

Affordability of Healthy Food: the role of the pasta meal



Cynthia Harriman, Oldways
Director of Food & Nutrition Strategies



IV World Pasta Congress
Scientific Consensus Conference
Rio de Janeiro • 26 October 2010

Why Affordability Matters

- [1/6 world's population lives on \leq US\$ 1 per day
- [Poor spend 50-60% of their income on food *
- [Undernourishment and chronic disease are rampant

*Countries in this room spend on average 25% of income on food

sources: USAID.gov and FAO.org

A Real Problem...

“Results found that the average estimated monthly food cost [of a high-quality, healthy diet]... exceeded the benefit and food budget set by [government] agencies.”



Barriers to Purchasing Foods for a High-Quality, Healthy Diet in a Low-Income African American Community
Fulp RS, McManus KD, Johnson PA – Boston, MA, USA
Family and Community Health. July-Sep 2009; 32(3):206-17.

A Real Problem...

“Obesity and type 2 diabetes follow a socioeconomic gradient. Highest rates are observed among groups with the lowest rates of education and income...”



Obesity, Diets, and Social Inequalities
Drewnowski A – Seattle, WA, USA
Nutrition Reviews. May 2009; 67 Suppl 1 S36-9.

Perception & Affordability

“The impact of financial difficulties is crucial, as is the perception of affordability...”



Socioeconomic Factors and Attitudes Toward Food Affordability...
Bihan H et al. – INSERM, Bobigny, France
Journal of Nutrition. April 2010; 140(4):823-30.

Perception & Affordability

“...[S]ocioeconomic differences in diet were almost wholly explained by perceptions of availability, accessibility and affordability. Strategies ... could involve... ensuring that people of low SEP are aware that many healthy foods are available at relatively low cost.”



Socioeconomic Variations in Women's Diets: What is the Role of Perception of the Local Food Environment?

Inglis V, Ball K, Crawford D – Burwood, Victoria, Australia

Journal of Epidemiology & Community Health. Mar 2008; 62(3):191-7.

Affordable Healthy Pasta Meals

Country	Pasta Meal Cost
United States	US\$ 0.81
Canada	US\$ 1.01
Mexico	US\$ 0.71
Argentina	US\$ 1.54
Brazil	US\$ 0.93
Colombia	US\$ 1.03
Costa Rica	US\$ 0.86
Chile	US\$ 0.71
France	US\$ 0.84
Italy	US\$ 1.20
Portugal	US\$ 0.85
Spain	US\$ 0.69
Turkey	US\$ 0.56

onions, mushrooms, broccoli

onions, peas, zucchini, mushrooms

zucchini, broccoli, chayote

onions, mushrooms, broccoli

onions, carrots, broccoli or pods

eggplant, green pepper

onions, carrots, broccoli, red pepper

mushrooms, peas, corn, broccoli

onions, carrots, broccoli

onions, carrots, broccoli

broccoli, spinach, eggplant

onions, zucchini, eggplant

eggplant, green pepper



pasta, 500g
olive oil, 75 ML
garlic, 3 cloves
tomatoes, 2
vegetables, 750 ML
cheese, 120 ML or 30 g
makes 6 servings

Pasta Meal vs. Big Mac Index

Country	Pasta Meal Cost	Big Mac Index
United States	US\$ 0.81	US\$ 3.73
Canada	US\$ 1.01	US\$ 4.11
Mexico	US\$ 0.71	US\$ 2.57
Argentina	US\$ 1.54	US\$ 3.53
Brazil	US\$ 0.93	US\$ 5.20
Colombia	US\$ 1.03	US\$ 4.56
Costa Rica	US\$ 0.86	US\$ 3.83
Chile	US\$ 0.71	US\$ 3.62
France	US\$ 0.84	US\$ 4.68
Italy	US\$ 1.20	US\$ 4.68
Portugal	US\$ 0.85	US\$ 4.68
Spain	US\$ 0.69	US\$ 4.68
Turkey	US\$ 0.56	US\$ 4.19



average: \$0.90



average: \$4.16

All values in U.S. dollars at current currency exchange rates.

Big Mac Index from www.economist.com

Pasta Meal vs. Chicken Meal



	Pasta Meal	Chicken Meal	How much more?
United States	US\$ 0.81	US\$ 1.23	52% more
France	US\$ 0.84	US\$ 1.79	113% more
Chile	US\$ 0.71	US\$ 1.12	57% more

Pasta – an Affordable Solution

“Diet optimization techniques, when sensitive to cost and social norms, can help identify affordable, good tasting, nutrient-rich foods that are part of the mainstream [local] diet.”



Can Low-Income Americans Afford a Healthy Diet?
Drewnowski A, Eichelsdoerfer P – Seattle, WA, USA
Nutrition Today. November 2010; 44(6):246-249.