

Medical Nutritional Therapy	Pg
Service Category Definition – Part A	1
FY 2020 Part A Performance Measures	5
HIV: What to Know About Supplements – Everyday Health March 2023	6
HIV Diet: What to Know About Nutrition and HIV – Healthline, April 2022	9

Houston EMA/HSDA Ryan White Part A Service Definition Medical Nutritional Therapy (Last Review/Approval Date: November 2021)	
HRSA Service Category Title: RWGA Only	Medical Nutritional Therapy
Local Service Category Title:	Medical Nutritional Therapy and Nutritional Supplements
Budget Type: RWGA Only	Hybrid
Budget Requirements or Restrictions: RWGA Only	<p>Supplements: An individual client may not exceed \$1,000.00 in supplements annually without prior approval by RWGA.</p> <p>Nutritional Therapy: An individual nutritional education/counseling session lasting a minimum of 45 minutes. Provision of professional (licensed registered dietician) education/counseling concerning the therapeutic importance of foods and nutritional supplements that are beneficial to the wellness and improved health conditions of clients. Medically, it is expected that symptomatic or mildly symptomatic clients will be seen once every 12 weeks while clients with higher acuity will be seen once every 6 weeks.</p>
HRSA Service Category Definition: RWGA Only	Medical nutrition therapy is provided by a licensed registered dietitian outside of a primary care visit and may include the provision of nutritional supplements.
Local Service Category Definition:	<p>Supplements: Up to a 90-day supply at any given time, per client, of approved nutritional supplements that are listed on the Houston EMA/HSDA Nutritional Supplement Formulary. Nutritional counseling must be provided for each disbursement of nutritional supplements.</p> <p>Nutritional Therapy: An individual nutritional education/counseling session lasting a minimum of 45 minutes. Provision of professional (licensed registered dietician) education/counseling concerning the therapeutic importance of foods and nutritional supplements that are beneficial to the wellness and improved health conditions of clients. Medically, it is expected that symptomatic or mildly symptomatic clients will be seen once every 12 weeks while clients with higher acuity will be seen once every 6 weeks. Services must be provided under written order from a state licensed medical provider (MD, DO or PA) with prescribing privileges and must be based on a written nutrition plan developed by a licensed registered dietician.</p>
Target Population (age, gender, geographic, race, ethnicity, etc.):	Persons with HIV living within the Houston Eligible Metropolitan Area (EMA) or HIV Service Delivery Area (HSDA).
Services to be Provided:	<p>Supplements: The provision of nutritional supplements to eligible clients with a written referral from a licensed physician or PA that specifies frequency, duration and amount and includes a written nutritional plan prepared by a licensed, registered dietician.</p> <p>Nutritional Supplement Disbursement Counseling is a component of</p>

	<p><i>Medical Nutritional Therapy. Nutritional Supplement Disbursement Counseling</i> is a component of the disbursement transaction and is defined as the provision of information by a licensed registered dietitian about therapeutic nutritional and/or supplemental foods that are beneficial to the wellness and increased health condition of clients provided in conjunction with the disbursement of supplements. Services may be provided either through educational or counseling sessions. Also included in this service are follow up sessions with clients' Primary Care provider regarding the effectiveness of the supplements. The number of sessions for each client shall be determined by a written assessment conducted by the Licensed Dietitian but may not exceed twelve (12) sessions per client per contract year.</p> <p>Medical Nutritional Therapy: Service must be provided under written order of a state licensed medical provider (MD, DO, PA) with prescribing privileges and must include a written plan developed by state licensed registered dietitian. Client must receive a full range of medical nutritional therapy services including, but not limited to, diet history and recall; estimation of nutrition intake; assessment of weight change; calculation of nutritional requirements related to specific medication regimens and disease status, meal preparation and selection suggestions; calorie counts; evaluation of clinically appropriate laboratory results; assessment of medication-nutrient interactions; and bio-impedance assessment. If patient evaluation indicates the need for interventions such as nutritional supplements, appetite stimulants, or treatment of underlying pathogens, the dietitian must share such findings with the patient's primary medical provider (MD, DO or PE) and provide recommendations. Clients needing additional nutritional resources will be referred to case management services as appropriate and/or local food banks.</p> <p>Provider must furnish information on this service category to at least the health care providers funded by Ryan White Parts A, B, C and D and TDSHS State Services.</p>
<p>Service Unit Definition(s): RWGA Only</p>	<p>Supplements: One (1) unit of service = a single visit wherein an eligible client receives allowable nutritional supplements (up to a 90 day supply) and nutritional counseling by a licensed dietitian as clinically indicated. A visit wherein the client receives counseling but no supplements is <u>not</u> a billable <u>disbursement transaction</u>.</p> <p>Medical Nutritional Therapy: An individual nutritional counseling session lasting a minimum of 45 minutes.</p>
<p>Financial Eligibility:</p>	<p>Refer to the RWPC's approved <i>Financial Eligibility for Houston EMA Services</i>.</p>
<p>Client Eligibility:</p>	<p>Nutritional Supplements: Person with HIV and documentation that the client is actively enrolled in primary medical care.</p>

