

THE TRUTH ABOUT **PASTA**



One food, one love

5 GOOD REASONS TO LOVE PASTA

In an age that is fast-paced and prone to nutritional fads and diets-of-the-day, pasta remains a mealtime favorite, enjoyed at family tables and gourmet restaurants around the world.

A key component of many of the world's traditional healthy eating patterns, such as the scientifically-proven Mediterranean Diet, pasta is perfect in its simplicity, healthfulness and versatility. It is also an affordable staple food that offers solutions to modern concerns about health, nutrition and the environment.

The International Pasta Organization offers 5 good reasons consumers can continue to enjoy pasta as a delicious part of a healthy eating plan to help manage weight and prevent disease -- as we have for hundreds of years.

PASTA IS GOOD FOR YOU AND GOOD FOR THE PLANET

PASTA IS THE PILLAR OF THE MEDITERRANEAN DIET

PASTA HELPS KEEP YOU FULL

PASTA DOES NOT MAKE YOU FAT

PASTA IS TASTY AND BRINGS PEOPLE TOGETHER



I.P.O.

International Pasta Organisation

1. Pasta is Good for You and Good for the Planet

- Made from durum wheat semolina or from the flour of other grains mixed with water and/or eggs, pasta is nutritious by itself. Mixed with other healthful foods like olive oil, tomato sauce, vegetables, beans, seafood and lean meats it is a key ingredient of healthy traditional eating plans around the world.
- Few foods can boast a “sustainability index” as high as pasta. In all steps of the food supply chain, pasta is sustainable: from wheat harvesting to pasta production to preparation at home and package disposal. Pasta life cycle analysis shows that, from farm to table, the environmental impact of pasta is quite low. In other words, eating a plate of pasta means choosing a food produced in full respect of the environment.^{1 2 3 4}
- Grains are the most important source of food worldwide, providing nearly 50% of the calories eaten, and are some of the least environmentally intensive foods to produce.⁵
- In the aftermath of the **Paris climate conference agreement**, nations are more committed than ever to improving the health of the planet. New dietary **recommendations** from the Dutch government recommend slashing meat consumption by almost half for reasons of health and sustainability and other countries like **Brazil** and the **United Kingdom** have incorporated sustainability into their dietary guidelines, encouraging more plant foods (like pasta), and fewer animal foods (like meat and dairy).
- While sustainability was not included in the 2015 U.S. Dietary Guidelines, a **national poll** from the Johns Hopkins Center for a Livable Future found that 74% of Americans say dietary guidelines should include sustainability measures, and that 92% believe that producing food in a sustainable way is a high priority.
- Given the heightened awareness of climate change and our environment, it is clear that the long-term sustainability of food is inseparable from discussions of health and wellness. After all, the food system is thought to account for **up to one third of global greenhouse gas emissions**, and is the largest contributor of non CO2 greenhouse gases.

¹ Baroni, L., Cenci, L., Tettamanti, M. Berati, M. Evaluating the environmental impact of various dietary patterns combined with different food production systems. European Journal of Clinical Nutrition (2006) 1-8

² FAO (2012) Sustainable Diets and Biodiversity

³ Scarborough P. et al, 2014. Dietary greenhouse gas emissions of meat-eaters, fish-eaters, vegetarians and vegans in the U.K, Climatic Change (2014)

