Peas

Overview

Green beads that roll across tables and floors with ease at dinner time have proven to be a staple in households around the world. Peas as we famously call them are smush-able, gushy, vegetables which are from the 'Legume' family which consist of pod plants, lentils, chickpeas, and peanuts. Peas come from pods and are the harvest of a 'fruit' pod, growth of the Pisum Sativum plant.

Garden Peas have been consumed for hundreds of years supplementing bodies with high content fiber, protein, carbohydrates and antioxidants, as early as the Neolithic era in Greece, Syria, Turkey, Israel, Iraq, and Jordan. It was a common plant of country's such as Egypt, Georgia, Afghanistan, India, Pakistan, and Genoa.

Today, our varied cultures support the use of 'peas' as a fresh garden vegetable, frozen, dried food or canned item for long term shelving. The recommended best use is as a fresh veggie having frozen at close back-up in preserving nutrients and vitamins. They are readily prepared steamed, within a vegetable mix, buttered, casserole additive, stews, and even as 'pea' milk in America. Our cultures have devised through time the best use of the simple round pea for a snack food as it becomes more attractive to the ages and less repetitive and boring as a meal adjoin.

Using such options as a drying food, peas are highly seasoned in Wasabi Hot Salt, Sriracha or other flavors. They've been reprocessed and blended into notable veggie crisps, protein pea chips, crunchy seasoned peas, or fresh, high nutrient based 'smoothies'.

Nutrient Base

Peas are generally a 'low' caloric content vegetable having a high protein value rich in polyphenol antioxidants and other vitamins and minerals.

Nutrition Chart: *table 1*

1/2 cup = 62 calories	Protein/ Fiber rich :	Health Benefits: (protects against)	Purine Breakdown problems: (too much uric acid produced)
Nutrition Value: Starch Carbohydrate fiber protein vitamins A,K, & C thiamin folate manganese iron phosphorus	- along with fiber, protein aids with appetite fullness - supports blood sugar control - good vegetarian resource	-chronic illnesses -heart disease - cancer - stronger immune system - beautiful skin	- kidney stones - gout -flatulence

Fresh 'spring peas' are notably one of the best resources providing uncompromised nutrient values to consumers. They should be eaten to capture their natural sweetness. If they are from a garden, they can also be frozen to preserve their natural state. Each batch must be rinsed and removal of strings from the stem suggested. The tips of snow peas are recommened to be cut. Prepared steamed, stir-fried, or buttered, add a tad bit of sugar and short cooking window to retain color and nutrient value.

The use of 'frozen peas' is of a secondary recommended use as freezing tends to preserve nutritive values and elongate storage dates. They are inexpensive, convenient, naturally sweet, and loaded with power you need daily. The retention of high fiber, high protein, high folate, Vitamin C and low calories essentially fat free is most attractive.

Types of Peas: *table 2*

yellow pea	black eyed peas	purple peas	white peas	pigeon pea	cow pea	black pea	a. snap b. snow c. sugar peas

Peas are graded by their tenderness and size as this generates a categorization of kinds. Most common are the sugar, snap, and snow green pea. The Macrocarpon Group of peas is specific for the snow and snap peas.They are defined by specific characterizations:

a. Sugar Peas: softer membrane, tender and edible pods

b. Snow Peas: flat pods with thin walls

c. Snap Peas: sugar snap peas rounded pods with thick pod walls which are eaten before maturity

There is also the Field Peas or Blue Schokker. This is consistent of the: dun [grey brown] pea dun [blue brown] pea, and the maple and white varieties. These are marketed as human consumption food or stock feed within the U.S., Russia, Canada, China, Europe, and Australia.

White Peas are of constant growth and use for diverse cultures. They are called Safed Vatana or Safed Matar in India as they are harvested until mature and dried for full removal of their skin after which splitting occurs naturally. This is most notable as 'split pea soup' a common menu item in America.

As they are dried, the peas deep green colour turns white or slightly yellowish to white. They are often confused with the 'chick pea or garbonzo bean' however peas are generally smaller. These variations of peas are preferred use known as navy, fagioli, or pea beans. Choice item for baked beans or soups. As a high calorie food, it retains high fiber, iron, and protein value. This is good for those experiencing high count blood loss by incident or naturally in children, pregnant women, or those experiencing heavy menstrual cycles.

White Pea Benefits: *table 3*

lower cholesterol	prevent constipation	weight loss food	glucose level stability	good for the heart	cancer preventive	mood improvement food	strength bones & teeth

Dry Field Peas

Field Peas were first cultivated in Southwest Asia and migrated to Afghanistan, Iran, Ethiopia and after some time, the U.S.. Today's market finds the Soviet Union, China, India, Canada, and U.S. as leaders in pea production. Top state producers are Washington, Idaho, Oregon, Minnesota, and North Dakota. It is best growing during a cool season of 55 to 65 degrees, however, peas can withstand considerable frost exposure without damage. If damaged or killed, new shoots naturally form from the nodes below the earth as a new crop.

Hot weather will cause the flowers to blast which results in a reduction in seed setting, as high sodium [salt] will ruin the field pea crop entirely.

