

*The GUIDES*

# **RUNNER'S WORLD**

## THE SUPER BOOST OF AMERICAN PISTACHIOS FOR YOUR RUN

» **COMPLETE PROTEINS  
FOR YOUR MUSCLES**

» **POCKET ENERGY**

» **AN AID FOR  
YOUR RECOVERY**

» **THE HEALTHIER  
THE FITTER**

» **RECIPES  
FOR RUNNERS**





# AMERICAN PISTACHIOS

## special nourishment for runners



The super powers of the fruits symbol of California. Rich in energy and a complete source of protein, pistachios are a precious ally for your runs and your active lifestyle

**SMALL, BUT INCREDIBLY TASTY AND GENEROUS.** Few foods like American pistachios contain – in so few grams – so much energy of excellent quality and such a large number of precious substances, for our runs and our well-being. And if one pistachio leads to another, it's because virtually everyone likes them! As a snack, at breakfast, in the main meals of the day: they even deserve to be consumed every day, to find another gear in training and competitions, and help our body to better face the fatigue of running. So, with the help of Dr. Elena Araldi – nutrition biologist, marathon runner and Asics FrontRunner – let's discover why pistachios are such a precious ally for our runs and our health.

### FRIENDS OF RUNNING

► **A COMPLETE SOURCE OF PROTEIN FOR THE RUNNER'S MUSCLES** Most plant-based foods are “incomplete” proteins, meaning they are lacking one or more essential amino acids. But not pistachios. Recent studies carried out on the American ones have shown that they contain all nine essential amino acids in the right quantities, just like proteins of animal origin, thus falling among the foods with high biological

value proteins. And a 30-gram serving of pistachios provides 7 grams of protein. “Often runners pay attention only to carbohydrates, but our muscles, in addition to sugar, are also hungry for proteins”, explains Dr. Araldi.

“The runner's body works like a Formula 1 car, where proteins provide the chassis and carbohydrates provide fuel. We may have the best quality gasoline in the world, but if the chassis is that of an old Fiat 500 we won't get very far. This is also why proteins are so important”.

“Pistachios have the advantage of hav-

ing a full spectrum of amino acids, comparable to that of animal sources such as meat, fish, eggs and dairy products. They are therefore ideal as a snack during the day, and also at the end of training, especially after a significant muscle work, to promote the repair of damaged muscles and to support the protein synthesis, necessary for increasing muscle mass. Perhaps as an alternative to the classic Greek yogurt and fruit”.

“Besides, they can be an all-purpose food for the runner who follows a vegetarian or vegan diet”.

► **ENERGY AT YOUR FINGERTIPS** American pistachios are also an energy food. The recommended daily serving of 30 grams (49 pistachios) provides around 160 calories. “And these are not “empty” calories”, points out our expert,







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“because pistachios are a complete food. They are a precious source of fats, which can help us when we run long distances”.

“The runner’s engine is like that of a hybrid car, which uses different energy sources depending on the situation. For short and fast efforts, it needs immediate, ready-to-use, energy and therefore “burns” the carbohydrates. But when running distances get longer and the carbohydrate reserve runs out, it uses more and more fat as fuel. And this already starting from 5/10 km, if we talk about amateur runners”. “For athletes who are passionate about long distances”, Araldi again explains, “pistachios are an interesting option for training and running. I always suggest to ultra-runners to also consume solid foods when they exceed certain mileage during their runs, precisely to ensure the right mix of carbohydrates and fats. Those used to eating dried fruit can easily turn to pistachios”. Being of vegetable origin, pistachios also have the advantage of not containing saturated fats, the so-called “bad” fats present in foods of animal origin. They provide only “good”, monounsaturated and polyunsaturated fats – the friends of health – which also contribute to lowering cholesterol.

▶ **A PLUS CALLED CHROMIUM** Pistachios support the mechanisms responsible for energy production also with chro-

mium, a micronutrient that controls blood sugar. “Managing blood sugar levels is crucial for the long runner, which is why chromium should be present in their diet. This mineral is directly involved in glucose metabolism, and helps prevent the insulin spikes that cause blood glucose levels to drop – and performance to decline”.

