

Pasta as a healthy eating choice



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Keys' legacy



HOW TO
**EAT WELL
AND STAY WELL**
THE MEDITERRANEAN WAY
By the Authors of the Best-selling Book
EAT WELL AND STAY WELL
Ancel and Margaret Keys

Food habits in Southern Italy and USA in the sixties

<u>Food groups (g/die)</u>	<u>US railroad</u>	<u>Nicotera</u>
Cereals	123	455
Legumes	1	43
Vegetables	171	231
Potatoes	124	73
Fruit	233	104
Meat	273	50
Fish	3	44
Eggs	40	22
Cheese	18	17
Milk	231	38
Edible fat	33	43
Alcohol	6	28

By courtesy of Prof J. Stamler

FOOD CONSUMPTION IN MEDITERRANEAN COUNTRIES

↑↑ Legumes, vegetables and fruits

↑↑ Cereals (pasta and whole-meal bread) and nuts

↑↑ Olive oil

↑↑ Fish

One or two glasses of wine

↓↓ Meat

↓↓ Dairy products

**Are carbohydrate foods the
culprit of the obesity
epidemic?**



Cereal foods

**Carbohydrate foods have not
equal metabolic effects**

Unadjusted food intakes (g/1000 kcal) of men (aged 40–59 y) by category of BMI, (United States, 1996–1999): the INTERMAP (n = 1794)

Food groups/subgroups ²	Men		
	<25.0 (n = 202)	25.0–29.9 (n = 414)	≥30.0 (n = 331)
Total fruit	114.8 (48.7–193.9)	88.1 (39.8–175.0)	88.2 (34.2–166.7)
Fresh fruit ³	45.1 (13.7–84.5)	29.0 (5.9–66.2)	26.2 (4.6–65.6)
Total vegetables ⁴	112.1 (79.4–171.9)	121.2 (83.7–153.1)	110.7 (79.8–154.9)
Whole grains ⁴	16.6 (4.8–30.5)	13.1 (4.6–24.1)	11.7 (4.2–22.4)
Pasta and rice ³	36.4 (14.7–89.9)	30.9 (10.9–61.4)	21.5 (5.3–47.3)
Beef, pork, veal, and game meats ³	25.8 (11.4–41.2)	29.2 (17.6–43.1)	32.7 (21.8–48.8)
Processed meats ³	4.5 (0.0–13.3)	5.3 (0.0–13.2)	8.7 (2.5–15.1)
Total visible fats ⁵	16.1 (11.4–20.9)	17.3 (13.3–23.0)	17.2 (12.7–21.6)
Snacks and sweets	21.0 (10.4–31.6)	21.1 (11.8–32.2)	19.0 (10.0–31.5)
Alcoholic beverages ³	6.0 (0.0–112.2)	0.3 (0.0–109.4)	0.0 (0.0–79.7)
Carbonated soft drinks ⁵	483.6 (275.7–655.0)	477.8 (295.4–707.1)	525.0 (355.7–762.2)
Sugar-sweetened beverages ⁴	105.0 (32.0–204.8)	98.8 (29.0–216.2)	119.6 (24.8–242.6)