	<i>Medical Nutritional Therapy:</i> Person with HIV and documentation that the client is actively enrolled in primary medical care.
Agency Requirements:	None.
Staff Requirements:	The nutritional counseling services under this category must be provided by a licensed registered dietician. Dieticians must have a minimum of two (2) years experience providing nutritional assessment and counseling to PLWH.
Special Requirements: RWGA Only	Must comply with Houston EMA/HSDA Part A/B Standards of Care, HHS treatment guidelines and applicable HRSA/HAB HIV Clinical Performance Measures. Must comply with the Houston EMA/HSDA approved Medical Nutritional Therapy Formulary.

FY 2024 RWPC “How to Best Meet the Need” Decision Process

Step in Process: Council		Date: 06/08/2023
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Steering Committee		Date: 06/01/2023
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Quality Improvement Committee		Date: 05/2023
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: HTBMTN Workgroup #2		Date: 04/19/2023
Recommendations:	Financial Eligibility:	
1.		
2.		
3.		

Barbie Robinson, MPP, JD, CHC
 Executive Director
 2223 West Loop South | Houston, Texas 77027
 Tel: (832) 927-7500 | Fax: (832) 927-0237



Michael Ha, MBA
 Director, Disease Control & Clinical Prevention Division
 2223 West Loop South | Houston, Texas 77027
 Tel: (713) 439-6000 | Fax: (713) 439-6199

FY 2020 PERFORMANCE MEASURES HIGHLIGHTS

RYAN WHITE GRANT ADMINISTRATION

HARRIS COUNTY PUBLIC HEALTH (HCPH)

Ryan White Part A
 HIV Performance Measures
 FY 2020 Report

Medical Nutritional Supplements

HIV Performance Measures	FY 2019	FY 2020	Change
80% of clients for whom there is lab data in the CPCDMS will be virally suppressed (<200)	376 (81.7%)	496 (83.4%)	1.7%
90% of clients diagnosed with wasting syndrome or suboptimal body mass will improve or maintain body mass index (BMI) in the measurement year	3 (50.0%)	5 (83.3%)	33.3%

HCPH is the local public health agency for the Harris County, Texas jurisdiction. It provides a wide variety of public health activities and services aimed at improving the health and well-being of the Harris County community.

Follow us and stay up-to-date! | @hcphtx    

HIV: What to Know About Supplements

By Dennis Thompson Jr Medically Reviewed by Jane Yoon Scott, MD Reviewed: March 18, 2023



Dietary supplements are used by many people to ensure that they get enough daily nutrients — and when you're living with [human immunodeficiency virus](#) (HIV), supplements can play an important role in your therapy. That's because people with HIV are more likely to develop [deficiencies](#) in important micronutrients, and a lack of proper nutrition is known to speed the infection's progress. Getting the nutrients you need can provide a needed boost to your immune system and support you in your HIV treatment.

