

# Understanding the Role of Pasta in a Healthy Diet

September 16, 2021

# Housekeeping

- Attendees will receive an email within ONE WEEK with **CPEU certificate, slides, and recording**
- Visit **oldwayspt.org** and click on “CPEU Library” in the top-right corner to register for upcoming webinars or view recordings of previous webinars
- Please submit any questions using the CHAT function in Zoom

## NEXT WEBINAR (9/29):

Webinar

**The Honey Effect: Honey Bees Impact on Our Food Supply & Honey in the Mediterranean Diet**

September 29 • 2:00 PM E.T.

OLDWAYS

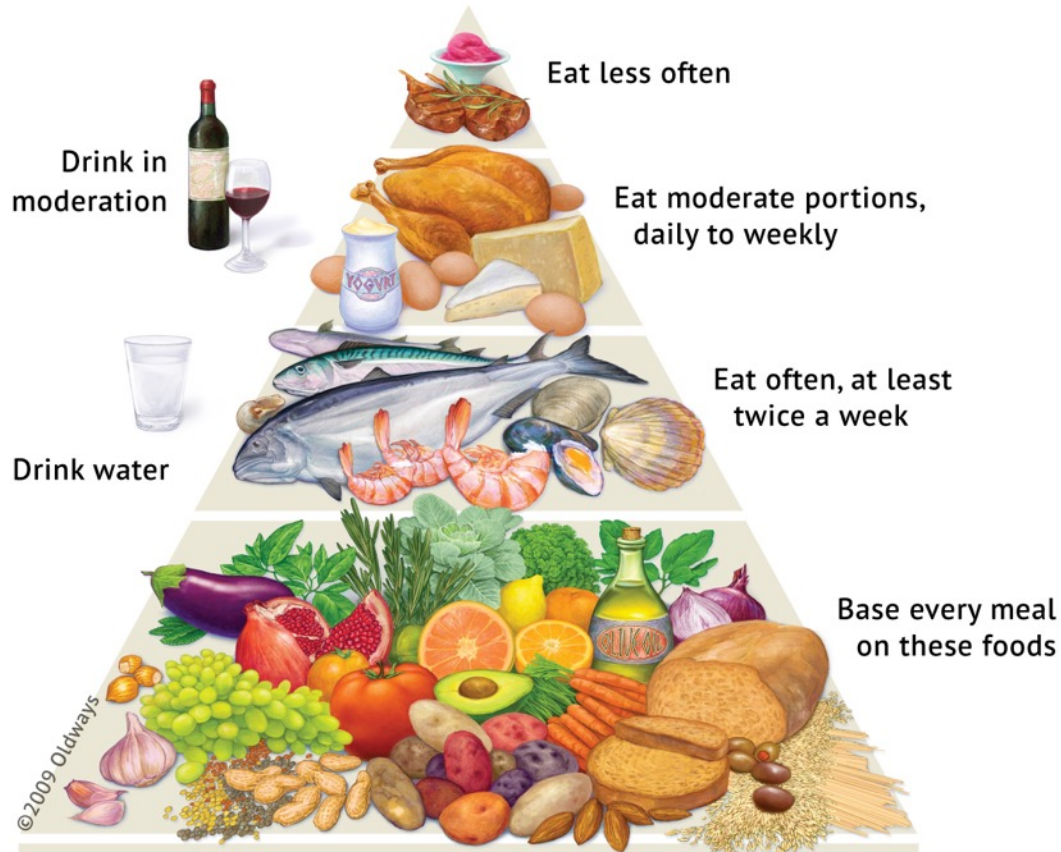


# About Oldways

- Nutrition nonprofit founded in 1990
- **Mission:** To inspire people to embrace the healthy and sustainable joys of the old ways of cooking and eating
- Visit us online at **oldwayspt.org**

The screenshot shows the Oldways website homepage. At the top right, there are navigation links: ABOUT US, NEWS & MEDIA, TRAVEL, BLOG, CONTACT, HI, KELLY | LOG OUT, and a CPEU LIBRARY button. The main header features the Oldways logo with the tagline "rediscover goodness" and "CULTURAL FOOD TRADITIONS". Below the logo, it says "A Food And Nutrition Nonprofit" and "Helping People Live Healthier, Happier Lives". A dark purple navigation bar contains links for TRADITIONAL DIETS, RECIPES, RESOURCES, HEALTH STUDIES, PROGRAMS, SHOP, and EVENTS & COURSES. The main content area features a large image of a Mediterranean Diet Pyramid with a yellow award badge that says "1 #1 BEST". The pyramid is divided into sections: "Meats and Seafood, Less often", "Dairy, Eggs, Cheese, and Yogurt, Moderate portions, daily to weekly", "Fish and Seafood, Others, at least once a week", and "Whole Grains, Beans, Rice, Legumes, Nuts, Seeds, Herbs, and Spices, Base every meal on these foods". Below the pyramid, there is a dark grey banner with the text "THE MEDITERRANEAN DIET IS #1" and a link "Here's how to start the best diet of 2021 LEARN MORE >".

