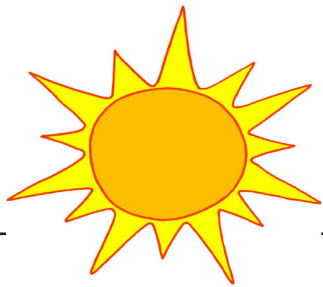




DECEMBER 2019

A NEWSLETTER FOR THE  
STAFF AND VOLUNTEERS  
OF EMERGENCY  
FEEDING PROGRAMS



## Ask the Expert:

What is Vitamin D and Why Are Many Americans Deficient?

Written by Emma Rich - Purdue University Dietetics/  
Nutrition, Fitness, and Health, 2020

Vitamin D is essential for strong bones, a powerful immune system, muscles, and heart strength. This vitamin is not very common in foods. We mainly get this vitamin by making it in our own bodies when UV rays from the sun are absorbed by our skin and turn it into an active form, called calcitriol. Calcitriol is a hormone that regulates calcium and phosphorus in the body.

Unfortunately, Vitamin D is a nutrient that most people don't get enough of and deficiency is very common in the United States, especially for those in the Northern regions of the country who do not get long days of sunlight in the winter. The months from October-March can be an especially difficult time to get adequate vitamin D in the Northern United States because the UV rays from the sun are not strong enough during these months for our skin to make calcitriol.

Deficiency of vitamin D is associated with rickets in children, osteomalacia and osteoporosis in adults. The symptoms of rickets include bowed legs, and delayed development. People with osteomalacia have bone pain and muscle weakness in the lower back, hips, legs, ribs, and pelvis. Osteoporosis is common in the United States. Symptoms of osteoporosis include loss of height over time and a stooped posture.

Low vitamin D levels can also increase the risk for certain cancers, infections, and certain auto-immune diseases, more body aches and stiffness in the winter. Winter is a great time to go get your vitamin D levels checked by a doctor to keep yourself as healthy as possible. Even though many foods do not have vitamin D, some are good sources and include: salmon, tuna, fortified milk and breakfast cereal, fortified orange juice, eggs, and yogurt. Learn more about foods with Vitamin D in the Eating Right section of this newsletter.

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Sources: <https://www.sanus-q.com/blogs/news/vitamin-d-deficiency-during-winter>; <https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/>; [http://l.bp.blogspot.com/-ZtKGm8qqwWU/TRprVoPZ8GI/AAAAAAAAAGo/\\_AF-](http://l.bp.blogspot.com/-ZtKGm8qqwWU/TRprVoPZ8GI/AAAAAAAAAGo/_AF-)

## Food Safety: Salmon and Tuna Safety

Written by Lydia Conner - Purdue University Nutrition and Dietetics, 2020

Salmon and Tuna are often packaged in cans and retort pouches. A retort pouch is flexible and made of aluminum foil and polyester. Fish is packaged in retort pouches after it has been processed. The entire pouch is sterilized at 240 to 250 degrees Fahrenheit. Seafood packaged in retort pouches can be kept on the shelf for about a year and a half. After opening, the fish can be stored in the refrigerator for three to four days.

Canned salmon and tuna have different safety considerations. After opening a can of seafood, you may find what looks like a crystal or glassy substance. According to the U.S. Food and Drug Administration, the crystals are magnesium ammonium phosphate, and form from things naturally found on fish. The crystals are perfectly safe to eat. After opening a can, it is important to put the uneaten fish in a new container. This will preserve quality, flavor, and limit the microorganisms that may get onto the fish.

If you are preparing fresh fish, here are some tips to ensure it is as safe as possible to enjoy:

- Make sure the internal temperature of the fish reaches 145 degrees Fahrenheit when cooking.
- Do not eat raw or undercooked fish. Freezing can kill some harmful pathogens, but some bacteria and parasites may still survive.
- The more safely you handle fish, the less you will need to worry about contracting foodborne illness.



### Tuna Slider with Green Chiles

#### Ingredients (3 servings)

5 oz canned tuna, drained  
 1 can chopped green chiles (1-4.25 oz. can)  
 1/4 cup diced celery  
 1/4 cup diced red onion  
 1/4 cup reduced fat mayonnaise  
 2 tbsp. chopped fresh parsley or cilantro  
 6 slider rolls  
 Lettuce

1. Combine tuna, green chiles, celery, onion, mayonnaise, and chopped herbs in a large bowl. Toss to mix.
2. Top the bottom half of each roll with lettuce leaves, and add some tuna mixture. Top with the other half of the roll.
3. Enjoy!



