

A Dietitian's Guide to Gender-Affirming Nutrition Care

Education, Counseling & Clinical Considerations

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ABOUT DREW

- Buffalo State University & Hilbert College 
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DISCLOSURES

- Academy of Nutrition & Dietetics speaking honorariums
- Committee for Lifelong Learning volunteer
- C.D.R. Appeals Panel volunteer
- Advisory board member – upcoming Academy microcredential
- This session meets the CDR-mandated 1.0 Ethics CEU requirement

DISCLAIMERS

- Info in this presentation is intended for educational & informational purposes only and does not substitute a medical opinion nor a medical diagnosis.
- The socio-political state of the U.S., as well as research in transgender health, is ever evolving. Some info & data presented here may become outdated as time passes.

TODAY'S OBJECTIVES

1

UNDERSTAND GENDER DIVERSITY & LIVED EXPERIENCES

and its relevance to nutrition care

3

DISCUSS NUTRITION & PRACTICE CONSIDERATIONS

for transgender & non-binary individuals in order to implement appropriate nutrition care plans

2

APPLY INCLUSIVE, AFFIRMING PRINCIPLES

to gender diverse populations in order to help build trust & rapport

4

CONSIDER EDUCATION & COUNSELING STRATEGIES

that target psychosocial determinants in order to help motivate & facilitate behavior changes for improved health & well-being

AGENDA/FLOW

1

BECOMING FAMILIAR

Concepts & terms
Prevalence
Lived experiences
Connection to care

2

SETTING THE ENVIRONMENT

#1 Priority
Biases
Language &
Communications

3

PRACTICE FACTORS

Forms of transition
The NCP
Hormone therapy
Nutrition concerns
Access & billing

4

MAKING AN IMPACT

Education &
counseling
Empowerment
Taking Action
(Case Study)

1

UNDERSTAND GENDER DIVERSITY & LIVED EXPERIENCES

<https://www.youtube.com/watch?v=YSuJ700Mo3I>



SEX VS GENDER¹



SEX

Biological & physiological features, categorized as male, female, and intersex



GENDER

Associated social roles, cultural roles & behaviors



GENDER IDENTITY

Sense of being male, female, and/or beyond



GENDER EXPRESSION

External presentation of one's gender identity

GENDER IDENTITY¹



CISGENDER

Gender identity aligns with sex assigned at birth



TRANSGENDER

Gender identity that differs from sex assigned at birth



GENDER NON-CONFORMING

Expression of gender identity that does not conform to norms



NON-BINARY

Do not exclusively identify as male or female



TWO SPIRIT

Embodiment of both masculine & feminine; Used by some indigenous people



OTHER GENDER IDENTITIES

Agender, Genderqueer, Gender fluid, Bigender, Demigender

LGBTQ+

PREVALENCE IN THE U.S.²

Lesbian, Gay & Bisexual

25.5M

(23.6M adults, 1.9M youth)

Transgender

1.6M

(1.3M adults, 300K youth)

1.2M LGBTQ+ adults identify as **non-binary**

MISCONCEPTIONS THAT STIGMATIZE NON-HETERO, NON-BINARY &/OR NON-CISGENDER LIVES

"They're confused"

"They're pretending"

"They're mentally ill"

"They all get surgery"

"They're a threat"

"It's not normal"

<https://www.pbs.org/independentlens/content/genderdiversity>



GENDER DIVERSITY IS NOT NEW

For centuries, numerous communities & populations have recognized & held customs for genders beyond the binary perspective of male & female.

3	CIS FEMALE	DISABILITY	BIPOC	TRANS, NON-HETERO, NON-BINARY
Marginalization	Systemic barriers to leadership & equal opportunities.	Excluded from full participation in society due to inaccessible environments & limited accommodations.	Systemic racism, discrimination, & lack of representation in various domains.	Exclusion from societal norms & structures.
Powerlessness	Gender-based discrimination, sexism, & a lack of decision-making power.	Disempowered by ableism, facing barriers to autonomy & decision-making.	Systemic power imbalances, racial profiling, & limited influence in shaping policies.	Discrimination, limited agency, & unequal treatment.
Cultural Imperialism	Cultural norms & expectations that reinforce traditional gender roles & stereotypes.	Erasure, devaluation, & a lack of representation in cultural narratives.	Erasure, appropriation, & pressure to conform to dominant cultural norms.	Imposing norms, limiting autonomy to express oneself authentically.
Violence	Gender-based violence, including domestic violence, sexual assault, & harassment.	Violence, abuse, & neglect due to ableism and vulnerability.	Hate crimes, racial violence, & systemic violence due to systemic racism.	Violence due to phobias (harassment, physical assault, hate crimes & murder)
Whiteness	Intersectional biases of gender & race that compound challenges.	Ableism & racism compound challenges faced by disabled individuals of color.	Systemic racism & oppression as a result of being part of non-white racial or ethnic communities.	Intersectionality of identity & other minority factors (race, ethnicity, age, sexuality, religion, disability, etc.)

