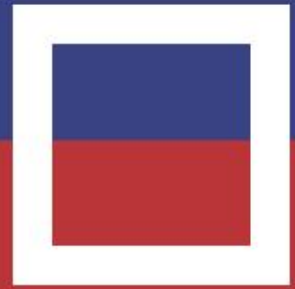




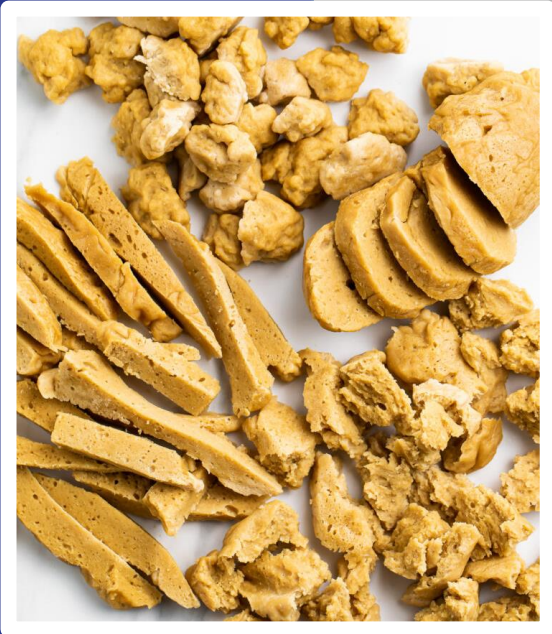
INGREDIENT OF THE MONTH



American Culinary Federation
Education Foundation

ALL ABOUT SEITAN

Seitan, pronounced as 'say-tan' and alternatively referred to as wheat meat, wheat gluten, or "mianjin" in Chinese cuisine, has a rich history dating back to the 6th century with profound ties to East Asian cultures. Its inception can be attributed to China, where it emerged as a protein-rich meat substitute tailored for Buddhist monks adhering to a vegetarian lifestyle. The earliest known mention of wheat gluten is found in the *Qimin Yaoshu*, a Chinese agricultural encyclopedia scribed by Jia Sixie in 535, underscoring the long-lasting legacy of seitan in culinary traditions.



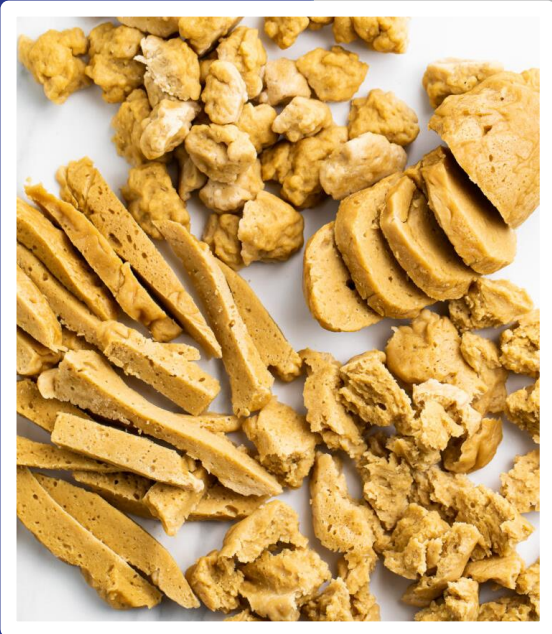
Over the years, seitan's popularity expanded to other East Asian countries, including Japan, where it is known as "fu" or "kofu." Japanese Buddhist monks valued seitan as a protein source, and its versatility in traditional dishes has been evident throughout history. Beyond East Asia, seitan has gained global prominence in recent years due to the increasing interest in plant-based diets. This wheat-based meat substitute is now widely appreciated in vegetarian and vegan cuisines worldwide, celebrated for its meaty texture and adaptability in diverse dishes.