⁴ BCFN (2012). Double Pyramid 2012: enabling sustainable food choices

⁵ http://wholegrainscouncil.org/files/2014wgcBBconf_BarriersMyths.pdf P. 11



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

- Luckily for food lovers everywhere, shelf-stable dry pasta is poised to become a part of the climate solution. In his presentation at the 5th World Pasta Day and Congress, held in Milan in October 2015, Duncan Williamson of the World Wildlife Foundation **explained** that pasta has a high "sustainability index" and that good taste and food for the earth can go hand in hand. According to Williamson, healthy pasta meals are an affordable way to embrace more sustainable diets, as "Traditional ways of eating are more sustainable and less expensive."
- Grains are among the least intensive foods to produce, requiring fewer resources and water per calorie than most other foods. Research published in *Ecosystems* found that grains (like the wheat used to make pasta) use only 0.51 liters of water to produce 1 calorie of food. On the other hand, beef production uses **10.19 liters of water** to produce 1 calorie of food, while fruits use 2.09 liters per calorie, and vegetables use 1.34 liters per calorie.
- Also at the World Pasta Congress, presenter **Luca Ruini** explained that the carbon footprint of pasta is only 15.5 oz CO₂eq/lb (34.44g CO₂eq/kg), much lower than many other foods.
- Another speaker at the World Pasta Congress 2015, Alessandra Luglio, a nutritionist in Brazil, explains that pasta "has many environmental advantages. With just two ingredients, it comes straight from nature and the process is simple."
- Recognizing the importance of sustainable diets, nutrition experts at the **2015 Healthy Pasta Meals Scientific Consensus meeting**, organized by the nonprofit Oldways, added a point about sustainability for the first time to the Scientific Consensus statement, declaring that "pasta is a simple plant based food, and has a low environmental impact."



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

2. Pasta is the Pillar of the Mediterranean Diet

- Pasta joins other grains, as well as fruits, vegetables, olive oil, beans, legumes nuts, seeds, herbs and spices as the basis of the Mediterranean Diet, which has been recognized by UNESCO as an intangible heritage of humanity. The Mediterranean Diet topped the U.S. News & World Report's 2015 Best Diet issue. It was named the best of the plant-based diets and the third best diet overall.
- The Oldways Mediterranean Diet Pyramid is a well-known visual guide to this gold-standard eating pattern. Pasta and the other foods mentioned above fall at the base of the pyramid, which indicates people should base all meals on these foods.
- Research over the last 50 years supports traditional dietary patterns in the Mediterranean Diet confer greater health benefits than current Western dietary patterns.
- A thorough review of decades of studies indicates that following a Mediterranean Diet may lower the incidences of major chronic diseases such as type 2 diabetes, heart disease, and some types of cancer, and may help people live longer.⁶
- Dr. Michel De Lorgeril of University Joseph Fourier in Grenoble, France, agreed, saying at the 2015 World Pasta Congress, "Pasta is the queen of the Italian Mediterranean cuisine." This is particularly important for health, as he explains that, "Medically the Mediterranean Diet is the best way to prevent cardiovascular disease, diabetes, cancers, inflammatory disease and to increase longevity based on the best scientific evidence."
- Researchers are also uncovering a link between Mediterranean foods (especially carbohydrates, like pasta) and healthy aging. Dr. Giancarlo Logroscino, of the University of Bari in Italy, explained at World Pasta Day 2015 that "Carbohydrates for the brain are like gas for a car." This means that "When we follow the Mediterranean Diet, including healthy pasta, mostly vegetables, and olive oil as the main fat source, the risk of getting Alzheimer's disease is lowered."
- One analysis, presented at Experimental Biology, an expansive scientific conference, even showed that people who regularly consumed pasta as part of a Mediterranean-style diet were less likely to be overweight or obese or have a high body mass index (BMI).⁷

⁶Antonia Trichopoulou et al, BMC Medicine 2014, **12**:112

⁶<http://oldwayspt.org/sites/default/files/files/MedDietBrochure.pdf>

⁷Pounis G, Di Castelnuovo A, Costanzo S, et al. Pasta consumption is negatively associated with obesity markers: an analysis of Molisani and INHES studies. http://www.fasebj.org/content/30/1_Supplement/1b308.short



