PASTA: AN ANCIENT FOOD FOR MODERN TIMES

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PASTA DAY & CONGRESS



The science and history of why pasta continues to be universally relevant for modern times



...& how such a good-tasting food is also good for you

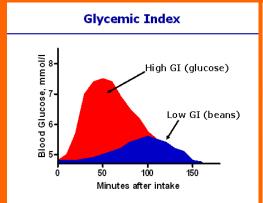


EMERGING TRENDS & WHAT PEOPLE WANT

- pure, simple foods
- convenient, affordable, quick
- satiety
- heritage-inspired good-foryou foods

EMERGING LESSONS FROM SCIENCE

- low Glycemic Index
- wholesome not just nutrients
- calories not carbohydrates
- durum pasta less likely to cause gluten issues



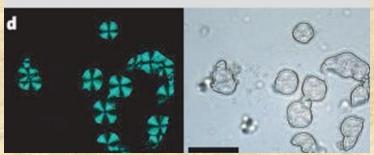




The origins of pasta: myths & legends

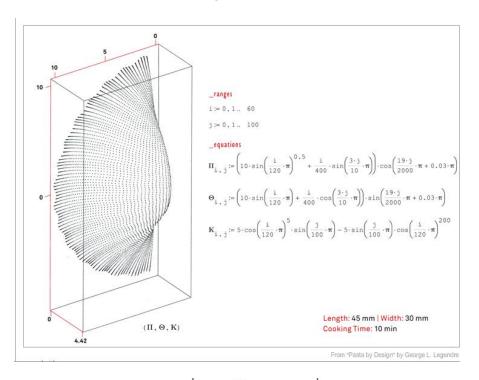


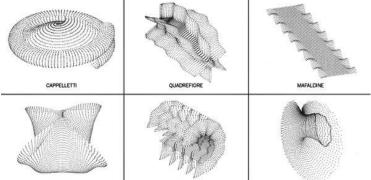


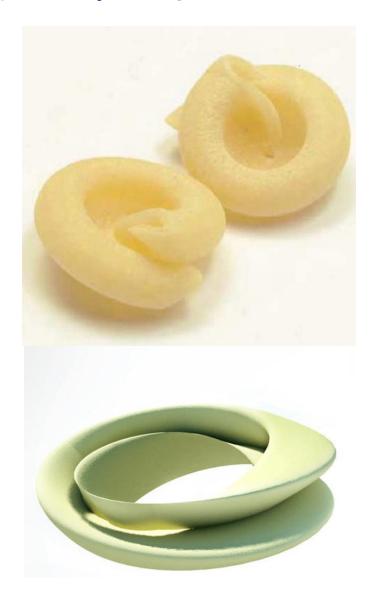


A centuries-old culinary marvel, pasta epitomizes human ingenuity, and continues to be a globally popular!

How can something that looks and tastes so good also be so good for you?



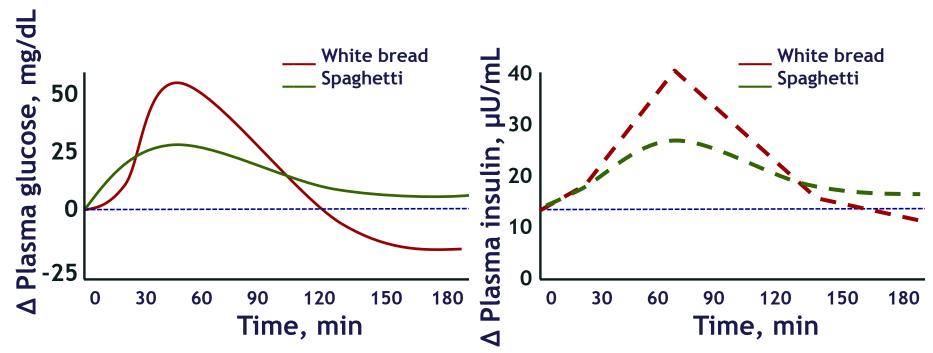




Food labels vs. scientific reality

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→ Foods with similar carbohydrate content can have significantly different metabolic effects

Pasta entails science and art



Good pasta is all about texture. Traditionally, the dense, slippery, slightly chevry characteristics of a good noodle have come from a combination of starch and protein from the flour. Kneading the dough helps to hydrate the starch and develop the elastic strength of the gloten. Fresh pastas, onderful as they may be, will rarely have the al dente texture we so love they are thousked a bit with modern ingredients.

omes from classic dejed Italian pasta or traditionally made Asian noodles, but without the difficulty or labor.

machine that extrudes the dough through bronze dies. These give the pasta a jagged, coarse surface (see photo) to which sances love to cling.

designed to be used fresh. The eggless recipes, including semolins and rice flour, dry beautifully on a rack or in a dehydrator. We like to dry our pasts in a vacuum dehydrator because it dries evenly and ouickly.