U.S. TRANSGENDER DISPARITIES ⁴

4x

THE RATE OF EXTREME POVERTY

2x

THE RATE OF UNEMPLOYMENT

90%

EXPERIENCED MISTREATMENT @ WORK

78%

EXPERIENCED HARASSMENT @ SCHOOL

~20%

WERE REFUSED A HOME OR APARTMENT

~20%

WERE REFUSED MEDICAL CARE

50%

NEEDED TO TEACH PROVIDERS ABOUT TRANSGENDER CARE

28%

DELAYED CARE D/T DISCRIMINATION

41%

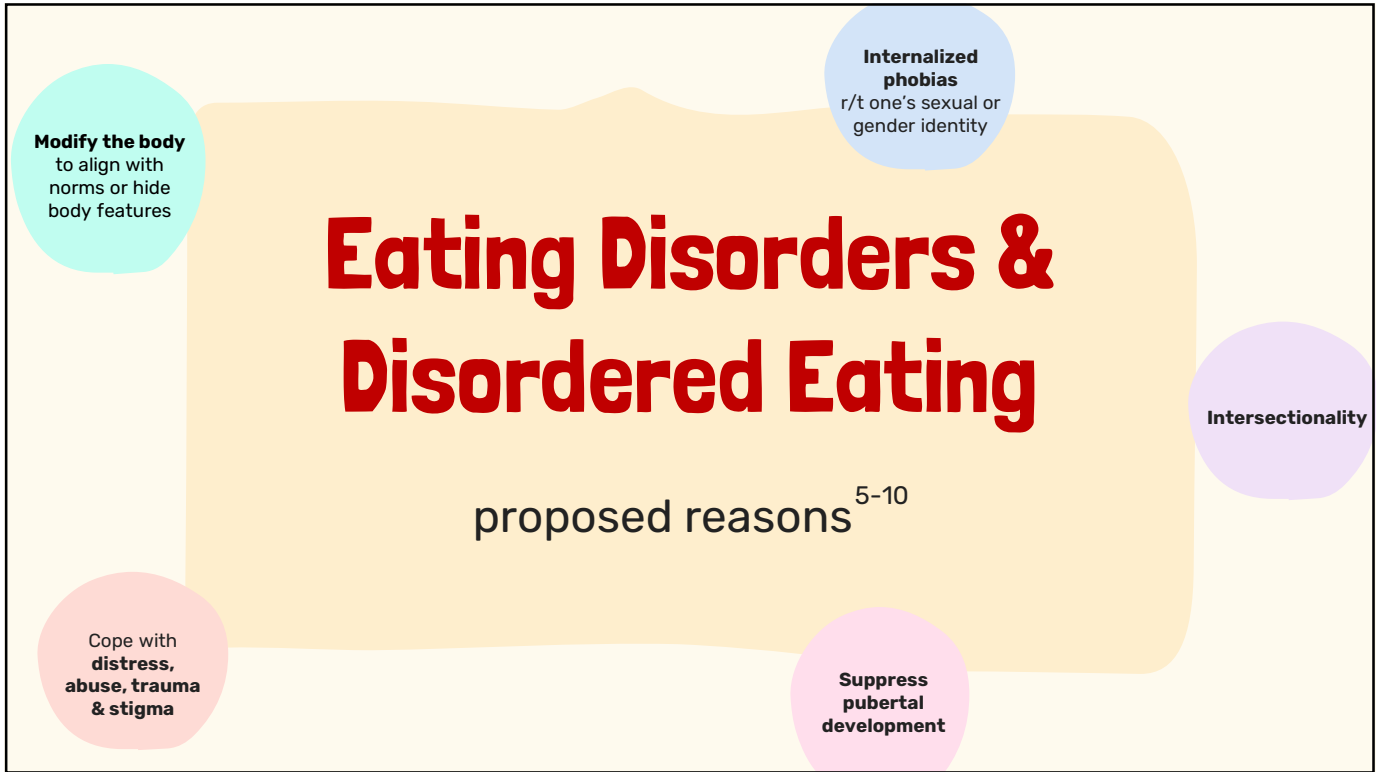
of surveyed U.S transgender adults
attempted suicide
compared to 1.6% of the general population⁴