# Pasta as a Pillar of the Mediterranean Diet



Be physically active and enjoy meals with others



## HEALTHY PASTA MEALS SCIENTIFIC CONSENSUS STATEMENT & SIGNATORIES

V World Pasta Congress  
Agreed in Milan, 26 October, 2015

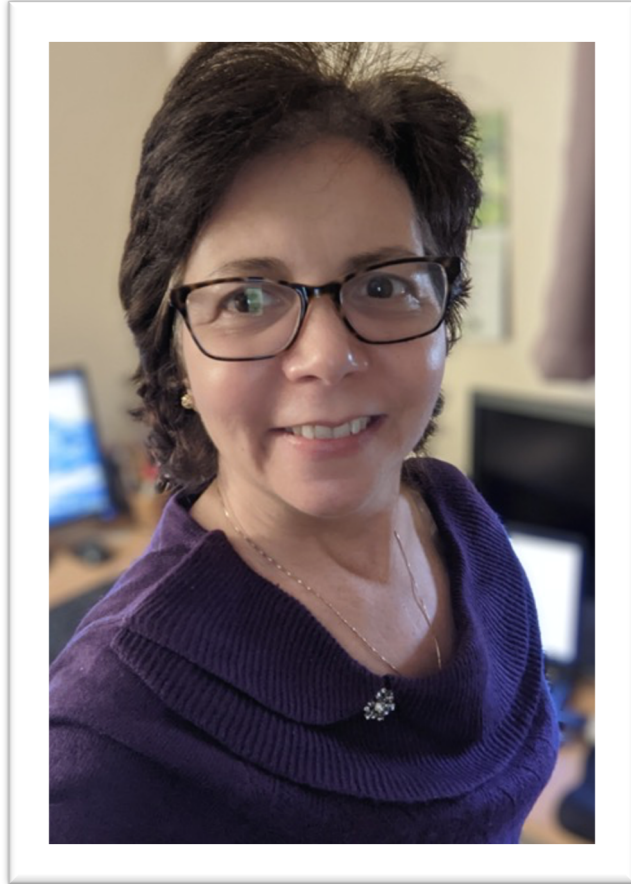
10. Pasta is a simple plant-based food that can be eaten as part of a healthy diet.
11. Pasta consumption is suitable for all ages and can be used alone or lightly seasoned to improve physical performance in active people.
12. Doctors, nutritionists and other health professionals should recommend balanced pasta meals as part of a healthy diet.

### Signatories of the Scientific Consensus Committee

Joel Abecassis, PhD, Nutrition, Biotechnology and Food Science, University of California, Davis  
Sara Beer-Sinnott, President, Oldways  
Nuno Borges, PhD, University of Coimbra  
Hector Borges, PhD, Mexico  
Sergio Brito, University of Coimbra  
Furio Briganti, PhD, University of Rome  
Michel de Lorgeril, MD, University of Dijon  
Mauro Fisberg, PhD, Federal University of São Paulo  
Michelangelo Giampietro, Rome and Modena, Italy  
Marta Garaulet Aza, PhD, University of Granada  
Vasily Isakov, MD, PhD, Nutrition, Biotechnology and Food Science, University of California, Davis  
Giancarlo Logroscino, MD, University of Naples  
Alessandra Loglio, Nutritionist, University of Naples  
Oleg Stepanovich Medvedev, PhD, Healthy Eating, Moscow, Russia  
Pietro Migliaccio, MD, President, University of Rome  
Luca Piretta, MD, Sapienza University of Rome  
Andrea Poli, MD, Nutritionist, University of Rome  
Gabriele Riccardi, MD, Federal University of Rio de Janeiro  
Ksenia Sergeevna Selezneva, Atlas Biomed Group (Moscow, Russia)  
Kantha Shelke, PhD, Cornell University  
Joanne Stavin, PhD, University of Minnesota (Minneapolis, USA)  
Elena Tikhomirova, nutritionist and medical advisor (Moscow, Russia)  
Kelly Toups, MLA, RD, Oldways (Boston, USA)

1. Scientific research increasingly supports the importance of total diet, rather than individual foods.
2. Pasta is a key component of many of the world's traditional healthy eating patterns, such as the scientifically-proven Mediterranean Diet. Most plant-based dietary patterns help prevent and slow progression of major chronic diseases and confer greater health benefits than current Western dietary patterns.
3. Many clinical trials confirm that excess calories, and not carbohydrates, are responsible for obesity. 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. Moreover, very low carbohydrate diets may not be safe, especially in the long term.
4. Pasta is satiating and keeps you fuller longer. A pasta meal can be moderate in its calorie content, assuming the portion is correct and the dressing-topping is not calorie-rich.
5. At a time when obesity and diabetes have a high prevalence around the world, pasta meals and other low-glycemic index foods may help control blood sugar and weight especially in overweight people. Glycemic index is a factor that impacts the healthfulness of carbohydrate-rich foods. There is a beneficial effect in the way pasta is made. The process of manufacturing reduces its glycemic response. Whole grain pasta, which provides more fiber, is also a good choice.
6. Pasta is an affordable, healthy choice available in almost all societies. Promoting the affordability and accessibility of pasta meals can help overcome the misperception that healthy foods are too expensive.
7. Healthy pasta meals are a delicious way to eat more vegetables, legumes and other healthy foods often under-consumed. Pasta is a way to introduce other Mediterranean diet foods (other cultural traditions), especially for children and adolescents.
8. Pasta meals are enjoyed in cultural traditions worldwide. As they are like a canvas, they are versatile and easily adaptable to national/regional seasonal ingredients.
9. The general population can eat pasta and should not choose a gluten-free product if not affected by a gluten-related disorder correctly diagnosed. For those with gluten sensitivities or allergies, or celiac disease, there are gluten-free alternatives.

