Ask the Expert: Vitamin D
Written by Camille T. Clark, Undergraduate in Nutrition Sciences, Purdue University

Many people are aware of the dangers of too much summer sun, but spending time out in the sun is also an important part of a healthy lifestyle. Vitamin D is a nutrient that is made and activated by the ultraviolet-B (UVB) radiation from the sun’s rays. But how much sun is enough?

Fair skinned individuals only need a few minutes each day. Those with tanned and darker skin will need a little more time, about 15-20 minutes. Be sure to apply sunscreen after getting the amount of time you need if you are staying outdoors. During the winter months it may be difficult to get the sun you need. You may also get vitamin D from food, however, very few foods naturally have vitamin D. The recommended dietary allowance (RDA) for vitamin D is about 600 IU (15 mcg) per day. Foods that are high in vitamin D are fatty fish, like tuna, mackerel, and salmon, beef liver, cheese and egg yolk. Some foods, for example dairy products, orange juice, soy milk, and cereals are often fortified with vitamin D. Dietary supplements are another way to get vitamin D when sun and food sources are not enough.

FOODS CONTAINING VITAMIN D

<table>
<thead>
<tr>
<th>Food</th>
<th>Serving Size</th>
<th>International Units of Vitamin D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cod Liver Oil</td>
<td>One tablespoon</td>
<td>1360</td>
</tr>
<tr>
<td>Swordfish</td>
<td>Three ounces</td>
<td>566</td>
</tr>
<tr>
<td>Salmon</td>
<td>Three ounces</td>
<td>477</td>
</tr>
<tr>
<td>Canned Tuna in Water</td>
<td>Three ounces</td>
<td>154</td>
</tr>
<tr>
<td>Orange Juice with</td>
<td>One cup</td>
<td>137</td>
</tr>
<tr>
<td>Vitamin D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milk with Vitamin D</td>
<td>One cup</td>
<td>115-124</td>
</tr>
<tr>
<td>Yogurt with Vitamin D</td>
<td>Six Ounces</td>
<td>80</td>
</tr>
<tr>
<td>Cooked Beef Liver</td>
<td>Three ounces</td>
<td>42</td>
</tr>
<tr>
<td>Eggs (Yolk)</td>
<td>One</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: https://www.healthxchange.sg/food-nutrition/supplements/vitamin-d-recommended-dietary-allowances-food-sources-side-effects
Chart Source: https://www.fns.usda.gov/sfsp/raise-awareness
Image Source: www.creativecommons.org

In This Issue

Ask the Expert: Vitamin D 1
Food Safety: Online Grocery Shopping 2
Eating Right: Meal Prepping 3
In the News: Kombucha 4
Now more than ever before, grocery shopping can be done online. In 2017, approximately 1/3 of grocery shoppers had shopped online for groceries, adding to $14.2 billion in sales alone in the United States. This number is estimated to double by 2021. However, while buying food online might be more convenient, the safety of the food may be less assured compared with food purchased at a physical store. Here are the top 3 food safety concerns when buying groceries online:

1. Bacteria Growth: Bacteria grow fast in protein-rich environments with high levels of moisture. This means that perishable food items such as meat and dairy are more sensitive to bacteria. These foods are riskier to buy online as they are more likely to cause infections or foodborne illnesses.

2. Storage: According to the Centre for Food Safety, storing food at the wrong temperature is a major cause of foodborne illnesses and food spoilage. When transporting food, frozen food items should be kept in containers that are below 0 degrees Fahrenheit while refrigerated food should be kept below 39 degrees Fahrenheit. Whether or not the food you order online is stored at the proper temperature during delivery, however, is hard to know when shopping online.

3. Freshness: Online grocery shopping, while convenient, does not allow shoppers to hand pick food items like they would in a traditional grocery store. In addition, depending on where shoppers choose to shop, the delivery time can take days instead of hours. These factors mean that produce may not be fresh by the time it is delivered.

Here are some more tips for shopping online:

* Avoid buying easily spoiled food items such as meat, dairy products, or fresh fruits online.
* If necessary, buy fruits that are in season to ensure freshness.
* Only buy products from reliable stores, or those that seem to be organized, clean, and well-managed.
* Always check the quality of the food before eating.
* Be extra careful when buying food for children, elderly individuals, and anyone who is pregnant or has a weakened immune system as they are more sensitive to foodborne illnesses.

Sources: https://www.statista.com/topics/1915/us-consumers-online-grocery-shopping/
Image source: https://www.entrepreneur.com/article/274692
Make-Ahead Burrito Bowls

Ingredients (4 servings)

- 2 cans chicken breasts
- 1 bell pepper
- 1 can sweet corn
- 1 can black beans
- 2 cups cooked brown rice
- shredded cheese to garnish
- salsa to garnish

1. Slice chicken breasts and bell peppers into strips and place on non-stick baking sheet.

2. Bake for 30 minutes or until chicken is thoroughly cooked.

3. Divide brown rice evenly into 4 microwavable bowls.

4. Divide chicken and peppers evenly into bowls with rice.

5. Drain black beans and corn, then divide evenly into the bowls.

6. Garnish with cheese and salsa if desired.

7. Cover uneaten bowls and keep refrigerated.

Underlining denotes TEFAP commodity ingredients

Nutrition Information (1 serving)

Calories: 220
Fat: 6g
Carbs: 22g
Protein: 11g
Kombucha, a fermented tea, has sparked much interest recently. Fermenting is an ancient technique used to preserve food and other items. During the process of fermentation, microorganisms such as bacteria or yeast chemically breakdown foods. To make Kombucha, tea is brewed and then sugar is added. After these two basic steps, the tea is fermented by adding a microbial. This microbial group is called a SCOBY, or a Symbiotic Community of Bacteria and Yeast. The SCOBY uses the added sugar to produce alcohol in the tea, which helps to preserve the tea. Most Kombucha contains an alcohol content of .5% or less, making it controversial but legal for all ages to consume.

Throughout the fermentation process, the tea also becomes carbonated because the break-down of sugars produces carbon dioxide (CO2). This simple technique gives Kombucha its sweet, vinegary, and bubbly character. Within the past 20 years, Kombucha has become more and more popular, appearing in grocery stores all around the U.S. The first commercial U.S. Kombucha brand was established in 1995 and still remains as one of the top producers. Just like any other soda or tea, Kombucha comes in an array of fruity and citrusy flavors, like blackberry, lemon, apple, ginger, cranberry, and pomegranate. Kombucha is becoming one of the fastest growing beverages in industry today.

Sources: http://microbialfoods.org/science-digested-microbial-diversity-kombucha/
https://kombuchabrewers.org/resources/kombucha-faqs/
http://catalog.purdue.edu/preview_program.php?catoid=9&poid=12491