Eating Disorders & Disordered Eating

are often experienced among gender
diverse youth & adults⁵⁻¹⁰





OUR LGBTQ+ YOUTH ¹¹

- ...are placed at **higher risk of suicide** because of how they are **mistreated & stigmatized** in society.
- ...who experience **violence, discrimination, or conversion therapy** report significantly **higher rates of attempting suicide**.
- ...who **live in accepting communities & feel high social support** from family & friends report significantly **lower rates of attempting suicide**.

NUTRITION CARE RELEVANCE

BIOLOGY & PATHO/PHYSIOLOGY

- Development
- Pharmacotherapy
- Disease Risk



OTHER PRACTICE CONSIDERATIONS

- Forms of Transition
- The NCP
- Access & Coverage



EDUCATION & COUNSELLING

- Language & Communications
- Psycho-Socio-Cultural Determinants of Behavior



2

CREATE AN INCLUSIVE & AFFIRMING ENVIRONMENT



ADDRESSING BIASES & ASSUMPTIONS ¹²

NOT KNOWING NUTRIENT NEEDS

Lack of considering therapies, surgeries, & gender-affirmation

BINARY THINKING

Assuming people have a binary approach to gender

STEREOTYPING

Eating habits, body image, or relationships with food

CULTURAL INCOMPETENCE

Failing to understand & address cultural & social factors

SEXUALITY ASSUMPTIONS

Not addressing unique challenges of non-cis, non-hetero, non-binary people

NON-INCLUSIVE COMMUNICATIONS

Misgendering, deadnaming, or using outdated language



DON'T ASSUME SOMEONE'S GENDER IDENTITY & PRONOUNS

Ask for & honor pronouns & gender identity
Misgendering can be harmful ²⁷

"Hi there" vs "Ms/Mrs or Mr"

"folks" vs "ladies & gentlemen"

<https://www.transgendertraininginstitute.com/resources/pronouns/>



RESPECT CHOSEN NAMES

Ask for their chosen name when appropriate

"Deadnaming" can be painful

<https://health.clevelandclinic.org/deadnaming/>

**RECOGNIZE & RESPECT
DIVERSE RELATIONSHIP
STRUCTURES & DYNAMICS**

Ask for their preference when appropriate

“partner” vs
“boyfriend” or
“husband”

“parent” vs
“mom” or “dad”