# Today's Speaker



**Diane Welland, MS, RD**  
Director of Communications  
National Pasta Association

# Understanding the Role of Pasta in a Healthy Diet

Presented by  
Diane Welland MS, RD  
Director of Nutrition  
Communications  
National Pasta Association  
September 16, 2021



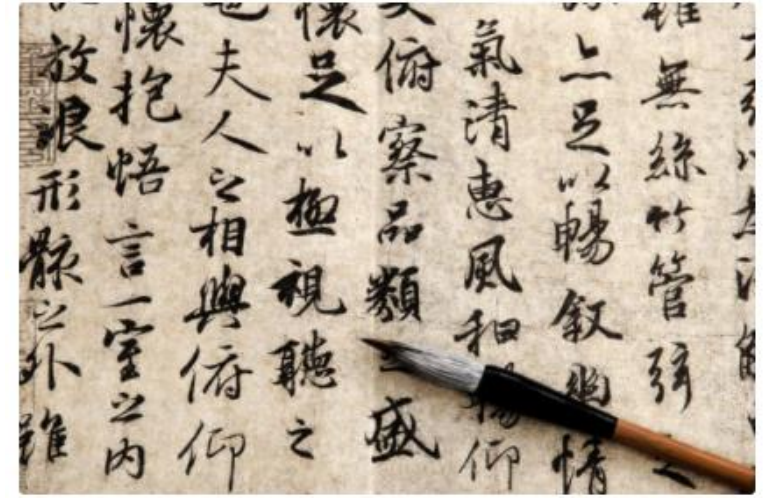
# An Ancient Food

## Early History

Pasta's history is as varied as its shapes. While widespread consumption is documented from the 14<sup>th</sup> century, it is believed to have existed in some form in ancient China and Greece. And evidence of pasta dishes appeared in Italian recipe books in the early 1200s.