But supplements for HIV management come with a caveat: Doctors prefer that people undergoing HIV therapy get most of their nutrients from a healthy diet, not pills, says [Margaret Hoffman-Terry, MD](#), a specialist in infectious diseases and HIV care at the Lehigh Valley Health Network in Allentown, Pennsylvania.

However, because HIV/AIDS can lead to difficulty eating — whether due to decreased appetite or [gastrointestinal](#) symptoms of the virus — it is not always possible to get enough nutrients from food. Diarrhea and vomiting, which are common [symptoms of HIV](#) as well as side effects of some [HIV medications](#), can also lead to malabsorption, or the inability of the body to absorb needed nutrients from food. Further, some people may opt for quick options like fast food when they get busy, making it tough to get all the nutrients they need from diet alone.

“In our modern life, it can be difficult to find time to cook a good meal all the time,” Dr. Hoffman-Terry notes.

Dietary Supplements in HIV Therapy

In addition to eating as [well-balanced a diet](#) as possible, people undergoing HIV therapy can benefit from a daily [multivitamin](#). You can talk to a nutritionist about how to best accomplish this. He or she

can look at your diet and make recommendations on what to eat when you're experiencing HIV symptoms that prevent you from having regular meals. You can also discuss whether dietary supplements could help you meet your nutrition goals, and which ones would be most beneficial for you.

Dietary supplements beyond a daily multivitamin usually are not necessary in HIV therapy. "Although supplements are a big business, they aren't generally warranted when one looks at the evidence on how helpful they actually are," says [Joseph S. Cervia, MD](#), a certified HIV practitioner and clinical professor of medicine and pediatrics at the Donald and Barbara Zucker School of Medicine at Hofstra/Northwell in New York.

However, dietary supplements can prove useful for those who are deficient in certain nutrients due to malabsorption or gastrointestinal symptoms and lack of appetite. Just be sure to check with your HIV specialist or provider before using them, Dr. Cervia cautions, since supplements and herbal remedies can still cause side effects and interact with other medications you may be taking.

Dietary supplements that can assist in HIV therapy include:

B-complex vitamins, which help boost the immune system and the nervous system

[Vitamin C](#), which helps the body fight infection and respond to illness

[Vitamin D](#), which can help protect aging HIV patients from [osteoporosis](#)

[Selenium](#) and zinc, which play important roles in the function of the immune system and are often lacking in people undergoing HIV treatment

Omega-3 fatty acids, which are found in [fish oil](#) dietary supplements and can decrease inflammation and support immunity

Dehydroepiandrosterone (DHEA), which is a hormone often low in people undergoing HIV therapy and which can help with minor depression

[Probiotic](#) dietary supplements and L-glutamine, which can support gastrointestinal health

Coenzyme Q10, which is a powerful antioxidant that could increase immune system function

Supplements to Avoid in HIV Therapy

Be cautious about starting any supplements beyond a daily multivitamin on your own, Hoffman-Terry and Cervia note, especially the following three:

St. John's Wort Some people take this herbal supplement as a [treatment for depression](#), but it can interfere with medications used in HIV therapy. "St. John's wort is processed by the same system in the liver that handles protease inhibitors and other HIV antivirals," Hoffman-Terry says. "It will

decrease your levels of those drugs.”

Fat-Soluble Vitamins The body excretes excess amounts of most water-soluble vitamins in urine, but fat-soluble vitamins like A, D, E, and K are stored in the body. “This may lead to toxic effects over time,” Cervia says.

Megavitamin Therapy Some people try to treat chronic illnesses by taking high doses of dietary supplements that far exceed recommended daily allowances. Cervia says those undergoing HIV therapy should not do this because huge doses of some vitamins can cause serious risks and side effects. For example, too much fat-soluble [vitamin A](#) can cause side effects like [jaundice](#), nausea, and vomiting.

In general, when you’re undergoing HIV therapy, be very cautious regarding any claims made about dietary supplements, particularly if the supplement seems like part of a fad.

