDCES
Chair
Diabetes DPG

Melissa M. Page, MS, RDN, CSOWM, LDN
Chair
Weight Management DPG

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Three-Part Webinar Series

New Anti-Obesity Medications and the Critical Role of Nutrition and the RDN

Obesity as a Chronic Disease 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

All webinars are/will be archived for on-demand viewing at eatrightpro.org/aom
These webinars do not provide CPE credit.

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This webinar series is made possible through a sponsorship from Eli Lilly and is supported by an educational grant provided by Novo Nordisk Inc. to the Academy Foundation.

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Planning Committee

Julia Axelbaum, RD, CSOWM, Weight Management DPG representative

Linda Gigliotti, MS, RDN, CDCES, FAND, Academy Foundation Board member

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Affiliations and Disclosures

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UVA Health System – Heart and Vascular Center
No relevant financial disclosures

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Clinical Registered Dietitian, Cleveland Clinic Center for Human Nutrition
No relevant financial disclosures

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Learning Objectives

- Review the role of incretin-based therapies in weight management
- Describe the four critical times to refer to the RDN in the use of incretin-based therapies
- Outline the role of the RDN in shared decision making, start of therapy, in special circumstances and long-term support and treatment
- Discuss current best practices to minimize loss of lean body mass, prevent micronutrient deficiencies, and maintain optimal nutrition status
- Identify the role of the RDN as a supportive counselor in short and long-term obesity care

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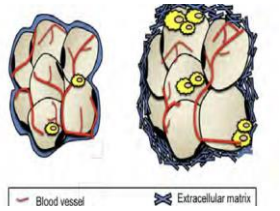
Recap from Webinar #1

Discuss the biology of weight regulation with your patients!

7 FDA approved weight management meds with different efficacy, costs and indications

Unhealthy adipose is driver for cardiovascular disease

Weight management is a chronic disease requiring long term treatment



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We need you! There is no time that we've ever needed our registered dietitian more than right now to help with the management of these patients who are going to be taking these medications for health improvement. We need you, please!

Donna Ryan, MD
Professor Emerita, Pennington Biomedical Research Center

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Language and How We Talk about Weight

- Starts with asking permission
- Person-centered
- Empathetic
- Unbiased—free of judgement, shame, and guilt
- Focused on ***health*** rather than ***weight***
- Performed using appropriate terminology and people-first language

Focus on shared decision-making and providing practical options to assist with weight management.

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Language Also Applies to Medications

Replace the words: 2nd generation anti-obesity medications with:

- Incretin-based therapies *or*
- Nutrient stimulated hormone-based therapies (NuSH)

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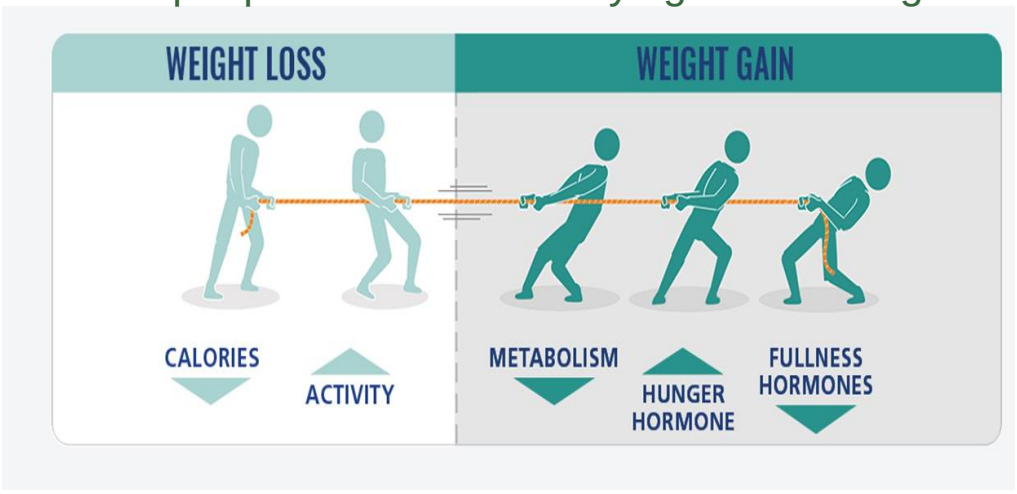
This is what people feel like when trying to lose weight



https://www.rethinkobesity.com/metabolic-adaptation.html

Bray GA, Kim KK, Wilding JPH. Obesity: a chronic relapsing progressive disease.

