

# Welcome to the August Statewide Wellness Virtual Lunch and Learn

Hosted by: OSHR Worksite Wellness

If you participate in the State Health Plan, you can find a nutritionist close to you by logging into your BCBSNC account or calling BCBS.

Dietician visits are covered at 100 percent when an in-network provider is used. Visit [www.shpnc.org](http://www.shpnc.org) to learn more.

For future Wellness Lunch and Learn events or recordings of previous events, visit <https://oshr.nc.gov/wellness-webinars>.

**Let's Lunch and Learn!**



# Vitamin and Mineral Supplementation

By Katie Godin, RD, LDN



**LifeStyle**  
MEDICAL CENTER

Evidence-based Lifestyle Modification  
and Medical Nutrition Therapy


# Katie Godin, RD, LDN

- Lifestyle Medical Centers offers Nutrition Counseling to assist with educating you on how to make positive lifestyle changes alongside continual support and encouragement.
- **Services offered:**
  - Weight Management
  - Women's Health
  - Sports Nutrition
  - Chronic Disease Counseling
  - Bariatric Support
  - Smoking Cessation
  - Sleep Assessment and Stress Management



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# Dietary Supplements: General Facts

- Any vitamin/mineral/herb/enzyme/probiotic/amino acid/animal byproduct that is added to the diet to benefit health.
- They are a 149-Billion-dollar industry as of 2021!
- Forms: Tablets, Powders, Capsules, Liquids, Gummies
- NOT intended to treat/cure/prevent disease
- More than 50 percent of the U.S. population uses some type of dietary supplement
- **Bottom Line: We absorb and utilize nutrients from foods more efficiently than from a dietary supplement. Always put food first and supplements as a backup way to ensure meeting nutrient needs.**

# How are they regulated?

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- FDA's Role: Because supplements are regulated as foods, not as drugs, the FDA doesn't evaluate the quality of supplements or assess their effects on the body.
- Third Party Verification is an essential first step to ensuring you are choosing a reputable product.



# How to choose the best brands:

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- Third Party Verification Seals
  - NSF (National Sanitation Foundation)
  - USP (United States Pharmacopeia)
- Seek guidance from the medical provider that is recommending the dietary supplement.



# Who should be taking them?

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- Anyone who is at risk of not meeting essential nutrients through food:
  - Children
  - Elderly
  - GI disorders that impair absorption
  - Pregnant/Breastfeeding
  - Post Bariatric Surgery
  - Restricted diets (Ex. Vegan/Vegetarian)
  - Insufficient Sun Exposure
- Anyone with specific nutrient deficiencies that have been told this through laboratory evaluation or physical/functional assessments.



# Physical Signs to look for:

- Fatigue – Chronic/Daily
- Muscle Weakness
- Pale Skin
- Cold hands/feet
- Muscle Cramps
- Dry skin/Brittle Nails
- ***These are just some symptoms that may present. The best way to ensure you are meeting essential nutrients is to have regular physical check-ups with your primary care physician and have regular, annual blood tests and other tests per your physician's recommendations.***





# Dietary Supplements

## Benefits



Aid in meeting nutrient requirements



Help you improve or maintain overall health



A way to offer an alternative therapeutic approach to health

## Risks/Limitations

- Limited Research
- Toxicity Levels
- Added expense
- May not even benefit from them
- Drug interactions
- ***You should always consult with a medical professional before taking any dietary supplements***

# Supplements to highlight :

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Daily Multi-Vitamin

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Calcium/Vitamin D

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Magnesium

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Omega-3/Fish Oil

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Probiotic/Prebiotic

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Fiber Supplementation

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B Vitamins

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Iron/Vitamin C



# Multi-Vitamins

40 percent of adults are on a Multi-Vitamin (MVI)

Bottom Line: It's best to obtain nutrients from food if able.

Who would benefit?

