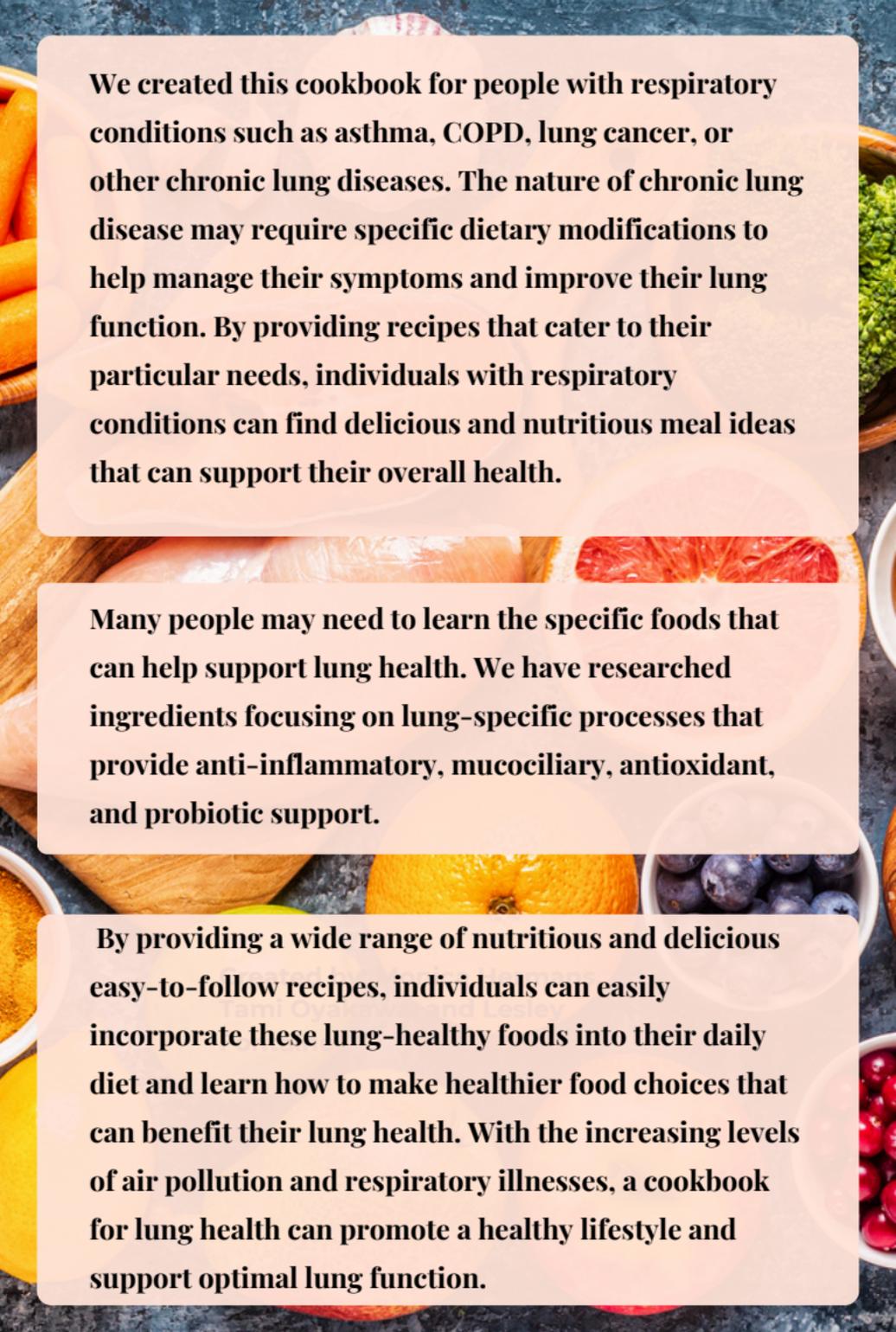


EAT BETTER, BREATHE BETTER: A CULINARY GUIDE FOR LUNG SUPPORT

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Table of Contents

Introduction	3
Terms to know	5
Breakfasts	7
Lunches	15
Dinners	23
Snacks	32
Desserts	39
Lung Healthy Ingredients	45
General Facts and Information ...	57
References	63



We created this cookbook for people with respiratory conditions such as asthma, COPD, lung cancer, or other chronic lung diseases. The nature of chronic lung disease may require specific dietary modifications to help manage their symptoms and improve their lung function. By providing recipes that cater to their particular needs, individuals with respiratory conditions can find delicious and nutritious meal ideas that can support their overall health.

Many people may need to learn the specific foods that can help support lung health. We have researched ingredients focusing on lung-specific processes that provide anti-inflammatory, mucociliary, antioxidant, and probiotic support.

By providing a wide range of nutritious and delicious easy-to-follow recipes, individuals can easily incorporate these lung-healthy foods into their daily diet and learn how to make healthier food choices that can benefit their lung health. With the increasing levels of air pollution and respiratory illnesses, a cookbook for lung health can promote a healthy lifestyle and support optimal lung function.

TIPS FROM A DIETICIAN

Typically, when a person takes a breath in (also called inspiration), the lungs exchange oxygen for carbon dioxide, which is blown out when we exhale (also called expiration). In disease states like chronic obstructive pulmonary disease (COPD), carbon dioxide (CO₂) builds up, making it difficult to breathe. The foods we eat can also add to carbon dioxide buildup, so being mindful and making the right dietary choices is essential.

We asked Nicole Ishii, a registered dietician, for tips on how nutrition can impact lung function. Here are the recommendations she makes for her patients:

Tip #1: Eat high-protein, calorie-dense foods.

Why is protein so important?

For individuals with chronic lung disease, particularly COPD, breathing can be an energy-intensive process. This is where protein plays a crucial role. It not only safeguards lean muscle mass but also strengthens respiratory muscles. Moreover, protein aids in preventing muscle wasting and malnourishment. The American Lung Association recommends a good protein source twice daily. These sources include lean meats, fish, poultry, nuts, beans, and dairy products like Greek yogurt and cottage cheese.

Tip #2 Aim to eat less carbohydrates, but don't restrict yourself!

When metabolized, carbohydrates produce more CO₂ than fats and protein. Therefore, being mindful of your carbohydrate intake can help reduce excessive CO₂ retention. Choose more complex carbohydrates in whole grains, fruits, and vegetables over simple carbohydrates like table sugar and junk foods. Remember, moderation is key.

Remember, you are not alone in your journey! Your healthcare team is here to provide guidance and support every step of the way.

Terms To Know

Antibacterial: Stops the growth of bacteria or inhibits its ability to reproduce.

Anti-infective: Prevents infectious agents from spreading or killing healthy cells.

Alveolar surfactant: Fluid found in the lungs that prevents collapsing of the alveoli

Alveoli: Tiny air sacs in the lungs where oxygen and carbon dioxide exchange occurs.

Asthma: A condition in which the airways swell and become smaller, making it difficult for air to move through them.

Bronchodilator: Substance that causes the relaxation of the smooth muscles in the bronchi

Bronchus (Bronchi): The pathway that connects the windpipe to the lungs, moving air to and from.

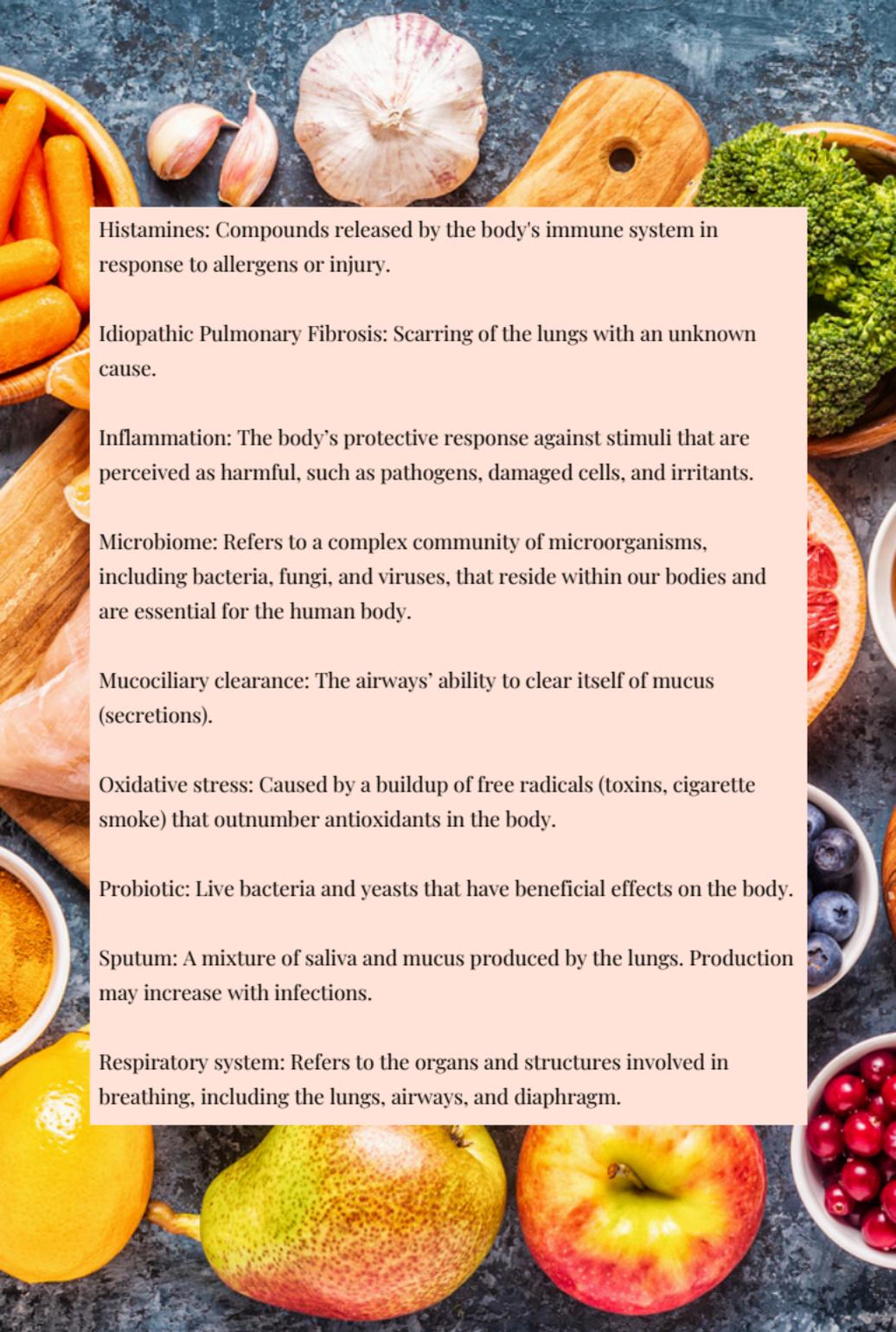
Chronic Obstructive Pulmonary Disease (COPD): a chronic inflammatory lung disease that causes obstructed airflow from the lungs.