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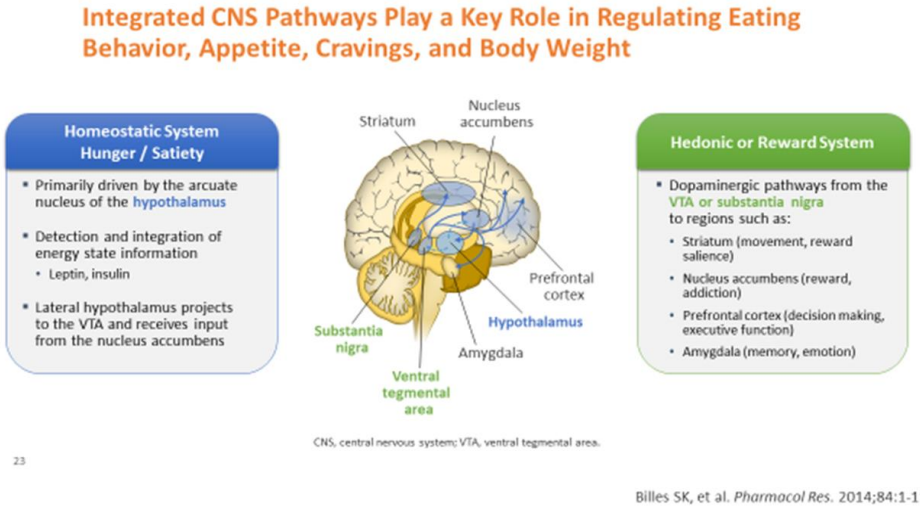
What's Happening in the Brain?



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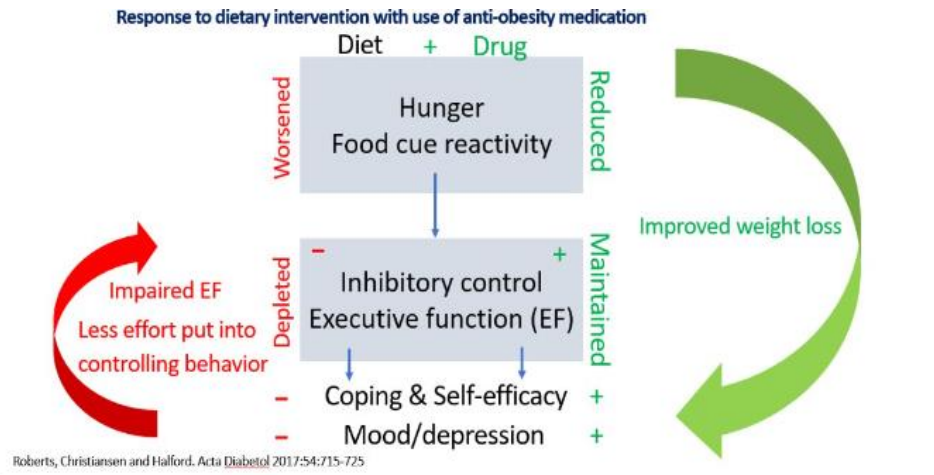
Effects of **incretin-based therapies -** on multiple processes of appetite regulation (behavior and cognition)



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Four Critical Times for RDN Referral Using Incretin-Based Therapies

1. Shared decision making *(even before decision is made)*
2. At start of therapy including assessment and education
3. Special circumstances (GI, rapid weight loss, nutrient adequacy)
4. Ongoing assessment, education, support, lifestyle focus