▶ **RICH IN PRECIOUS VITAMIN B6.** Not many people know about it, but vitamin B6 – which pistachios are rich in – is doubly important for runners. It plays a key role in energy processes, by intervening in the conversion of lactic acid into glucose to provide energy to the muscles during the run. But, above all, it’s a fundamental cofactor in protein synthesis.

“In fact, it is no coincidence that almost all of the protein powder mixes on the market are added with vitamin B6”.

“But let’s keep in mind that in protein powder we have a selection of amino acids formulated by companies and then added with vitamin B6. Pistachios, on the other hand, are a complete natural protein source, with all 9 essential amino acids, plus that cofactor – which is vitamin B6 – which supports protein synthesis”.

“For this reason, adding pistachios to a smoothie or using them as a garnish for fish, salads or any other dish helps reach the daily protein quota”.

## WHAT IS THE RIGHT MOMENT?

### ▶ **At breakfast**

A bowl of yoghurt, cereals and pistachios is perfect at breakfast after a run on an early morning fasting, or to charge up for the day. Adding a kiwi or strawberries improves the absorption of iron.

### ▶ **As a snack**

A healthy snack based on pistachios allows to maintain the right energy levels between meals, and is also an excellent fast-breaking snack for evening workouts. Also excellent as an aperitif snack, instead of (and better than) peanuts.

### ▶ **After the run**

After a normal run, it’s okay to eat a portion of American pistachios (30 g) together with a fruit, preferably in the first half hour. Rich in proteins, pistachios are particularly suitable after muscle training, to support the muscle repair and growth processes. In general, after running they should be combined with a source of carbohydrates, to also facilitate the restoration of glycogen stores.

### ▶ **At the table**

It’s advisable to add pistachios to vegetable-based preparations, such as salads, but they can also be used for breading fish or for making tasty desserts. Thanks to their protein supply, they will help make the meal well balanced between the various macronutrients.





# PISTACHIOS in the kitchen

Two quick and easy recipes for runners, one to recover in the best possible way after the efforts of the run, the other for a tasty meal with a low glycemic index

## BANANA, YOGURT AND PISTACHIOS SMOOTHIE



### Ingredients

- 150 g of Greek yogurt
- 30 g of American pistachios
- 1 banana

### Preparation

Pour the pistachios, keeping some aside, in a blender and blend several times until a kind of flour is obtained. Add the other ingredients and blend again until a creamy consistency is reached. Pour into a glass and sprinkle the remaining pistachios, coarsely chopped with a knife, over the surface.

### The benefits for the runner

This smoothie is an ideal snack for muscle recovery after physical activity. The simultaneous presence of a good amount of protein, provided by both pistachios and Greek yogurt, and simple carbohydrates, present in bananas, in fact favors the repair of muscle fibers and the replenishment of the muscle glycogen stores that have been depleted with the practice of physical activity. Both banana and pistachios are also rich in precious salts, such as potassium in particular, which helps restore the water-saline balance that has been altered with the practice of sports, especially if the activity involved profuse sweating. Finally, adding a few mint leaves to the smoothie will help give a greater sensation of freshness, especially useful during the hot season.

## BAKED ORATA IN PISTACHIOS CRUST WITH TOMATOES AND OLIVES



### Ingredients

- 300 g of orata (sea bream) fillets
- 35 g of American unroasted and unsalted pistachios
- 50 g of wholemeal breadcrumbs
- 400 g of fresh cherry tomatoes
- 10 pitted green olives
- A pinch of oregano
- Extra virgin olive oil
- Salt to taste

### Preparation

Rinse the orata fillets without the fishbone and place them in a baking tray lined with baking paper. Separately, prepare a mixture with chopped pistachios, wholemeal breadcrumbs, a pinch of salt, a tablespoon of extra-virgin olive oil and a pinch of water, to make it creamier. Spread the mixture on the fillets evenly. Cut the cherry tomatoes in a bowl, add a pinch of oregano, a drizzle of oil to flavor and a few olives, mixing everything. Arrange the cherry tomatoes in the pan alongside the orata fillets. Bake at 180°C (356°F) for 20 minutes, covering the tray with a sheet of baking paper, then finish cooking for another 10-15 minutes without covering and in ventilated mode, until golden brown.