Cystic fibrosis: A genetic disorder in which the lungs and the digestive system get clogged with mucus.

Emphysema: A lung disease that results in shortness of breath due to destruction and dilatation of the alveoli.

FEV₁: This value measures the progression of lung conditions such as COPD or asthma. It is measured by the air forced out in the first second of a breath.

Flavonoids: Chemical compounds that help reduce inflammation, have antioxidants, and have cancer-fighting abilities.



Histamines: Compounds released by the body's immune system in response to allergens or injury.

Idiopathic Pulmonary Fibrosis: Scarring of the lungs with an unknown cause.

Inflammation: The body's protective response against stimuli that are perceived as harmful, such as pathogens, damaged cells, and irritants.

Microbiome: Refers to a complex community of microorganisms, including bacteria, fungi, and viruses, that reside within our bodies and are essential for the human body.

Mucociliary clearance: The airways' ability to clear itself of mucus (secretions).

Oxidative stress: Caused by a buildup of free radicals (toxins, cigarette smoke) that outnumber antioxidants in the body.

Probiotic: Live bacteria and yeasts that have beneficial effects on the body.

Sputum: A mixture of saliva and mucus produced by the lungs. Production may increase with infections.

Respiratory system: Refers to the organs and structures involved in breathing, including the lungs, airways, and diaphragm.

Breakfast



- Fruit Tart
- Breakfast Quiche
- Shakshuka
- Breakfast Tacos
- Cinnamon Quinoa
Breakfast Bowl
- Whole Wheat Waffles
- Avocado Egg Toast





Fruit Tart



6-8 servings



30 minutes

INGREDIENTS

20 pitted dates

1 cup of unsalted cashews (walnuts or pistachio as substitution)

1 cup of unsalted almonds

1 cup of Greek yogurt

Assortment of fruits

Optional topping: 2 tablespoons of any preserves mixed with 1 tablespoon of water

DIRECTIONS

1. Soak dates in warm water for approximately 10 minutes.
2. Spray the bottom of a 9-inch cake/pie pan and line it with parchment paper.
3. Once the dates are soaked, drain and cut them into quarters.
4. In a food processor or blender, blend the dates and nuts until the nuts are all broken and a thick dough forms.
5. Once the sticky dough forms, press it evenly on the bottom and partially on the sides of the 9-inch pan.
6. Spread the Greek yogurt on top of the crust.
7. Decorate the top with your favorite assorted fruit.
8. Optional: Mix the preserves and water and brush over the top for a glossy finish, and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 13, 14, 19, 21, 23, 26, and 27.

Breakfast Quiche



8 servings



1 hour

INGREDIENTS

1 pie crust

5 large eggs

½ cup of milk of choice

½ cup of heavy cream

½ teaspoon minced garlic

1 cup of fresh chopped spinach

1 ½ cups of shredded cheese of choice

8 slices of cooked bacon, chopped into bits

Salt and pepper to taste



DIRECTIONS

1. Preheat oven to 400 degrees F (200 degrees C).
2. In a large mixing bowl, beat the eggs.
3. Add milk, heavy cream, garlic, spinach, cooked bacon, and salt and pepper to taste to the bowl.
4. Pour the mixture into the pie crust and evenly spread.
5. Shake the pie crust to release any air bubbles.
6. Bake the quiche in the oven for 40-45 minutes or until the top is golden brown.
7. Serve hot and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7 and 17.

Shashuka



4 servings



30 minutes

INGREDIENTS

- 2 tablespoons extra virgin olive oil
- 1 cup chopped yellow onion
- 1 red bell pepper diced
- 3 medium garlic cloves, minced
- Salt and pepper to taste
- 1 teaspoon smoked paprika
- 1 teaspoon ground cumin
- 1 28-ounce can of crushed tomatoes
- 2 tablespoons harissa paste
- 1 cup fresh spinach, chopped
- 5 eggs
- ½ cup of crumbled feta cheese
- ¼ cup fresh parsley leaves
- 1 avocado, diced
- Toasted bread for serving



DIRECTIONS

1. Heat the olive oil in the cast-iron skillet over medium heat.
2. Add onion, red pepper, salt and pepper until the onions become translucent (6-8 minutes)
3. Once the onions are cooked, reduce the heat to medium-low and add garlic, paprika, cumin, and cayenne.
4. Stir for about 30 seconds and add the tomatoes and harissa paste.
5. Simmer the tomatoes for about 15 minutes or until the sauce becomes thick.
6. After thickening the sauce, add spinach and allow it to wilt.
7. Using a spoon, create 5 pockets in the sauce, crack the eggs in the pockets, cover the pan, and allow the eggs to cook for about 5-8 minutes.
8. Season with salt and pepper to taste, and add feta, parsley, and avocado before serving and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 11, 12, 15, 17, and 25.

Breakfast Tacos



4 servings



20 minutes

INGREDIENTS

- 8 small tortillas (corn or flour)
- 1 tablespoon extra virgin olive oil
- 1 can of low-sodium black beans
 - 1 teaspoon garlic powder
 - 1 teaspoon onion powder
 - ½ teaspoon cayenne pepper
 - Salt and pepper to taste
 - ¼ cup water
- 1 tablespoon unsalted butter
 - 8 large eggs
 - 8 ounces shredded cheese
- 6 slices turkey bacon, cooked and chopped,
 - optional
 - 1 avocado, diced
 - Cilantro



DIRECTIONS

1. Warm the tortillas on the stove in a skillet over medium heat.
2. Remove tortillas and set aside.
3. Add the olive oil, beans, garlic powder, onion powder, salt, and cayenne to the skillet.
4. Mash the beans with the back of a spoon until creamy.
5. Pour the water into the skillet and cook until the water gets cooked off.
6. Stir in ½ tablespoon of butter into the beans until thoroughly melted. Remove from heat.
7. In a bowl, beat the eggs together.
8. Heat a second skillet over low-medium heat and add ½ tablespoon of butter.
9. Pour the eggs into the pan and continue to scramble the eggs.
10. Once almost fully cooked, season with salt and pepper
11. Spread the bean mixture on the tortillas and add eggs, cheese, avocado, and bacon to each taco. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 12, and 15.

Cinnamon Quinoa Breakfast Bowl



2 servings



20 minutes



INGREDIENTS

- 1 cup almond milk
- ½ cup uncooked quinoa
- 1 teaspoon cinnamon
- ½ teaspoon vanilla
- ½ tablespoon chia seeds or flaxseed
- 1 tablespoon of nut butter (almond or peanut)
- Maple syrup, optional
- Fruit, optional

DIRECTIONS

1. Rinse and drain the quinoa.
2. Place almond milk and quinoa in a pot and bring to a boil.
3. Once boiling, add cinnamon and vanilla.
4. Reduce the heat to a simmer and cook until all the milk is absorbed, approximately 15 minutes. Continue to stir to avoid burning.
5. Top with nut butter and chia seeds or flaxseed.
6. Optional: add maple syrup and your favorite fruit, like bananas, to top
7. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 18 and 21.



Whole Wheat Waffles



8 servings



15 minutes

INGREDIENTS

2 cups of almond milk at room temperature (or milk of choice)

1 ½ tablespoons of lemon juice

2 cups of whole wheat pastry flour

2 teaspoons of baking powder

2 tablespoons ground flax meal

2 tablespoons cane sugar

Pinch of sea salt

¼ cup melted coconut oil

1 teaspoon vanilla

1 teaspoon cinnamon

Optional: top with fruit and honey

DIRECTIONS

1. Preheat the waffle iron.
2. Combine flour, baking powder, flax meal, cinnamon, sugar, and salt in a large bowl.
3. Mix milk and lemon juice in a separate bowl.
4. Add melted coconut oil and vanilla to the wet mixture and whisk together.
5. Add wet and dry ingredients and mix until well combined, ensuring to not overmix the batter.
6. Spray oil on the waffle iron and add batter.
7. Cook to desired crispiness and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 3, 18, and 21.

Avocado Egg Toast



2 servings



15 minutes

INGREDIENTS

4 slices of Rye bread

2 hard boiled eggs

1 avocado

2 teaspoon chopped brazil nuts or flaxseeds

a pinch of salt



DIRECTIONS

1. Boil 2 eggs.
2. Place bread in toaster.
3. Cut avocado into slices
4. Cut boiled eggs into slices
5. Chop Brazil nuts
6. Place items on toast.
7. Add salt to taste.
8. Enjoy!