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Four Critical Times for RDN Referral Using Incretin-Based Therapies

1. Shared decision making
(even before decision is made)

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Shared Decision-Making is:

"the process of **interacting** with patients who **wish** to be involved in arriving at an **informed**, **values-based** choice among two or more medically reasonable alternatives"[1]

Informed
- There is a choice
- The options
- The benefits and harms of the options

Values-Based
- What's important to the patient

Information
The Clinician ⟷ The Patient

[1]A.M. O'Connor et al, "Modifying Unwarranted Variations In Health Care: Shared Decision Making Using Patient Decision Aids" *Health Affairs*, 7 October, 2004

https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2816062

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Decision-Making Tool


What Should I Know About Injectable Weight-Loss Medications?

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Case Study: Client presents with interest in Incretin-Based Therapy

- **PMH**: 52 y/o female with T2D x 1 year & HTN
- **Meds**: lisinopril 10 mg, Crestor 10 mg, metformin 2000 mg
- **BP**: 140/84
- **Height**: 5'5"
- **Weight:** 240 lb.
- **BMI:** 39
- **A1c**: 6.7%
- TSH: 1.8 mUt/mL

"I've been able to master things in my life, but for whatever reason, I can't control this, and I feel like such a failure, why can't I do this, what's wrong with me?"

"It feels like a crutch if I ask for this medication, but understanding my appetite regulation helps. What do you think I should do? Just stay on metformin and join a gym?"

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Four Critical Times for RDN Referral Using Incretin-Based Therapies

1. Shared decision making *(even before decision is made)*

2. At start of therapy including assessment and education

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Roles of the RDN in Medication Initiation and Ongoing Use

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What Should the Nutrition Assessment Include?

Physical Activity Assessment- determine level of physical activity and identify sedentary behaviors or any issues with mobility/ functional status

Behavioral Assessment: Screen for disordered eating patterns, eating disorders, food insecurity issues, or other psychosocial concerns- lack of family support, high family stressors, unemployment, sleep issues, or untreated mental health conditions

Sleep and bedtime routines

Overall diet intake and assess for quality of foods and timing

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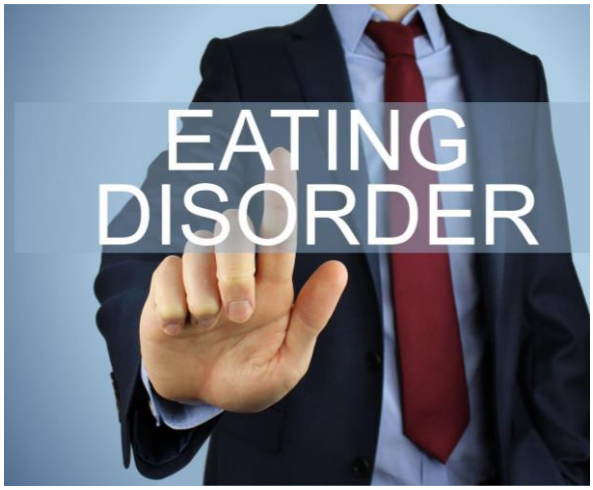
Screening Tools for Eating Disorders/Disordered Eating

- SCOFF (answer of "yes" to 2 or more questions indicates need for more comprehensive assessment
- Eating Disorders Examination Questionnaire (EDE-Q)- completed with online scoring
- Eating Disorder Screen for Primary Care (ESP)- 5 questions that may trigger abnormal response
- "WATCH"- used in post op bariatric patients



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Therapy Initiation: Education

- Medication Administration
  - Dosing and dose escalation/storage/disposal
  - Teaching injection technique
- Medication Adherence
  - Side effects and strategies
- Nutrition
  - Hydration
  - Nutrition quality

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Administration of Injectable Incretin-Based Therapy