“There are a lot of drugs out there that are sold to people as immune strengtheners, but they may not actually help,” Hoffman-Terry says. “Dietary supplements, such as vitamins, are not tested by the FDA or held to any particular standard. If you are curious about whether a supplement might be good for you, ask your doctor before taking it.” He or she may agree that supplementation with certain nutrients is worth a try under medical watch.

HIV Diet: What to Know About Nutrition and HIV

HIV treatment has come a long way, and people with HIV can live long and healthy lives if medication, including antiretroviral therapy (ART) medications, are accessible and taken as prescribed.

In addition to ART, many people with HIV are interested in natural ways to support their health, including diet and supplementation.

This article reviews the role of diet and supplementation in HIV-positive populations and gives recommendations for how to support overall health while living with HIV.

Nutrients, including protein, vitamins, and minerals, are necessary for the proper functioning of the body, including the immune system.

That's why it's important for all people, regardless of HIV status, to consume a varied diet that provides an array of nutrients.

A well-rounded diet can help support the health of the immune system and can reduce the risk of malnutrition.

[HIV-positive people](#) have higher needs for certain nutrients and are more likely to experience nutrient deficiencies than the general population. Plus, some nutrients are especially important for those with HIV, as they play an essential role in immunity and may help reduce side effects of ART ([3Trusted Source](#)).

People with HIV are at a higher risk for malnutrition

People with HIV are at higher risk for becoming malnourished compared with the general population: energy needs are around 10% higher in those with asymptomatic HIV and 20–30% higher in those with symptomatic HIV ([4Trusted Source](#)).

A 2019 study that included 812 HIV-positive people found that 11.45% of the participants were at some risk for malnutrition. The risk of malnutrition was higher in older adults and females. Hispanic participants also had a higher risk compared with Black and white participants ([4Trusted Source](#)).

That may mean that people with HIV — even those who are asymptomatic — have higher overall needs for calories and nutrients, including protein.

Although it's recognized that people with HIV have [higher protein](#) needs than people who don't have HIV, there are currently no guidelines for protein intake for people living with HIV.

According to older research, some experts recommend .45–.63 grams of protein per pound (1–1.4 g/kg) of bodyweight for HIV-positive people *maintaining* weight and muscle mass and .68–.9 grams per pound (1.5–2 g/kg) for HIV-positive people *gaining weight* and muscle mass ([5Trusted Source](#)).

Other studies have shown that nutritional supplements containing high amounts of protein can help people with HIV gain muscle mass and bodyweight ([6Trusted Source](#), [7Trusted Source](#)).

Plus, older research suggests that protein supplements may help improve immune function by increasing levels of certain blood cells that help fight infections, including CD4 lymphocytes ([6Trusted Source](#), [8Trusted Source](#)).

HIV attacks and destroys CD4 cells, which is why we use [CD4 counts](#) to assess the health of HIV-positive folks.

People with HIV are at a higher risk of nutrient deficiencies

People with HIV are more likely to be deficient in certain nutrients compared with the general population.

That's likely due to immune dysfunction, higher nutrient needs, nutrient malabsorption, and ART-related side effects ([9Trusted Source](#), [10Trusted Source](#), [11Trusted Source](#), [12Trusted Source](#)).

Studies over time show that people with HIV are more likely to be deficient in many vitamins and minerals, including vitamin D, B12, folate, [selenium](#), vitamin E, B6, and more ([9Trusted Source](#), [10Trusted Source](#), [11Trusted Source](#), [12Trusted Source](#)).

For example, numerous studies have demonstrated that HIV-positive people are at a significant risk of being deficient in vitamin D, which can negatively impact immune function ([13Trusted Source](#)).

Plus, [vitamin D deficiency](#) in people with HIV has been associated with bone disease, depression, high blood pressure, and infections ([10Trusted Source](#)).

Fortunately, research suggests that supplementing with vitamin D can replenish vitamin D levels and help improve markers of immune function, including CD4 counts ([14Trusted Source](#)).

Supplementation with a multivitamin or single-nutrient supplements may be helpful for those with HIV, as they can help treat deficiencies and support people with HIV in maintaining optimal nutrient levels.