This type of pea is best grown within a mixture of oats, barley or triticale as the yield is greater amongst dry matter per acre than as a straight pea farm plot. The pea stalks stand more erect in this condition making it easier to harvest. There are alternative options such as 2/3rds field pea, 1/2 oat both seeded with alfalfa or clover crop. A highly populated stand also reduces weed competition.

Two benefits of this method in farming is the use of pea 'tender shoots' as a salad green and most important, 25 pounds of nitrogen [N] per acre returns to the soil.

Pea Economics

Back in 2020, the green pea CAD [Canadian Dollar] held at closes to $12 a bushel as the yellow peas trade CAD $7 per bushel. There was an expectation of a larger crop for the 2020/2021 year as there was strong anticipation for a $9 to 9.50 price range. Though U.S. exportation volume was constant as the Canadian rate was expected to drop having China and Bangladesh as top destinations. The harvest acreage was suggested to drop by 12%.

Pricing 2021:	Bag/100lbs	Average
Black Bean	$36 - 40	$ 37.75
Garbonzo Bean	$32 - 34	$ 32.67
Northern Bean	$30	$ 30
Navy Bean	$33 - 36	$ 34
Whole Green Peas	$11.67 - 14.20	$ 12.92
Whole Yellow Peas	$11.67 - 15.80	$ 13.74

table 4

Chinese Dry Pea Market

The Chinese dry peas market is becoming an attractive export destination for overseas suppliers as it internal demand is rising and the country is unable to meet its demand. Despite China's standing as the second largest pea producing continent, it has dually become the leading importer of 94% Canadian and 4.3% United States dry pea source. Due to animal feed use, the country's consumption has increased 20%. The 2020 swine fever outbreak crisis left farmers scrambling to recover the 20% lost volume of livestock feed reserves using peas as an affordable alternative against high grain prices.

Inter-cropping / Argroecology

Inter-cropping is the basic practice of peas in rotation with wheat as a means of strategically reducing the variance of farmers income with a resulting high-yield, high-protein harvest. Argroecology is a diversification system introduced by researchers in response to the high nitrogen levels of soil when nitrogen based expensive fertilizer is used on wheat crops. Peas can be planted as a 'nitrogen fixing' plant crop after a proper wheat harvest. This is a much desired mechanism to build 'soil' organic nitrogen.

Legumes [peas] and the bacteria housed in the nodes of its root system enables the plant to fix atmospheric nitrogen. This meets nitrogen nutrient requirements for wheat using natural nitrogen which reduces the nitrogen inputs [fertilizer] and production cost. There is an insurance of production with less pollution and leaves fewer sources for 'weed' development.

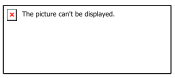
Interest wavers dependency upon pea prices being at a low rate and attractive enough to compensate for the loss in profitability suffered using the fertilizers. The dry pea market place is where transactions determine pricing of traditional pea harvest and thus hampers the ability to 'valorize' peas from inter-

cropping. There is consideration of transport, storage, processing, and traceability expenses well outside of custom duties or imposed tariffs. Also, this wheat-pea process in incompatible with feed market suppliers as it is a 'niche' market. Therefore it is believed the best approach for farmers is to pre-contract sales of the 'pea' crop to be secure of a higher income.

Unique Uses of Peas

Chaats /stews	**rice dishes**	**pea protein powder**	**nutrient blend smoothies**	**pea veggie capsules**	**pea milk**	**pea snack chips**

Pea Milk is a plant based milk which is allergy friendly beverage which is dairy, soy, nut, and gluten free. It has a rich, creamy, thick texture in use with coffee or smoothies and is a good milk substitute. This milk specialty comes in flavors such as vanilla and chocolate having a sweet, slightly chalky taste. Pea Milk has a protein equivalent of 8 grams per 8 ounce serving.



Thai Pea Soup

This Thai pea soup is made completely in the blender and full of fresh spring flavor. With ginger, lemongrass, coconut milk, jalapenos and peas, you'll want a big bowl.

INGREDIENTS: 3 cups fresh or frozen peas (if using frozen, thaw beforehand)

15 ounces full fat coconut milk ½ cup vegetable broth 1 large shallot

zest of 1 lime juice of 1 lime 2 teaspoons lemongrass paste (I use the Gourmet Garden brand found in the refrigerated area of the produce section)

½ jalapeno 1½ inch piece fresh ginger ½ teaspoon red pepper flakes

1 cup fresh cilantro salt and pepper to taste Pea shoots and dash red pepper flakes garnish

INSTRUCTIONS: Combine all ingredients in a blender and blend until smooth.Garnish with pea shoots and red pepper flakes. Soup can be served cold, room temperature or hot depending on preference.

Minty Pea and avocado spread

INGREDIENTS: 1 cup peas (I used thawed frozen ones) 1/2 an avocado4-5 mint leaves 1 small clove of garlic 1 tablespoon extra virgin olive oil 1/2 lemon, juiced salt & pepper to taste ricotta salata or feta for garnish

INSTRUCTIONS: Place all ingredients in a food processor except for cheese and process until combined but still chunky.Garnish with cheese shavings and use as a spread, dip or pesto.