3 P-trend , 0.05 across BMI categories for men and women.

4 P-trend , 0.05 across BMI categories for women.

5 P-trend , 0.05 across BMI categories for men.

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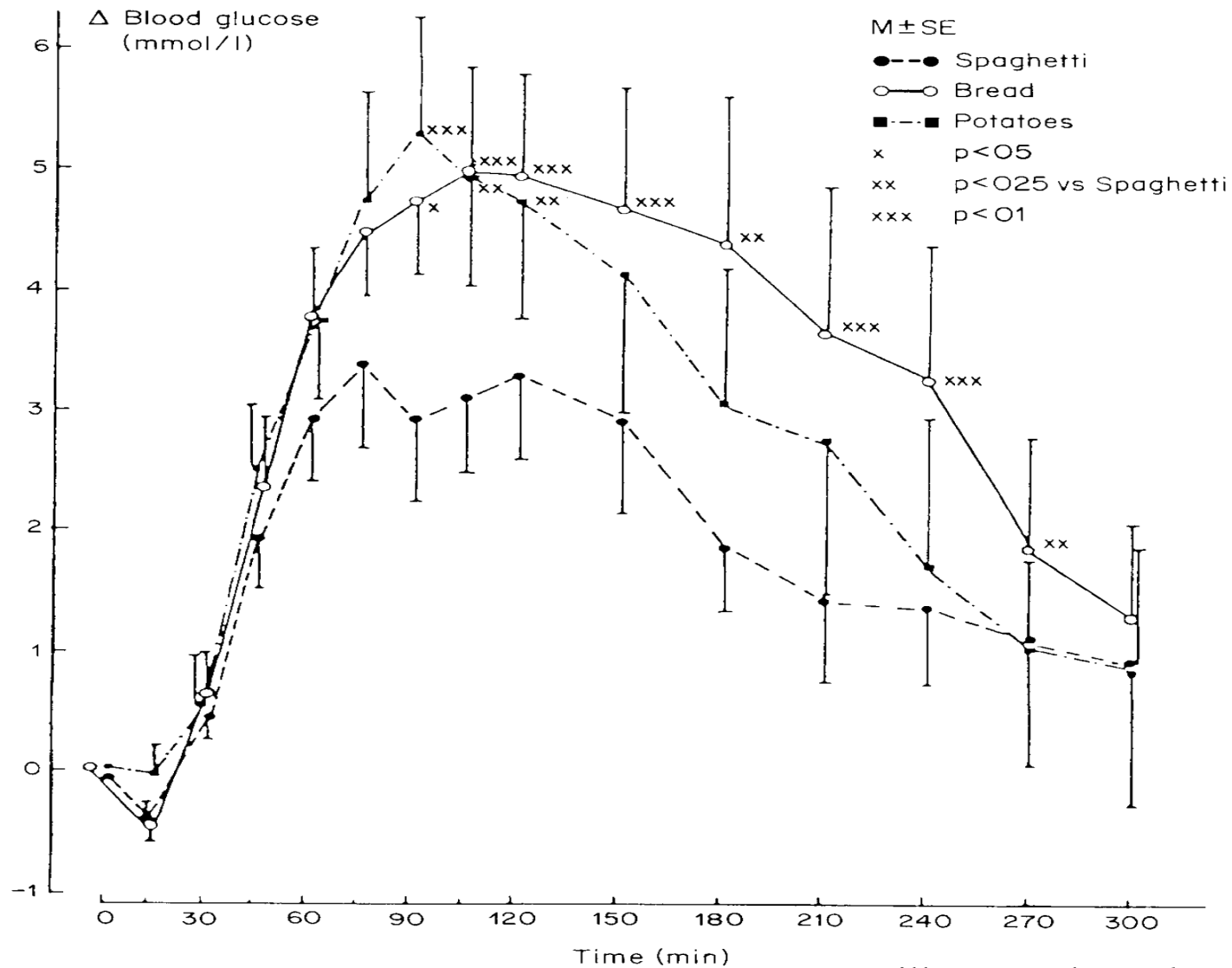
4 P-trend , 0.05 across BMI categories for women.