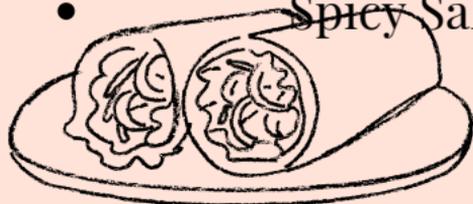
Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 8 and 15.

Lunch



- Cabbage Soup
- Roasted Garlic Tomato Soup
- Roasted Beet Salad w/ a Honey
Dijan Vinaigrette
- Rainbow Thai Chopped Chicken
Salad
- Greek Chicken Gyros and Greek
Salad
- Sweet Potato and Black Bean
Burrito Bowls
- Spicy Salmon Wrap





Cabbage Soup



4-6 servings



15 minutes

INGREDIENTS

- 2 tablespoons extra virgin olive oil
- 1 medium yellow onion, chopped
- 3 garlic cloves, minced
- 1 medium head of green cabbage, cored and chopped
- 2 celery sticks, chopped
- 2 carrots, sliced into rounds
- Kosher salt (to taste)
- Black pepper (to taste)
- ½ teaspoon ground turmeric
- 1 teaspoon ground cumin
- 1 teaspoon ground coriander
- ½ to 1 teaspoon red pepper flakes (optional)
- 1 (28-ounce) can diced tomato
- 3 cups low sodium vegetable broth
- 1 cup chopped parsley leaves (from about 1 bunch parsley)
- 3 green onions, sliced
- 1-inch piece fresh ginger, peeled and grated
- 1 large lemon, zested and juiced

DIRECTIONS

1. In a large Dutch oven or stock pot with a lid, heat the olive oil over medium heat until shimmering. Add the onion and garlic and cook, stirring, until fragrant. Take care not to burn the garlic.
2. Add the cabbage, celery, carrots, and a generous pinch of kosher salt and black pepper. Cook, stirring occasionally, until the vegetables start to soften, about 5-7 minutes
3. Add the turmeric, cumin, coriander, and red pepper flakes and toss to coat the vegetables with the spices.
4. Add the diced tomatoes and the broth. Bring to a boil for about 5 minutes, then turn the heat to medium-low. Cover the pot partway, leaving just a small opening at the top. Simmer for about 20-25 minutes, or until the vegetables are tender.
5. Turn off the heat, then stir in the parsley, chopped green onions, ginger, lemon zest, and lemon juice. Enjoy!

**If you want to add some protein, try adding some cooked, shredded chicken in step 4.

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 5, 6, 12, 16, 19, and 25.

Roasted Garlic Tomato

Soup



4 servings



50 minutes

INGREDIENTS

- 3 pounds vine-ripened or heirloom tomatoes, quartered
- 1 red pepper seeded and roughly diced
- 1 small onion sliced
- 4-8 cloves garlic peeled
- 2 tablespoons olive oil
- 2 teaspoons Italian seasoning
- 1 teaspoon salt
- Black pepper to taste
- 1 - 2 cups vegetable broth
- ¼ cup heavy cream
- Handful fresh basil, sliced into ribbons



DIRECTIONS

1. Preheat oven to 425 degrees F.
2. Place tomatoes, red pepper, onion, and garlic on a large baking sheet. Drizzle with olive oil and toss with Italian seasoning, salt and pepper.
3. Roast the veggies for about 25-30 minutes or until soft, fragrant, and roasted.
4. Let the veggies cool for a few minutes, then transfer to a blender and blend until smooth (or transfer to a large pot and use an immersion blender to blend until smooth)
5. Transfer blended veggies to a large soup pot.
6. Add enough vegetable broth to reach the desired consistency.
7. Stir in heavy cream, if using, then finish with fresh basil and extra salt and pepper to taste.
8. Serve with crusty bread or croutons for texture!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, and 12.

Roasted Beet Salad with Honey Dijon Vinaigrette



4-6 servings



1 hour

INGREDIENTS

2 medium-sized beets, roasted, peeled, and sliced *(may substitute canned beets; drain well & pat dry)

4-5 large Swiss chard leaves, stems removed and chopped (a bag of your favorite mixed greens also will work well)

½ small red onion, thinly sliced

¼ cup crumbled feta cheese

¼ cup toasted walnuts, chopped

2 tablespoons chopped fresh parsley

For the dressing:

3 tablespoons extra-virgin olive oil

2 tablespoons balsamic vinegar

1 tablespoon honey

1 teaspoon Dijon mustard

1 clove garlic, minced

Salt and pepper to taste



DIRECTIONS

1. Preheat the oven to 400 degrees F. Wrap the beets individually in aluminum foil and roast them until tender, about 45-60 minutes. Let them cool, then peel and slice them into rounds.
2. While the beets are roasting, wash the Swiss chard leaves thoroughly. Remove the stems and chop them into bite-sized pieces. Tear the leaves into smaller pieces and place them in a large salad bowl.
3. To make the dressing, whisk together the olive oil, balsamic vinegar, dijon mustard, minced garlic, salt, and pepper in a small bowl.
4. Add the sliced beets, crumbled feta cheese, chopped toasted walnuts, and chopped parsley to the bowl with the Swiss chard.
5. Drizzle the dressing over the salad and toss gently to coat all ingredients evenly.

It can be served for lunch or as a side to one of our main dishes!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 2, 7, 9, 12, and 22.

Rainbow Thai Chopped

Chicken Salad



4-6 servings



15 minutes

INGREDIENTS

- 3 cups cooked chicken, shredded or chopped
- 2 cups shredded purple cabbage
- 1 cup shredded green cabbage
- 1 avocado, chopped
- 1 mango, peeled, pitted and diced
- 1 (large) carrot, shredded or chopped
- 1 red pepper, de-seeded and chopped
- 1 cup fresh cilantro leaves, roughly chopped
- 1/2 cup chopped green onions
- 1/4 cup chopped cashews or peanuts

PEANUT DRESSING:

- 1/3 cup peanut butter
- 2-3 tablespoons hot water
- 2 tablespoons rice wine vinegar
- 2 tablespoons low-sodium soy sauce or tamari
- 2 tablespoons honey
- 1/4 teaspoon sesame oil
- juice of 1 lime
- pinch of red pepper flakes



DIRECTIONS

1. Whisk all of the dressing ingredients together until well combined. Add a teaspoon of hot water until it reaches your desired consistency.
2. Toss all salad ingredients together in a large bowl. Drizzle with dressing or toss to combine, then serve immediately.

*If prepping ahead of time, store the dressing separately until ready to serve

Tip: Use a veggie chopper to reduce time prep! This tool can quickly and efficiently chop your salad ingredients, saving time and effort.

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 12, 16, and 19.



Greek Chicken Gyro W/ Tzatziki

Sauce



4-6 servings



15 minutes

INGREDIENTS

- 2 lb chicken breast tenderloins
- 1 tbsp olive oil, for cooking
- 4-6 pita breads (or use your favorite flatbread or naan bread)
- 3 tomatoes, chopped or thinly sliced
- 3 cucumbers, chopped or thinly sliced
- 1/2 red onion, finely chopped or thinly sliced
- Pitted Kalamata olives

MARINADE:

- 3 large garlic cloves, minced
- 1 tbsp white wine vinegar (or red wine or apple cider vinegar)
- 3 tbsp lemon juice
- 1 tbsp extra virgin olive oil
- 3 tbsp Greek yogurt
- 1 1/2 tsp dried oregano
- 1 tsp salt
- Black pepper to taste

TZATZIKI:

- 2 cucumbers (grated, with excess water squeezed out)
- 1 1/4 cups Greek yogurt
- 1 tbsp lemon juice
- 1 tbsp extra virgin olive oil
- 1 garlic clove, minced
- 1/4 tsp salt
- Black pepper to taste

DIRECTIONS

MARINADE THE CHICKEN:

Place the marinade ingredients in a ziplock bag and massage to mix. Add the chicken to the ziplock bag and massage to cover all the chicken in the marinade. Marinate for at least 30 minutes, but it can be marinated for up to 24 hours.

MAKE THE TZATZIKI:

Cut the cucumber in half lengthwise. Use a teaspoon to scrape the watery seeds out. Coarsely grate the cucumber using a box grater. Then, wrap in paper towels or a tea towel and squeeze to remove excess liquid.

Place cucumber in a bowl. Add remaining ingredients, then mix to combine. Set aside for at least 20 minutes for the flavors to come together.

COOK AND ASSEMBLE:

1. Chop salad ingredients while chicken and tzatziki sauce marinate. Combine ingredients in a bowl.
2. Heat one tablespoon olive oil in a non-stick skillet over medium-high until shimmering.
3. Add chicken tenders to the pan (shake off any excess marinade before adding chicken).
4. Cook on one side undisturbed for 5 minutes until browned. Using a pair of tongs, turn the chicken over and cook on the other side for another 5 minutes or until the chicken is done.
5. Warm pita bread and assemble it with chicken and Greek salad. Top with tzatziki sauce, and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 12, 25, and 26.

