

#### **Carrots**

THE SUPER VEGGIE **BENEFITS OF CARROTS** SHOPPING TIPS **5 WAYS TO ENJOY CARROTS** 

#### **Fiber**

WHAT IS FIBER? **BENEFITS OF FIBER** FIBER IN FOODS **HOW TO ADD MORE FIBER** FIBER CLEAN

### specials

#### Flavor Lab

**GROW A CARROT TOP** 

#### **Taste Kitchen**

**CARROT CAKE BARS** ROASTED CARROT & CHICKPEA HUMMUS

#### **Nutraplanet Playground**

**CROSSWORD PUZZLE VOLUME 18 TRIVIA** THIS-OR-THAT 2 TRUE & 1 FALSE TIC-TAC-TOE

**Nutraplanet Gazette Survey** 



Carrots have come a long way from their ancestors in Central Asia. The first carrots were not the bright orange variety we see today, but were purple, red, and even black. These early carrots were much smaller and less sweet than modern carrots. Over time, farmers in Europe bred them to become sweeter and orange in color. The orange carrot we know today was developed in the Netherlands in the 1600s, and since then, carrots have become a staple in kitchens around the world.

#### Some Fun Carrot Varieties

Carrots are one of the most popular vegetables in the world, and for good reason! They come in a rainbow of colors, including orange, yellow, purple, red, and even white. Each type of carrot has its own flavor, from sweet and crunchy to a little earthy. Their versatility and vibrant color make them a popular choice in many different cuisines.



Imperator carrots long orange ones



Nantes carrots, extra crunchy



Purple Haze or Cosmic Purple carrots, spicier



Chantenay carrots shorter and sweeter



White Satin and Snow White carrots similar to orange



Atomic Red and Dragon carrots super sweet.

# **HOW** to enjoy carrots

Dip in hummus or peanut butter for a healthy snack.

Grate for salads or baked goods





Roast with olive oil and herbs



Nutritional Facts of carrots

vitamin A

This vitamin plays a crucial role in eye health. Vitamin A supports the cornea (eye surface) and improves your overall vision.

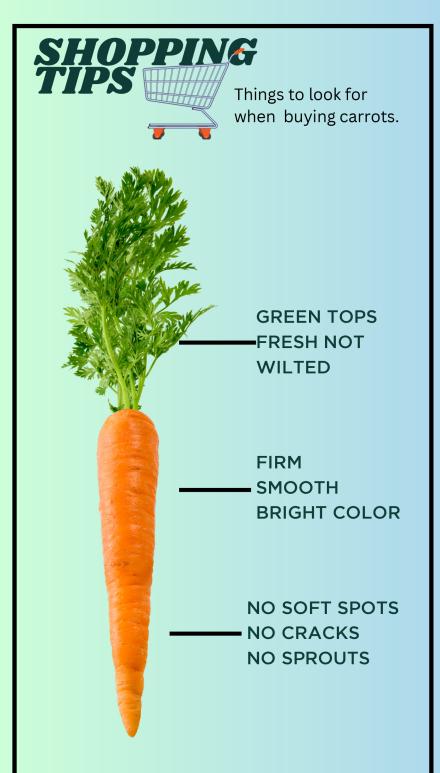
#### fiber

Fiber keeps things moving in your digestive system and helps prevent constipation. It also lowers cholesterol levels and helps regulate blood sugar, which can reduce the risk of heart disease and diabetes.

#### antioxidants

Antioxidants help your body fight harmful molecules called free radicals that damage cells and reduce the overall risk of heart disease and cancer.







- 1. How does Vitamin A from carrots help protect your eyes?
- 2. Why is fiber important for your digestive health?
- 3. How do antioxidants help protect your body from diseases like cancer?
- 4. What other health benefits can you get from eating carrots regularly?
- 5. How can you tell if a carrot is fresh and ready to eat?
- 6. What's one new way you can try preparing carrots this week?



#### **BIG IDEAS ON CARROTS**

- Carrots are not only delicious and versatile but also packed with nutrients
   vitamin A and fiber
- Carrots support overall health, from helping protect your eyes to improving digestion and fighting off disease.
- Carrots play an important role in a balanced diet. Add carrots to your meal to boost your health and bring vibrant color to your plate!