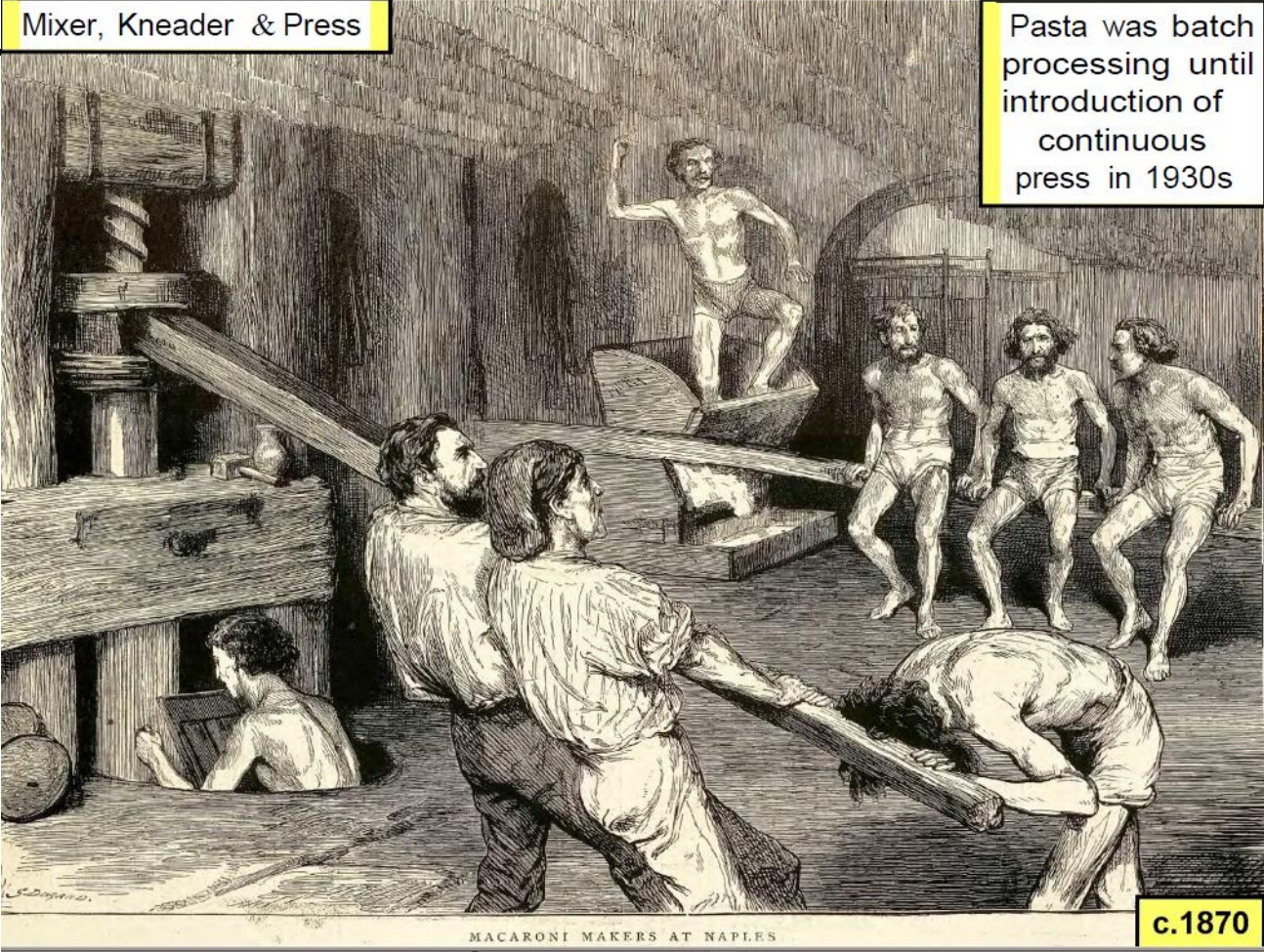


Eating pasta  
in Naples

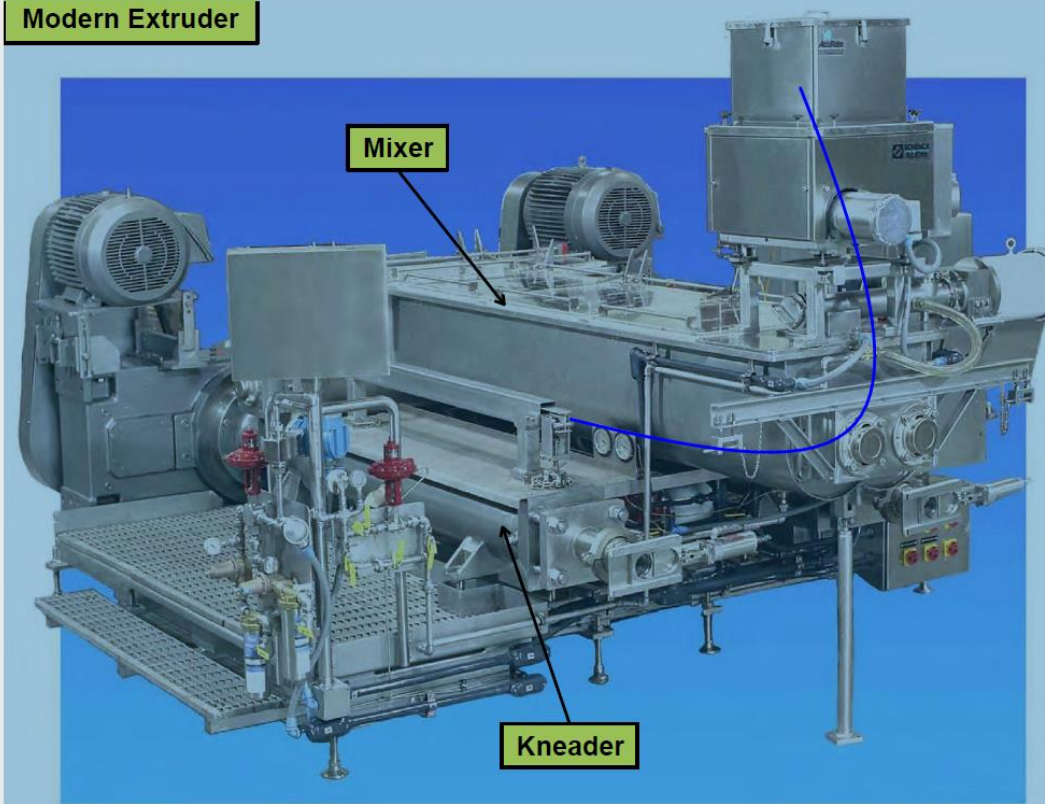


# Pasta = Flour and Water

Mixer, Kneader & Press



Modern Extruder

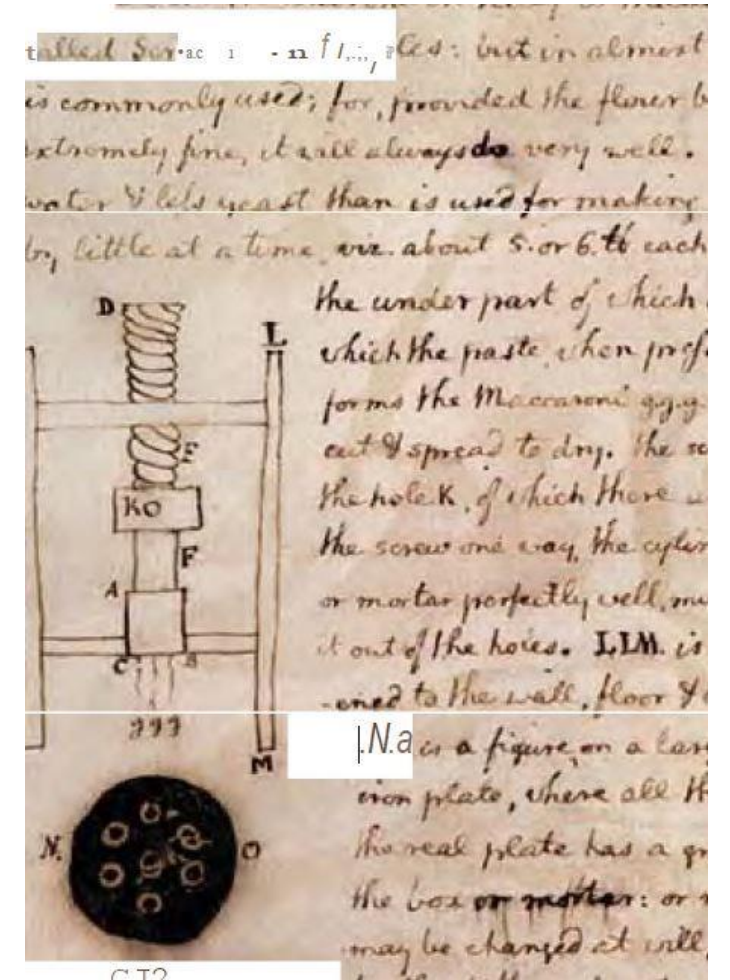
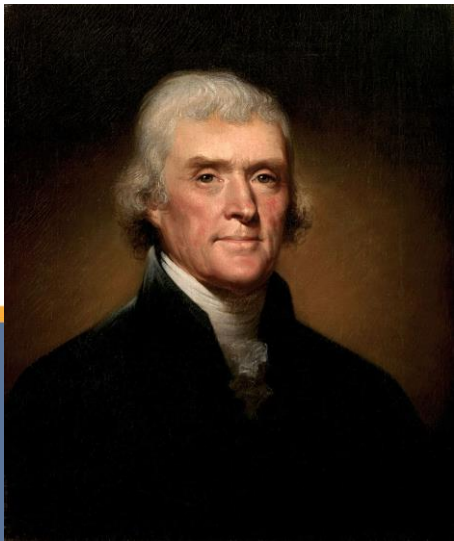