<https://www.healthline.com/health/types-of-relationships>

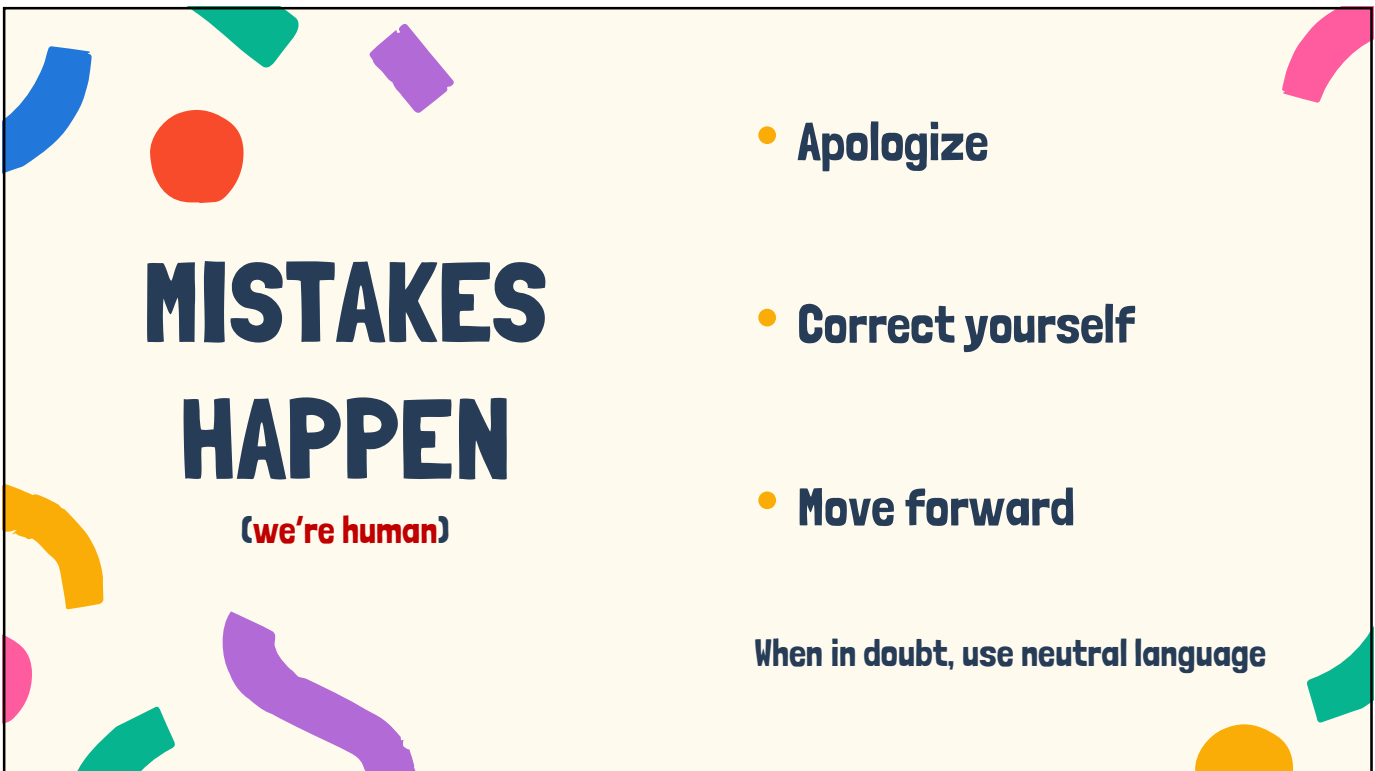
The infographic features a man on the left and a woman on the right, both holding devices. The background is decorated with colorful confetti. The central text is in a yellow banner, and the relationship examples are in purple ovals.

**BE SENSITIVE TO
TRANSITIONS &
MEDICAL HISTORY**

Use respectful & non-invasive
language when inquiring

<https://transfamilies.org/understanding-transitions/>

The infographic features a man on the left and a woman on the right, both holding devices. The background is decorated with colorful confetti. The central text is in a yellow banner, and the advice is in a pink oval.



CREATING A SUPPORTIVE ATMOSPHERE

Establish trust & confidentiality

Provide your pronouns.
Emphasize the importance of confidentiality.
Assure personal info will be kept confidential.

Respectfully ask questions

Tone & body language matter.
Inquire with open-ended questions.
Be interested in learning; express interest!

Actively listen & validate experiences

Give your full attention.
Demonstrate empathy.
Use affirming responses.

Personalize care & collaborate

Involve/lead them in decision-making.
Foster collaboration with, and provide referrals for, other gender-affirming care providers.

3

CONSIDER NUTRITION & PRACTICE FACTORS FOR TRANSGENDER INDIVIDUALS

TRANSITIONING IS A UNIQUE PROCESS TO EACH PERSON & TAKES MANY FORMS

SOCIAL



LEGAL



MEDICAL



- The NCP
- Hormone therapy
- Food & nutrition-related concerns
- Health care coverage & billing

SEX-SPECIFIC ASPECTS OF THE NCP ¹³



Food/Nutrition Hx

- Energy Needs
- DRI Values



Anthropometrics

- Body Fat %
- Waist Circumference
- Waist : Hip
- BMI-for-age Percentiles



Biochemical Data

- Lipid panel
- RBC, Hgb, Hct, Ferritin
- Creatinine, K+, ALP
- Bone mineral density

RDN SUGGESTIONS FOR THE NCP ¹³



Nutrition Assessment

- Obtain PMHx info
- Consider medical transition status & progress
- Consider client interests



Reference Values

- Use clinical discretion
- Hgb, Hct, BUN, Cr, K+, Fasting Glucose, A1C, Lipids, ALP ^{14, 15}



Data Expression

U... F&M
or:
... nths
... he
therapy treatment

HORMONE THERAPY (HT) EFFECTS ¹⁶

Table 12. Masculinizing Effects in Transgender Males

Effect	Onset	Maximum
→ Skin oiliness/acne	1–6 mo	1–2 y
→ Facial/body hair growth	6–12 mo	4–5 y
→ Scalp hair loss	6–12 mo	— ^a
→ Increased muscle mass/strength	6–12 mo	2–5 y
→ Fat redistribution	1–6 mo	2–5 y
→ Cessation of menses	1–6 mo	— ^b
→ Clitoral enlargement	1–6 mo	1–2 y
→ Vaginal atrophy	1–6 mo	1–2 y
→ Deepening of voice	6–12 mo	1–2 y

Estimates represent clinical observations: Toorians *et al.* (149), Asscheman *et al.* (156), Gooren *et al.* (157), Wierckx *et al.* (158).