### The benefits for the runner

Cooked in this way, the orata fillets are a very tasty, easy to prepare second course, which combines different nutrients that can give provide the palate with a special experience. Orata is a food rich in high biological value proteins, polyunsaturated and monounsaturated (and therefore "good") fatty acids and vitamins. Monounsaturated and polyunsaturated fatty acids help maintain a good lipid profile, lower LDL cholesterol and increase HDL cholesterol. Pistachios are also an excellent source of polyunsaturated fatty acids, vitamin E (anti-oxidant) and B vitamins. They are also very rich in fiber and, like all dried fruit, provide a high energy boost. Just what you need for your health... and your runs!



## RICH IN POTASSIUM, PISTACHIOS HELP FIGHT CRAMPS

► **POWERFUL ANTIOXIDANTS** During intense runs, or runs exceeding an hour, the body increases the production of free radicals, molecules capable of damaging the cells.

Among the defenses that we can deploy against these “enemies” of our health, vitamin E is of particular importance because, thanks to its powerful antioxidant effect, it can counteract the action of free radicals. “Among the different foods with which a runner can supplement vitamin E, pistachios deserve particular attention, because they contain a lot of it”, says Araldi. “One hundred grams of pistachios ensure a quarter of the daily requirement of vitamin E, the

antioxidant par excellence”.

► **ALLIES AGAINST CRAMPS** Especially in the summer, runners have to deal with the unpleasant (and painful!) problem of cramps. Here, too, pistachios can help. “American pistachios contain a good amount of potassium, a mineral that is necessary for the correct functioning of the muscles and which, when combined with proper hydration, can prevent cramps. Everyone thinks of bananas when it comes to potassium, but pistachios are actually a great choice too. The recommended serving of 30 g provides 285 mg, almost as much as a medium-sized banana.



### A HELP FOR THE IMMUNE SYSTEM

Never as during this pandemic did, we realize how important our immunity defenses are, and how vital it is to keep them efficient: indeed, the stronger our immune system, the higher our defense capacity against viruses and bacteria, and, consequently, the lower the risk of getting sick or infected.

Among the factors that can affect the immune system are physical exercise and nutrition. In fact, a healthy practice of running, without excess, has been shown to strengthen the immune system, assisted by the support provided by some substances contained in foods. The European Food Safety Authority (EFSA) believes that six vitamins (D, A, C, folate, B6, B12) e four minerals (zinc, iron, copper and selenium) are essential for the normal functioning of the immune system. All these substances, with the exception of vitamins D and B12, are present in pistachios.

## THE HOME-MADE PISTACHIO PROTEIN BAR

Easy and quick to prepare, these pistachio bars are ideal to be consumed immediately after a run or at any other time you feel the need for a healthy and tasty snack.

### Ingredients (for 16 bars)

- 50 g of dried blueberries
- 75 g of unroasted coconut flakes
- 75 g of golden linseed
- 72 g of cow's milk whey protein, or your favorite vegan protein powder
- 230 g of salted American pistachios
- 1 teaspoon of salt
- 100 g of sugar
- 1 tablespoon of oil
- 65 ml of water

### Preparation

In the food processor, mix the dried cranberries, coconut flakes, golden linseed, whey proteins milk and salted American pistachios for about 20 seconds. Pour the salt, sugar, oil and water into a small pan and boil for 15 seconds. Add the liquid ingredients to the dry ingredients and mix well. Cover a baking tray with baking paper, pour the mixture and flatten it evenly. Freeze for 10 minutes and the bars, once cut, will be ready to eat. Store the bars wrapped in baking paper.





## SOME PISTACHIO NUMBERS

**30**

grams: recommended daily portion

**49**

number of pistachios corresponding to approximately 30g

**160**

kcal provided by 30 g of pistachios

**46%**  
of lipids

**21%**  
protein

**17%**  
of carbohydrates

**9**

essential amino acids (all) contained

**300**

years of life a pistachio plant can reach

**0,6**

grams: the average weigh of one pistachio

In addition, potassium also helps recover faster from the dehydration caused by training”.