# In America

## Thomas Jefferson

In 1789, Thomas Jefferson brought the first “macaroni” maker to America after visiting Europe as an ambassador to France. Macaroni became popular among the upper class as an expensive delicacy. Most pasta and pasta ingredients were imported.



**In America**

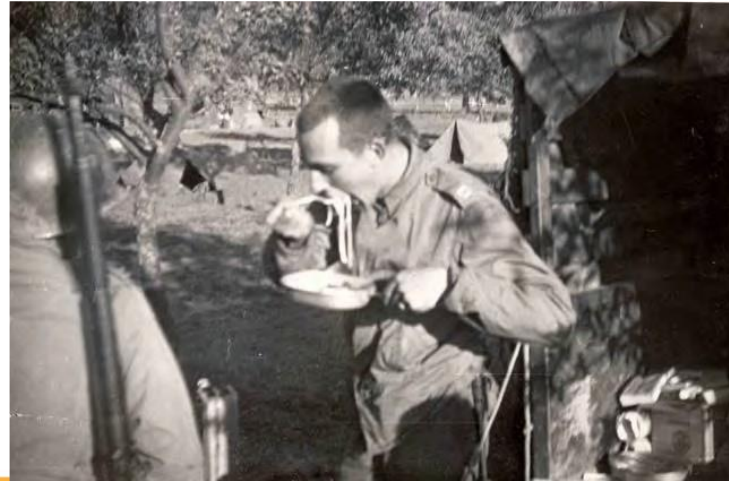
**Italian Immigrants**



**World War I**



**World War II**



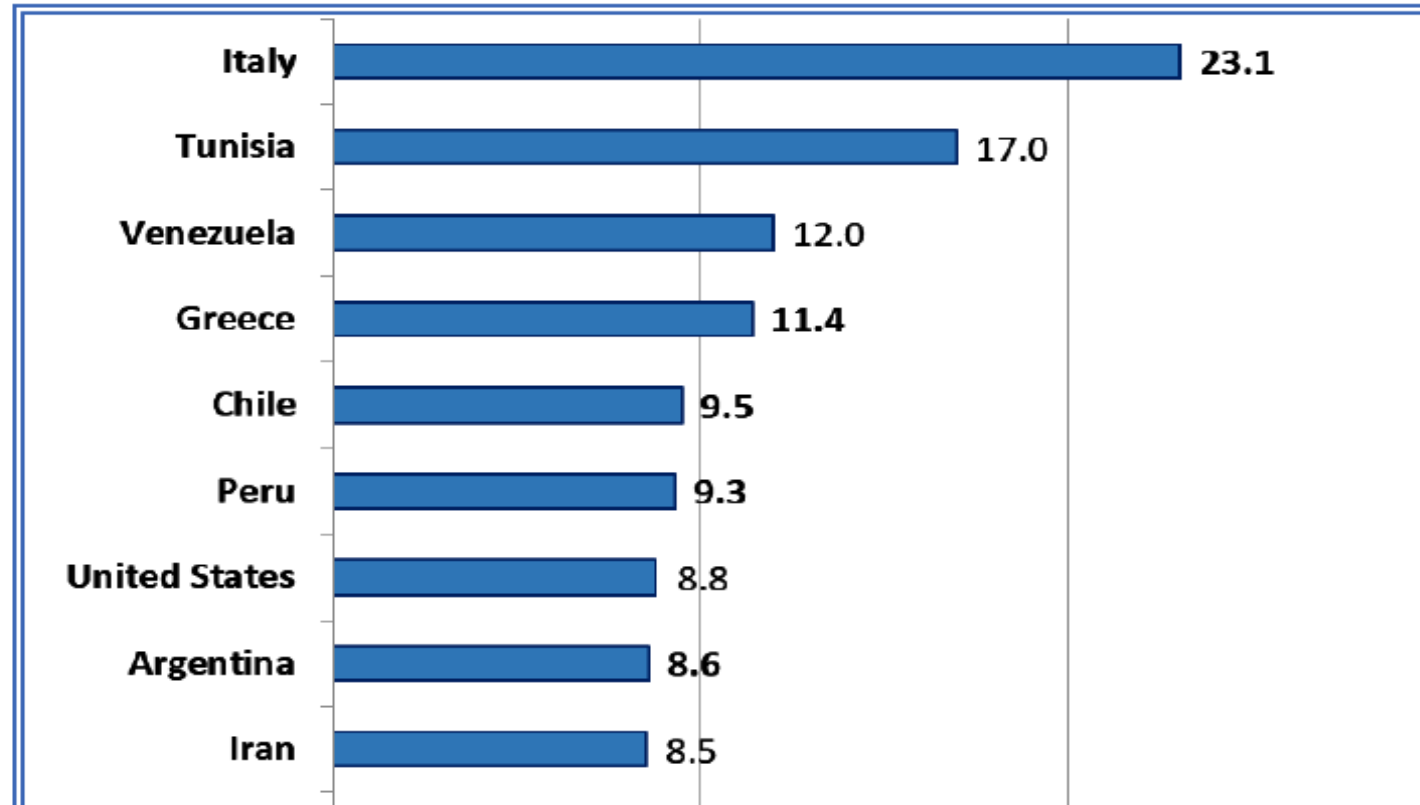
# Why did Pasta become so popular?