Sweet Potato and Black Bean

Burrito Bowl



4 servings



40 minutes

INGREDIENTS

- 2 cups cooked grain of choice (quinoa, cilantro lime rice, even cauliflower rice all would be great)
 - 3 medium-sized sweet potatoes, peeled, if preferred, and chopped into $\frac{1}{2}$ inch cubes
 - 2 tbsp olive oil, divided
 - 1 tsp chili powder
 - 1 tsp paprika
 - 1 tsp cumin
 - $\frac{1}{2}$ tsp garlic powder
 - $\frac{1}{2}$ tsp sea salt
 - 2 red bell peppers, de-seeded and thinly sliced
 - 1 red onion, sliced
 - 1 (15 oz) can black beans, drained and warmed (add a dash of cumin and chili powder while warming for flavor!)
 - 1 (15 oz) can corn, drained and warmed
 - 1 avocado, thinly sliced
 - Cilantro leaves, optional for serving
- CILANTRO LIME DRESSING:**
- 1 cup plain Greek yogurt
 - 12 tablespoons fresh cilantro leaves, chopped
 - 2 limes, zested and juiced
 - 1 tablespoon olive oil
 - 1 teaspoon pepper
 - $\frac{1}{2}$ teaspoon salt



DIRECTIONS

1. Preheat the oven to 400 degrees Fahrenheit.
 2. Chop sweet potatoes in a bowl and toss with 1 tbsp of olive oil, paprika, chili powder, garlic powder, and salt. Transfer to a baking tray lined with parchment paper.
 3. Bake for 15 minutes, then remove from oven and toss with tongs
 4. Add the peppers and onions to the baking tray and drizzle with the remaining olive oil.
 5. Place sheet pan back in the oven for 15 more minutes or until sweet potatoes are easily pierced with a fork
 6. During the final 5 minutes, warm the black beans. Also, warm the corn at this time.
 7. Remove the veggies from the oven and assemble your bowls with $\frac{1}{2}$ cup of the cooked grains.
 8. Top grains with the roasted veggies, black beans, corn, and avocado.
 9. Whisk all the dressing ingredients together and drizzle on top of the bowls. Enjoy!
- *If making in advance, you can store ingredients separately until ready to serve.

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 11, 12, and 26.

Spicy Salmon Wrap



2 servings



15 minutes

INGREDIENTS

1 can (6 oz) of canned salmon, drained and flaked with a fork

Salt and pepper, to taste

1 medium carrot, julienned or grated

1/2 cucumber, thinly sliced

1 whole avocado, sliced

1 cup leafy greens (such as spinach, kale, or mixed greens)

2 large whole wheat or spinach tortillas

Spicy Yogurt Sauce:

1/2 cup Greek yogurt

1 tablespoon sriracha sauce (adjust to taste for desired spice level)

1 teaspoon honey

1 teaspoon lime juice

Salt to taste



DIRECTIONS

1. Mix the Greek yogurt, sriracha sauce, honey, lime juice, and salt in a small bowl until well combined. Adjust the amount of sriracha to your desired level of spiciness. Set aside.
2. Cook the edamame according to the package instructions (or thaw if using frozen), and then shell them if they are not already shelled.
3. Drain the canned salmon and flake it apart with a fork. Season to taste with salt and pepper.
4. Chop and grate the vegetables.
5. To assemble the wraps, lay out the tortillas.
6. Spread a generous amount of the spicy yogurt sauce onto each tortilla, leaving about a 1-inch border around the edges.
7. Divide the flaked salmon evenly between the tortillas, spreading it over the yogurt sauce.
8. Arrange the julienned/grated carrots, sliced cucumber, edamame, avocado, and leafy greens on top of the salmon.
9. Fold the sides of each tortilla over the filling, then roll it up tightly from the bottom to enclose the ingredients thoroughly. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 15, 17, 19, and 26.

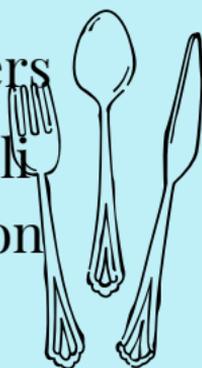
Dinner



- Sheet Pan Tumeric Chicken and Roasted Veggies
- Chicken Sausage Flatbread Pizza
- Blackened Halibut Tacos W/ Spicy Cabbage Slaw
- Red Lentil Curry



• Unstuffed Peppers
• Three Bean Chili
• Sheet Pan Salmon
Dinner





Sheet Pan Turmeric Chicken and Roasted Veggies



4-6 servings



45 minutes

INGREDIENTS

- 1.5 lbs boneless skinless chicken thighs (6 thighs)
- 3 tablespoons olive oil, divided, plus more as needed
- 2 teaspoons garlic powder
- 1 ½ teaspoons ground turmeric
- 2 teaspoons ground coriander
- 2 teaspoons sweet paprika
- Salt and black pepper, to taste
- 4 large carrots, peeled and cut into ½ inch pieces
- 2 medium sweet potatoes, washed, peeled and diced
- 1 large broccoli crown cut into florets
- 1 medium onion, chopped

DIRECTIONS

1. Preheat the oven to 425 degrees F and line a large sheet pan (you may use two if necessary) with parchment paper or aluminum foil.
2. In a small bowl, combine garlic powder, turmeric, coriander, paprika, salt, and pepper.
3. Pat chicken thighs dry and drizzle with one tablespoon of olive oil, then add the seasoning blend.
4. Rub the spice mixture on the chicken using your hands, ensuring each piece is well-coated.
5. Drizzle the veggies with the remaining oil, and use your hands to coat them evenly with the oil.
6. Arrange chicken and veggies on the sheet pan in an even layer (separate the chicken from the veggies if using two pans).
7. Bake at 425 F for about 40 minutes, or until veggies are fork tender and the chicken reaches an internal temperature of 165 degrees. *If using two pans, rotate the pans halfway through cooking.
8. Enjoy as is, or serve with rice or a side salad!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 6, 7, 9, 12, and 19.

Chicken Sausage Flatbread Pizza



2 servings



20 minutes

INGREDIENTS

- 2 pieces of naan bread or preferred flatbread pizza crust
- 2 chicken sausages, sliced
- 2/3 cup low-sodium pizza or marinara sauce
- 1 cup mozzarella cheese (divided)
- 1 cup fresh spinach leaves
- 1/2 cup halved cherry tomatoes
- 1/2 red onion, thinly sliced
- 1 tbsp olive oil (divided)



DIRECTIONS

1. Preheat oven to 350 F
2. Brush one side of the naan flatbreads with 1/2 tbsp of olive oil, ensuring it's fully covered.
3. Heat a skillet or cast iron grill pan over medium-high heat. When the pan is hot, add the flatbread and oil side down. Leave for 30 seconds or one minute to heat and slightly char. Remove with tongs and set aside on a large baking sheet.
4. In the same pan, add the chicken sausages and cook until warmed through and crispy. Remove from skillet and set aside. Sprinkle the flatbreads with Italian seasoning and garlic powder.
5. Spread the naan pieces (grilled side) with the pizza sauce. Add half of the cheese, followed by the chicken sausage slices, cherry tomatoes, red onion, and spinach. Finish with the rest of the cheese.
6. Put the pizzas in the oven and cook for 5-10 minutes until the spinach is wilted and the cheese is melted. Remove from the oven and garnish with fresh basil and red pepper flakes, if desired. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 9, 12, 17, and 25.

Blackened Halibut Tacos w/ Spicy Cabbage Slaw



4 servings



30 minutes

INGREDIENTS

4 halibut fillets (about 2 lbs) *Any white fish would also work!

1 tablespoon cooking oil

8 small corn or flour tortillas

1 large avocado, thinly sliced

1 lime, cut into 4 wedges, for serving

For the Spicy Slaw:

1 cup thinly sliced onion (red or white)

½ head of red or purple cabbage shredded

½ cup Greek yogurt

4 tablespoons chopped fresh cilantro leaves, plus extra for garnish

4 tablespoons fresh lime juice

3 jalapeño peppers, seeded and thinly sliced

For the Blackening Seasoning Blend:

*Or 2 tablespoons of your favorite low-sodium cajun or creole blend!

1 ½ teaspoons paprika

1 ½ teaspoons brown sugar (may omit, but it helps make a nice crust on the fish)

1 teaspoon dried oregano

1 teaspoon garlic powder

½ teaspoon salt

½ teaspoon ground cumin

¼ teaspoon cayenne pepper



DIRECTIONS

1. Make the slaw: Combine sour cream, cilantro, lime juice, and jalapeños in a bowl; whisk until well combined. Add onions and cabbage to the same bowl and toss until combined. Refrigerate until ready to use.
2. Make the spice blend: Combine paprika, sugar, oregano, garlic powder, salt, cumin, and cayenne in a small bowl. Set aside.
3. Blacken the fish: Heat a large dry skillet over medium-high heat until hot. Lay the fish out on a plate lined with parchment paper. Brush a little oil on each side and rub the fillets with the spice blend, ensuring they are completely covered. Cook for 2-3 minutes per side or until the spices are blackened and the fish is cooked through. Flake the fish with a fork. *If cooking the fish in batches, clean the pan in between to avoid burning the spices.
4. Assemble the tacos: Divide fish, slaw, and avocado evenly among warmed tortillas. Top with cilantro leaves and a squeeze of lime wedge.
5. Enjoy! Can be served with black beans and cilantro lime rice to round out the meal

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 1, 7, 11, 12, 15, 16, and 26.