However, it's best for those with HIV to come up with a personalized supplement regimen with a team of healthcare professionals, since HIV-positive people have different nutrient needs depending on factors like diet, sex, age, and severity of disease.

If you have HIV, healthcare professionals can order bloodwork to assess levels of certain nutrients, such as vitamin D and B12, and make appropriate supplement recommendations based on your results.

Proper nutrition may help decrease ART-related side effects and improve treatment efficacy

A nutrient-dense diet may help reduce the risk of [HIV medication](#)-related side effects and improve treatment efficacy in people with HIV.

Some ARTs interfere with the body's ability to metabolize glucose (sugars) and fats as well as negatively affect bone health, which may lead to increased risk of heart disease, [type 2 diabetes](#), and decreased bone mineral density ([15Trusted Source](#), [16Trusted Source](#), [17Trusted Source](#)).

That is why it's important for people with HIV taking ARTs to follow a healthy, balanced diet and supplement with certain nutrients when appropriate.

A diet rich in protein, healthy fats, and fiber could help improve ART- and HIV-related side effects like insulin resistance and high blood fat levels ([17Trusted Source](#), [18Trusted Source](#)).

For example, a balanced, high fiber, low [glycemic index](#) diet may help reduce blood fat levels and support healthy insulin and blood sugar regulation ([19Trusted Source](#)).

What's more, supplementation with nutrients like vitamin D can help reduce ART-related complications like decreased bone mineral density ([16Trusted Source](#)).

Summary

People living with HIV have higher energy needs and face higher risks of developing nutrient deficiencies compared with the general population. ART can also lead to side effects like decreased bone mineral density and high blood lipid levels.

Energy (caloric) needs are around 10% higher in those with asymptomatic HIV and 20–30% higher in those with symptomatic HIV ([4Trusted Source](#)).

These increased energy needs can [make it harder for those with HIV to gain and maintain bodyweight](#) and muscle mass.

Notably, one study found that the risk of malnutrition was significantly higher in specific groups of people with HIV, including older adults, females, and Hispanic people ([4Trusted Source](#)).

What's more, for HIV-positive people experiencing food insecurity, the risk of [malnutrition](#) is even higher, according to older research studies ([20Trusted Source](#), [21Trusted Source](#), [22Trusted Source](#)).

Malnutrition is associated with poor physical and mental health and poorer clinical outcomes in people with HIV ([22Trusted Source](#)).

Because HIV increases overall energy needs, it's important for those living with this condition to follow a balanced diet, including regular meals and snacks, in order to prevent weight loss.

That's essential for all HIV-positive people, regardless of whether they're [experiencing symptoms](#).

Although there's no set protein intake guidelines for people with HIV, a higher protein diet appears to help promote muscle mass gain and maintenance ([23Trusted Source](#)).

Adding a source of protein to all meals and snacks can help ensure that you're meeting daily protein needs. Examples of protein sources include chicken, fish, eggs, and beans.

Incorporating a [protein powder supplement](#) into the diet can also help people with HIV increase their daily protein needs.

Making a smoothie or protein shake with other nutrient-dense ingredients like nut butter, Greek yogurt, and berries can be a simple way to improve overall diet quality.

It's important to note that people with HIV have varying nutrient needs, so there's no one-size-fits-all diet when it comes to promoting overall health and supporting a healthy body weight.

Whenever possible, it's helpful to get personalized advice from a medical professional like a [registered dietitian](#).

Summary

People with HIV have higher nutrient needs, which increases the risk of weight loss and malnutrition. Eating regular, balanced meals and snacks can help support a healthy body weight and cover nutritional needs.

It's clear that eating a nutritious diet high in vitamins, minerals, fiber, healthy fats, and protein is important for people living with HIV. Following a healthy diet can help support healthy body weight maintenance, immune health, mental health, and more.

However, there's currently no specific dietary pattern recommended for all HIV-positive people.

Yet, because HIV compromises the immune system, food safety is important for those living with this condition ([24](#)).