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

- The Mediterranean diet is often romanticized for its links to generations past. However, by carrying forward these food traditions, we can help promote a healthier future for our children and grandchildren. Research supports this notion. After analyzing the diets of high school students, **for a study** called "Quality of dietary habits (adherence to a Mediterranean Diet) in pupils of compulsory secondary education," Spanish researchers A.A. Diaz and T.D. Trave recommended that students should "increase consumption of fruit, vegetables, nuts, pasta and rice, yogurt and cheese, pulses and fish."
- While pills and supplements may seem like a modern way to be nutritious, particularly for athletes, simple, balanced pasta meals are perfect for keeping you on the right track. Michelangelo Giampietro, MD, Sapienza University and University of Modena and Reggio Emilia (Rome and Modena, Italy) and formerly associated with the Sports Science Institute of the Italian National Olympic Committee (CONI), explains that "Pasta is a great source of complex carbohydrates and is highly recommended for athletes." In fact, "With the Mediterranean Diet, athletes have no need for supplements," he said. "I am of the opinion that many of the medals, for sure the Italian ones, are owed to pasta."



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

3. Pasta Helps Keep You Full

- Because the starch present in pasta is digested very slowly, it provides the prolonged feeling of fullness or satiety familiar to all pasta lovers.
- At a time when obesity and diabetes are rising around the world, pasta meals and other low-glycemic foods may help control blood sugar and weight especially in overweight people. Glycemic index (GI) is one of many factors that impact the healthfulness of foods.⁸
- The best foods for glucose metabolism and for health – like pasta cooked “al dente,” vegetables and fruit – have a low GI (less than 55).⁹ Surprisingly, pasta has a lower GI than oatmeal and quinoa.
- Pasta has a low GI due to the way it’s made. Extruded durum pasta has a dense matrix that is less permeable even after cooking than other foods like durum bread or grits. This extrusion process leads to denser pastas, which are less susceptible to digestive enzymes and have a lower GI. They are also digested more slowly than sheeted pastas. From its bulk, extruded pasta is more satiating and less glycemic.¹⁰
- According to Furio Brighenti, Professor and Chair of Human Nutrition at the Department of Food Science, who currently serves as Deputy-Rector for Research of the University of Parma, Italy, “Pasta’s processing makes it a unique food. The processing actually reduces the starch digestibility and thus the glycemic response of its base ingredient, durum wheat semolina. Pasta has a lower glycemic index than the wheat it is made from.”
- Another benefit is that eating pasta at one meal lowers blood glucose and insulin responses at the next meal. Pasta has the potential to satisfy flavor buds and provide a sense of fullness so that less is eaten at the subsequent meal.¹¹
- Science shows that when pasta is eaten with other healthy foods like tomatoes, olive oil and cheese the GI is even lower so the feeling of fullness lasts even longer.¹²

⁸ http://oldwayspt.org/sites/default/files/OW_PastaConsensusRio_4lang.pdf

⁹ <http://oldwayspt.org/programs/special-custom-programs/glycemic-index-scientific-consensus2013>

¹⁰ <http://oldwayspt.org/resources/good-food/pasta-unique-grain-food-webinar>

¹¹ <http://oldwayspt.org/resources/good-food/pasta-unique-grain-food-webinar>

¹² http://www.internationalpasta.org/resources/WPD2014/25_10_2014_WPD_2014_Buenos_Aires_Pasta_Glycemic_Index_and_Health_Cyrl_W_C_Kendall.pdf



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

- By virtue of their slow rate of digestibility and absorption, carbohydrate foods with a low glycemic index and glycemic load, such as pasta, consumed within an otherwise healthy eating pattern, may provide a strategy to prevent and manage chronic diseases such as type 2 diabetes and coronary heart disease (CHD).¹³
- At the **Scientific Consensus Summit on Glycemic Index, Glycemic Load, & Glycemic Response**, in Stresa, Italy in 2013, **Dr. Salwa Rizkalla** of the University Pierre et Marie Curie, in Paris, France, explains that "it is important after eating to feel satiated and full, and not to eat more, to control our energy intake," and recommends "low glycemic index foods that do not give us the sensation of hunger."
- Similarly, **Dr. Jennie-Brand Miller** of the University of Sydney, emphasizes the "quality of the carbohydrate," recommending carbohydrate foods that digest slowly. Luckily, traditional pasta meals fit the bill. In fact, research shows that eating pasta produces a low glycemic response, not only at that meal, but also at the following meal, in a phenomenon known as the '**second meal concept**'.