Seitan made its mark in the United States in the mid-20th century, finding initial favor among health-conscious individuals and vegetarians. As interest in alternative diets grew, seitan evolved into a widely embraced meat substitute, aligning with the surge in plant-based lifestyles during the late 20th and early 21st centuries. Today, seitan is a readily available staple in grocery stores and restaurants nationwide, reflecting the broader cultural shift towards plant-based eating and the ongoing exploration of alternatives to traditional meat sources.

Seitan is crafted through a straightforward process that involves growing, processing, and preparing wheat gluten. Wheat crops are harvested, ground into flour, and mixed with water to create a dough. Through a washing process, starches are removed, leaving behind gluten—a protein-rich, elastic substance. This glutenous mass is then seasoned and cooked, typically by boiling, steaming, or baking, resulting in the final product known as seitan. This versatile meat substitute, appreciated for its texture and ability to absorb flavors, is available in various forms, from pre-packaged options to homemade creations, making it a staple in the kitchens of those seeking plant-based alternatives.

HEALTHY INGREDIENT CONTRIBUTION

Seitan (vital wheat gluten), a versatile and often overlooked plant-based protein, offers a delicious alternative to meat and traditional plant-based proteins like tofu and tempeh. Well-known in Asian cuisine, this vegan protein is gaining popularity in Western kitchens. Whether you're a seasoned vegan or just exploring plant-based options, seitan can offer several health benefits and contributions when included in a well-balanced diet.



Protein: Protein is an important macronutrient for the building blocks of the body. The body uses protein to build and repair tissue, make enzymes and hormones, and build muscle and skin. One ounce of crumbled seitan supplies an impressive 21g of protein or roughly 35-50% of the recommended daily value (DV) dependent on body weight.

Phosphorous: Approximately 7% of the DV can be found in just a one-ounce portion of crumbled seitan. Phosphorous is key for the growth, maintenance, and repair of all tissues and cells. Phosphorous also helps balance and use other vitamins and minerals.

Iron: In addition to helping hemoglobin carry oxygen from the lungs to other parts of the body, iron also helps muscles store and use oxygen, reduces tiredness and fatigue, and improves both mental and physical performance. You'll find approximately 8% of the DV of iron when consuming approximately one ounce of crumbled seitan.

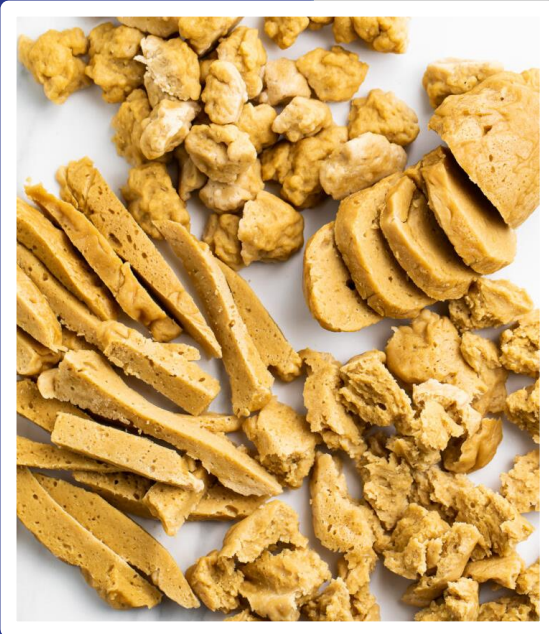
Selenium: Used by the body for reproduction, thyroid gland function, DNA production, and protecting the body from infection damage, seitan is a great source of selenium. A one-ounce portion of crumbled seitan contains approximately 16% of the DV.

Allergens: One of the benefits of seitan is that it is naturally free of soy, one of the "big eight" allergens, making it a great plant-based alternative to items like tofu and tempeh. However, because seitan is a gluten-based product, those with gluten sensitivities or celiac disease should avoid consuming it.