- ✓ Convenient
- ✓ Affordable
- ✓ Easy to Prepare
- ✓ Well-liked
- ✓ Nutritious



# Pasta Consumption

*World pasta consumption  
(kg per capita)*



Source: Survey carried out by the International Pasta Organization- 2020



# Pasta and Your Health

# Pasta Nutrition

## Carbohydrates

Dietary Guidelines recommend 45-65%

- Source of Energy
- Need for Brain Function (at least 130 grams of CHO/daily)

## Vitamins and Minerals

- Folate
- Iron
- Fiber



# Impact on Health

## Blood Sugar Levels

*Pasta is considered a low glycemic index food*

GI varies depending on pasta

Falls below 50

**low GI foods:** 55 or less

**medium GI foods:** 56–69

**high GI foods:** 70 or above



# Impact on Health

*At a time when obesity and diabetes have a high prevalence around the world, pasta meals and other low-Glycemic Index foods may help control blood sugar and weight especially in overweight people. Glycemic Index is a factor that impacts the healthfulness of carbohydrate-rich foods.*

***There is a beneficial effect in the way pasta is made. The process of manufacturing reduces its glycemic response.***

*2015 Healthy Pasta Meals Scientific Consensus Statement*



# Impact on Health

## Blood Sugar Levels

### *Pasta contains resistant starch*

Resistant starches are starches that pass through the small intestines undigested, but later are broken down by the gut bacteria in the large intestine.

Beneficial properties:

- Microbiome

- Weight management

- Appetite control



# Impact on Health

## Pasta and Diabetes

Pasta both white and whole wheat, can still be enjoyed by people living with diabetes

portion size

pasta preparation

add vegetables and limit sauce



# Impact on Health

## Pasta and Cardiovascular Disease

- Mediterranean diet
- Healthy diets include carbohydrate-rich pasta
- Low carbohydrate diets are not recommended



# Impact on Health

## Pasta Intake Linked to Better Diet Quality

in both adults and children

In adults, associated with:

- ❖ Greater intake of fiber, folate, iron and magnesium
- ❖ Lower intake saturated fat and added sugar

In children and adolescents, associated with:

- ❖ Greater intake of fiber, folate iron, magnesium and vitamin E
- ❖ Lower daily intakes of saturated and total fat



Published in *Frontiers in Nutrition* August 2020

# Impact on Health

## Pasta Intake Linked to Higher Vegetable Intake

Pasta consumption in *adults* is associated with:

- ❖ Higher daily total vegetable consumption
- ❖ Greater whole grain consumption



21  
MAR

Press Releases

### EATING PASTA ASSOCIATED WITH HIGHER CONSUMPTION OF VEGETABLES

A new study presented at the 2017 Food and Nutrition Conference and Expo in Chicago revealed that the diets of adults who eat pasta are associated with higher daily consumption of total vegetables than the diets of non-pasta-eaters. The increased vegetable intake referred specifically to red and orange vegetables, such as tomatoes and peppers. In fact, the research showed pasta eaters ate about twice as many tomatoes as non-pasta eaters. Tomatoes are an excellent source of vitamin C and other antioxidants like lycopene. Pasta eaters also had higher intakes of whole grains compared to non-pasta eaters.

# Impact on Health

## Pasta and Obesity and Weight Gain

No differences were seen in total daily calories and sodium intake

No significant associations were seen with body weight, waist circumference and body mass index in children and adult males.

In adult women (19 -50 years), pasta eating was associated with *reduced waist circumference, lower body weight and body mass index (BMI)*.