Red Lentil Curry



6 servings



15 minutes

INGREDIENTS

- 2 cups red lentils
- 2 tablespoons olive oil
- 1 large onion diced
- 3 garlic cloves minced
- 1 1/2 inch piece fresh ginger, grated
- 2 tablespoons red curry paste
- 1 tablespoon curry powder
- 1 teaspoon turmeric
- 1 teaspoon cumin
- 1 teaspoon paprika
- 1 teaspoon salt plus more to taste
- 1 large sweet potato peeled and cut into 1-inch cubes
- 1 15 oz can diced tomatoes
- 1-quart vegetable broth
- Fresh cilantro for serving
- Greek yogurt for serving
- Lime wedges for serving



DIRECTIONS

1. Wash the lentils in cold water until the water runs clear and set aside.
2. Heat olive oil in a large Dutch oven or heavy-bottomed pot over medium heat; add onions, garlic, and ginger, and cook until soft and fragrant, about 3-5 minutes. Take care not to burn the garlic.
3. Add curry paste, curry powder, turmeric, cumin, and salt until the onions are well coated.
4. Add the red lentils, sweet potatoes, diced tomatoes, and vegetable broth. Bring mixture to a boil, then cover and simmer until sweet potatoes are knife tender and red lentils are cooked and thickened, 35-40 minutes. Season to taste with salt and pepper.
5. It may be served over rice with fresh cilantro, lime wedges, and yogurt. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 5, 6, 9, 11, 12, 20, 25, and 26.



Unstuffing Peppers



4 servings



30 minutes

INGREDIENTS

- 1 tablespoon olive oil
- 1 pound ground turkey
- 1 small onion, chopped
- 2 garlic cloves, minced
- 2 teaspoons Italian seasoning
- 1 teaspoon salt
- ½ teaspoon black pepper
- 3 small red bell peppers, chopped
- 1 cup uncooked long-grain white rice
- 15-ounce can of diced tomatoes undrained
- 2 tablespoons tomato paste
- 2 cups low sodium broth (use your favorite!)
- 1 cup low-fat or fat-free shredded cheddar cheese (optional for topping)
- chopped parsley (optional for topping)

DIRECTIONS

1. In a large sauté pan, heat olive oil over medium heat. Brown ground turkey for 10 minutes or until cooked through. Add salt, pepper, onions, garlic, and sauté for 5 minutes.
2. Add Italian seasoning, bell peppers, rice, diced tomatoes, tomato paste and broth. Stir together, then bring to a boil.
3. Once boiling, reduce heat to low and cover the pan with a well-fitting lid. Simmer for 20-25 minutes until rice is cooked and most liquid is absorbed.
4. Top with cheese and chopped parsley. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 12, and 25.



Three Bean Chili



4 servings



30 minutes

INGREDIENTS

- 1 tablespoon olive oil
- 1 large onion, diced
- 3 cloves minced garlic
- 2 jalapeños, de-seeded and diced
- 3 tablespoons chili powder
- 1 teaspoon chipotle powder
- 1 (15oz) can black beans, drained and rinsed
- 1 (15oz) can kidney beans, drained and rinsed
- 1 (15oz) can pinto beans, drained and rinsed
- 1 (28oz) can diced tomatoes, do not drain
- 1 1/2 cups vegetable broth, plus more if needed
- salt and pepper, to taste

DIRECTIONS

1. Heat olive oil over medium heat in a large pot or Dutch oven.
2. Add the diced onion and cook for 5-7 minutes or until soft and translucent.
3. Add the garlic, jalapeño, chili, and chipotle powder. Cook for 1 minute more.
4. Add the beans, tomatoes, and broth to the pot with the onions, stir, and boil.
5. Once the chili comes to a boil, reduce heat, cover the pot halfway with a lid, and simmer for about 20 minutes, stirring occasionally. Add more broth as needed—season with salt and pepper to taste. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 11, 12, 24, and 25.

Sheet Pan Salmon

Dinner



4 servings



35 minutes

INGREDIENTS

- 4 (6 oz) salmon fillets (completely thaw if using frozen salmon)
- 1 pound baby yellow or red potatoes, cut in half
- ½ pound green beans
- ¼ cup lemon juice
- ¼ cup grated Parmesan cheese
- 2 tablespoons olive oil (divided)
- 2 garlic cloves, minced
- 1 teaspoon paprika
- Pinch of red pepper flakes
- 1 tablespoon fresh chopped parsley
- Salt and pepper to taste



DIRECTIONS

1. Preheat oven to 425 F and line a large sheet pan with parchment paper.
2. Spread the potatoes in an even layer on the prepared baking sheet. Drizzle with one tablespoon of olive oil and season with salt and pepper. Toss the potatoes to coat them evenly with the oil.
3. Roast the potatoes for 15 minutes, until just tender.
4. While the potatoes are roasting, prepare the lemon garlic sauce. Combine the lemon juice, parmesan cheese, parsley, garlic, paprika, crushed red pepper, and the remaining tablespoon of olive oil in a medium bowl.
5. When the potatoes are tender, remove them from the oven. Scoot the potatoes to one side of the pan. Pat the salmon dry and place it on the baking sheet and the green beans. Season with salt and pepper, then brush the lemon garlic sauce over the salmon. Pour any remaining sauce over the green beans and potatoes.
6. Place it back into the oven and bake until the salmon flakes easily with a fork, for about 12-15 minutes. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 1, 9, and 11.

Snacks

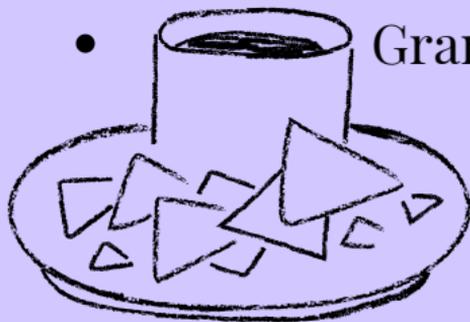


- Bruschetta
- Smoothie
- Elote Cup
- Sun-Dried Tomato

Hummus

- Guacamole
- Mixed Green Fruit Salad

- Granola





Bruschetta



8 servings



20 minutes

INGREDIENTS

- 1 loaf of French bread or whole wheat bread
(cut into about $\frac{1}{4}$ slices)
- 2 tablespoons of extra-virgin olive oil
- 1 tablespoon of balsamic vinegar
- 10 Roma tomatoes diced
- 1 ounce of parmesan cheese freshly grated
- $\frac{1}{4}$ cup chopped fresh basil
- 2 cloves of garlic minced
- Salt and pepper to taste

DIRECTIONS

1. Preheat oven to 400 degrees F (200 degrees C)
2. Brush both sides of each bread slice with 1 tablespoon of olive oil, then place on a large baking sheet.
3. Place the baking sheet in the oven and toast the bread for 5 to 10 minutes, turning halfway through, until golden brown.
4. Toss tomatoes, basil, Parmesan cheese, and minced garlic into a bowl.
5. Once well incorporated, mix in balsamic vinegar, the remaining olive oil, and salt and pepper to taste.
6. Spoon the mixture onto the toast.
7. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, and 25.



Smoothie



4 servings



5 minutes

INGREDIENTS

- 1 cup of Greek yogurt
- 1 orange
- 1 apple
- 1 cup of blueberries
- 1 cup of almond milk
- ½ teaspoon vanilla extract
- 1 scoop of protein powder
of choice (optional)

DIRECTIONS

1. Blend all ingredients into a blender until smooth and enjoy!
2. You may switch out different fruits to make other flavors.

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 13, 19, 21, 23, 26, and 27.

Elote Cup



10 servings



25 minutes

INGREDIENTS

5 corn on the cob

Olive oil

½ cup of plain Greek yogurt

1 tablespoon minced garlic

1 teaspoon smoked paprika

1 teaspoon chilli powder

1 teaspoon chipotle powder

1 teaspoon cumin

1 teaspoon black pepper

3 limes cut into four wedges

¼ cup of cilantro, chopped



DIRECTIONS

1. Lightly oil the grill with olive oil.
2. Preheat the grill to high heat.
3. Mix the Greek yogurt, seasonings, and the juice of half of a lime in a bowl.
4. Place the corn on the grill and lightly char each side, which should take about 10 minutes.
5. Once charred, cut corn off the cob and put it in a bowl. Then, add the Greek yogurt and seasonings to the bowl until evenly coated.
6. To serve, divide into bowls, garnish with cilantro, and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 11, and 26.

Sun-Dried Tomato

Hummus



8 servings



10 minutes

INGREDIENTS

- 1 (15 oz) can of no salt added garbanzo beans
rinsed and drained
- 8-10 sun-dried tomatoes in water or dried
(not in oil)
- 2 small cloves of garlic
- 2 tablespoons of olive oil
- 2 tablespoons of lemon juice
- 2 tablespoons of tahini or Greek yogurt
- 2 tablespoons of basil



DIRECTIONS

1. Place the garbanzo beans, sun-dried tomatoes, garlic, olive oil, lemon juice, tahini, and basil in a food processor or blender.
2. Blend and pulse for about 1 minute until the desired consistency is reached. To thin out the hummus, slowly add 1 tablespoon until the appropriate consistency is reached.
3. Serve with raw vegetables or whole wheat tortillas.
4. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 9, 24, and 25.



Guacomole



4 servings



10 minutes

INGREDIENTS

- 4 ripened and pitted avocados
- 2 diced Roma tomatoes
- 4 tablespoons of finely chopped cilantro
- 2 garlic cloves, minced
- Juice of 1 lime
- ½ teaspoon salt

DIRECTIONS

1. Mash avocados until the desired consistency is reached.
2. Add remaining ingredients and add more lime or salt to taste.
3. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 7, 15, and 25.



Mixed Green Fruit Salad



3 servings



5 minutes

INGREDIENTS

- 5 cups of mixed greens or spinach
- ½ cup of blueberries
- ½ cup of strawberries
- ½ cup of pineapples
- ½ cup of oranges
- ¼ cup of walnuts or choice of nuts chopped
- ⅛ of a red onion, finely sliced
- 4 tablespoons of extra virgin olive oil
- 2 tablespoons of lemon juice
- Pinch of salt and pepper

DIRECTIONS

1. Throw greens, fruits, red onion, and walnuts in a large bowl.
2. Combine olive oil, lemon juice, salt, and pepper in a small bowl for the dressing.
3. Drizzle the dressing over the salad before serving, and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 9, 12, 17, 21, 23, and 27.