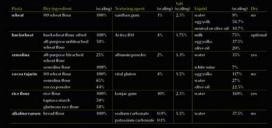








Best Bets for Pasta Doughs























Heritage matters!

Tetraploid wheats:
Durum, Kamut, Spelt

VS

Hexaploid wheats:
Modern bread wheats

Pasta: pure, wholesome, goodness!

- Contrary to popular myth, pasta has been proven to be a healthful inclusion in the diet for weight and health management
- The glycemic response of pasta is naturally low
- Pasta is not eaten alone by itself...the hysteria about the ills of pasta lacks scientific evidence
- Pasta, often accompanied by vegetables, legumes, nuts and olive oil, does wonders for managing hunger and consequently, in managing weight and health
- Pasta is a satiating food; satiety is a key attribute of foods for people watching calories and weight while also eating for pleasure and health
- Purity! No preservatives, yet pasta can last forever!

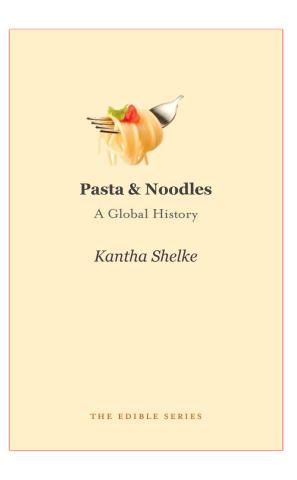
What matters most about pasta...

- Quality ingredients and trusted for centuries
- The glycemic and digestive properties of pasta can provide perceptible benefits that people can "feel"
- Linking science with health & taste helps the body and the soul
- Pasta is "wholesome" "minimally processed"
 "delicious" "good-for-you" "convenient" ...powerful value propositions few foods offer
- The physiological and emotional benefits offer even better and long-term economic value

[&]quot;...healthful diets are cheaper than the cures that doctors offer"

Disclosures & Sources

CORVUS BLUE



- Oldways Preservation Trust
- Listservs
- Editorial duties
- Corvus Blue insights
- Research for book

Selected references

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- Davidson A (1999). 'Pasta', in The Oxford Companion to Food, ed. Alan Davidson, Oxford University Press, 580–584.
- Jovanovic A, Gerrard J, Taylor R (2009). The second-meal phenomenon in type 2 diabetes.
 Diabetes Care 32: 1199-1201.
- Jenkins DJ, Wolever TM, Taylor RH, Griffiths C, Krzeminska K, et al. (1982). Slow release dietary carbohydrate improves second meal tolerance. Am J Clin Nutr 35: 1339-1346.
- Wolever TM, Jenkins DJ, Ocana AM, Rao VA, Collier GR (1988). Second-meal effect: lowglycemic-index foods eaten at dinner improve subsequent breakfast glycemic response. Am J Clin Nutr 48: 1041-1047.
- Kim EHJ, Petrie JR, Motoi L, Morgenstern MP, Sutton KH, Mishra S, Simmons LD.2008. Effect of Structural and Physicochemical Characteristics of the Protein Matrix in Pasta on In Vitro Starch Digestibility. Food Biophysics (3) 2:229-234.
- van den Broeck H, Hongbing C, Lacaze X, Dusautoir JC, Gilissen L, Smulders M, van der Meer I (2010). In search of tetraploid wheat accessions reduced in celiac disease-related gluten epitopes. Mol Biosyst 6:11:2206-13.
- Salentijn EM, Goryunova SV, Bas N, van der Meer IM, van den Broeck HC, Bastien T, Gilissen LJ, Smulders MJ (2009). Tetraploid and hexaploid wheat varieties reveal large differences in expression of alpha-gliadins from homoeologous Gli-2 loci. BMC Genomics 26(1);10:48.
- Molberg O, Uhlen AK, Jensen T, Flaete NS, Fleckenstein B, Arentz-Hansen H, Raki M, Lundin KE, Sollid LM (2005). Mapping of gluten T-cell epitopes in the bread wheat ancestors: implications for celiac disease. Gastroenterology 128(2):393-401.