^aPrevention and treatment as recommended for biological men.

^bMenorrhagia requires diagnosis and treatment by a gynecologist.

Table 13. Feminizing Effects in Transgender Females

Effect	Onset	Maximum
→ Redistribution of body fat	3–6 mo	2–3 y
→ Decrease in muscle mass and strength	3–6 mo	1–2 y
→ Softening of skin/decreased oiliness	3–6 mo	Unknown
→ Decreased sexual desire	1–3 mo	3–6 mo
→ Decreased spontaneous erections	1–3 mo	3–6 mo
→ Male sexual dysfunction	Variable	Variable
→ Breast growth	3–6 mo	2–3 y
→ Decreased testicular volume	3–6 mo	2–3 y
→ Decreased sperm production	Unknown	>3 y
→ Decreased terminal hair growth	6–12 mo	>3 y ^a
→ Scalp hair	Variable	— ^b
→ Voice changes	None	— ^c

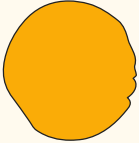
Estimates represent clinical observations: Toorians *et al.* (149), Asscheman *et al.* (156), Gooren *et al.* (157).

^aComplete removal of male sexual hair requires electrolysis or laser treatment or both.

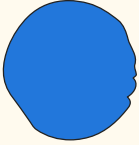
^bFamilial scalp hair loss may occur if estrogens are stopped.

^cTreatment by speech pathologists for voice training is most effective.

FOOD & NUTRITION FOCUSES



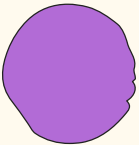
EDs & DISORDERED EATING⁵⁻¹⁰
 Screening, Assessment, Education & Counseling, Referrals



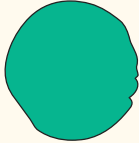
FOOD IN/SECURITY⁹
 Screening, Assessment, Education & Counseling, Referrals



BONE HEALTH¹⁷
 Transgender women on HT
 (Ca, D, Phos, Mg, Vit K, etc.)



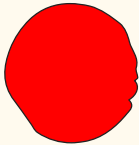
SKIN HEALTH
 Possible MNT: Gut health, GI/GL,
 Omega 3s, Milk, Dietary restrictions
 (Environmental toxins & Skin care)



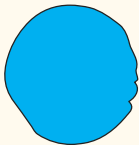
METABOLIC HEALTH & BODY COMPOSITION
 Muscle & fat changes¹⁶, client interests
 Transgender women on HT: Possible T2DM risk^{24, 25}
 Renal & hepatic function implications²⁶



IRON STATUS¹⁶
 Transgender men on masculinizing HT where
 menstruation significantly decreases or stops



HEART HEALTH^{17, 18}
 Cardiovascular health markers may be impacted
 (TG, BP, LDL*, HDL*)



SURGERY
 Surgery prep & healing
 (Nutrient adequacy & hydration)

GENDER-AFFIRMING HEALTHCARE ACCESS



Per State

www.LGBTmap.org
www.HRC.org



Per Plan

www.TransHealthProject.org
 (Resources section)




Billing Info¹⁹

Name & sex
 considerations



4

**EDUCATING & COUNSELING WITH
LIVED EXPERIENCES IN MIND,
ALWAYS**



*We know from experience & the growing body
of supportive literature...that the therapeutic
relationship a counselor forms with each client
can be the most powerful tool...*

— Nancy & Jeff Cochran



Self-Depictions

- Discuss the importance of self-acceptance & positive self-image.
- Encourage them to challenge societal expectations & embrace their authentic selves.
- Highlight the potential for behavior change to enhance their *self-esteem, -worth, & overall body positivity*.

Coping Self-Efficacy

- Address potential challenges & barriers they may encounter on their journey.
- Help them build resilience & problem-solving skills to overcome obstacles.
- Provide resources for seeking support from mental health professionals, support groups, or community organizations.