Granola



6 servings



45 minutes

INGREDIENTS

2 cups of whole-rolled oats

½ cup of almonds or walnuts

½ cup of coconut flakes, optional

2 teaspoons cinnamon

1 teaspoon salt

2 tablespoons melted coconut oil

¼ cup maple syrup

2 tablespoons creamy nut butter (almond or peanut)



DIRECTIONS

1. Preheat oven to 325 degrees F (160 degrees C)
2. Line a baking sheet with parchment paper.
3. In a bowl, mix oats, nuts, coconut flakes, cinnamon, and salt until well combined.
4. Slowly add coconut oil, maple syrup, and nut butter.
5. Mix until fully incorporated.
6. Add the granola to the baking sheet and evenly press it, creating a 1-inch-thick dough.
7. Bake for 20–30 minutes or until the top is golden brown, ensuring to rotate the pan halfway through.
8. Let it cool until room temperature, and enjoy!

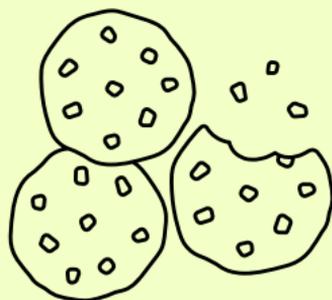
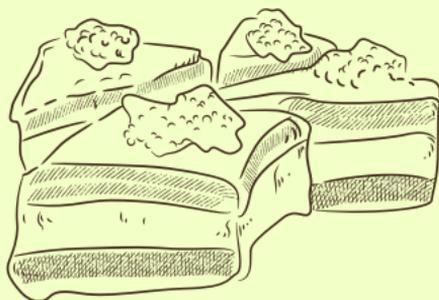
Notes

For this recipe's benefits, see Lung Healthy Ingredients section 3.

Desserts



- Mango Guava Chia Pudding
- Dark Chocolate Cherry Oatmeal Cookies
- Extra Special Dark Chocolate Brownies
- Mixed Berry “Nice Cream”
- No Bake Pumkin Bites





Mango Guava Chia Pudding



6 servings



2-24 hours

INGREDIENTS

- 1 large mango, diced (or 1 cup frozen mango, fully thawed)
- 1/2 cup guava, diced (fresh, frozen, or pulp)
- 1 cup unsweetened coconut milk (or dairy/nondairy milk of choice)
- 2 tablespoons honey or pure maple syrup
- 1 teaspoon vanilla extract
- 4 tablespoons chia seeds
- Additional diced fruit and coconut flakes for topping (optional)

DIRECTIONS

1. Prepare the guava: Peel and dice it, then place it in a blender or food processor. Puree until smooth, then pour into a mesh strainer over a bowl. Push the puree through the sieve with the back of a spoon. This will strain out the tiny guava seeds that can be unpleasant to chew. *Skip this step if using guava pulp.
2. Rinse the blender to make sure there are no leftover guava seeds. Place the guava puree back into the blender, along with the mango, coconut milk, honey, and vanilla. Blend until smooth.
3. Transfer the mixture to a jar and add the chia seeds. Stir or shake vigorously to combine, let sit for 5 minutes, and then shake again to prevent the chia from clumping.
4. Refrigerate the chia pudding for at least 1-2 hours, but preferably 5 hours up to overnight. Top with desired toppings, and enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 3, 19, and 27.

Dark Chocolate Cherry

Oatmeal Cookies



15 servings



1 hour

INGREDIENTS

1 cup quick cooking or traditional rolled oats

¾ cup whole wheat flour (or all-purpose)

1 ½ tsp baking powder

1 ½ tsp ground cinnamon

Pinch of salt

2 tbsp coconut oil

1 large egg, room temperature

½ cup applesauce to sweeten (may also use honey or agave)

1 tsp vanilla extract

¼ cup dried cherries

¼ cup chopped dark chocolate or dark chocolate chips



DIRECTIONS

Important baking tip When measuring the oats and flour, lightly scoop the dry ingredient into the measuring cup with a spoon, then level off with a butter knife. This prevents over-measuring and altering the cookie dough.

1. Whisk the oats, flour, baking powder, cinnamon, and salt in a medium bowl.
2. Whisk together the coconut oil, egg, and vanilla in a separate bowl. Stir in the applesauce. Add in the flour mixture, stirring just until incorporated.
3. Fold in the dried cherries and the dark chocolate. Chill the cookie dough for at least 30 minutes.
4. Preheat the oven to 325°F, and line a baking sheet with parchment paper.
5. Drop the cookie dough into 15 rounded tablespoon-size scoops onto the prepared sheet and flatten slightly.
6. Bake at 325°F for 10-12 minutes. It is okay if the centers are still soft. They will continue to cook while they cool. Cool on the pan for 10 minutes before transferring to a wire rack. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 3, 23, and 28.



Extra Special Dark Chocolate Brownies



8 servings



45 minutes

INGREDIENTS

- 1 large avocado
- 1/2 cup mashed banana or apple sauce
- 1/2 cup maple syrup
- 1 teaspoon vanilla extract
- 3 large eggs
- 1/2 cup whole wheat flour
- 1/2 cup unsweetened cocoa powder (Hershey's special dark is excellent!)
- 1/4 teaspoon sea salt
- 1 teaspoon baking soda
- 1/3 cup chopped dark chocolate or dark chocolate chips, plus additional for topping (optional)

DIRECTIONS

1. Preheat oven to 350 F. Spray an 8x8 baking dish with cooking spray. You can also line the baking dish with parchment paper that overhangs the sides for easy removal.
2. Whisk together the flour, cocoa powder, baking soda, and salt in a medium bowl. Set aside.
3. In a larger bowl, thoroughly mash the banana and avocado. This is important as it helps to create a smooth batter. Next, add the maple syrup, vanilla, and eggs. Mix these ingredients until they are well combined and smooth. *You may want to use an electric mixer for this part to ensure thorough mixing.
4. Add dry ingredients to the wet ingredients and mix until combined. Fold in the dark chocolate.
5. Transfer brownie batter to the prepared baking pan, smoothing it over. Add additional chocolate if desired. Bake for 25-30 minutes, or until a toothpick inserted into the center comes clean with a few moist crumbs. Enjoy!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 23 and 28.



Mixed Berry "Nice Cream"



4 servings



10 minutes

INGREDIENTS

2 Cups mixed frozen berries (or choose your favorite! This recipe is very customizable!)

1/3 Cup Greek Yogurt (plain or vanilla)

2-4 Tbsp Water

Squeeze of lemon juice (optional but recommended)

DIRECTIONS

1. Add the mixed berries, greek yogurt, water, and lemon juice to a food processor.
2. Process on high for 2-3 minutes, stopping to scrape sides down. The texture may be crumbly but will come together with longer processing. Feel free to adjust the water content to your liking.
3. Process until the berries are broken down and the consistency is like a sorbet.
4. Divide into bowls and enjoy immediately!

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 13, 14, 19, 21, 23, 26, and 27.



No Bake Pumpkin Bites



24 servings



20 minutes

INGREDIENTS

1 ½ cup of rolled oats

¼ cup of flax seeds

1 cup of natural creamy peanut butter
(warmed)

½ cup of pumpkin puree

1 tablespoon of pumpkin spice

½ cup of real maple syrup

¼ cup of dark chocolate chips

DIRECTIONS

1. Combine rolled oats, flax seeds, and pumpkin spice in a bowl and set aside.
2. Mix the warmed-up peanut butter, pumpkin puree, maple syrup, and chocolate chips in a large bowl.
3. Mix the dry ingredients with the wet.
4. Once the dough is formed, place the dough in the freezer for 20 minutes.
5. After the dough has become solid, create tablespoon-sized balls.
6. Serve immediately or place in the refrigerator.

Notes

For this recipe's benefits, see Lung Healthy Ingredients sections 10, 18, and 28.



Lung Healthy Ingredients

1. Fish (tuna, mackerel, salmon, and anchovies): contains anti-inflammatory properties

Disease processes it benefits: Asthma and COPD

Salmon, mackerel, tuna, and anchovies (oily fish) rich in omega-3 fatty acids can significantly support lung health. The potent anti-inflammatory properties of these fatty acids can help reduce airway inflammation, protect the lungs, and potentially lower the risk of respiratory conditions such as COPD and asthma. So, next time you're thinking about what to have for dinner, consider including one of these on the menu for a tasty and nutritious way to support your lung health. Reference (1a, 1b)

2. Beets: contains anti-inflammatory and antioxidant properties

Disease Process it benefits: Asthma and COPD

Root vegetables like beets are not just nutritious; they're also a feast for the senses with their earthy, sweet flavor and vibrant, deep red color. They are rich in fiber, antioxidants, and minerals, including folate and potassium. Nitrates, which might enhance lung oxygenation and blood flow, are also abundant in beets. This aids circulation and should help lower the effects of COPD and asthma. You may be able to reduce inflammation, guard against lung damage, and enhance your general respiratory health by adding these colorful gems to your diet. Reference (2)





3. Coconut oil: contains anti-infective, anti-inflammatory, and antioxidant properties

Coconut oil may also stimulate alveolar macrophages, which are the cells that help fight against pathogens in the lungs.