Dietary fiber, also known as roughage or bulk, includes the parts of plant foods that your body can't digest or absorb. Unlike other food components, fiber isn't broken down into digestible units as it passes through your digestive tract. This unique characteristic is what gives fiber its numerous health benefits. There are two main types of fiber. Most plant-based foods contain both types of fiber, but the amounts of each vary in different foods. Eating a wide variety of high-fiber foods is the best way to get all the health benefits.



#### Soluble Fiber

This type can help lower blood cholesterol and glucose levels. Good sources include oats, peas, beans, apples, citrus fruits, carrots, and barley.

#### **Insoluble Fiber**

This type promotes movement through your digestive system Good sources include whole-wheat flour, wheat bran, nuts, beans, and vegetables such as cauliflower and potatoes.



## HOW to enjoy fiber

## 1 CHOOSE WHOLE GRAINS INSTEAD OF REFINED VERSIONS

Whole grains provide more fiber, vitamins, and minera For example, one slice of whole wheat bread contains about 2 grams of fiber, while one slice of white bread contains less than 1 gram.



#### 2 ADD MORE FRUITS & VEGETABLES

Include a variety of colorful fruits and vegetables in your diet. Leave the edible peels on for extra fiber. Try different cooking methods like roasting or grilling to make vegetables more appealing.



#### CHOOSE HIGH-FIBER INSTEAD OF HIGH-SUGAR SNACKS

Consider high-fiber snacks like nuts, seeds, and dried fruits and make your own trail mixing various nuts, seeds, and dried fruits into a fiber-rich snack.



#### 4 ADD MORE BEANS, LENTILS, AND PEAS

Beans, lentils, and peas are excellent sources of fiber. Try adding them to soups, salads, or as a side dish. Just one cup of black beans provides 15 grams of fiber—that's about half of your daily requirement!



#### CHOOSE PRODUCTS WITH HIGH-FIBER

Look for product food labels with at least 3 grams of fiber per serving. Pay attention to serving sizes when comparing products. The % Daily Value (%DV) on the label can help you determine if a food is high in fiber (20% or more) or low in fiber (5% or less).







#### **BIG IDEAS ON FIBER**

- There are two types of fiber found in various types of food, including fruits and vegetables.
- Fiber has a profound impact on digestive and heart health and is beneficial to wellness.
- Fiber-rich foods should be included in our diet as meal or snack.



#### heart health

Fiber can lower cholesterol levels, reducing the risk of heart disease by removing cholesterol through the digestive system.



Fiber helps with weight control by reducing overall calorie intake. Fiber-rich foods slow down your eating pace, triggering fullness signals.

#### blood sugar

Fiber slows the release of sugar,
helping to reduce blood sugar
levels and maintain steady
energy throughout the day.

#### digestive health

Fiber promotes regular bowel movements, reducing the risk of digestive disorders. It also feeds beneficial gut bacteria, regulating inflammation and supporting the immune system.

#### KNOWLEDGE

- 1. What are the main differences between soluble and insoluble fiber?
- 2. How does fiber contribute to maintaining a healthy gut microbiome?
- 3.In what ways can a high-fiber diet potentially reduce the risk of certain diseases?
- 4. What creative ways can you think of to incorporate more high-fiber foods into your favorite recipes?

FLAVOR

#### BEND A CARROT?

This activity will demonstrate osmosis - the movement of water - in two solutions: fresh water and salt water. Which effect do you think fresh water will have on the carrot? what about salt water?

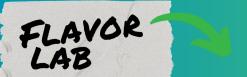
#### STEPS

- 1. Cut both carrots into similar sizes (about 3-4 inches long) to fit into the glasses.
- 2. Fill one glass with fresh water. Label this glass "Fresh Water." Place one carrot into the glass of fresh water.
- 3. Fill the second glass with water and add 3 tablespoons of salt. Stir the water until the salt dissolves. Label this glass "Salt Water." Place the second carrot into the glass of salt water.
- 4. Let the carrots sit in their solutions for 12-24 hours. Record any changes you observe, such as color or texture changes during this time.
- 5. After 12-24 hours, remove the carrots from the solutions and measure their length and texture (firmness). Optionally, weigh the carrots using a scale to see if their mass has changed.

#### **ITEMS NEEDED:**

2 fresh, raw carrots
Table salt
2 clear glasses ⚠
Water
A ruler
Spoon
Paper and pencil
Optional:
Weighing Scale
Knife ⚠
Gloves





#### **EXTRACTING DNA**

This activity will involve extracting and visualizing DNA from carrots using common household materials.