Nutritional Information/Values from [USDA FoodData Central](https://www.ars.usda.gov/fooddata/)

TYPES AND VARIETIES

Seitan, with a consistent base composition, offers a range of types and varieties distinguished through diverse preparation methods, textures, and flavorings. Its adaptability shines in its capacity to embody textures ranging from tender to chewy, making it a versatile ingredient for diverse, flavorful dishes. Understanding techniques to alter both the flavor and firmness of seitan not only unlocks a world of culinary possibilities but also empowers chefs and home cooks to craft textures and flavors that are suited to their distinct recipes and preferences.



Common Textures of Seitan:

- **Tender & Succulent**
 - Achieved through poaching, steaming, and simmering
- **Firm & Chewy**
 - Achieved through baking, steaming, or simmering for an extended period
- **Spongy & Porous**
 - Achieved through boiling or steaming for shorter time periods
- **Airy & Smooth**
 - Achieved through deep frying

Common Forms of Seitan:

- Blocks or Steaks
- Strips
- Diced or Chunked
- Crumbled
- Shredded
- Further Processed (Sausage, Nuggets, Deli Slices)

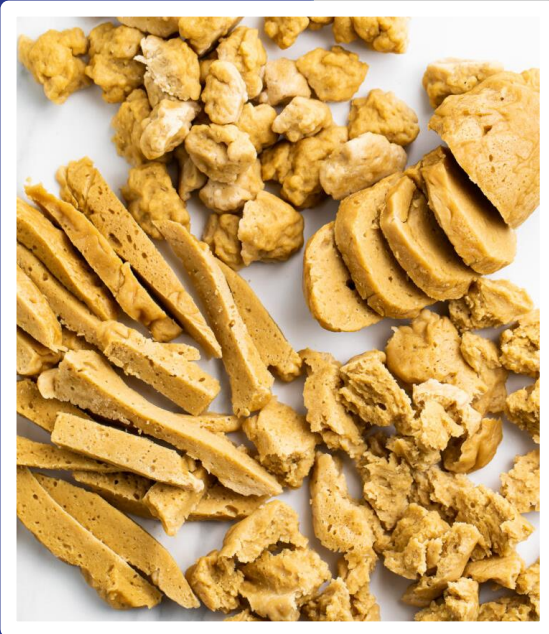
Common Varieties of Seitan:

- **Traditional**
 - Neutral flavor with no additives
- **Flavored**
 - Prepared with variety of flavors and spices
- **Smoked**
 - Prepared by natural smoking or liquid smoke
- **Spicy**
 - Prepared with variety of peppers or hot sauce
- **Mushroom**
 - Prepared with mushrooms or flavor extracts
- **Herbed**
 - Prepared with variety of herbs
- **Whole Wheat**
 - Prepared with whole wheat flours
- **Gluten-Free**
 - Prepared with gluten-free flours

SELECTING AND STORING

Selecting Seitan:

- **Check Ingredients:** Read through the ingredient list to ensure the seitan you are purchasing aligns with your dietary preferences and restrictions. Keep in mind that packaged seitan can have higher levels of sodium.
- **Texture Preference:** Consider the recipe you are preparing when deciding which texture seitan to utilize as the different textures often work better when prepared by certain cooking methods.
- **Flavor Varieties:** Explore the various flavors such as smoked, herbed or spiced, to suit your recipe preferences.
- **Fresh or Packaged:** Depending on time constraints, making fresh seitan at home allows more control of the ingredients, texture and flavor, whereas, packaged is a definite time-saver.

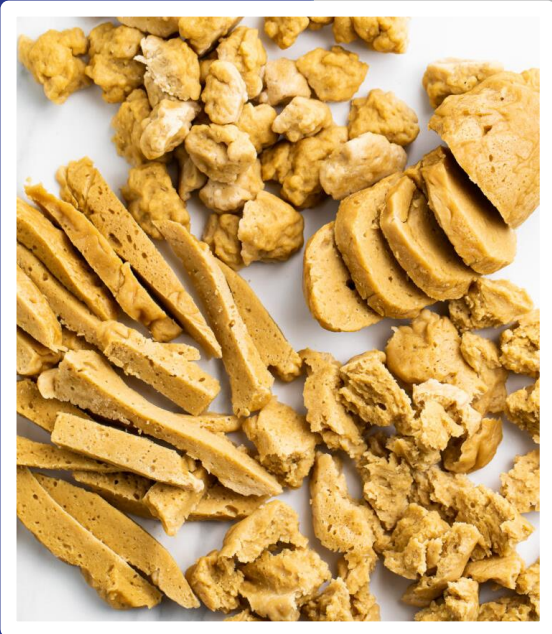


Storing Seitan:

- **Refrigeration:** Store opened or homemade seitan in an airtight container in the refrigerator for up to 5 days. Check the packaging for specific storage instructions when storing purchased seitan. Packaged seitan that hasn't been opened can be refrigerated for a longer period.
- **Freezing:** Seitan can be frozen for longer storage as long it is tightly wrapped in plastic and stored in an airtight container or freezer bag. Frozen seitan is best consumed within 6 months. Slowly thaw in the refrigerator before use.
- **Expiration:** When purchasing seitan, pay close attention to the expiration date and use it prior to that date for the best quality texture and flavor.
- **Homemade:** Seitan that is prepared fresh is best stored in the refrigerator and consumed within 3-5 days but can be frozen for extended storage.
- **Freezer Burn:** Seitan is prone to freezer burn so it's imperative to tightly wrap and remove as much air as possible before freezing.
- **Flavor Absorption:** Seitan easily absorbs flavors from other items, especially flavors like garlic and onion, so it should be stored away from strong-smelling foods.
- **Sliced Seitan:** Deli-meat-style seitan slices should be separated with parchment paper before storing to prevent sticking.

CULINARY USES

Seitan, adaptable to various cuisines and cooking styles, lends its flexibility in the kitchen to allow its preparation to suit the needs of the chef or home cook. By exploring these different cooking preparations, you can unlock the full potential of seitan and create a wide range of delicious dishes that will satisfy both vegetarians and meat lovers alike.



- **Stir Fry & Asian Dishes:** Seitan's chewy texture makes it an excellent addition to stir-fries, replacing traditional meat.
- **Grilling & Barbecuing:** Seitan steaks or sausages can be grilled or barbecued, providing a meaty texture and absorbing smoky flavors.
- **Curries & Stews:** Chunks or strips of seitan added to curries and stews do an excellent job of absorbing the rich flavors.
- **Tacos & Burritos:** Seitan crumbles can be seasoned and used as fillings for tacos and burritos to give them a protein-packed punch.
- **Breaded & Fried:** Breaded and fried nuggets or cutlets of seitan provide an alternative to fried chicken and other breaded dishes.
- **Sautéed Dishes:** Seitan sautéed with vegetables and sauces lend a quick and flavorful meal.
- **Deli Sandwiches:** Thinly sliced seitan, both traditional and flavored, can be used in sandwiches, providing a meaty alternative.
- **Holiday Roasts:** Seitan is even known to be shaped and seasoned to create a meatless alternative to the traditional holiday roast centerpiece.

FUN FACTS



- Seitan is a complete protein, meaning it contains all essential amino acids, which makes it a valuable source of protein in plant-based diets.
- The name “seitan” is of Japanese origin and was coined by George Ohsawa, a Japanese advocate of the macrobiotic diet, in 1961.
- Seitan has more plant protein in a 4oz serving than tofu, another plant-based protein product.
- Along with tofu and tempeh, seitan is the third product to make up the meat substitute trinity.
- Mock duck, seitan processed with oil, sugar, soy sauce, and salt, has a distinctive flavor and artificial “plucked duck” texture that distinguishes itself from other forms of seitan.
- Like most other animal proteins, seitan is imparted with a slightly different texture depending on its preparation method.
- Although seitan makes a great meat substitute, it is not suitable for those that have a gluten sensitivity or celiac disease.
- Producing seitan generally has a lower environmental impact compared to traditional meat production, making it a more sustainable protein choice.
- The global market valuation for seitan reached \$72.2 million in 2022 and is expected to increase to nearly \$107 million by 2032.

