

Hormone Therapy and Nutrition for Transgender Patients



General Nutrition Recommendations

Overall, nutrition recommendations between transgender and non-transgender individuals are similar. There are different approaches to nutrition recommendations. Some recommend that a transgender individual use nutrition recommendations for their biological sex in the short-term and then nutrition recommendations for their transitioned gender in the long-term.

Basic Changes in Nutritional Needs

Male-to-female (MTF) hormone therapy:

Potential decreased calorie needs and decreased protein needs due to decreased muscle mass that occurs with therapy.

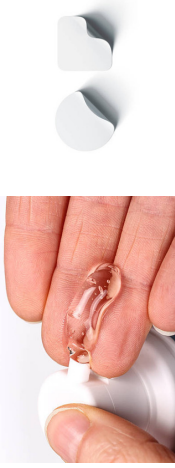
Female-to-male (FTM) hormone therapy: Less dietary iron may be required, especially if menstruation no longer occurs (amenorrhea).

Principles for Nutrition

- **Adequacy** (sufficient amounts of a kind of food)
- **Balance** (not too much or too little of a kind of food)
- **Calorie Control** (not too many or too few calories)
- **Moderation** (not eating too much of a kind of food)
- **Variety** (choosing a wide variety of foods, even within food groups: think eating a variety of colors)

Common Hormone Therapy Medications

Hormones may be administered orally, transdermally (absorption through the skin), and by injection. Common hormones used at the clinic for MTF patients include estrogen, medroxyprogesterone, finasteride, and spironolactone. For FTM patients, the common hormone is testosterone.



Hormone Therapy Impact

Hormone medications may impact nutritional status in a number of ways. They may alter how your body metabolizes certain nutrients. They may also cause significant side effects (e.g. vomiting or diarrhea that causes a loss of nutrients, decreased appetite that causes decreased food intake, etc.).

Potential Side Effects that May Impact Nutritional Status

	Upset stomach/ Abdominal pain	Nausea	Vomiting	Constipation	Diarrhea	Change in appetite	Dysphagia (problems swallowing)	Weight change	Decreased lean body mass/ muscle, change in fat distribution	Problems urinating	Dry Mouth	Iron need changes	Bloody stools
Estrogen/estradiol	✓	✓	✓		✓	✓	✓	✓	✓				
Medroxyprogesterone	✓	✓		✓		✓		✓		✓			
Finasteride							✓					✓	
Spirolactone	✓	✓			✓	✓	✓		✓				✓
Testosterone	✓	✓			✓	✓						✓	✓

*Discuss symptoms with your doctor

Potential Blood Lab Outcomes

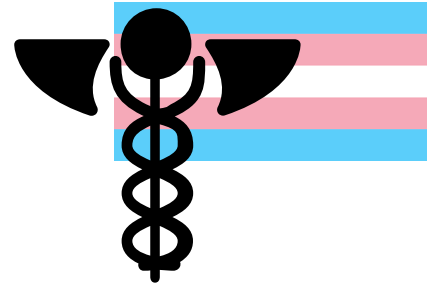
	Ca	Folate	K	Na	Cl	Mg	Chol	TG	HDL	LDL	H2O	Glucose	Insulin
Estrogen	↑	↓				↓		↑	↑	↓			
Medroxyprogesterone			↑					↑	↑	↓		↑ / ↓	↓
Finasteride													
Spirolactone			↑	↓		↑			↓	↑	↓		
Testosterone						Mixed	Mixed	Mixed	Mixed	Mixed	↓		



Caution

- Caution with alcohol and other drugs
- Warning: Pregnant women should not touch broken finasteride tablets, as this can harm the fetus.

Health-Related Concerns to Monitor



- To assist in increasing bone density, monitor calcium and vitamin D.
- Monitor calcium in cancer patients.
- Continue to monitor for any symptoms.



Monitor	Bone density if at risk for osteoporosis	Blood pressure	Lipids	Digital rectal exams for prostate cancer	Electrolytes	Renal (kidney) function	Lipids	Hepatic function (liver function)	Testosterone
Estrogen	✓	✓	✓					✓	
Medroxyprogesterone	✓								✓
Finasteride				✓				✓	✓
Spirolactone		✓			✓	✓	✓		✓
Testosterone			✓					✓	✓



Fruits and Vegetables

For the most part, we do not consume enough fruits and vegetables. Generally, it is recommended that men consume 2½ - 3 cups of vegetables per day and 2 cups of fruit per day. Women are generally recommended to consume 2 -2½ cups of vegetables per day and 1½ - 2 cups of fruit per day. These can provide plenty of nutritious vitamins and minerals.

Protein and Dairy

Remember to get enough protein in your diet (usually even more is required in FTM transitions as lean body mass increases). Protein is necessary for the body to properly function. Protein can also help you feel full longer. Food sources of protein are packed with many vitamins and minerals as well. Examples of high protein sources include meat, fish, beans, nuts, eggs, dairy, and more. If possible, try to consume 2-3 servings of low-fat dairy per day.

Grains

Make half of your grain consumption whole grains. Whole grains provide fiber, encourage healthy bowel function, help improve cholesterol, and contain many B vitamins.

Fluids

Be sure to drink enough fluids. The common recommendation is 8 glasses of water per day, but this may vary depending on the individual, environment, physical activity, and other factors. Fluid balance is necessary for digestion, absorption, circulation, nutrient utilization, and much more!



Sources

<https://medlineplus.gov/druginfo>, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5182227/>, <http://www.todaysdietitian.com/newarchives/1217p8.shtml>, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2492928/>, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4527564/>, <https://www.ncbi.nlm.nih.gov/pubmed/24127736>, *Food Medication Interactions*

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