This glossary of be used through First the motivat presented alphab This is the user

Determinant	
Behavioral Intention	
Behavioral Intention	A statement reflecting the readiness or conscious decision to engage in a behavior or take a given action.
Expected outcomes of behavior / Attitudes	
Attitudes	Evaluating favorable or unfavorable judgments about a given behavior in terms of usefulness (e.g., harmful - beneficial, unimportant - important) and feelings (e.g., unpleasant - pleasant; painful - enjoyable).
	consequences of involvement in a behavior (e.g. they will feel delighted, satisfied, happy, proud, pleased).

Page 1
Developed by Teachers College Columbia University and Columbia Center for Teaching and Learning
Based on: Cameron D. and East J.A., Motivation Education: Linking Research, Theory and Practice, 4th Edition, Jones and Bartlett Learning, 2011

FACILITATING DETERMINANTS – IDEAS WHICH...

MOTIVATING DETERMINANTS – IDEAS WHEN WORKING WITH GENDER DIVERSE PEOPLE

- Encourage individuals to reflect on current behaviors & evaluate how they align with their health goals.
- Help them recognize their strengths & areas for improvement without judgment or self-criticism.
- Explore the impact of their behaviors on their physical, emotional, & social well-being.

Perceived Norms

- Discuss the influence of social norms & cultural expectations on their health behaviors.
- Highlight positive role models within the gender diverse & 2SLGBTQ+ community who have embraced healthy habits & achieved positive outcomes.
- Explore any perceived barriers related to social acceptance or cultural norms & provide support to navigate these.

PEOPLE
to gender

Disclosures: The presented list was developed by ChaePT™ in June 2023 to generate ideas for approaching "determinants of behavior change" as presented in: Nutrition Education Nutrition Education: Linking Research, Theory, and Practice (4th Ed.) by Susan Gortmaker & Pamela Koch
Disclaimer: It's crucial to take these considerations to each individual's unique circumstances, preferences, and needs. Building a trusting and culturally sensitive relationship will enhance the effectiveness of behavior change interventions for gender diverse and 2SLGBTQ+ individuals.

FOOD & EXERCISE TO EMPOWER ^{22, 23}



AUTHORITY



CONFIDENCE



AUTONOMY

3 STEPS TO SUPPORT GENDER DIVERSITY

1

SHARE YOUR PRONOUNS
Name tags, cards & handouts
Display name in media
By mouth

2

IDENTIFY SEX AT BIRTH
During assessment

IDENTIFY GENDER
During assessment

ADVOCATE FOR AFFIRMING CARE

3

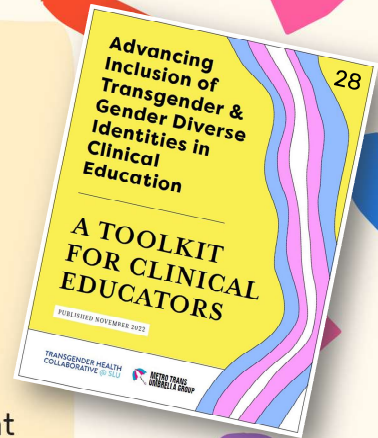
Demonstrate cultural competence

Educate & train others

Foster policy & program development

Network & collaborate

Engage in research



LET'S BRIEFLY RECAP



GENDER DIVERSITY

It's real; it exists
It's important to know



LIVED EXPERIENCES

Harassment & discrimination
Food insecurity
Mental health challenges



A SUPPORTIVE ENVIRONMENT

Safety, respect & trust are priority
Language & collaboration matter



MNT & PRACTICE

The NCP
Hormone therapy
MNT Focuses
Access & billing



EDUCATION & COUNSELING

Consider motivating & facilitating determinants to help guide, support & empower health & well-being



TAKING ACTION

Pronouns help
Assessment is essential
Advocacy is continuously needed

Performance Indicators: 1.5.1, 1.7.3, 1.7.6, 2.1.1, 8.1.1, 9.1.3, 9.6.2



**THANK
YOU!**

QUESTIONS?

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CASE STUDY: MEET ALEX

Alex is a 28 y/o transgender male who began hormone therapy 3 months ago and is seeking nutrition education to “support [their] hormone therapy & transition journey.”

Alex has **experienced positive changes from the hormone therapy** but is **concerned with body image**. Alex has **faced challenges in finding inclusive healthcare providers** and is **seeking a safe and understanding environment** for nutrition care. Alex has a **history of disordered eating and body dysphoria**, and has had **weight fluctuations** of 40 lbs / 18kg **throughout the past 2 years**. Alex’s weight is now, and has remained around 160 lbs / 73kg. Alex is 5 ft 6 in / 1.67 m tall.