Start low and escalate
Storage and Disposal
Injection Technique
Missed Dosing

Within RDN Scope of Practice

Semaglutide: Wegovy

Tirzepatide: Zepbound

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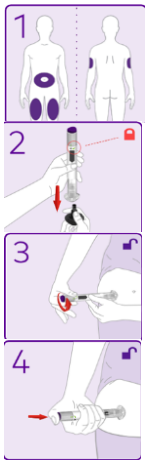
Injection Technique



Choose injection Site

Pull of needle cap

Place base flat on skin

Press & hold button for 10 seconds; 2nd click

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Nutrition Considerations when Initiating Medication

- Food portions:
  - Eat smaller portions of food than usual. Consider using a smaller plate, bowl, etc.
  - Eat more slowly.
  - Stop eating at the first sign of fullness.
- Meal timing:
  - Eat regularly, don't skip meals.
  - Don't rely on hunger as a signal to eat.
- Nutrition quality:
  - Choose and eat healthy foods.
  - Eat some protein with each meal. Consider eating protein first.
  - Limit high fat, greasy foods as they can take longer to digest, cause more indigestion.
  - Limit spicy foods, choose blander foods more easily tolerated.

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Medication Adherence: Strategies to Manage Side Effects

GI side effects most common with delayed gastric emptying

- Decrease nausea, vomiting
  - On injection day, have largest meal prior to injection, followed by low-fat meals for remainder of day
  - Eat small, frequent, low-fat meals
  - Consume adequate fluid, minimize caffeine and carbonated beverages
  - Rotate injection sites (different side of belly, upper thigh, upper arm)
- Constipation
  - Assure adequate fiber intake
  - Eat a variety of vegetables, fruits, whole grains to assure adequate fiber intake
  - Use powdered fiber supplement if early satiety presents
  - Maintain hydration
  - Encourage physical activity

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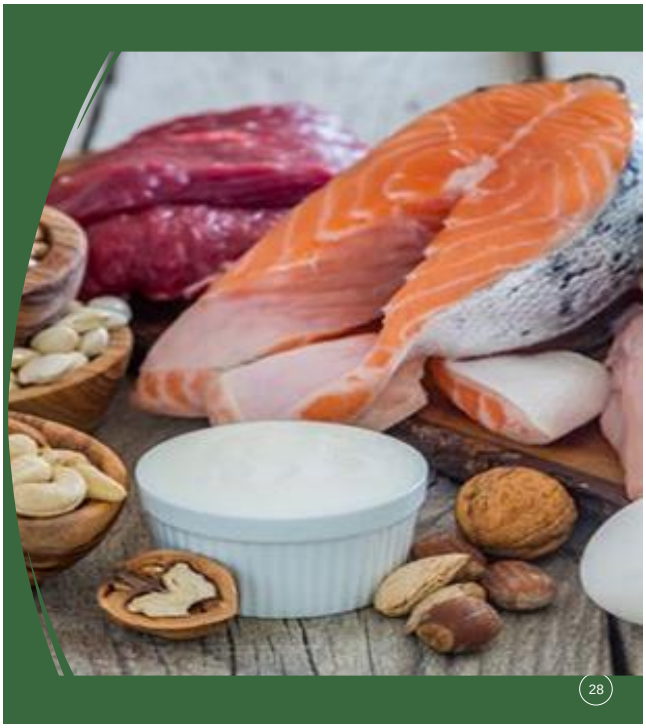
Protein Needs

- Requirements
  - RDA 0.8 g.kg current weight
  - ASMBS guidelines 60 g minimum with goal 1.2 g/kg ideal wt. of BMI 24
  - Some literature suggests 1.25-1.5 x RDA
  - Others question if additional protein has beneficial impact on muscle mass
- Distribute protein throughout the day due to refractory period of muscle synthesis versus majority of protein consumed at one meal
- Appropriate use of protein shakes/bars/powders vs. solid protein



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Other Nutrition Considerations

Fluid recommendations

- Literature unclear for GLP-1- hydration may prevent nausea and/or constipation symptoms
- ASMBS guidelines at least 64 oz calorie-free, carbonation-free, caffeine-free
- Literature unclear if hydration will prevent symptoms of nausea or constipation