- Pregnant/Nursing (Prenatal/Post Natal MVI)
- Children without a variety of nutrients in their diet (Ex. extreme picky eating)
- Individuals on restricted diets (Ex. Vegetarians/Vegans – may consider a Vegan/Vegetarian-based MVI as it will have more essential nutrients that are lacking in their diet from lack of animal products.)
- Conditions that deplete nutrients (Ex. Cancer, Diabetes, Post Bariatric Surgery, GI Disorders)
- ***When choosing a Multi-Vitamin – aim for one that is targeted toward your age/gender. Best to take a MVI with a meal.***



# Omega 3 Supplement

- **Function within the body:**
  - Supports healthy brain function and nervous system regulation
  - Three main Omega 3 fats = DHA/EPA/ALA
  - RDA = 250-500mg of combined Omega 3 fats daily
- **Who would benefit from supplementation?**
  - Those with limited fish intake (Ex. Vegan/Vegetarian)
  - Infants/Children – support brain development
  - Heart health concerns (Ex. High Triglycerides) – however, research supports food sources vs. supplementation
- **Dosage to look for:**
  - 250-500mg of Omega 3 fats (can be a combination of Omega 3 fats and doses can be higher depending on needs)
  - Best to take with food, specifically a meal containing fat
  - ***Best to discuss with your medical provider prior to taking. Omega 3 supplements can act as blood thinner and should not be used by certain individuals.***



# Magnesium

## Function within the body:

- Around 60 percent of individuals are deficient in this mineral
- Blood pressure control, bone health, blood sugar control, muscle and nerve function
- ***RDA = 130-400mg daily. Take supplement with food – taking on empty stomach may cause diarrhea.***

## Most common supplemental forms:

- Citrate (Constipation)
- Glycinate (Sleep/Stress)
- Chloride (Muscle Spasms/Dermatitis)
- Sulfate (In Epsom Salt; Muscle soreness/aches/pains)

## Who would benefit from?

- Struggle with constipation
- Athletes/Those struggling with muscle soreness
- Those who need natural sleep support
- Elderly (absorption decreases as we age)
- GI Disorders affecting absorption



# Calcium and Vitamin D

- **Function within the body:**
  - Critical for bone health, good immune system, heart health, and much more.
  - RDA for Calcium = 1000-1300 mg daily – take with meals.
  - RDA for Vitamin D = 600-800 IU daily – take with meals (specifically meal with fat).
- **Who would benefit from?**
  - Post Bariatric Surgery
  - Vegetarian/Vegan diets
  - Post-Menopausal (if dietary intake is insufficient)
  - Blood levels indicate a deficiency
- **Things to remember:**
  - Taking Calcium with Vitamin D will aid in absorption.
  - Calcium Citrate (better absorbed in the body). Take dosages 500mg or < at a time. Consume with food.
  - Vitamin D3 (this form is better absorbed in the body). The best way to get Vitamin D is from sunlight – 15 min. daily.
  - ***Dosages will vary depending on laboratory markers and how much of the nutrient you are consuming through food. Always check with your healthcare provider before picking out a Vitamin D or Calcium Supplement.***





# Vitamin B12



## Function within the body:

- Keeps blood/nerve cells healthy
- Protects against forms of anemia
- RDA = 2.4 micrograms per day

## Who would benefit from?

- Vegetarian/Vegan diets (B12 is found mostly in meat/poultry/fish) May get adequate B12 from a Vegan focused MVI
- Post Bariatric Surgery (absorption impaired) – may need higher doses as well

## Considerations when choosing a supplement:

- Sublingual (under the tongue) = better absorption. Can take daily or larger dosage weekly. Keep in mind – only about 1% of supplemental B12 is absorbed – why supplemental dosages are usually >100% RDA.
- Dosage can be discussed with individual's health care provider who is recommending the supplement.
- You can take with or without food.