Alex **socially transitioned at age 24** but is **hesitant in expressing gender identity with health care providers based on past experiences** (cultural incompetence, discrimination, mistreatment, and refusal of care reported throughout the past 3 years).

Alex reports that, for the past year, **“food has taken on a new purpose & role since transitioning.”**

CONSIDERATIONS: CARE FOR ALEX

Admin/Logistics:

- **Discuss & confirm insurance & billing information (name, sex, gender)**, if needed.
- **Obtain consent** for discussions regarding gender identity, health history, & mental health concerns...**and with whom**.

Language & Communications:

- **Use inclusive & affirming language**, inquiring about and respecting Alex's **chosen name & pronouns**.
- **Be sensitive to the challenges Alex may have faced** in healthcare settings & **create a welcoming environment**.
- **Practice cultural humility & avoid making assumptions & over-asking** about Alex's experiences.

Medical Nutrition Therapy:

- **Review physiology & nutrition implications of hormone therapy** for transgender male individuals.
- **Determine appropriate assessment** components, values & ranges to include & use.
- **Address Alex's concerns & interests** regarding potential weight changes, body composition, & emotional well-being.
- **Consider applicable food & nutrition focuses** based on collected assessment info & 1:1 findings.
- **Collaborate with Alex** to develop a nutrition plan that aligns with their needs & personal goals.

Education & Counseling:

- **Discuss the impact of hormone therapy** on nutrient needs, metabolism, & potential health risks.
- **Discuss the role of nutrition in managing potential hormone-related health concerns & food being a source of empowerment**.
- **Explore disordered eating & body dysphoria history, offering non-judgmental, empathic support**.
- **Encourage body positivity & self-compassion** while addressing body image concerns.
- **Collaborate with Alex to contact other providers for integrated care, if necessary & if consent is provided**.