Fiber recommendations

- RDA 25-38 grams/day (women vs men) or 14 grams/1000 calories consumed

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Physical Activity Recommendations

- AACE/AHA/Academy: 150 min aerobic exercise/week.
- Literature (aerobic vs resistance training) >300 minutes of moderate intensity decreased thigh muscle; brisk walking for ~1 hour 6/week.
- Don't assume a person hasn't exercised in the past but may have had negative experiences.
- Assess comfort level both mentally and physically during exercise, make modifications as needed.
- Start with low intensity chair exercises or encourage water exercises and progress from there incorporating resistance training/light weights to preserve lean body mass.

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Case study: 8 weeks on Mounjaro follow up

- PMH: 52 y/o female with T2D x 1 year & HTN
- **Patient not taking metformin due to nausea**
- Initial: BP: 140 Weight 240 lb.
- **Update: Wt.: 205 lb. (35 lbs.) (8.5%), BP: 98/64**

Notes:

- Getting "dizzy" when standing, sleeping more
- Not being able to exercise due to extreme fatigue.
- Having a hard time opening jars, but is so happy that she is finally losing weight and is getting compliments from friends and family**.**

Nutrition Focused Physical Exam is performed

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Four Critical Times for RDN Referral Using Incretin-Based Therapies

1. Shared decision making *(even before decision is made)*
2. At start of therapy including assessment and education
3. Special circumstances (GI, rapid weight loss, nutrient adequacy)

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What constitutes “rapid weight loss?”

- Anticipated rate of weight loss varies on how a person responds to medication and if a dosage increase is warranted.

Semaglutide @ 2.4 mg (STEP) 4 Trial		**Tirzepatide(@ 72 weeks) SURMOUNT Trial**	
1 month	**5% TWL**	5 mg	15% TWL
3 months	**8% TWL**	10 mg	**19.5% WL**
20 weeks	10% TWL	15 mg	**20.9%**
68 weeks	18% TWL		

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Nutrition Focused Physical Exam (NFPE)

- Special considerations include rapid weight loss (clinical judgment?)
- Difficult to determine in patients with obesity possible use of CT scans and/or ultrasounds to assess small changes
- Muscle/fat loss often easier to determine in face/upper extremities (*Face, clavicles, pectorals, acromial process*) verses “Ozempic face/hands/butt”
- Best seen if patient is able to sit up straight- skin will sag (difficult to accomplish in virtual setting)
- Patient will lose muscle before fat
- Edema and fat will mask muscle loss

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Nutrition Focused Physical Exam (NFPE)

- Fat (orbital, triceps, ribcage)
- Muscle (temples, shoulders, clavicles, scapula, thigh, calves)
- Fluid (extremities / dependent areas)
- Micronutrient: Skin, Nails, Hair, Head/Neck, Oral cavity, Eyes, Nose/Face

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Common insufficiencies seen with rapid weight loss

Often seen within first 3-4 months of rapid weight loss

- Most commonly seen with protein and zinc deficiencies.

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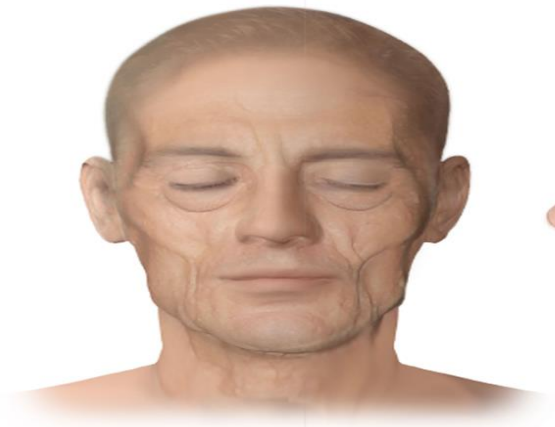
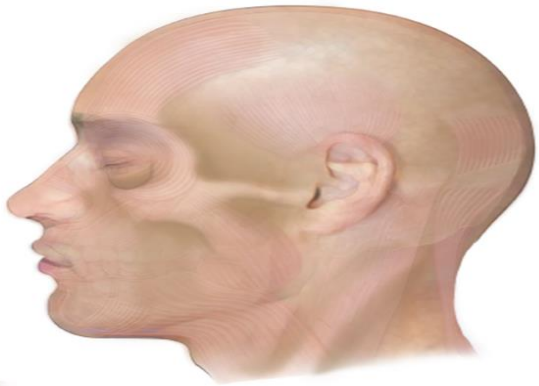
Common insufficiencies seen with rapid weight loss