#### **Nutrition Facts (2 sliders)**

Calories: 285  
 Protein: 20g  
 Carbs: 34g

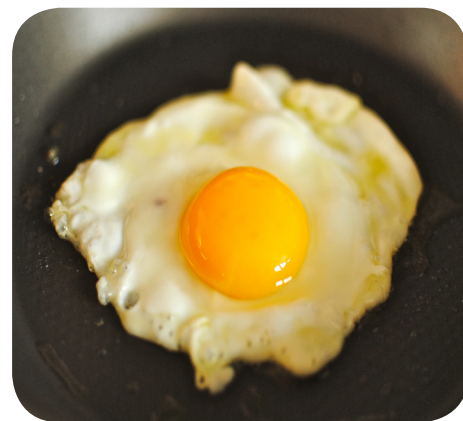
## Eating Right: Food Sources of Vitamin D

Written by Caroline Parker - Purdue University Dietetics/Nutrition, Fitness, and Health, 2021

Most Americans do not get enough vitamin D because they do not get enough vitamin D in their diets, and also because they do not spend enough time in direct sunlight. However, a shortage of vitamin D can also be caused by old age. When people get older, their bodies aren't able to absorb all the nutrients from food they need and it may be more difficult to create vitamin D from sunlight.

Eating a variety of fruits, vegetables, and meat can be affordable and helpful to getting enough vitamins and minerals to stay healthy. The amount of vitamin D varies between foods. Choose foods high in Vitamin D in order to increase your intake. Look at the nutrition facts label on food products to find and compare the percent daily vitamin D that is contained in a serving of that food. The list below provides some common foods, the amount and percentage of vitamin D provided by a standard portion size.

<b>Food</b>	<b>Standard Portion Size</b>	<b>Vitamin D in Portion (micrograms)</b>	<b>% Daily vitamin D provided by a serving</b>
Salmon, sockeye, canned	3 oz.	17.9	64%
Tilapia, cooked	3 oz.	3.1	18%
Tuna, light, canned in oil, drained	3 oz.	5.7	38%
Milk (non-fat, 1%, 2%)	8 oz.	2.9	20%
Whole milk	1 cup	3.2	22%
Yogurt (various types and flavors) fortified	8 oz.	2.0-3.0	22%
Egg, whole, fresh	1 large	1.1	7%
Orange juice, fortified with extra vitamins	1 cup	2.5	17%
Soy milk, plain	1 cup	2.9	20%
Pork chop	3 oz.	0.7	5%
Cheddar cheese	2 oz.	0.2	2%
Portabella mushroom, raw	1 whole mushroom	0.3	2%



Send comments and/or change of address to:  
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Purdue University  
700 West State Street  
West Lafayette, IN 47907-2059  
Phone: (765) 496-0271  
Fax: (765) 494-9606  
**Email: [parke285@purdue.edu](mailto:parke285@purdue.edu)**  
Website: [www.purdue.edu/indianasefrnetwork/](http://www.purdue.edu/indianasefrnetwork/)

This newsletter is edited by Caroline Parker and Heather A. Eicher-Miller, PhD and is created by the Eicher-Miller Lab in the Department of Nutrition Science at Purdue University. This institution is an equal opportunity provider.

## In The News: Food Bank Events this Month!

Written by Caroline Parker - Purdue University Dietetics/Nutrition, Fitness, and Health, 2021

### Foodbank of Northwest Indiana

#### Giving Tuesday

- December 3, 9 AM - 3 PM
- Pack meal bags for kids or boxes filled with food for seniors

#### Pack To Give Back

- December 12, 4-6 PM
- Pack meals that will be sent home with Northwest Indiana Students over holiday break
- Includes refreshments, games, crafts, music, face paintings, and Santa!

#### Strack & Van Til Checkout Challenge

- November 4 - December 29
- Visit Strack & Van Til to give your loose change that will provide hope, help, and a nutritious meal to hungry kids and families in northwest Indiana