SPRING PEA AND LEMON PESTO PIZZA (yield: 3-4 SERVINGS in 22 minutes)

This pea and lemon pesto pizza is dolloped with ricotta for a light pizza to celebrate spring.

INGREDIENTS:

1 store bought whole wheat or multi-grain pizza dough (Or make your own. I always keep store bought dough on hand for pizza in a pinch)spring pea pesto (see below) 8 ounces whole milk ricotta 1 large lemon, thinly sliced and seeds removed ¼ cup grated parmesan salt & pepper ½ teaspoon red pepper flakes

FOR THE SPRING PEA PESTO: 2 cups fresh sugar and/or snap peas zest from ½ a lemon juice from ½ a lemon ½ cup grated parmesan cheese 2 tablespoons pine nuts salt & pepper to taste 2-3 tablespoons extra virgin olive oil

INSTRUCTIONS: Combine all the ingredients except the olive oil in a food processor. With the processor running, drizzle the olive in until pesto-like. Scrape the sides down as needed. Set aside.Preheat oven and pizza stone to 500 degrees.Roll out pizza dough into a circle, transfer the dough onto parchment paper.Spread the spring pea pesto evenly over the dough, leaving a ½ inch border around the edges.Dollop the ricotta on top of the pesto all around the pizza.Lay lemon slices on top, pressing down on the ricotta to somewhat flatten.Season with salt and pepper, red pepper flakes and sprinkle the ¼ cup parmesan cheese all over the top.Slide the pizza with the parchment paper onto the stone in the oven.Bake for 10-12 minutes until the edges are golden brown and the center of the dough is cooked.Remove from oven, let cool 1-2 minutes before slicing with a pizza cutter.

Peas as a Dessert

Here are a few recipes to implement into your total health initiative.

Green Pea Smoothie with mint:

Ingredients

1/2 cup frozen green peas

1 banana - preferably frozen

1 cup spinach

4 mint leaves - more to taste

1.5 cups almond milk - can sub milk of choice

Instructions: Combine all ingredients in a blender. Blend until smooth, about 1 minute. Add more almond milk if needed to promote blending. Enjoy cold!

* For digesting ease, it is suggested you steam the peas before adding them to the smoothie.
Serving: 1smoothie | Calories: 121kcal | Carbohydrates: 14g | Protein: 7g | Fat: 5g | Saturated Fat: 1g | Sodium: 254mg | Potassium: 344mg | Fiber: 6g | Sugar: 5g | Vitamin A: 3538IU | Vitamin C: 39mg | Calcium: 498mg | Iron: 2mg

Green Pea and Orange Smoothie:

1 medium-large navel orange, peeled

1 cup water

1 cup 250 mL) loosely packed fresh spinach leaves

1/4 cup (60 mL) frozen green peas

2 tablespoons (30 mL) fresh lime juice

3/4 cup (175 mL) frozen mango, pineapple or banana

Optional: stevia or preferred liquid sweetener to taste

INSTRUCTIONS:

Place everything except the optional sweetener in a blender. Blend on High speed until completely smooth. Add sweetener to taste, if desired.

Green Sweet Pea Blueberry 'Skin' Brightening Smoothie:

Ingredients:

2 frozen bananas

1 cup frozen blueberries

1 cup coconut milk

1 cup frozen green peas

1/2 cup coconut water

2 level teaspoons collagen bone broth powder

Instructions:

Put all ingredients in the blender and blend until smooth. The smoothie function on this blender, gets it down in as little as 30 seconds.

Pea Edible Idea You Might Like:

Crunchy Roasted Peas [seasoned]

White Pea Chili

Pureed white peas with olive oil

Minestrone soup

Chilled pasta salad

Pea-dom mastered is the provision for this odd tasting, rolly, smush-able vegetable to be eaten by anyone, adult or child, at anytime to obtain its health benefits for our bodies. It too has been a challenge for healthy initiatives throughout the world as nutritionist, food chemist, chefs and other such professional have met the recipe and menu needs agriculturalist have enable through continued harvesting all around the world.

The Princess and The Pea ['Prinsessen paa AErten'] Danish

First published in English 1846, The Princess and The Pea fairytale by Hans Christian Andersen, rose to fame as a favorite story of chance, good fortune, intuition, and spirit. Rather than draw false conclusion the royal family prescribes a 'test' of divine intervention as much as grooming.

A Prince is striving to marry a 'real' princess. As he looks high and low around the world, the women are faced with discovering how to choose the demeanor of a princess. So as the fable goes, one wet rainy night a young woman appears at the door of the royal family having been lost in the woods then staking claim to being a 'real' princess from a far away land. For the night, the royal family piles twenty mattresses and twenty feather beds atop one single pea. The self-proclaimed princess awakens the next morning with bruises and pain having not slept well at all. She had felt the pea through the mattresses and feathers so she must be a 'true' princess. The pea was put into a glass box and placed at the royal museum.

The pea itself is believed to symbolize 'our truest selves'. The pea itself was a dry pea!

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