



The "sunshine" vitamin & the connection with depression

Background Information:

- [Vitamin D - Harvard](#)
- [WHO Info on Depression](#)
- [Depression and Older Adults](#)
- [Is Vitamin D Deficiency Causing Your Depression?](#)

Definition of “fortify”:

To add nutrients to a food during processing or to replace nutrients lost when a food product is produced or stored. The process is sometimes called enrichment. For example, when calcium is added to processed orange juice, the orange juice is said to be “fortified with calcium.” Another example is adding vitamin D to milk or cereal.

Behavior Goals

1. Participants will know gardening can be an excellent physical activity.
2. Participants will understand what foods contain vitamin D.
3. Participants will understand the connection between vitamin D and depression/mood disorders.

Meeting Preparation:

1. Review the newsletter. Send questions or concerns to your coordinator.
2. Review the background resources (website links are provided above).
3. Choose one of the recipe options. Make the recipe at least once before the meeting. Write down helpful hints for the group. If virtual, have ideas on what to share about the recipe you tried.
4. Determine how to transport and taste featured food tasting.
5. Determine if you will provide seed packets to participants and what the packets will be.

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The suggested wording for the presentation is in regular font and the facilitator directions are in ***bold, dark red italic.***

It's best not to read the presentation, but to use your own words, staying close to the meaning.

6. If the meeting is virtual, prepare ideas for how to engage participants in the recipe making process.

- a. Prepare a grocery list for the recipe chosen that can be sent with newsletter for participants to purchase
- b. Demonstrate recipe on video and direct participants to the recipe in the newsletter.
- c. If conference call: create a conversation about the recipe: serving size, freezing instructions, tips, discussion on ingredients, nutrition etc.

Props:

1. Example food labels (if virtual, ask participants to grab example food with label at beginning of class)
2. Optional: Seed packets to pass out to each participant (suggestion: herb that can be grown in a pot)

Conversation

Welcome to Fresh Conversations! At our last meeting we discussed the connection between diet, exercise, and sleep. Were there any habits you noticed that had either a positive or negative effect on the quality of your sleep?

(Allow time for participants to answer. Possible ideas: reduced caffeine intake increased my sleep quality, exercising during the day improved my sleep, being on my computer or phone before bed made it difficult for me to fall asleep).

We also talked about fiber and it's beneficial effect on your sleep. Does anyone recall what foods are high in fiber?

(Examples include whole grains, vegetables, fruits, beans, oatmeal, etc.)

Introduction

Our topic today is about vitamin D and it's connection to depression. Vitamin D is known as the "sunshine" vitamin. This is because one of the sources of vitamin D is sunlight. Your body needs vitamin D to survive and thrive, but it can be difficult for most of us to get enough through our diet alone. It is estimated that 41% of adults in the U.S. are deficient in vitamin D.

Depression is also a very common mental illness affecting about 18% of the U.S. population. Depression can happen at any age. It is a real illness; it is not a sign of a person's weakness or a character flaw. It is also not a normal part of aging. Studies have shown there may be some correlation between the vitamin D deficiency and depression. What they have found is that adequate vitamin D levels are connected with improved depression symptoms.

Discussion

Let's first discuss the importance of vitamin D. We know that vitamin D is an essential nutrient. This means that when your body does not get enough, it may not function properly. So what are some of the functions of vitamin D? Does anyone have any ideas?

Your body uses vitamin D to help absorb calcium. This is important to maintain good bone health. Low vitamin D levels put you at risk for osteoporosis and fractures. Vitamin D also has a role in your immune system. This means it may help your body fend off germs! Vitamin D has also been shown to have some positive benefits on heart health.

Where do I find vitamin D?

Ask for 3 participants to volunteer to read each of the sources from the newsletter.

1. Sunlight

- a. The amount of sun exposure needed for adequate vitamin D production is uncertain, but most estimate no more than 15 minutes a day, between 10 a.m. and 3 p.m., three times a week.
- b. Skin produces vitamin D in response to the sun's rays, but they aren't strong enough to stimulate this process during much of the year. Also, we know the sun can damage our skin and cause skin cancer and sunscreen blocks vitamin D synthesis. It is not simple enough to say "get more sun exposure."

2. Food

a. Refer to chart in newsletter.

- b. Fatty fish is the best source. The Dietary Guidelines for Americans 2020-2025 recommends 8 oz fish per week.
- c. Fortified orange juice, milk, and cereal are other good sources. It's important to remember that different brands of cereals and orange juice may have varying amounts of vitamin D. It's best to always check the nutrition foods label.

d. Briefly discuss what fortification means. See definition at the top of the newsletter guide.

3. Supplements

- a. An additional source may be supplements. It's best to talk with your provider to determine what is best for you.