Coconut oil contains medium-chain triglycerides (MCTs). MCTs contain anti-inflammatory qualities connected to enhanced energy production and better respiratory function. MCTs are quickly absorbed and processed by the liver, offering a fast energy source that may be helpful for those suffering from respiratory disorders. Antioxidants like vitamin E are abundant in coconut oil and can help prevent oxidative stress and lessen inflammation in the airways. Reference (3)

4. Oysters: contains anti-inflammatory properties

Disease processes it benefits: Idiopathic Pulmonary Fibrosis (IPF) and COPD

Oysters are a rich source of zinc, a mineral crucial in combating respiratory conditions. For instance, zinc deficiency is often associated with respiratory conditions like COPD, increasing the risk of developing ailments such as Sudden Oxygen Distress Syndrome and upper respiratory tract infections. Reference (4a, 4 b)

5. Ginger: contains properties that help relax smooth muscle

Disease process it benefits: asthma

Pure forms of ginger, frequently used to soothe upset stomachs, have comparable effects on the smooth muscle of the airways. The first-line treatment for asthma symptoms is β -agonists, which temporarily open the airway. One great approach to include fresh ginger root's health benefits is adding it to already healthful recipes, like stir-fried vegetables and wild rice. Reference (5)





6. Turmeric: contains anti-inflammatory properties

Disease process it benefits: asthma

Turmeric, seen in Indian and South Asian cuisine, is also used medicinally. Curcumin is the active ingredient in turmeric that has anti-inflammatory qualities and may reduce inflammation of the airways. According to research on patients with bronchial asthma, the study demonstrated therapeutic improvement in FEV₁ values and relevant hematological parameters as it assessed the clinical efficacy and safety of curcumin capsules as an adjunct therapy in individuals with mild to moderate asthma. This supports the idea that curcumin's anti-inflammatory properties have a demonstrable positive impact on lung function. Reference (6)

7. Garlic: contains anti-inflammatory and antioxidant properties

Disease processes it benefits: asthma and COPD

Garlic- Garlic's potent smell comes from a chemical called allicin, which is also the source of many health advantages. Among the well-known advantages of garlic are that it increases resistance to infection, lowers blood pressure, and lowers cholesterol. The respiratory system benefits indirectly from each. For instance, the cardiovascular advantages are significant because oxygenated blood is circulated throughout the body by both the lungs and the heart in unison. A robust immune system also aids in the prevention of illnesses, particularly lung infections. Furthermore, a study discovered that eating raw garlic protects against lung cancer. According to a study, garlic extracts containing allicin had antibacterial action against a natural environment-found species of bacteria. The findings showed that garlic and allicin extracts have bactericidal and inhibitory effects on several infections, including those that can harm the lungs. Furthermore, allicin has anti-inflammatory properties and potent antioxidants, making it a potential treatment for inflammatory diseases like asthma and COPD. Reference (7)





8. Brazil nut: contains anti-inflammatory and antioxidant properties

Disease processes it benefits: lung cancer, COPD, and asthma
Brazil nuts contain selenium. This helps reduce inflammation in the airways. It also protects against oxidative stress. Some studies correlate Brazil nuts with a reduction in lung cancer. Brazilian nuts contain healthy fats that can also reduce inflammation throughout the body. Magnesium is also a property in the nuts, which may help reduce asthma attacks.
Reference (8)

9. Olive oil: contains antioxidant

Disease process it benefits: COPD

Olive oil contains a large amount of Vitamin E, which is essential for the function of alveolar surfactant. About 90% of surfactants are comprised of lipids. Lipids are fats that are highly vulnerable to oxidation. As a result, lipid-binding antioxidants ought to have a specific place in the lungs. Vitamin E is the most significant lipid-binding antioxidant in the lungs.
Reference (9)





10. Pumpkin: contains antioxidant properties

Disease processes it benefits: COPD, lung cancer, and asthma

Beta-carotene, a pigment that gives red, orange, and yellow foods their color, is abundant in pumpkin. The body can transform beta-carotene into vitamin A, enhancing lung function. According to a study, eating fruits and vegetables high in beta-carotene and other carotenoids may help prevent lung cancer.

According to other research, beta-carotene protects aging lungs. The potent antioxidant qualities of this plant pigment guard against oxidative stress, a significant harm that free radicals can inflict. Reference (10)

11. Chili peppers: contain mucociliary clearance and anti-inflammatory properties; they also prevent lung cancer cells from growing

Disease process it benefits: lung cancer

The chemical capsaicin, which gives chili peppers heat and spicy flavor, is found in them. It is also responsible for the health advantages peppers can offer the human body. Its anti-inflammatory properties improve lung function by lowering airway inflammation. By promoting mucociliary clearance, capsaicin facilitates the removal of fluids and mucus from the respiratory tract. Furthermore, a study discovered that chemicals in chili peppers may prevent the spread of lung cancer. Reference (11a, 11b)





12. Onions: contain anti-inflammatory properties and promote mucus production

Disease processes it benefits: COPD and acute respiratory infections

Onions contain antibacterial and anti-inflammatory compounds, which may help prevent respiratory infections and enhance lung function. According to a study, the characteristics of onions may help reduce sputum production, headaches, and coughing associated with virus-induced influenza. Thus, consider increasing your intake of onions if you require assistance eliminating mucus and phlegm from your respiratory system. A straightforward home-based treatment of an alternative approach with inhalation of preparation of onion, garlic, or scallions improved all symptoms in a clinical study of viral flu patients with mild symptoms of cough, headache, and sputum production at the onset of the disease. This suggests the application of these plants to treat mild virus-infected respiratory diseases at the onset of the disease.

Reference (12)

13. Oranges: contain antioxidant properties

Disease process it benefits: asthma and lung cancer

Vitamin C, abundant in oranges, is vital for the immune system and avoiding lung infections. It has also been demonstrated that eating a lot of oranges and other citrus fruits lowers the incidence of asthma attacks. Oranges are also a good source of flavonoids, an antioxidant that reduces the risk of lung cancer. Experimental research and theoretical analysis supported flavonoids' more decisive inhibitory action against lung cancer. Flavonoids have several beneficial qualities, including anticancer, antibacterial, antioxidant, and antidiabetic effects. Popular publications also help explain their toxicities. The detailed action modalities of the compounds described are provided. Reference (13)





14. Grapefruit: contains antioxidant properties

Disease processes it benefits: pneumonia and COPD

Vitamin C, abundant in grapefruit, has been demonstrated to strengthen the body's defenses against bacterial and viral infections, including those that result in pneumonia. Additionally, researchers believe vitamin C may guard against inflammatory lung conditions like COPD. According to studies, the antioxidant qualities of vitamin C may lessen the narrowing of the airways and other respiratory side effects brought on by strenuous exercise.

Reference (14a, 14b, 14c)

15. Avocado: contains anti-inflammatory and antioxidant properties

Disease processes it benefits: COPD, asthma, and lung cancer

Avocados are a popular and adaptable fruit, rich in flavor and creamy texture. Avocados are a tasty addition to many dishes and a good source of various essential elements, some of which may be good for the lungs. Antioxidants and good fats found in avocados have anti-inflammatory properties. Antioxidants help to maintain healthy lung tissue and prevent the development of respiratory conditions such as asthma, COPD, and lung cancer. They also provide many vitamins C and E essential for immune system support. Incorporating avocados into a balanced diet can significantly impact overall lung health. Whether enjoyed on toast, in salads or blended into smoothies, this versatile fruit offers a delicious and nutritious way to support respiratory function and reduce the risk of lung-related illnesses. So, next time you reach for a snack, consider adding some avocado to your plate and reap the benefits of this superfood for your lungs. Reference (15)





16. Cabbage: contains flavonoids and fiber

Prevents a decline in lung function.

Red cabbage is not only a tasty and an adaptable ingredient in many recipes, but it also has several essential nutrients and health advantages, some of which are beneficial to the respiratory system. Red cabbage is an excellent source of flavonoids, which have been shown to stop lung function from declining. Additionally, it is a good source of fiber, which has been shown to enhance lung health. Reference (16a, 16b).

17. Leafy greens: contains anti-inflammatory properties

Disease processes it benefits: asthma and Cystic Fibrosis

Vegetables with a leafy green color are high in vitamins, minerals, and folate. Studies have indicated that diets deficient in folate and vitamin D can lead to a higher frequency of asthma attacks.

Additional research on the thoracic cavity has validated the benefit of leafy greens in lowering respiratory stress. Reference (17a, 17b)

18. Flaxseeds: contain anti-inflammatory and antioxidant properties

Disease process it benefits: asthma

Flaxseeds are rich in omega-3 fatty acids, fiber, and antioxidants.

Studies suggest that omega-3 fatty acids reduce inflammation and asthma attacks. The majority of adults consume meals high in omega-6 fatty acids, which exacerbates the symptoms of asthma.