► **IDEAL FOR ANEMICS** Many runners, especially women, complain of a lack of iron, which is essential for the transport of oxygen to the muscles. Tiredness, shortness of breath and decreased performance are the most common consequences of iron deficiency. Supplementing the diet with foods rich in this mineral is the first step to have one’s batteries always charged.

“Pistachios ensure a good quantity of iron (4 mg per 100 g of product), and are therefore among the foods more indicated for this purpose. However, since it is of vegetable origin, the iron found in pistachios is absorbed with greater difficulty than that of animal origin, such as that contained in meat or fish. It is therefore advisable to combine the consumption of pistachios with a source of vitamin C, such as kiwi, citrus fruits and strawberries, which favors iron absorption”.

► **MORE OXYGENATED MUSCLES** It is not only iron that can ensure a good oxy-

genation of the muscles; also substances such as arginine – an amino acid contained in pistachios – can let them “breathe more”.

“Arginine”, explains Dr. Araldi, “activates the production of nitric oxide, a powerful vasodilator that favors a greater flow of blood to the muscles, which become more oxygenated and can therefore support the effort of running. Nitric oxide also prevents thrombus formation, and has protective effects on the cardiovascular system”.

► **IDEAL WEIGHT AND MORE** Among the virtues of American pistachios, there is also that of providing good quantities of zinc and selenium, two essential minerals for the thyroid, a gland whose optimal functioning is very important for the runner. “The thyroid is essential for the management of energy and body weight. Suffice it to say that those suffering from hypothyroidism (reduced production of thyroid hormones) tend to be overweight and always tired. On the contrary, those suffering from hyperthyroidism (excessive production of thyroid hormones) can manifest excessive thinness, alterations in the

## IRON AND ARGININE PROVIDE THE RUNNER'S MUSCLES WITH AN EXTRA GEAR





## PISTACHIOS ARE AN ALL-PURPOSE FOOD FOR THE VEGETARIAN OR VEGAN RUNNER

heart rate, increased energy consumption and, again, fatigue.

This is why the runner who pursues an optimal weight and wants to make the most of his/her energy sources needs to keep the thyroid in good shape”.

“Having said all that”, concludes Dr. Araldi, “for their energy content, for the good component of monounsaturated and polyunsaturated fats, for the presence of fiber and the wide spectrum of vitamins and mineral salts, pistachios deserve a place in the balanced nutrition of a runner, supporting not only the proper functioning of the muscles, but that of the whole body”.

### PRECIOUS ALSO FOR EVERYDAY LIFE

► **BENEFITS FOR THE HEART** Not just running. The benefits of American pistachios are many also in everyday life, starting with the health of the heart and blood vessels.

Their content of phytosterols helps improve the lipid profile, contributing in particular to the containment of LDL cholesterol, the “bad” one.

► **SKIN BEAUTY** The abundant presence of vitamin E acts as a powerful antioxidant, preventing the aging of the skin and body cells, and also helping detoxify the body from pollution and smoke.

► **HEALTHIER BONES** In pistachios, oleic acid prevails among the monounsaturated fatty acids. This is the same fatty acid that is found as a major component in olive oil, and which not only boasts good resistance to oxidation, but also aids in bone growth and health.

### ► A PANACEA FOR EYESIGHT

In these green fruits there is a good content of vitamin A, an antioxidant that helps eyesight.

### A LITTLE BIG RESOURCE

Inside their shell, therefore, American pistachios hide a treasure of beneficial virtues. Their mix of complete proteins, fiber, good fats, vitamins and minerals is a panacea for the body and for the runner’s muscles.

They are a tasty and practical snack to

take along during workouts or to put in the gym bag, but they can also be used in the preparation of appetizing recipes, and even homemade energy bars, for a healthy and complete diet... and also for the delight of the palate!

Supplemento a

## RUNNER’S WORLD ITALIA

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