#### **STEPS**

- 1. Blend or mash the carrots with water to create a carrot "soup."
- 2.Add a tablespoon of salt and a few drops of dish soap to the mixture, and stir gently. The soap helps break down the cell membranes.
- 3. Strain the mixture using a coffee filter or fine strainer to remove solid carrot pieces.
- 4. Slowly pour cold rubbing alcohol down the side of the glass, forming a layer on top of the carrot mixture.
- 5. Watch as the DNA begins to appear as cloudy, stringy white strands where the alcohol and carrot mixture meet.
- 6.Use a toothpick to carefully lift the DNA strands from the solution.

7. Cut both carrots into similar sizes (about 3-4 inches long) to fit into the glasses.

#### **ITEMS NEEDED:**

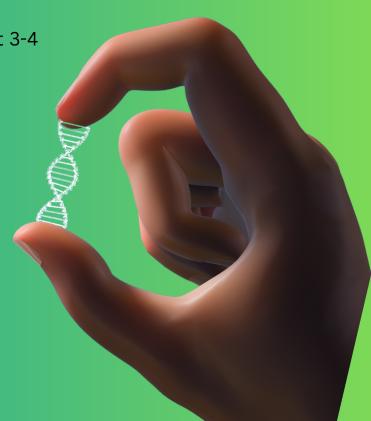
Carrots (chopped or grated)
Dish soap

Salt

Rubbing alcohol (chilled in the freezer)

Water

Blender or food processor Coffee filter or fine strainer Clear glass or small beaker Stirring stick or toothpick





# CARROT CAKE BARS WITH CREAM CHEESE FROSTING

#### **INGREDIENTS**

3 tbsp unsalted butter, melted 1/3 cup ground flaxseed 2.5 tsp ground cinnamon 1/3 tsp ground nutmeg 1/2 cup pure maple syrup 1.5 tsp vanilla extract

2.5 cups almond flour
1.25 tsp baking soda
1 tsp ground ginger
1/3 tsp fine sea salt
3 large eggs
1/2 cup raisins
3 medium carrots
shredded (1.25 cups)

#### **TOPPING INGREDIENTS**

1 batch healthy cream cheese frosting 1/3 cup chopped toasted pecans or walnuts

#### **INSTRUCTIONS**

- 1.Preheat oven to 350°F (175°C). Line a 9x9 inch (23x23 cm) baking dish with parchment paper and lightly grease with cooking spray. Set out cream cheese to soften if making frosting.
- 2.Mix dry ingredients: In a large bowl, whisk together almond flour, flaxseed, baking soda, cinnamon, ginger, nutmeg, and salt.
- 3. Mix wet ingredients: In the same bowl, add maple syrup, eggs, vanilla, and melted butter. Stir until well combined. Fold in shredded carrots and raisins (and optional pineapple or coconut, if using)...
- 4. Spread batter evenly in the prepared baking dish. Bake for 32-35 minutes, or until a toothpick inserted in the center comes out clean.
- 5. Allow cake to cool completely in the pan.
  Meanwhile, prepare the frosting according to the recipe. Once cooled, spread frosting over the cake and sprinkle with chopped nuts.
  6. Cut into squares and enjoy! Store unfrosted cake at room temperature for up to 2 days. Refrigerate frosted cake after 2 hours and consume within 5 days.







# ROASTED CHICKPE,

#### **INGREDIENTS**

1.25 pounds carrots, chopped into 1-inch chunks 3/4 cups cooked chickpeas, rinsed and drained 1/3 cup tahini 3/4 tsp ground cumin 3/4 tsp salt 1/3 tsp ground cinnamon 1/3 tsp ground cayenne 1/4 tsp ground cloves

4 whole cloves of garlic, peels left on 5 tbsp extra virgin olive oil 1/3 cup water (more if necessary) Fresh cilantro, minced, to serve 3 tbsp fresh lemon juice 3/4 tsp ground ginger 1/2 tsp ground black pepper 1/3 tsp ground coriander 1/3 tsp ground allspice

#### **OPTIONAL INGREDIENTS**

1/4 cup roasted red peppers for added sweetness and color 2 tblsp pomegranate molasses for a tangy-sweet flavor 1/4 cup toasted pumpkin seeds for garnish and crunch

#### **INSTRUCTIONS**

- 1. Preheat the oven to 425°F (220°C). Toss the chopped carrots and whole garlic cloves with 3 tablespoons of olive oil. Spread evenly on a parchment-lined baking sheet and roast until tender and lightly browned, 20 to 22 minutes, tossing halfway through.
- 2.Once cool enough to handle, squeeze the garlic cloves out of their peels.
- 3. In a food processor, combine roasted carrots, roasted garlic, chickpeas, tahini, lemon juice, water, and all spices. With the motor running, drizzle in the remaining 2 tablespoons of olive oil. Process until smooth, scraping down the sides as needed.