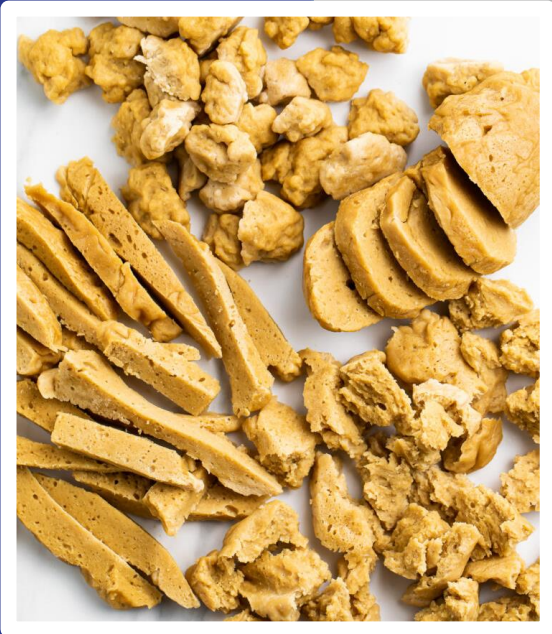
RECIPE

Homemade Seitan (“Chicken Flavored”)

Yield: 4 Servings

Ingredients:

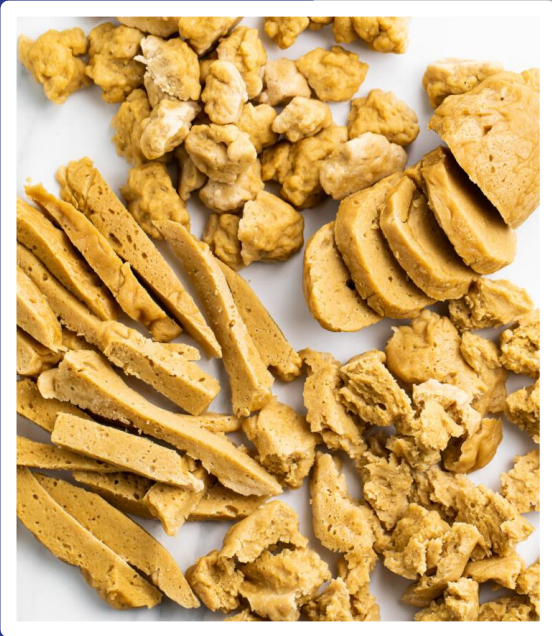
1 C. Vital Wheat Gluten
¼ C. Chickpea Flour
1 Cup Water
6 C. Vegetable Stock
1/3 C. Coconut Aminos
¼ C. Nutritional Yeast
1.5 t. White Wine Vinegar
1.5 t. Poultry Seasoning
1 t. Onion Powder
½ t. Garlic Powder
½ t. Liquid Smoke



Directions:

1. Whisk the vital wheat gluten and chickpea flour together in a medium bowl. Add the water and stir with a wooden spoon to form a soft dough.
2. Transfer the dough to a work surface and knead it for 5 minutes. After kneading, allow the dough to rest for 5 minutes.
3. While resting, combine the remaining ingredients into a large pot and place over high heat. Bring the stock mixture to a boil and then lower to a simmer.
4. Cut the dough into at least four large pieces. If desired, the dough can be cut into smaller strips or chunks.
5. Add the dough to the stock mixture. Allow to simmer for 1 hour, uncovered, watching to ensure it remains at a simmer. Do not boil.
6. Remove the pot from the heat and allow the seitan to slightly cool.
7. When the seitan is cool enough to handle, cut it into desired size pieces.
8. The seitan is ready to use in your favorite recipe or can be refrigerated for up to 5 days.