: **cod safety**

People living with HIV face greater risks of developing foodborne illnesses ([food poisoning](#)), so certain precautions should be taken in order to minimize those risks.

The United States Department of Health and Human Services recommends that HIV-positive folks avoid foods likely to cause foodborne illness, including raw eggs, raw meat, [unpasteurized dairy](#), and raw seafood. It's also advised to wash fruits and vegetables thoroughly before eating ([25](#)).

Ways to help protect against foodborne illness include ([25](#), [26](#)):

- using a separate cutting board when preparing meat
- cooking foods like meat thoroughly
- refrigerating perishable foods within two hours of cooking or purchasing
- washing hands and utensils thoroughly after food preparation
- paying special attention to the quality of water you drink

Nutrient-dense dietary patterns to consider

In addition to minimizing foodborne illness risks, it's recommended that folks with HIV follow a diet high in nutritious foods that provide an array of nutrients, including vegetables, fruits, protein-rich foods like fish, and healthy fats like avocados, [olive oil](#), nuts, and seeds.

Following a balanced diet can help minimize the risk of nutrient deficiencies and make sure your body gets sufficient amounts of protein, vitamins, minerals, and other important nutrients needed for immune function, muscle mass maintenance, and more.

It should be noted that [some HIV-positive people experience diarrhea](#) and other symptoms due to ART side effects, pathogens, and HIV-related intestinal damage.

Your healthcare team can prescribe medication to help reduce these symptoms and may recommend a special diet to help treat the diarrhea, whether it's chronic or short-term.

Staying hydrated by drinking plenty of fluids is essential for everyone, including those with HIV. It becomes even more important if you're also experiencing prolonged diarrhea, as it can lead to [dehydration](#) and other complications ([27Trusted Source](#)).

If you're experiencing diarrhea or other gastrointestinal symptoms, it's important to visit a healthcare professional so you can get appropriate treatment.

Lastly, people with HIV are at greater risk of developing certain health conditions. In fact, your risk of developing type 2 diabetes may be 4 times greater if you have HIV ([17Trusted Source](#)).

People with HIV are also more likely to [develop heart disease](#) ([28Trusted Source](#)).

Following a nutritious diet high in fiber, protein, and healthy fats may help reduce the risk of HIV-related health complications by improving blood sugar regulation, reducing blood lipid levels, and maintaining a healthy bodyweight.

What about supplements?

Every person with HIV has different needs and may benefit from different supplement regimens based on factors like dietary intake, nutrient deficiencies, and disease severity.

Some evidence suggests that [some dietary supplements](#) may be helpful for improving certain aspects of health in people living with HIV.

For example, one review of nine studies found that omega-3 supplements significantly reduced triglyceride levels and increased heart-protective high density lipoprotein (HDL) cholesterol in HIV-positive people ([29Trusted Source](#)).

A 2019 review that included 6 studies found some evidence that supplementation with 200 mcg of selenium per day over 9–24 months may help delay the decline of CD4 counts in people with HIV ([30Trusted Source](#)).

Vitamin D supplementation can help increase vitamin D levels in the body and has also been shown to reduce inflammation, protect bone health, and improve CD4 levels ([31Trusted Source](#)).

Supplementing with zinc, B12, [folate](#), calcium, and other nutrients may also be helpful for those with HIV ([32Trusted Source](#), [33Trusted Source](#), [34Trusted Source](#)).

However, everyone living with HIV has different needs, so it's important to develop a personalized supplement regimen with healthcare professionals. They can help you choose supplements that may be most helpful for you and can also recommend appropriate dosing.

It's important for those with HIV to discuss all supplements with their healthcare team. Some dietary supplements, including herbs like [St. John's Wort](#) and nutrients like vitamin C and some forms of calcium, can significantly reduce the effects of some ARTs ([35Trusted Source](#)).

Summary

Even though there's currently no specific diet recommended for HIV-positive folks, a nutrient-dense diet high in healthy foods can help support overall health. Food safety is essential for reducing the risk of foodborne illness. Some supplements may be helpful, while others can interfere with ARTs.