- Taste and adjust seasonings. If too thick, add more water or oil and process until desired consistency is reached.
- Serve garnished with minced cilantro, alongside fresh vegetables and crackers.
- For a smoother hummus, remove the skins from the chickpeas before blending.
- Roast extra carrots to use as a colorful garnish on top of the hummus.
- This hummus can be stored in an airtight container in the refrigerator for up to 5 days.

# NutraPlanet Playground

# Can you find all 14 words related to carrots?

R	P	R	F	C	В	V	Y	F	E	S	T	E	P
N	U	W	0	L	L	E	Υ	G	0	0	R	L	U
R	R	S	E	T	N	A	N	Y	Н	L	A	В	Υ
E	P	0	I	В	0	A	R	N	W	U	A	A	E
Y	L	M	В	I	R	С	N	Н	С	В	С	T	L
F	E	E	В	0	R	В	I	I	S	L	Н	E	0
B	U	A	٧	U	A	T	E	M	R	E	A	G	A
R	L	I	N	L	E	R	Н	P	E	I	N	E	E
E	В	C	A	N	T	E	E	E	٧	C	T	٧	G
P	Н	В	Y	E	R	I	0	R	N	N	E	G	I
Y	B	C	A	R	R	0	T	A	A	U	N	Н	G
Y	E	A	L	В	L	L	В	T	D	W	A	P	E
T	T	N	E	G	Υ	0	N	0	E	T	Υ	0	E
D	В	Н	В	F	I	В	E	R	Y	0	Α	E	N

Impersonator Vegetable **Nantes** Crunchy

Fiber Carrot Orange White Chantenay Yellow Danvers Baby

Soluble Purple



- 1. True or False: Soluble fiber dissolves in water to form a gel-like material.
- 2. True or False: Most plant-based foods contain both soluble and insoluble fiber.
- 3. What are the two main types of fiber?
- A) Solid and liquid

- B) Soluble and insolube
- C) Digestible and indigestible
- D) Natural and artificial
- 4. Which of the following is NOT a benefit of consuming adequate fiber?
- A) Improved digestive health
- B) Lower cholesterol levels
- C) Increased vitamin C absorption D) Better blood sugar control
- 5. What is the recommended daily fiber intake for adults according to the Academy of Nutrition and Dietetics?
- A) 10-15 grams
- B) 15-20 grams
- C) 25-35 grams
- D) 40-50 grams



That's right! Carrots are fatfree! Carrots are mostly water, natural sugars, and packed with Vitamin A!

Source: USDA Food Data Central

Unbelievable! The world's longest carrot grew to an astonishing 20 feet —that's taller than a giraffe!

Source: Guinness World Records



Carrots weren't just for salads in ancient Greece and Rome—they were used as medicine! People believed carrots could help with stomach problems.

Source: Oxford University Press

This one's **crazy but true!** Eat too many carrots, and your skin can turn a bit orange! It's harmless, and will return once you slow down on the carrots.

Source: NIH



# NutraPlanet Playground

## Tic-Tac-Toe

Player 2 Player 1 Taking turns with your partner, play a game of Tic Tac Toe with a goal of getting three in a row.

#### WE VALUE YOUR FEEDBACK!

That's why we invite you to share your feedback about this issue. This survey will take a few minutes. Just click any question to begin. Thank you for making us a better gazette.

Did you enjoy this edition of the Nutraplanet Gazette?							
	○ Yes, I loved it	○ It was OK	○ Not really	○ Didn't read it			
9	After reading,	food of the month?					
	○ Definitely	○ Maybe	○ Probably Not	○ No way			
Are you more likely to select the food of the month if you see it in the cafeteria?							
	○ Yes, I loved it	○ It was OK	○ Probably Not	○ No way			
Do you feel that you know more about the food of the month after reading the Gazette?							
	<ul><li>○ Yes, I learned a lot</li></ul>	∣	○ Not really	○ I didn't read			
5	What topics we of the Gazette	ould you like to : ?	see in future e	editions			