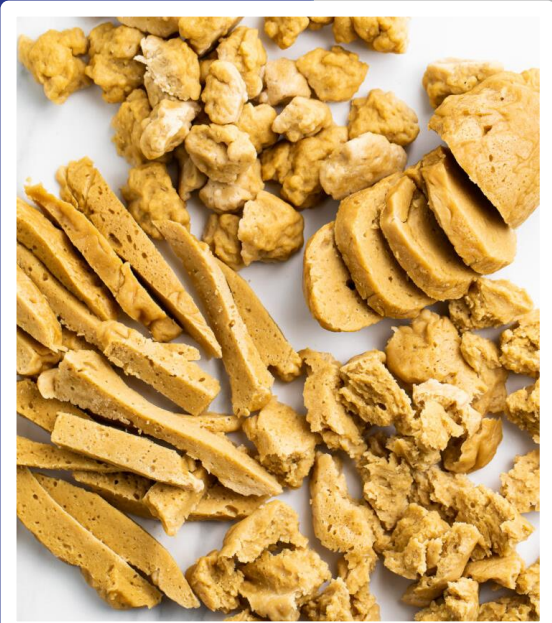
QUIZ



After you read through this month's Ingredient of the Month, take this quiz to test your knowledge. In order to earn continuing education hours (CEHs) from the American Culinary Federation (ACF), the test must be completed through the ACF's Online Learning Center. Seventy-five percent accuracy is required to earn one hour of continuing education credits toward professional certification.

QUIZ

Question #1

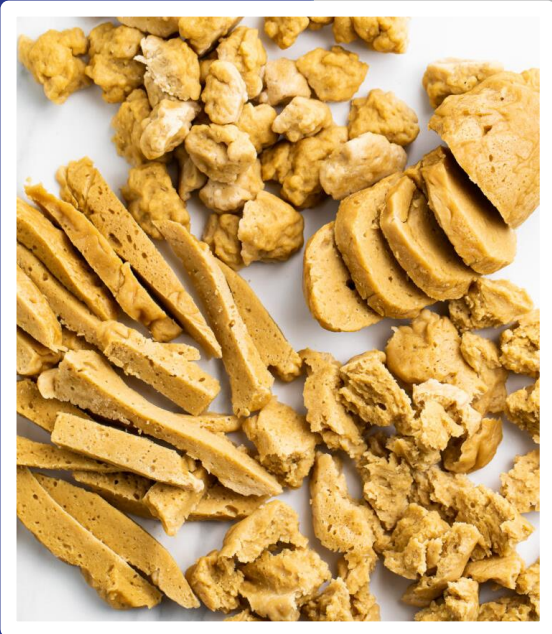


In which century did the earliest known mention of wheat gluten, the core component of seitan, appear in the Qimin Yaoshu?

- A. 3rd century
- B. 6th century
- C. 10th century
- D. 12th century

QUIZ

Question #2

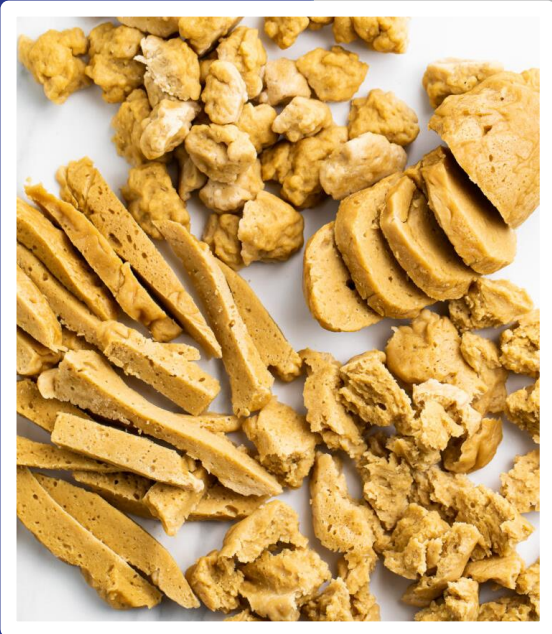


The process of crafting seitan involves removing starches from wheat gluten through a washing process.