# Iron

- **Function within the body:**

- Hemoglobin (form of iron found in red blood cells) needed to carry oxygen from lungs to tissues
- Boosts immune system
- ***RDA = 8-27mg per day. Children need less per day. Most MVI for kids do not contain iron due to risk of toxicity. Most children can meet iron needs through food. Discuss with your pediatrician if you feel your child may not be getting enough iron daily to see if a supplement is warranted.***

- **Who would benefit from?**

- Pregnant Women
- Vegan/Vegetarian
- GI disorders that affect absorption
- Those with Iron Deficiency Anemia (determined by laboratory testing)
- Post Bariatric Surgery

- **Considerations when choosing a supplement..**

- Certain brands are better for constipation (ask your medical provider prescribing supplement). Slow FE is a brand to consider.
- Addition of Vitamin C may help with absorption. Can use Vitamin C-rich foods.





# Probiotic

- **Difference between Probiotic and Prebiotic**

- Probiotics are live bacteria – intended to improve/maintain the good bacteria in the body.
- Prebiotics are food (fiber sources) that act as nourishment for human microflora.
- Limited research on the effectiveness of probiotic supplements.

- **Who may benefit from Probiotic supplements?**

- Post GI illness
- Post Antibiotic use
- GI Disorders (Ex. IBS, Chron's)
- Suffering from constipation

- **Choosing a Probiotic and things to consider:**

- Specific strains are good for certain conditions. (Clinical Guide to Probiotics App – great resource.
- Review studies behind the strains you are seeking out. Can ask medical provider for evidence-based research behind the supplement strain you are considering.
- A good dose contains around 1 Billion CFU's (Colony Forming Units). But doses will vary based on strain of Probiotic.



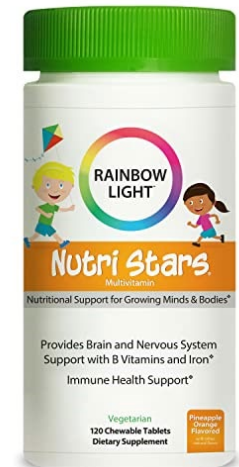
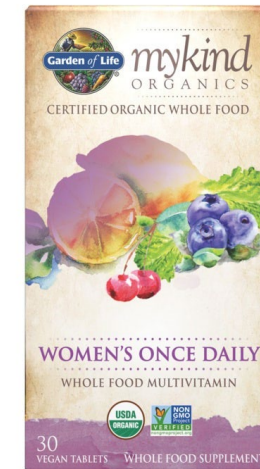
# Fiber

- Type of carbohydrate that the body can not digest. Two Types : Soluble and Insoluble.
- You need 25-35g per day. Best to obtain from food.
- **5% of Americans get enough fiber in their daily diet. Supplementation may be beneficial for individuals, but you always need to speak to your healthcare provider regarding supplement use and types of fiber to consume. Depending on specific GI disorders and current state of bowel regularity, it may not be ideal for you to take a fiber supplement.**
- Variety of supplements available (powders, capsules, gummies)
- Foods to supplement your diet: Flaxseeds/Chia Seeds and Wheat Bran. Prebiotic fibers (good for gut bacteria) are greens, garlic, onions, bananas, soybeans, and artichokes.
- Forms for fiber supplements
  - Psyllium Husk Powder – Soluble Fiber/Prebiotic Fiber. Helps with both constipation/diarrhea. Most clinical backing. Does not irritate the stomach lining.
  - Methylcellulose – Soluble Fiber helps with constipation (Citrucel). Less research behind its effectiveness.
  - Calcium Polycarbophil – Insoluble fiber that can help with diarrhea or constipation (Fibercon). Helpful for those with IBS symptoms.
  - Beta Glucan – Fermentable/Soluble fiber. Studies show it helps with blood glucose management vs. bowel regularity. Can cause gas as it's fermentable.



# Vitamin/Mineral Brands to check out:

- Thorne
- Pure Encapsulations
- Garden of Life, Mega Food, HUM (Vegetarian/Vegan)
- Culturelle
- Centrum
- NOW
- Kirkland (Costco)
- Nature Made
- Nordic Naturals (Fish Oil)
- Rainbow Light, HIYA, Smarty Pants (Children)



# Let's Cook!

Superfood Chopped Salad with  
Salmon and Creamy Garlic  
Dressing