¹³http://www.internationalpasta.org/resources/WPD2014/25_10_2014_WPD_2014_Buenos_Aires_Pasta_Glycemic_Index_and_Health_Cyril_W_C_Kendall.pdf



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

4. Pasta Does Not Make You Fat

- The gorgeous international film star Sophia Loren once famously said, “Everything you see I owe to spaghetti.” Without a doubt, pasta can fit with any healthy lifestyle.
- Made from durum wheat semolina or from the flour of other grains mixed with water and/or eggs, pasta is nutritious by itself. Mixed with other healthful foods like olive oil, tomato sauce, vegetables, beans, seafood and lean meats it is a key ingredient of healthy traditional eating plans around the world.
- Pasta is a carbohydrate and carbohydrates are a necessary part of a healthy diet. There is broad worldwide consensus among high-level nutrition scientists and related experts that 45-60% of our daily calories should come from healthy carbohydrates like pasta.¹⁴
- The best approach to eating includes all three macronutrient groups (carbohydrates, fats and protein) with an emphasis on quality choices in all three categories.¹⁵
- According to **Marta Garaulet Aza**, Ph.D., of the University of Murcia in Spain, and an expert on nutrition and weight loss, "Everything that you eat in a high amount makes you fat...even fruit. So it is a matter of the amount of food eaten. Pasta has been blamed to be [a cause of] obesity and this is not correct. We can lose weight during a weight loss treatment while eating pasta. It is not a problem, we only have to eat the right amount of pasta and we must combine it with low calorie ingredients."
- Diets successful in promoting weight loss can emphasize a range of healthy carbohydrates, protein and fat. All these three macronutrients, in balance, are essential for designing a healthy, individualized diet anyone can follow for their whole life.¹⁶

¹⁴ [V World Pasta Congress, Milan, Italy, Oct. 25-27, 2015; Dr. Luca Piretta, “The Perils of Spreading Misinformation”](#)

¹⁵ http://wholegrainscouncil.org/files/2014wgcBBconf_BarriersMyths.pdf p. 7

¹⁶ http://wholegrainscouncil.org/files/2014wgcBBconf_BarriersMyths.pdf P.7



International Pasta Organisation

Contact: Kyle Potvin, kpotvin@splashllc.com, +1 603-893-1707

- While low carbohydrate diets are the latest fad diet to gain popularity, experts say that reducing or eliminating this essential nutrient does not come without risks. **Dr. Andrea Poli**, of the Nutrition Foundation of Italy, explains that "While low carbohydrate, high protein diets often work in body weight reduction, they can be associated with health risks like higher abdominal adiposity and an increase in cardiovascular disease. In contrast, good carbohydrate diets like the Mediterranean Diet, which includes carbohydrates like pasta, vegetables and legumes, and is one of the healthiest diets in the world."
- A new study shows that, contrary to what many think, pasta consumption is not associated with weight gain. In fact, it shows quite the opposite: The recent [study¹⁷](#), published in *Nutrition & Diabetes*, links pasta intake with significantly lower body mass indexes (BMIs) and central obesity. It also showed regular pasta consumption was associated with better adherence to a Mediterranean-style Diet (foods such as tomatoes, onions, garlic, olive oil, and seasoned cheese) than less regular consumption of pasta.
- Healthy pasta meals are characterized by what you pair them with, as pasta can be an ideal canvas for a number of healthy ingredients. After analyzing how different pasta meals relate to diet quality, scientists, in a new study in *The FASEB Journal*, found that healthy pasta meals were linked with higher fiber intake and better diet quality.¹⁸
- As the rates of obesity and diabetes are rising around the world, pasta meals and other low-glycemic foods may help control blood sugar and weight, especially in overweight people¹⁹.
- A Canadian Community Health Survey concluded that consuming a low-carbohydrate diet (less than 47% carbs) is associated with a *greater* likelihood of being obese.²⁰
- While 1 in 100 people suffer from celiac disease, fully 1 in 10 now say they 'avoid gluten.' While sufferers of celiac disease, non-celiac gluten sensitivity or a severe wheat allergy need to avoid the gluten found in wheat-based foods like pasta, there is no evidence to show that removing gluten from the diet leads to weight loss or any health benefit for those without a medical need to avoid it.²¹
- At the 5th World Pasta Congress in Milan (Oct. 2015), Dr. Luca Piretta, MD, of the University Campus, Biomedico of Rome, pointed out that gluten-free diets are often fat-rich. While those suffering from celiac disease must follow a gluten-free diet there is no evidence that this diet is useful to other patients, obese or healthy people.²²