Orbital Region: Orbital Fat Pads
(fat exam area)



Temple Region: Temporalis Muscle
(muscle exam area)



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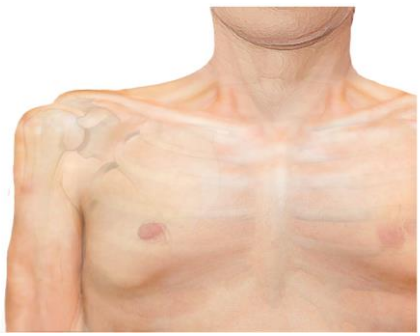
Common insufficiencies

Clavicle Bone Region
(Pectoralis Major, Deltoid, Trapezius)



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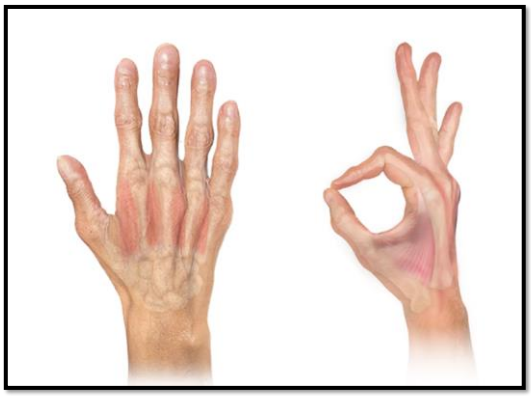
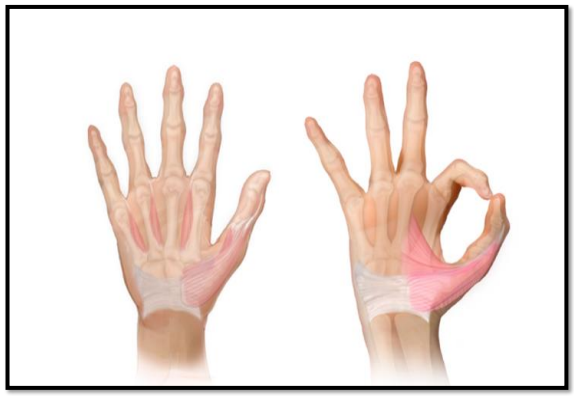
Decreased hand grip strength



Dorsal



Palmar

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Micronutrients

Area	Focus	Potential Deficiency
Eyes	Vision	Vitamin A
Nose	Shape, septum, nares, mucosa, discharge	Riboflavin or pyridoxine
Lips	Color, cracking, lesions, symmetry	Riboflavin, niacin, or pyridoxine
Mucosa	Color, texture, lesions, integrity, moisture	Iron, B12, folate, vitamin C, or vitamin B complex
Tongue	Color	Folate, niacin, iron, riboflavin, B12, or zinc
Gums	Lesions, integrity, moisture, color	Iron or Vitamin C
Skin	Color, Lesions, pigmentation, Wound healing, pressure ulcers, or Texture	Iron, folate, B12, essential fatty acid, zinc, niacin, or riboflavin, tryptophan, vitamin C, A or K
Face	Shape and symmetry of scalp; masses; hair distribution, color, texture	Protein-energy
Hair	Shape and symmetry	Protein, iron, zinc, or essential fatty acids
Nails	Shape, color, angle, contour, lesions	Iron, protein, vitamin C, vitamin A

Adapted from: Hammond KA. The nutritional dimension of physical assessment. Nutrition.1999;15:411- 419.