- A. True
- B. False

QUIZ

Question #3

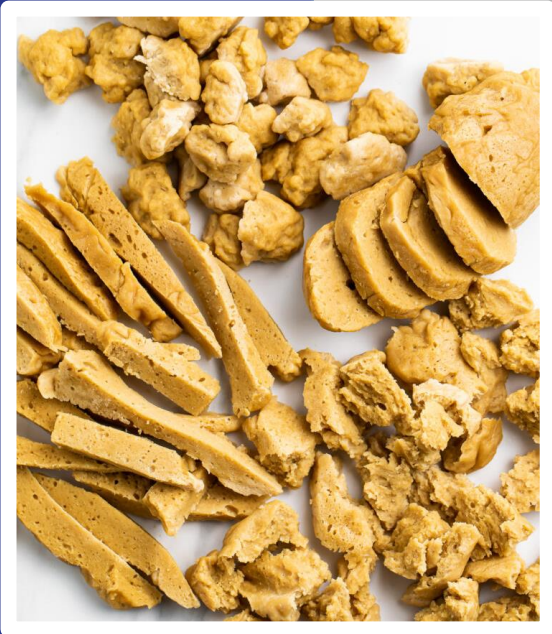


What key macronutrient does seitan (vital wheat gluten) primarily provide as a plant-based product?

- A. Carbohydrates
- B. Protein
- C. Fats
- D. Fiber

QUIZ

Question #4

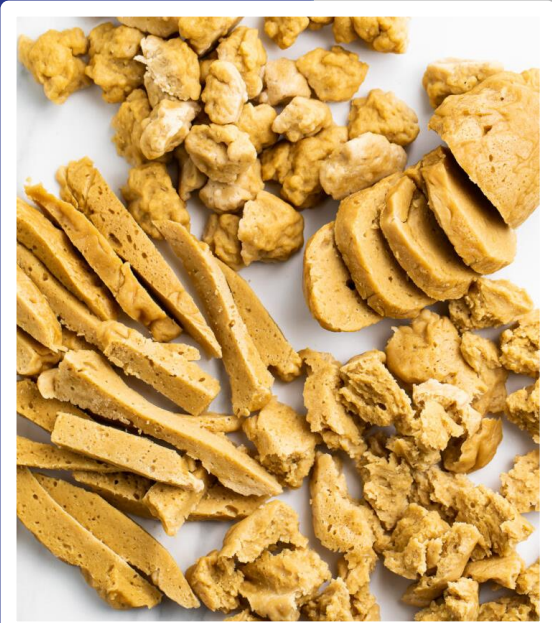


What role does selenium play in the body, and how much of the DV is found in a one-ounce portion of crumbled seitan?

- A. Supports bone health; 8%
- B. Aids in muscle growth; 12%
- C. Used for reproduction and DNA production; 16%
- D. Enhances immune function; 20%

QUIZ

Question #5

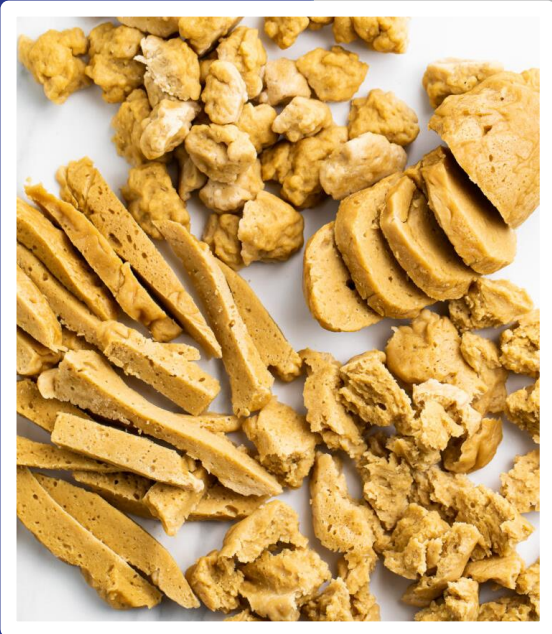


Which method is NOT recommended for achieving seitan that has a “tender and succulent” texture in its finished product?