# Impact on Health

## Healthy Dietary Patterns

Dietary Guidelines

up to 50% whole grain

2 oz serving size

Mediterranean Diet

Vegetarian Diet

US Healthy Standard Diet

Plant-Forward Diets



### DINNER

Total calories: 585

- **Oven-Roasted Tilapia and Vegetables With Pasta (510 calories)**
  - » Tilapia (4 ounces)
  - » Broccoli (½ cup)
  - » Carrots (⅓ cup)
  - » Summer squash (⅓ cup)
  - » Pasta (¾ cup cooked)
  - » Garlic-herb oil (1 Tbsp)
- **Orange (1 medium) (75 calories)**
- **Sparkling Water (8 ounces) (0 calories)**

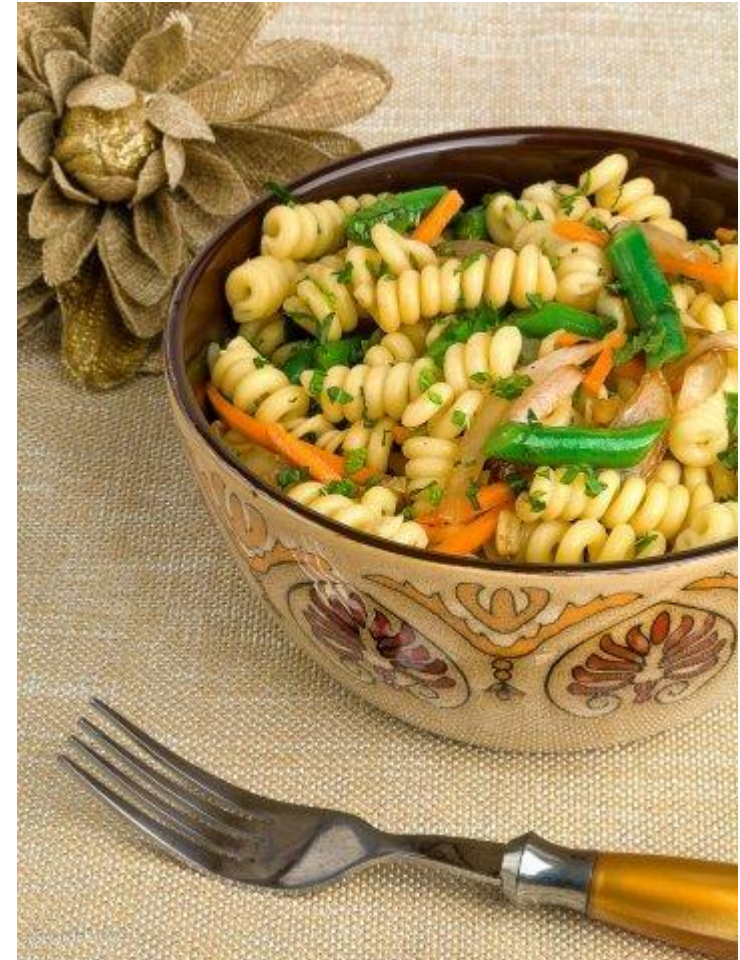


# Healthy Pasta Partners



# Healthy Pasta Preparations

- Al Dente
- Cooked and Cooled Pasta Dishes
- Addition of a Vinaigrette or Lemon Juice



# Healthy Pasta Partners

- High fiber foods and vegetables
  - Beans, peas and lentils
  - Cruciferous vegetables
  - Leafy greens
  - Soy, nuts, and seeds



# Healthy Pasta Partners

- Lean Proteins
  - Seafood
  - Lean chicken, beef or pork
  - Nut butters



# Healthy Pasta Partners

- Local Ingredients
  - Sustainable
  - Reduces Food Waste
  - Supports the Community
- Globally Inspired Ingredients
  - Asia
  - Middle East
  - Europe
  - US



# Resources:

- [Sharethepasta.org](https://www.sharethepasta.org)
- Nutrition Information
- Cooking Tips
- Nutrition Toolkit



## Pasta 101 is now in session...

Do you know your pasta? From types of pasta to what pasta shapes pair best with which sauces, we take you through all the pasta facts and figures. You can even test your pasta knowledge with our Pasta IQ quiz. So whether you want to expand your cooking skills or prove to everyone you're the ultimate pasta aficionado, get started below.



Types of Pasta



Pasta Shapes Dictionary



Pasta IQ

## The Truth About Carbs

## Confused About Carbs

The USDA recognizes the important role carbohydrates, such as pasta, play in a healthy diet. That's why the 2020 Dietary Guidelines for Americans continues to recommend consuming 45% to 65% of your total calories from these kinds of nutrients. Exactly how can you do this?

# Resources:

- Videos
- Healthy Recipes
- Blogs and Newsletter
- Social Media Channels



## Discover Pasta Recipes to Fit Every Need

Pasta Fits' pasta recipes have been carefully curated and tested to ensure they fit within recommended nutrition guidelines: calories low, nutrition high and cooking easy, with the occasional decadent indulgence. Whether you need a quick prep meal on pasta classics, or a taste of a different culture, Pasta Fits has you covered.



# Contact Information

Diane Welland MS, RD

Director of Nutrition  
Communications

[DWelland@kellencompany.com](mailto:DWelland@kellencompany.com)

202-207-1111

[Sharethepasta.org](http://Sharethepasta.org)





**THANK YOU!**



# References

Huang M, Lo K, Li J, Allison M, Wu WC, Liu S. [Pasta meal intake in relation to risks of type 2 diabetes and atherosclerotic cardiovascular disease in postmenopausal women : findings from the Women's Health Initiative.](#) *BMJ Nutr Prev Health.* 2021;4(1):195-205. Published 2021 Apr 30. doi:10.1136/bmjnph-2020-000198

Ludwig DS, Aronne LJ, Arne A. et. al. [The carbohydrate-insulin model: a physiological perspective on the obesity pandemic,](#) *The Amer J of Clinical Nutr,* 2021; nqab270, <https://doi.org/10.1093/ajcn/nqab270>

Papanikolaou Y. [Pasta Consumption Is Linked to Greater Nutrient Intakes and Improved Diet Quality in American Children and Adults, and Beneficial Weight-Related Outcomes Only in Adult Females.](#) *Front Nutr.* 2020 Aug 7;7:112. doi: 10.3389/fnut.2020.00112.