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Micronutrient deficiencies seen with rapid weight loss

Most common deficiencies associated with rapid weight loss & lowered PO intake:

- Protein
- Iron
- Calcium
- Vitamin B12
- Vitamin D

Consider preventative supplementation including adult MVI

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Four Critical Times for RDN Referral Using Incretin-Based Therapies

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2. At start of therapy including assessment and education
3. Special circumstances (GI, rapid weight loss, nutrient adequacy)
4. Ongoing assessment, education, support, lifestyle focus

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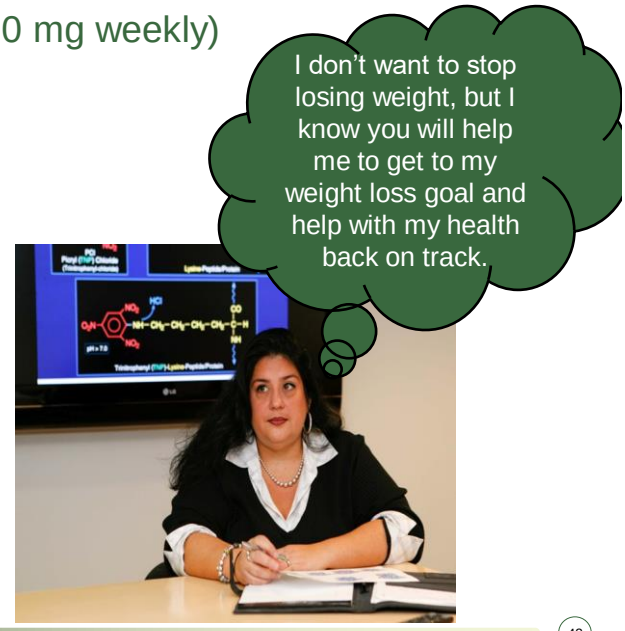
Case Study: 8 weeks on Mounjaro (10 mg weekly)

- Based on significant weight loss, decrease in functional status, mild muscle and fat loss, **mild malnutrition identified**
- Rapid weight loss has direct relationship to loss of lean body mass more than fat loss.
- Order labs including Complete Metabolic Panel, iron studies, all B vitamins, and Zinc.
  - If severe case suspected include Selenium and Copper.



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Case Study: 8 weeks on Mounjaro (10 mg weekly)

- PMH: 52 y/o female with T2D x 1 year & HTN
- Meds: lisinopril 2.5 mg, Crestor 10 mg, ~~metformin 2 g~~ ***Patient not taking Metformin due to nausea***
- Initial: BP: 140/84 Wt. 240lbs BMI: 39 A1c: 6.7%

Notes:

Decrease Mounjaro from 10mg to 5mg to stabilize weight loss.

Patient agrees to replace 2 meals/day with protein shake with at least 30 grams per serving and 1 pre-portioned healthy frozen dinner for evening meal and begin short walks with light weights to preserve lean body mass

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What happens when person is no longer able to take medication?

- Due to inability to manage symptoms of nausea, diarrhea, or constipation and needs to decrease dosage or discontinue? Change to older generation drug? Use dual therapy vs. monotherapy?
- Due to medication shortage causes person to not titrate dose or fill medication prescription?
- Safety/use of compound pharmacy formulation?

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Compensatory behaviors

- Clinician must continue to screen for disordered eating/eating behaviors at initiation of medication since anorexia is common, however, it is just as important as patient is reaching new set point/goal weight OR if patient has to halt medication and there is a fear of weight regain.

- Monitor for food insecurity issues to ensure patient isn't intentionally cutting back on food and/or other medications to afford medication.