- A. Poaching
- B. Steaming
- C. Baking
- D. Simmering

QUIZ

Question #6

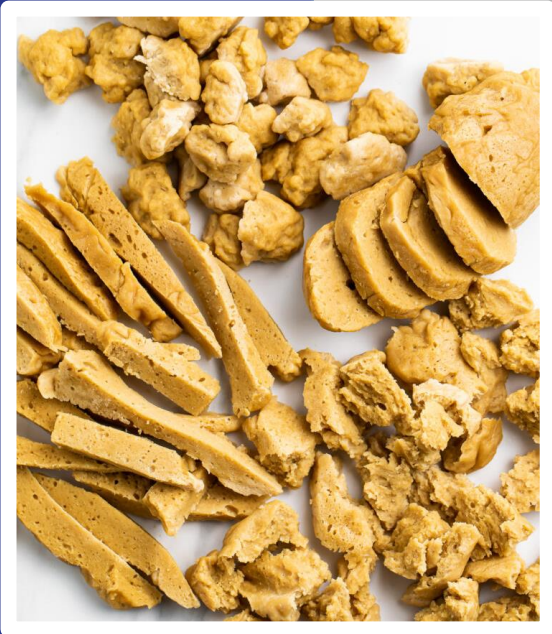


Seitan can be consumed by anyone with celiac disease because it is naturally free of soy products.

- A. True
- B. False

QUIZ

Question #7



Frozen seitan is recommended to be thawed quickly in the microwave for optimal texture and flavor.

- A. True
- B. False

QUIZ

Question #8



What is recommended to prevent deli-meat-style seitan slices from sticking together when stored?

- A. Freezing them with water
- B. Separating them with parchment paper
- C. Storing them in a single layer
- D. Adding extra oil

QUIZ

Question #9

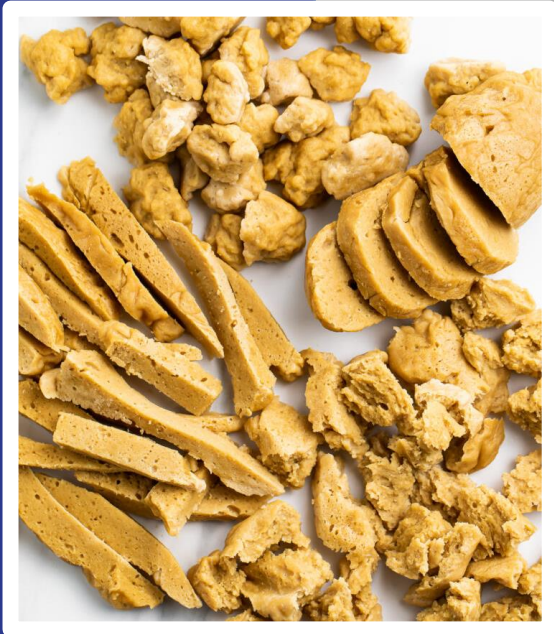


In which type of dish would seitan crumbles be most suitable to use in its preparation?

- A. Deli sandwiches
- B. Grilled dishes
- C. Spicy curries
- D. Tacos and burritos

QUIZ

Question #10



How does the environmental impact of producing seitan compare to traditional meat production?

- A. Higher environmental impact
- B. No significant difference
- C. Lower environmental impact
- D. Impact depends on the production method

JOIN US NEXT MONTH!

Stay tuned for the next ACF Ingredient of the Month! Be sure to visit the Online Learning Center (OLC) to download a copy of each month's ingredient presentation. Don't forget to take the official IOTM quiz through the OLC to earn one hour of continuing education credits toward professional certification.

For more information:

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