Meals substantial in omega-3 fatty acids, such as salmon and flaxseeds, counteract these harmful effects. Reference (18)

19. Carrots and fruits (cantaloupe, mangos, and apricots): promote alveolar development

Disease processes it benefits: asthma, COPD, and emphysema

Carrots contain vitamin A, a fat-soluble micronutrient essential to developing alveoli. According to research, higher vitamin A intake throughout childhood is linked to improved lung function and decreased risk of developing asthma in adolescence. According to another study, consuming vitamin A may reduce emphysema risk. Reference (19a, 19b)





20. Lentils: smooth muscle relaxant

Disease process it benefits: asthma

Lentils contain magnesium, an essential mineral for numerous bodily metabolic processes. Low blood magnesium levels have been linked to poor FEV₁ assessments and persistent asthma, according to studies. This is why researchers think magnesium sulfate may be able to treat patients experiencing severe asthma flare-ups by relaxing their airways. Reference (20)

21. Blueberries: contain anti-inflammatory properties and promote the death of tumorous cells

Disease processes it benefits: pulmonary fibrosis and COPD

Researchers have also found that resveratrol, a compound, may benefit lung damage associated with COPD. Furthermore, more research points to the possibility that resveratrol can effectively cure respiratory problems by inhibiting the formation of tumors, cell death, and fibrosis. Reference (21a, 21b, 21c)

22. Swiss chard: contains anti-inflammatory properties and relaxes smooth muscle tissue in the airways

Disease processes it benefits: COPD, lung cancer, and asthma

Swiss chard is a leafy green vegetable that is sometimes disregarded in favor of more widely consumed choices like kale and spinach. But because of its various health benefits, this nutrient-dense vegetable is worth including in your diet. Swiss chard is an excellent source of antioxidants such as flavonoids and polyphenols and vitamins A, C, and K. These nutrients have anti-inflammatory properties and aid in cell damage prevention. It is also a good source of magnesium, a mineral that aids in relaxing the smooth muscle of the lungs' airways. Additionally, researchers discovered that patients with COPD experienced increased symptoms when they had a magnesium shortage. Consuming leafy greens is also thought to lower the incidence of lung cancer. Reference (22)





23. Apples: contain antioxidant properties

Disease process it benefits: asthma

A study found that eating apples and their phytochemicals helps enhance lung health and lessens the impacts of asthma. For a long time, doctors have been aware of the advantages derived from apples' high antioxidant content. The study on dietary antioxidants and adult asthma likewise praised the benefits of an apple-rich diet. Reference (23)

24. Beans and legumes: contain anti-inflammatory and prebiotic properties

Disease process it benefits: asthma

Beans and legumes are delicious and full of prebiotics that play a crucial role in supporting good gut flora. This helps reduce the chance of developing asthma and other inflammatory diseases. A study examining how the gut microbiome limits autoimmune illnesses highlighted how important a diet high in beans and legumes is for managing inflammation. Reference (24)

25. Tomatoes: contain antioxidant properties

Disease process it benefits: asthma

Tomatoes are renowned for being nutrient-dense and a great source of antioxidants. A diet high in tomatoes has been shown to have positive effects on the prevalence of asthma in a study on the relationship between fruit and vegetable intake and asthma prevalence. For instance, lycopene, an antioxidant found in tomatoes, is thought to aid in bronchodilation, facilitating breathing. Reference (25a, 25b)





26. Yogurt: contains probiotic properties
Disease processes it benefits: COPD, Interstitial Lung Disease, Influenza, bronchiectasis, and Idiopathic Pulmonary Fibrosis (IPF)

Yogurt combines good bacteria, like Lactobacillus and Bifidobacterium, with milk to ferment it. It has a lot of probiotics, calcium, and protein. It also contains N-acetylcysteine (NAC), used to treat respiratory conditions such as idiopathic pulmonary fibrosis (IPF), bronchiectasis, influenza, interstitial lung disease, and COPD. Yogurt's probiotics, good bacteria that lower inflammation and boost immunity, have been related to better respiratory health. One needs a robust immune system to fend off respiratory infections and diseases. Reference (26a, 26b)

27. Guava: contains antioxidant and anti-inflammatory properties

Disease process it benefits: COPD

The tropical fruit guava contains vitamins, minerals, and other healthy ingredients. Researchers think guava pulp's anti-inflammatory and antioxidant qualities may help COPD sufferers. It also has a lot of vitamin C, which supports a healthy immune system and keeps potentially dangerous infections out of the lungs. Eat raw or blended into smoothies, and guava is a tasty and nourishing fruit that can assist your respiratory system. Reference (27)





28. Cocoa: contains flavonoids and antioxidant properties
Cocoa is a vital component of chocolate that grows on the cacao bean. It's a great source of flavonoids, antioxidants, and other benefits to your well-being. Research has indicated that cocoa's flavonoids may protect lung function. Furthermore, some scientists think that its characteristics could aid in preventing lung cancer. Reference (28)

29. Caffeine: contains bronchodilator properties

Disease process it benefits: asthma

The impact of coffee on asthmatic individuals
Cocoa, tea, cola drinks, and coffee all contain caffeine. One medication that is quite comparable to theophylline is caffeine. A bronchodilator medication called theophylline is used to widen the airways in the lungs, relieving asthma symptoms like coughing, wheezing, and dyspnea. Determining if caffeine is a bronchodilator is crucial for two main reasons. The first is that taking caffeine may help asthmatics reduce their asthma symptoms. Second, drinking coffee may impact the outcomes of essential tests that establish the severity of an individual's asthma. Reference (29)





Historical fun facts:

One notable time in history, when people utilized food ingredients for lung health, was during the Ming Dynasty in China. According to traditional Chinese medicine, certain foods were believed to strengthen the lungs and promote respiratory health. For instance, ingredients like almonds, pears, white fungus, and loquat leaves were commonly used in recipes to nourish the lungs and alleviate respiratory ailments (Banerjee, 2016). People sought these ingredients to maintain their lung function and prevent diseases such as asthma and bronchitis.

In ancient Ayurvedic medicine, the Indian system of healing that dates back thousands of years, specific foods were recommended for lung health. For instance, ginger, turmeric, garlic, and holy basil were used to clear the respiratory system, reduce inflammation, and support lung function (Biswas, 2013). These ingredients were incorporated into various dishes and herbal remedies to enhance lung health and prevent respiratory disorders.

Scientific research has supported the idea that certain food ingredients can benefit lung health. For example, studies have shown that omega-3 fatty acids found in fish, flaxseeds, and walnuts have anti-inflammatory properties that can reduce respiratory inflammation and improve lung function (Hooper et al., 2015). Additionally, fruits and vegetables rich in antioxidants, such as berries, citrus fruits, and leafy greens, have been shown to protect the lungs from oxidative damage and promote respiratory health (Diet and Lung Function, n.d.).





A 1994 study by the American Journal of Respiratory and Critical Care Medicine demonstrated the protective effects of antioxidants on lung health. The study found that individuals who consumed higher levels of vitamins C and E, two potent antioxidants, had significantly better lung function and a lower risk of developing chronic respiratory conditions, such as asthma and COPD.

Since then, numerous studies have explored the relationship between food and lung health. Researchers have identified foods that are particularly beneficial for lung function, such as fruits and vegetables that are rich in vitamins C, E, and carotenoids. These nutrients help strengthen the immune system, reduce inflammation in the airways, and protect against oxidative stress, improving lung health.





Healthy mucus production- Foods that limit excess production

Your body's glands and cells create slick and thick mucus. Mucus builds up in the lungs due to excessive phlegm production, hypersecretion, and reduced phlegm clearance. When your surroundings irritate your cells, your body typically signals them to make and discharge mucus. Smoking damages the cilia, which are microscopic hair-like structures in the lungs and are in charge of removing mucus. Because damaged cilia cannot remove mucus, the mucus gets lodged in your respiratory tract.

Since each person is unique, what makes mucus production worse for one person might not make it worse for another. Nonetheless, some meals have the potential to exacerbate mucus thickness and output. Food allergies or intolerances usually result in increased mucus production. People with chronic diseases may be more susceptible to food allergies, which might make your body create more mucus than usual.

Foods that may cause allergies and increase mucus production are eggs, fish, milk, tree nuts, peanuts, shellfish, wheat, and soy.

Foods that contain histamine naturally and may contribute to mucus production: Process Meats (hot dogs, bacon, ham, and cold cuts), Vinegar, Dried Fruits, Avocados, Tomatoes, Spinach, Mushrooms, Eggplant, Cheeses, Yogurt, Sour Cream, Buttermilk, Smoked Fish, Sardines, Anchovies, Alcoholic Beverages, Cider

*Check food labels and ingredients for any potential allergen exposure

Maucere, A., & RDN. (n.d.). Anti-Mucus Diet (What To Eat And What To Avoid). Lung Institute. Retrieved February 9, 2024, from <https://lunginstitute.com/anti-mucus-diet/>





Healthy mucus production- Foods that limit or cause excess production cont.

Foods that may limit or improve mucus production because they naturally contain antihistamines: Berries, citrus fruits, cantaloupe, kiwi, tomatoes, leafy greens, bell peppers, broccoli, and squash.

For example, vitamin C has anti-inflammatory qualities that may help clear the airways and lessen wheezing. Since each person is unique, what's successful for one may not be successful for you.

Aim for foods that can lessen the production of mucus. Fruits and vegetables are abundant in antioxidants, which actually assist the body's capacity to maintain health and recover from illness.

Maucere, A., & RDN. (n.d.). Anti-Mucus Diet (What To Eat And What To Avoid). Lung Institute. Retrieved February 9, 2024, from <https://lunginstitute.com/anti-mucus-diet/>





Saturated Fats: Leave Them Alone

Saturated fats impair lung function and increase susceptibility to lung infections. High intake of saturated fats has harmed the immune system's response to pathogens, rendering individuals more susceptible to respiratory illnesses such as pneumonia. Additionally, chronic inflammation caused by saturated fats can weaken lung defenses and hinder the clearance of pathogens from the airways, increasing the likelihood of infection (Barrett & Stanbrook, 2018).

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Foods that will interact with lung medication JUST SOME GENERAL INFORMATION

The statement, "Drugs are used to treat illness; nutrition is used to preserve health," aims to increase awareness of the connection between drugs and nutrition. Doctors write prescriptions for drugs, and dietitians deal with food. The similarity between the two groups has increased during the last ten years.

Some pulmonology-related drugs cause nutrient deficits. Other drugs have an unfavorable effect on taste, which is significant since the illnesses these drugs are intended to treat can benefit from nutrition. There are beginning to be examples that show the activities of specific drugs are enhanced by certain food elements. A more thorough analysis of the connection between diet and medication will benefit the patient.

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