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How to advocate and support people using medications

1. Ensure person is part of the decision-making process and communicate expectations for desirable and attainable weight loss as well as medication costs and potential side effects.
2. Always use “person-centered” language and be aware of internal bias.
3. Offer appropriate and timely alternatives if person is not responding to medications or having side effects that cannot be managed with diet modifications or other medications (anti-nausea, stool softeners, anti-diarrheal, etc.).
4. Discuss role of nutrition/nutrition quality and behavior change as long-term solutions instead of medication alone getting results.
5. Advocate for people seeking help from an obesity medicine specialist and investigate if there are ways to help afford medications through hospital or other organizations, Good Rx, patient assistance program with Eli Lilly, Novo Nordisk, etc.
6. Focus on non-scale victories/re-evaluate goals once weight loss has been achieved and focus is on weight maintenance.
7. Support people along the weight continuum and journey.

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Advocating for Comprehensive Obesity Care

Jeanne Blankenship, MS RDN
Vice President, Policy Initiatives and Advocacy

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Advocating for Obesity Care

Legislation

Treat and Reduce Obesity Act
Medical Nutrition Therapy Act

Regulatory

National Coverage Determination

Treat and Reduce Obesity Act

House: H.R. 4818/100 cosponsors

Allows for coverage of obesity medications

Senate: S. 2407/22 cosponsors

Would allow for RDNs to provide services **outside** of primary care **and** bill independently

Medical Nutrition Therapy Act

House: H.R. 6407/21 cosponsors

Senate: S. 3297/4 cosponsors

Increases the number of conditions covered by Medicare for MNT

Allows non-MD providers to refer for MNT

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Primary Advocacy Targets – Both Bills

Senate

- Finance Health Subcommittee

House

- Energy and Commerce Health Subcommittee
- Ways and Means Health Subcommittee

Any support is helpful from any member of Congress!

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Take Action Today!

VISIT THE ACADEMY'S ACTION CENTER

SEND A LETTER TO YOUR MEMBER OF CONGRESS

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- ✓ **A** – complete the Academy's MNT Act **A**ction Alert
- ✓ **C – C**ontribute $5 to ANDPAC
- ✓ **T – T**ell 5 people to take the public Action Alert

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What are the consequences of inaction?

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Excess weight has multiple contributors and influencers, therefore progress in obesity management and chronic disease cannot depend on a medication or any single sector. It requires scientific understanding of education, social services, economic development, environment, nutrition, food marketing, urban design and health. Success will depend on effective partnerships across numerous sectors.

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The role of the RDN is more important now in policy/advocacy, research, working on interprofessional teams, serving on guideline development, working to end stigma and health equity for all people

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Useful websites for clinicians

www.ascm-healthfitness.org

https://www.nationaleatingdisorders.org/get-help/

https://edrdpro.com/wp-content/uploads/2017/07/EDE-Q.pdf

https://www.wmdpg.org/wm-resources/professional-resources/health-professionals-guide

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Questions?

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Save the Date!

June 4th | noon-1:30 pm (Central time)
Anti-Obesity Medications: An Interdisciplinary Panel Discusses Cases

All webinars will be recorded for on-demand viewing

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Diabetes
a dietetic practice group of the
Academy of Nutrition and Dietetics
Experts in diabetes care and education

About the Diabetes DPG

As leaders in the healthcare community, Diabetes DPG members make positive contributions for people with diabetes and their families, the Diabetes DPG membership, healthcare providers, other professional organizations and industry partners.

Member Benefits:

Learning and Professional Development Opportunities

- *On the Cutting Edge (OTCE),* three issues annually of the peer-reviewed publication which provides self assessment questionnaires with continuing education credits. Free CPEUs are available in each issue of OTCE.
- NewsFlash is a peer reviewed newsletter published three times a year by Diabetes DPG
- *FREE webinars for members on hot topics*

Professional Resources

- DDPG reproducible patient educational handouts are produced annually and maintained in the DDPG publication area of the website.

Networking

- Member Directory
- Discussion Board

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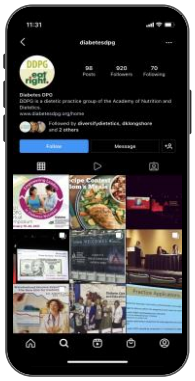

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