5 P-trend , 0.05 across BMI categories for men.

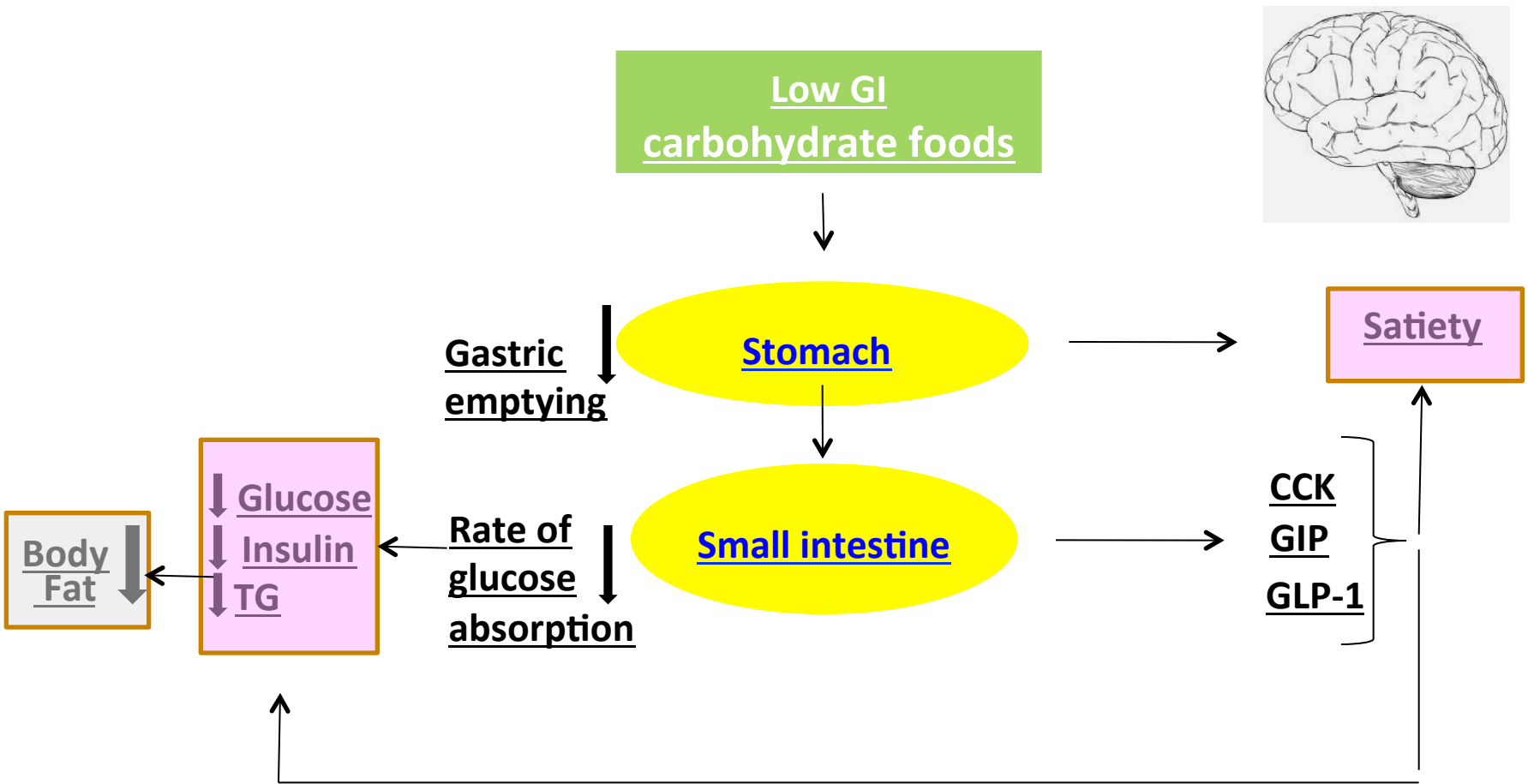
Pasta consumption clusters
with healthy eating
behaviours

Pasta induces a low post-prandial glucose and insulin response

Glycaemic Responses to Pasta, Bread and Potatoes in Diabetic Patients



Metabolic effects of low glycemic index (GI) foods





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CONSENSUS

Glycemic index, glycemic load and glycemic response: An International Scientific Consensus Summit from the International Carbohydrate Quality Consortium (ICQC)[☆]



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Glycemic Index, Glycemic Load and Glycemic Response: an International Scientific Consensus Summit.

- There is convincing evidence from meta-analyses of controlled dietary trials that diets low in GI improve glycemic control in people with type 2 and type 1 diabetes
- There is convincing evidence from meta-analyses of prospective cohort studies that low GI/GL diets reduce the risk of type 2 diabetes
- There is convincing evidence from a large body of prospective cohort studies that low GI/GL diets reduce the risk of coronary heart disease
- Low GI/GL diets improve blood lipids and inflammatory markers including C-reactive protein
- Probable evidence exists for low GI/GL diets in reducing total body fat mass and in weight management

Pasta as a healthy eating choice

A pasta meal prepared according to the mediterranean tradition

- has a low post-prandial glycemic and insulinemic response
- often includes other healthy ingredients like tomatoes, vegetables, legumes, olive oil and fish; if it contains meat or cheese, they are used in small amounts.
- is balanced with respect to the distribution of nutrients and is a vehicle of vitamins and minerals



Thank you for your attention