¹⁷ *Nutrition & Diabetes*. 2016 July 4;6:e218. (G Pounis et al.)

¹⁸ *The FASEB Journal*. 2016 Apr;30(1): suppl Ib332. (Fulgoni VL et al.)

¹⁹ http://www.internationalpasta.org/resources/WPD2014/25_10_2014_WPD_2014_Buenos_Aires_Pasta_Alimento_Saludable_Sergio_Britos%281%29.pdf . Page 6

²⁰ *Journal of the American Dietetic Association*, July 2009; 109(7): 1165-72

²¹ <http://www.slideshare.net/FoodInsight/gluten-infographic>

²² V World Pasta Congress, Oct. 25-27, 2015, Milan; Dr. Luca Piretta "The Perils of Spreading Misinformation"



- The bottom line is a healthy pasta meal features two key factors²³:
 - **What You Pair with Your Pasta:** Pasta is an ideal partner for healthy foods and ingredients such as vegetables, beans, and herbs (whole or in sauce form) and extra virgin olive oil. Nuts, fish, and small amounts of meat or cheese can also be added for extra flavor and protein.
 - **How Much Pasta You Eat in a Meal:** According to most dietitians, a healthy serving of pasta for an adult is one-half to two-thirds cup of cooked pasta (80 grams of uncooked pasta), which is much less than most people are used to seeing on their plates and in restaurants. Fill out your plate with extra vegetables and lean sources of protein such as fish or beans.

5. Pasta is Tasty and Brings People Together

- Voted the world's favorite food in an Oxfam poll, pasta goes well with almost anything and appeals to almost everyone.
- Pasta crosses culture, age and dietary boundaries like almost no other single food.
- As Massimo Bottura, chef of Osteria Francescana, named #1 in The World's 50 Best Restaurants 2016, says, "...pasta is not only comfort food but surprise! Flavor, innovation, emotion."
- According to the scientific experts at the 5th World Pasta Congress, "Pasta meals are enjoyed in cultural traditions worldwide." Indeed, food and nutrition experts from all across the globe take pride in their countries' delicious and nutritious pasta meals.
- For instance, Dr. Mauro Fisberg of the Federal University of Sao Paulo in Brazil says, "When we eat pasta in Brazil our sauces and combinations are slightly different than those of the traditional Mediterranean Diet and pasta is a main meal. Our recipes are compared to the best in the world."
- "Pasta is the thing that is going to unite the world," explained food historian Francine Segan during a presentation at the 2015 World Pasta Day celebration in Milan, Italy. "Every country has its own interesting take," she said as she introduced people to the creative ways that pasta is prepared across the globe. From *sopa seca di fideo* (spaghetti topped with avocado, queso, cilantro, and meat) in Mexico to *mee goreng* (pasta tossed with chicken, chiles, and spices) in Indonesia, there is hardly a nation that has not left their unique culinary fingerprint on pasta meals.

²³<http://oldwayspt.org/resources/good-food/pasta>



- A perfect blend of tradition and modern simplicity and pleasure, pasta is as fitting on the family table as it is in the kitchens of the world's most famous chefs.
- And true to the best traditions, it is a food that brings friends and family together to celebrate both the ordinary and the extraordinary moments in life.

###



I.P.O.
International Pasta Organisation