QUINOA

SOURCE OF VEGETABLE PROTEIN

ORIGIN

Quinoa (Chenopodium Quinoa Wild) is a seed indigenous to the Andean region. For centuries, its use was banned by the Spanish conquistadors because they considered it to be linked to superstitious practices. This all changed when prestigious American scientists published studies showing that it is a source of high-quality vegetable protein and it offers many other health properties.

Consequently, it began to be grown in North America and today, thanks to improvements in the growing techniques and new commercialization channels in the western world, it has become quite popular.





NUTRICIONAL

368 Kcal/100 g

Quinoa belongs to the same family as spinach and beets and it contains the 9 essential amino acids required to synthetize protein.

Quinoa's protein content is over 15%, twice the amount found, for example, in rice.

It is rich in the B-complex family of vitamins, especially thiamine and riboflavin, as well as tocopherols and ascorbic acid.

It has a high mineral content, especially phosphorous, potassium, magnesium, and calcium, and it surpasses any other cereal in providing these trace elements in amounts that exceed daily recommendations.

Regarding fat contribution, over 50% of its total fat contribution comes from essential fatty acids Omega-3 and Omega-6.

Its fiber content is 15% and, as a seed, it is insoluble, so it is not fermented by intestinal bacteria.

Consumption Recommendations in case of:

Overweight and Obesity



Diabetes

Hypertension

Celiac Disease





Cardiovascular

Disease







QUINOA

MORE INFORMATION

Quinoa is an Andean plant that was discovered growing around the Titicaca Lake in Peru and in Bolivia. It was grown and used by pre-Hispanic civilizations. It was then replaced by other cereals when the Spaniards conquered the region, although it was a staple for those populations. The available historic evidence shows that South American populations grew it between the years 3000 and 50000 BC. There are archaeological findings of quinoa in tombs in Tarapacá, Calama, and Arica in Chile, as well as in different regions in Peru. When the Spaniards arrived, quinoa had an adequate technological development and was widely distributed in the Inca territory and beyond.

Quinoa can play an important role in the eradication of hunger, malnutrition, and poverty.

Quinoa is the only vegetable food that contains all the essential amino acids, trace elements, and vitamins. Besides, it has the ability to adapt to different ecosystems and climates. It is resistant to drought, poor soils, and high salinity. It can be grown from sea level up to 4000 m altitude and it can bear temperatures between -8° and 38° C.

The challenge to increase quality-food production to feed the world population in the context of climate change can be faced with quinoa, which appears as an alternative for those countries suffering from food insecurity.

Quinoa leaves, stems, and grains have medicinal uses. It is said to have healing, anti-inflammatory, and analgesic properties against toothache. It is supposed to fight urinary tract infections, and it is also used in case of bone fractures, internal bleeding, and bug repellent.



2013 was Quinoa's International Year

Learn more about quinoa in the book "QUINOA Five Continents" by Alejandra Feldman with an introduction by Rafael Ansón.

Source: FAO (Food and Agriculture Organization of the United Nations)

RECIPES WITH QUINOA



DIDECTIONS

In colander, wash quinoa to remove starch.

YOGURT WITH QUINOA

Drain and reserve.

In a pot put water, salt, and quinoa, and cook and stir for 15 minutes.

When it has doubled in size, drain and cool.

Meanwhile, wash, hull, and slice strawberries. Other fruits such as kiwi, orange, pineapple, or peach may be used.

Mix quinoa and yogurt in a bowl and add honey (optional), stirring well to soak cereal.

Add fruit and garnish with additional quinoa.

INGREDIENTS

1 Natural yogurt
1 Tbsp honey (optional)
Strawberries or any other fruit
30 g quinoa

Additional quinoa for garnish

QUINOA BURGERS



INGREDIENTS

300 g white quinoa
3.5 g cassava
8 garlic cloves
200 g red onion
50 g carrots
4 Tbsp chopped parsley
10 g cumin
½ cup milk
5 g salt
50 g onion
16 cherry tomatoes

DIRECTIONS

Grate cassava and drain. Reserve starchy liquid.

Wash quinoa and cook together with cassava in 2 $\frac{1}{2}$ cups water. Once all water is absorbed, remove from stove and cover.

Finely chop garlic, parsley, and red onion.

Grate carrots. Heat 3 Tbsp. of oil and cook vegetables, cumin, and salt for 10 minutes at low heat. Add milk. Always at low heat, cook until milk is completely absorbed. Turn heat off and reserve. Mix cooked vegetables and quinoa. Shape burgers. Heat an oiled grill and cook burgers until nicely browned.

Chop onion and mash tomatoes. Cook 30 minutes. Serve with burgers.

Source: FAO / Chef: Flavio Solorzano

RECIPES WITH QUINOA

WHITE TUNA (OR BONITO) WITH QUINOA

INGREDIENTS

180 g bonito loin 125 g coarse salt Olive oil

For quinoa and sweet pepper oil:

100 g olive oil 10 g sweet pepper 10 g red quinoa For quinoa oil: 80 g grapeseed oil 15 g red quinoa

For quinoa emulsion:

1 egg ½ cup olive oil 1 tsp. powdered turmeric 15 g toasted quinoa. Hemp

For quinoa crisps:

110 g water 120 g flour 30 g trisol 25 g red quinoa Olive oil for frying



DIRECTIONS

Slice white tuna loin and put in coarse salt for 8 minutes.

After 8 minutes wipe salt, cube, and keep in oil until ready to use.

For quinoa and sweet pepper oil:

Cook ingredients in oil for 5 minutes at 55° C. Let it stand until oil settles.

For quinoa emulsion:

Beat egg and oil, as if you were preparing mayonnaise. Once it is well blended, add remaining ingredients.

Season with salt and pepper.

For quinoa crisps:

Mix all ingredients, except quinoa, in bowl.

Cut parchment paper in rectangles.

Cover parchment paper sheets with the flour, turmeric, trisol, and water mixture. Put quinoa on top.

Heat oil to 190° C and fry until nicely browned.

Drain, and remove paper.

Presentation:

Place white tuna cubes on plate, quinoa emulsion on one side, and hemp leaves seasoned with quinoa and sweet pepper oil. Top everything with crisps.