## Support Healing After Surgery Through Food



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## You should read this if...

- You had surgery in the last two weeks
- You plan to have surgery within the next month
- You struggle with chronic, non-healing, non-surgical wounds

# You should call your doctor if you have...

- Worsening pain
- Redness or swelling spreading beyond your wound
- Bleeding
- Draining pus
- Cloudy or thick fluid that can be yellow, green, or grey
- A bad odor coming from your wound
- Fever more than 24 hours after surgery
- Any other changes to your wound that worry you!



## Imagine your surgical wound is like a sinkhole in the middle of town.



In order to fix the sinkhole, we need roads to bring in resources.

 In our body, blood vessels are used to bring in nutrients.

Then, we need to make sure we are getting the right resources to fix the problem.

 Different nutrients (fats, proteins, carbohydrates, vitamins, and minerals) are used by our bodies in different ways at different times.



We also need to make sure the police are on the lookout to make sure no one is meddling with our sinkhole or causing it to get worse.

White blood cells help protect surgical wounds from infection and they need proper nutrients.

If we don't fix the sinkhole as soon as possible, it can get bigger, deeper, or start to affect the way the town functions.

- If not properly attended, non-healing wounds can get worse with time.
- An infected wound can cause your entire body to become infected, something known as sepsis.

# Let's look at some of the nutrients that will help you heal after surgery.

### Vitamin A

- Helps your white blood cells fight infection
- Helps skin grow to close the wound
- Found in:



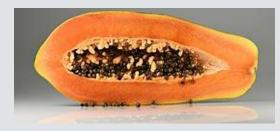
Apricots



#### Cantaloupe



Carrots



Papaya



Mangos



#### Pumpkins



#### Sweet potatoes

### Vitamin C

- Helps skin grow and bring the wound edges together
- Helps new blood vessels grow to bring in nutrients
- Found in:



Cauliflower



**Brussel Sprouts** 



Broccoli



Citrus fruits (oranges, limes, lemons, grapefruit)



Carrots



**Bell peppers** 



**Berries** 

## **More options for Vitamin C**



Swiss chard



Cabbage



Collard greens



Tomatoes



Kale



Potatoes (with skin)

## Vitamin D

- Helps body fight off infection
- Tells white blood cells to clean up the wound
- Found in:



#### Fortified non-dairy milks



#### Mushrooms



Tofu



Salmon



Tuna



Sunshine! wear sunscreen and keep your wound covered to decrease scarring

## Zinc

- Helps the body make new protein and DNA
- Keeps your immune system strong
- Strengthens skin
- Found in:



Lentils



Barley



Beans



Whole grain cereals (low in sugar)

## More options for zinc



Almonds



Pecans



Oatmeal



Walnuts



Sunflower seeds



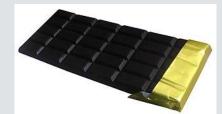
Brown rice

## Copper

- Helps grow new skin and blood vessels
- Can reduce scarring
- Found in:



Chickpeas (garbanzo beans)



Dark chocolate (70-85% cacao)



Figs



#### Mushrooms



Nuts & Seeds



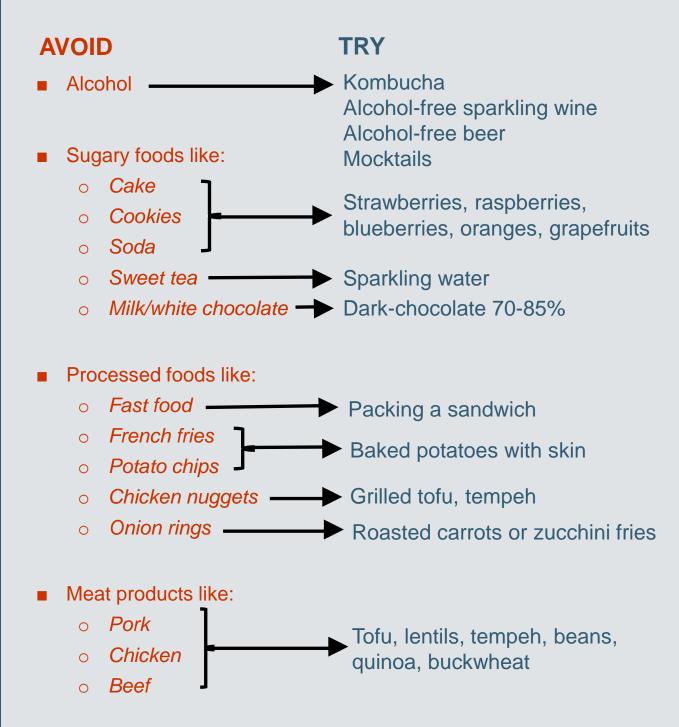
Dark leafy greens (kale, chard, collard greens, spinach, arugula)



Potatoes (with the skin)

# Foods to <u>avoid</u> the first month after surgery:

These foods weaken the immune system and lower your body's ability to fight infection and heal.



### Recipe Idea: Beans & Veggie Sausage



Ingredients:

2 Tbsp olive oil
2 veggie sausage links
1 white or yellow onion, sliced
4 cloves minced garlic
1 bunch Swiss chard or kale, chopped
1/4 cup dry white wine (optional)
1 cup chicken stock
1 15 oz can of cannellini beans or chickpeas, drained and rinsed
1 Tbsp salt
1 tsp black pepper
1/2 tsp red pepper flakes (optional)
1 lemon
1/4 cup grated parmesan cheese (optional)





Directions:

- 1. Heat 2 Tbsp oil. Add veggie sausage links to the pan to brown and cook through.
- 2. Remove sausage, slice into bite-sized pieces and set aside. Add remaining 1 tablespoon oil to pan and sauté onions over medium to high heat until translucent, but not browned, about 3-4 minutes.
- 3. Add Swiss chard and/or kale and garlic. Cook for about 30 seconds.
- 4. Pour in white wine, if using. Add chicken stock to the pan, scraping up any brown bits stuck to the bottom.
- 5. Add white beans, sliced sausage, salt and pepper, red chili flakes, if using.
- 6. Let the sauce simmer for about 10-15 minutes, until the chicken stock is slightly thickened. Taste and adjust seasoning.
- 7. Off the heat, add the juice of one lemon sprinkle with parmesan cheese.
- 8. Serve with crusty whole grain bread.



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