For those living in northern regions, many people do not have enough sun exposure during the winter months. People are at greatest risk for vitamin D deficiency at the end of the winter. It is best to check your vitamin D level in the spring.

Where can you find vitamin D on the Nutrition Facts Label?

Pass around food label examples. If virtual, ask participants to grab a food label.

- **Ask participants if they see where vitamin D is listed on the label. It is listed at the bottom of the label. The vitamins and minerals that are listed are of public health concern (Vitamin D, Potassium, Calcium, Iron). These have changed based on public health recommendations.**

- **Explain that vitamin D is listed in % of DV (Daily Value). This makes it easy to understand. The new nutrition facts label lists vitamin D in mcg (micrograms) instead of IU (International Units). It's easier to look at daily value percentage though.**
- **It is important to note that any vitamin or mineral more than 20% of daily value is considered high. Anything that is 5% or less is considered low.**

So we know that experts believe there may be some connection between vitamin D and depression, what else can you do to lower your risk for depression?

Ask 5 participants to volunteer to read each tip from the newsletter.

1. Prepare for major changes in life.
2. Stay in touch with family.
3. Let someone know if you feel sad
4. Be physically active.
 - a. Ask participants to share what their favorite activity is.
5. Eat a balanced diet.

Herbs:

Who loves springtime? Flowers are blooming and gardeners start planting. Does anyone have any fond memories of gardening growing up?

Allow participants to share any memories they have of gardening.

What is your favorite plant to have in your garden?

Gardening may look a little different at this point in your life. One fun thing you can do is grow herbs and spices. Herbs can be planted in the small pots like we used today or can be planted in a typical garden as well. There are many health benefits to this - utilizing more fresh herbs/spices in your cooking and diet and getting more activity outdoors. Check out the chart in the newsletter highlighting a few herbs and some growing suggestions. What is your favorite herb or spice to use in cooking?

Allow time for participants to share.

Physical Activity:

Last month we talked about physical activity impacting sleep. To take action we discussed keeping a log of our sleep for a week, and if physical activity impacted our sleep. Did anyone have any observations?

(Facilitator shares what they discovered. Example: I took a 30 minute morning walk on Tuesday, that night I slept great! I only woke up once!)

This month's newsletter discusses getting outdoors and enjoying the sunlight and fresh air while being active.

Sometimes it is hard to get into gardening because we're nervous that all that shoveling, and pulling and squatting will leave us sore. Has anyone experienced this? So excited to start the new season, and then we're sore for a couple of days!!

(Participants can raise hands.)

Gardening can be a great form of physical activity. If you have experienced soreness then you know how much it can work your muscles. Working in the garden and in the yard does provide cardiovascular benefits, and burns calories. The shoveling, raking, carrying your supplies and dirt, all make us sweat a little more and breath a little harder. It can also be great at strengthening your muscles and bones. Bending down to reach the plants, and standing up strengthens your leg muscles. They work even harder if you're holding on to something heavy. Pulling weeds uses your arm muscles. Gardening can really be a full-body workout!

Gardening definitely requires some planning so you don't over do it. Switching the hands you're using, switching the activity after 15 minutes, taking breaks, planning the work over the course of several days. What strategies do you use to make it manageable?

There are also tools to make it more comfortable for you. Kneeling pads, tools designed for gardeners with arthritis. Does anyone have any tools they use?

After gardening it's always a good idea to stretch, and of course drink water while you're working in the garden!

Tasting Activities:

Tasting Activities:

1. Salmon Patties

- Choose canned salmon in water (similar to what you would choose for canned tuna).
- The patties can be served on whole wheat bread or bun. Vegetables can also be added such as lettuce, tomato, and onion. Serve this with a side of fresh fruit and glass of milk or ½ cup cottage cheese (or dairy alternative) for a balanced meal.
- These could be made into smaller patties, into "cakes."
- There are many different seasonings that you can use in the patties.
 - Paprika - this would add a sweeter flavor.
 - Chili powder - this would be a little spicier flavor.
 - Dill weed - this would add a buttery, fresh flavor.
 - Oregano - this would add a peppery, slightly bitter flavor.
 - Basil - this would add a sweet & savory flavor with hints of mint and pepper.

2. Tabouli Bulgur Wheat Salad

- This recipe is a good source of fiber providing 4 g fiber per serving. It also provides 3 g protein per serving.
- Bulgur is a good replacement for brown rice or quinoa.
- Bulgur is a staple in Middle Eastern and Mediterranean regions. It is a versatile ingredient used for breakfast, lunch, and supper.

<https://www.mainesnap-ed.org/recipes/tabouli-bulgur-wheat-salad/>

Take Action

Three days this week I will be active outdoors.

Write down three ways and days you would like to be active outdoors this week. It could be gardening, it could be a walk around the neighborhood to look at the flowers, or something else.

Write down one strategy to incorporate more vitamin D into your diet.