Wee M, Henry CJ. [Reducing the glycemic impact of carbohydrates on foods and meals: Strategies for the food industry and consumers with special focus on Asia.](#) *Compr Rev Food Sci Food Saf.* 2020;19:670–702.

Dong T, Guo M, Zhang P, et. al. [The effects of low-carbohydrate diets on cardiovascular risk factors: A meta-analysis.](#) *PLoS Jan 2020, ONE 15(1): e0225348.* <https://doi.org/10.1371/journal.pone.0225348>

International Pasta Organization Survey – World Pasta Consumption 2020.

Hodges C, Archer F, Chowdhury M, et al. [Method of Food Preparation Influences Blood Glucose Response to a High-Carbohydrate Meal: A Randomised Cross-over Trial.](#) *Foods.* 2019;9(1):23. Published 2019 Dec 25. doi: [10.3390/foods9010023](https://doi.org/10.3390/foods9010023)

Martínez-González MA, Gea A, Ruiz-Canela M. [The Mediterranean Diet and Cardiovascular Health.](#) *Circ Res.* 2019 Mar;124(5):779-798. doi: 10.1161/CIRCRESAHA.118.313348. PMID: 30817261.

Webb, Densie PhD, RD [Pasta's History and Role in Healthful Diets,](#) *Nutrition Today:* 9/10 2019 - Volume 54 - Issue 5 - p 213-220 doi: 10.1097/NT.0000000000000364

Vitale M, Masulli M, Rivellese AA, et. al. [Pasta Consumption and Connected Dietary Habits: Associations with Glucose Control, Adiposity Measures, and Cardiovascular Risk Factors in People with Type 2 Diabetes-TOSCA.IT Study.](#) *Nutrients.* 2019 Dec 30;12(1):101. doi: 10.3390/nu12010101.

Chiavaroli L, Kendall CWC, Braunstein CR, et. al. [Effect of pasta in the context of low-glycaemic index dietary patterns on body weight and markers of adiposity: a systematic review and meta-analysis of randomised controlled trials in adults.](#) *BMJ Open.* 2018 Apr 2;8(3):e019438. doi: 10.1136/bmjopen-2017-019438. PMID: 29615407; PMCID: PMC5884373.

# References Continued

Eleftheriou D, Benetou V, Trichopoulou A, La Vecchia C, Bamia C. [Mediterranean diet and its components in relation to all-cause mortality: meta-analysis](#). *Br J Nutr*. 2018 Nov;120(10):1081-1097. doi: 10.1017/S0007114518002593.

Freitas D, Le Feunteun S. [Acid induced reduction of the glycaemic response to starch-rich foods: the salivary  \$\alpha\$ -amylase inhibition hypothesis](#). *Food Funct*. 2018 Oct 17;9(10):5096-5102. doi: [10.1039/c8fo01489b](#).

Fulgoni VL, Bailey R. [Association of Pasta Consumption with Diet Quality and Nutrients of Public Health Concern in Adults: National Health and Nutrition Examination Survey 2009–2012](#), *Current Developments in Nutrition*, Volume 1, Issue 10, October 2017, e001271, <https://doi.org/10.3945/cdn.117.001271>

Augustin LS, Kendall CW, Jenkins DJ, et al. [Glycemic index, glycemic load and glycemic response: an international scientific consensus summit from the International Carbohydrate Quality Consortium \(ICQC\)](#). *Nutr Metab Cardiovasc Dis*. September 2015;25:795Y815.

2015 Healthy Pasta Meals Scientific Consensus Statement and signatories Oldways, October 2015

Johnston CS, Steplewska I, Long CA, Harris LN, Ryals RH. [Examination of the antiglycemic properties of vinegar in healthy adults](#). *Ann Nutr Metab*. 2010;56(1):74-9. doi: 10.1159/000272133.

Dontas AS, Zerefos NS, Panagiotakos DB, Vlachou C, Valis DA. [Mediterranean diet and prevention of coronary heart disease in the elderly](#) [published correction appears in *Clin Interv Aging*. 2008;3(2):397. Vlachou, Cleo [added]]. *Clin Interv Aging*. 2007;2(1):109-115. doi:10.2147/cia.2007.2.1.109

Liljeberg H, Björck I. [Effects of a low-glycaemic index spaghetti meal on glucose tolerance and lipaemia at a subsequent meal in healthy subjects](#). *Eur J Clin Nutr*. 2000 Jan;54(1):24-8. doi: 10.1038/sj.ejcn.1600887. PMID: 10694768.

[Effects of carbohydrates in the form of pasta and bread on food intake and satiety in man](#) B.Barkeling, et al. *Nutrition Research*, April, 1995

Granfeldt Y, Björck I. [Glycemic response to starch in pasta: a study of mechanisms of limited enzyme availability](#), *J of Cereal Science*. July 1991;14(1):47-61.

Glycemicindex.com -FAQ's

A Healthy Meal: Cooking And Cooling Pasta Changes Starch Quality To Cut Calories, Fat L. Borreli Medical Daily, October 2014

[Myths about Diabetes](#): American Diabetes Association