REFERENCES

1. Guidelines for the primary and gender-affirming care of transgender and gender nonbinary people. Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People | Gender Affirming Health Program. (2016, June 17). <https://transcare.ucsf.edu/guidelines>
2. Publications archive, Williams Institute. <https://williamsinstitute.law.ucla.edu/publications>
3. Young, I. M. (1990). "Five Faces of Oppression," justice and the politics of difference. Princeton, NJ: Princeton University Press.
4. Grant JM, Mottet LA, Tanis J. Injustice at Every Turn: A Report of the National Transgender Discrimination Survey. https://transequality.org/sites/default/files/docs/resources/NTDS_Report.pdf Published 2016. Accessed June 19, 2023.
5. Avila JT, Golden NH, Aye T. Eating disorder screening in transgender youth. *J Adolesc Health*. 2019;65:815-817.
6. Coelho JS, Suen J, Clark BA, et al. Eating disorder diagnoses and symptom presentation in transgender youth: A scoping review. *Curr Psychiatry Rep*. 2019;21:107.
7. Diemer EW, Grant JD, Munn-Chernoff MA, et al. Gender identity, sexual orientation, and eating-related pathology in a national sample of college students. *J Adolesc Health*. 2015;57:144-149.
8. Guss CE, Williams DN, Reisner SL, et al. Disordered weight management behaviors, nonprescription steroid use, and weight perception in transgender youth. *J Adolesc Health* 2017;60:17-22.
9. Linsenmeyer WR, Katz JM, Reed JL. Disordered eating, food insecurity, and weight status among transgender and gender nonbinary youth and young adults: A cross-sectional study using a nutrition screening protocol. *LGBT Health*. 2021;8(5):359-366.
10. Watson RJ, Veale JF, Saewyc EM. Disordered eating behaviors among transgender youth: Probability profiles from risk and protective factors. *Int J Eat Disord*. 2017;50:515-522.
11. 2022 national survey on LGBTQ+ Youth Mental Health - the Trevor project. (n.d.). https://www.thetrevorproject.org/survey-2022/assets/static/trevor01_2022survey_final.pdf
12. Planned Parenthood. (n.d.). What's transphobia and Transmisia? <https://www.plannedparenthood.org/learn/gender-identity/transgender/whats-transphobia>
13. Linsenmeyer W, Garwood S, Waters J. An examination of the sex-specific nature of nutrition assessment within the nutrition care process: Considerations for nutrition and dietetics practitioners working with transgender patients and clients. *J Acad Nutr Diet*. 2022 (in press).
14. Deutsch, M. Overview of feminizing hormone therapy. Gender Affirming Health Program. <https://transcare.ucsf.edu/guidelines/feminizing-hormone-therapy>
15. Deutsch, M. Overview of masculinizing hormone therapy. Gender Affirming Health Program. <https://transcare.ucsf.edu/guidelines/masculinizing-therapy>
16. Hembree WC, Cohen-Kettenis PT, Gooren L, et al. Endocrine Treatment of Gender-Dysphoric/Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline [published correction appears in *J Clin Endocrinol Metab*. 2018 Feb 1;103(2):699] [published correction appears in *J Clin Endocrinol Metab*. 2018 Jul 1;103(7):2758-2759]. *J Clin Endocrinol Metab*. 2017;102(11):3869-3903. doi: 10.1016/j.metop.2022.100173. PMID: 35282421; PMCID: PMC8907681.
17. Chan Swe N, Ahmed S, Eid M, Poretsky L, Gianos E, Cusano NE. The effects of gender-affirming hormone therapy on cardiovascular and skeletal health: A literature review. *Metabol Open*. 2022 Mar 3;13:100173. doi: 10.1016/j.maturitas.2019.08.010. Epub 2019 Aug 20. PMID: 31547912; PMCID: PMC6761990.
18. Dutra E, Lee J, Torbati T, Garcia M, Merz CNB, Shufelt C. Cardiovascular implications of gender-affirming hormone treatment in the transgender population. *Maturitas*. 2019 Nov;129:45-49. doi: 10.1016/j.maturitas.2019.08.010. Epub 2019 Aug 20. PMID: 31547912; PMCID: PMC6761990.
19. Wilson, A., & Green, J. (2016, June 17). Health insurance coverage issues for transgender people in the United States. Gender Affirming Health Program. <https://transcare.ucsf.edu/guidelines/insurance>
20. Contento, I. R., & Koch, P. A. (2021). Nutrition education: Linking research, theory, and practice (4th ed.). Jones & Bartlett Learning.
21. Columbia University, & Columbia Center for Teaching and Learning. (n.d.). Design online. DESIGN Online. <https://designonline.cti.columbia.edu/>
22. Linsenmeyer W, Rahman R, Stewart DR. The evolution of a transgender male's relationship with food and exercise: A narrative inquiry. *Journal of Creativity in Mental Health*. 2022;1.
23. Linsenmeyer W, Heiden-Rootes K, Dralmeier T, Thomure M, Nye E, Armstrong E. (under review). Becoming a "big dude": A narrative inquiry on the evolving role of nutrition and exercise in the lives of transgender men. SSM-Qualitative
24. Auer, M. K., Ebert, T., Pietzner, M., Defreynne, J., Fuss, J., Stalla, G. K., & T'Sjoen, G. (2017). Effects of sex hormone treatment on the metabolic syndrome in transgender individuals: Focus on metabolic cytokines. *The Journal of Clinical Endocrinology: Metabolism*, 103(2), 790-802. <https://doi.org/10.1210/clinem.2017-01559>
25. Spanos, C., Bretherton, I., Zajac, J. D., & Cheung, A. S. (2020). Effects of gender-affirming hormone therapy on insulin resistance and body composition in transgender individuals: A systematic review. *World Journal of Diabetes*, 11(3), 66-77. <https://doi.org/10.4239/wjcd.v11i3.66>
26. SoRelle, J. A., Jiao, R., Gao, E., Veazey, J., Frame, I., Quinn, A. M., Day, P., Pagels, P., Gimpel, N., & Patel, K. (2019). Impact of hormone therapy on laboratory values in transgender patients. *Clinical Chemistry*, 65(1), 170-179. <https://doi.org/10.1373/clinchem.2018.292730>
27. Mitchell, L., MacArthur, H. J., & Blomquist, K. K. (2021). The effect of misgendering on body dissatisfaction and dietary restraint in transgender individuals: Testing a misgendering-congruence process. *International Journal of Eating Disorders*, 54(7), 1295-1301. <https://doi.org/10.1002/eat.23537>
28. Linsenmeyer, W., Heiden-Rootes, K., Dralmeier, T., Rahman, R., Buxbaum, E., Rosen, W., Gombos, B., & Otte, A. (2023). Advancing inclusion of transgender and gender-diverse identities in clinical education: A Toolkit for Clinical Educators. *Health Promotion Practice*. <https://doi.org/10.1177/15248399231183643>