



HEALTHY PASTA MEALS

SCIENTIFIC CONSENSUS STATEMENT

Agreed in Rio de Janeiro, October 26, 2010

1. Scientific Consensus Statement
2. Context of Pasta Meals Conference
3. Role of Carbohydrates in Healthy Eating Patterns
4. Assessing Glycemic Impacts
5. Role of Pasta Meals in Healthy Eating Patterns
6. Notes
7. Signatories of the Scientific Consensus Statement

1. Scientific Consensus Statement

1. Scientific research increasingly supports the importance of total diet, rather than individual foods and nutrients.
2. Pasta is a key component of many of the world's traditional healthy eating patterns, such as the scientifically-proven Mediterranean Diet. Traditional dietary patterns 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 carb diets may not be safe, especially in the long term.
4. 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 is one of many factors that impact the healthfulness of foods.
5. 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.
6. Healthy pasta meals are a delicious way to eat more vegetables, legumes and other healthy foods often underconsumed.
7. Pasta meals are enjoyed in cultural traditions worldwide, as they are versatile and easily adaptable to national / regional seasonal ingredients.
8. Doctors, nutritionists and other health professionals should recommend varied and balanced pasta meals for good health.

2. Context

Weight gain has become cause for grave public health concern in populations of affluent, developed countries, and is emerging as an issue in populations of developing countries. Causes of this weight gain are a combination of increased calorie intake, changed characteristics of the dietary macronutrients (carbohydrates, fats and proteins), reduced physical activity, and shortfalls of key nutrients. Many people are overweight and yet still undernourished.

Effective remedial policies and strategies for reversing overweight and obesity are urgently sought at the highest levels of governments and in international and national health and public policy organizations.

Carbohydrates and their digestive glucose products have supplied the majority of energy to most populations for thousands of years, and recent high-level considerations of appropriate macronutrient ratios confirm the essential role of carbohydrates in healthy eating patterns. As a result, it is a public health priority to engage nutrition and related experts, especially those who are experts in carbohydrate metabolism, to develop and regularly update a Scientific Consensus Statement on relationships between carbohydrates and healthy eating patterns.

A Scientific Consensus Statement will materially assist policy makers, professionals, business and consumers at all levels to: (a) discern among responsible and irresponsible dietary advice concerning foods and drinks containing carbohydrates; and (b) develop effective messages that will encourage and enable consumers to adopt and maintain eating patterns that promote lifelong good health.

3. Role of Carbohydrates in Healthy Eating Patterns

A half-century of population studies has made clear the characteristics of dietary patterns that promote low levels of chronic disease and extend longevity. There is broad worldwide consensus among high-level nutrition scientists and related experts concerning healthful ratio ranges among the major macronutrients: carbohydrates at 45- 60% of calories; fat at 25-30% of calories; and proteins at 15-20% of calories (see Note).

As these ranges indicate, the optimal ratio of dietary carbohydrates, protein and fats for promoting lifelong good health is a subject of ongoing review and debate, because humans can maintain good health within a range of nutrients so long as adequate attention is given to macronutrient balance, energy balance, and nutrient quality. This means avoiding extreme and/or unbalanced diets and favoring macronutrient-balanced eating patterns that emphasize high-quality nutrients such as unsaturated fats, low glycemic index carbohydrates, and a combination of plant and/or animal proteins.

Recent studies, detailed in the Scientific References for this conference, show that a diet with adequate carbohydrates is associated with lower likelihood of overweight and obesity, better appetite suppression, and lower overall mortality.

However, over-consumption of highly-refined carbohydrates is not health-promoting. Daily consumption of whole grain products together with better refined grain products represents

sound dietary guidance for overall good health for general populations.

The amount and type of carbohydrates consumed in the well-studied traditional Mediterranean Diet eating pattern, described as a gold standard, is in accord with these principles, and is also typical of other less-documented traditional diets.

4. Assessing Glycemic Impacts and Insulin Response

The amount and the type of consumed carbohydrates have both independent and cumulative impacts on health.

Over-consumption of carbohydrates in any form promotes weight gain and may precipitate disease. The same is true for over-consumption of either of the other macronutrients (fats and proteins).

Consumption of high levels of saturated fats or of highly-refined and/or highly-processed carbohydrates in large amounts can precipitate glycemic- and insulin-related health disorders, some of which may be irreversible. As a result, moderate consumption of foods containing these macronutrients should be stressed in dietary guidance programs.

Increased consumption of whole grain carbohydrates is encouraged by a large majority of official and unofficial dietary guidance policies. Promotion activities to encourage consumption of foods that contain whole grains should be expanded. These activities should specifically encourage consumers to move toward consuming at least half their grains as whole grains. Food companies can support this move by offering a wide range of foods with varying proportions of whole and refined grains, to meet consumer demand for different choices.

Assessments of glycemic impacts are essential to determining those eating patterns that promote good health and those that degrade health. Two important assessment measures in widespread current use are the glycemic index and the glycemic load, which gauge the glycemic impacts of individual foods commonly eaten.

In order to increase our understanding of the glycemic index and glycemic load as effective scientific measures and consumer education tools, research should be carried out to better document the relationship between glycemic load/index and insulin response.

5. Place of Pasta Meals in Healthy Eating Patterns

An abundance of studies analyzing the health of populations conclude that health correlates closely with the composition of diets – better diets are aligned with better health. This is so for the world's principal food cultures, which are often described in grain-centric terminology such as wheat, rice, corn and rye cultures. The macronutrient composition of these culturally-described eating patterns is remarkably similar despite the difference in the principal carbohydrate source.

In each of these cultures, the people harvested their central grain, dried and ground it, and then reconstituted it by cooking with water in soups and stews, and by making cakes and porridges. Both ground flour and cracked grains, and a wide variety of dried forms, are common in these cultures during the grain storage phase.

Wheat pasta is an important form of stored (or preserved) carbohydrate in Mediterranean cultures. It is called pasta on the north shores of the Mediterranean and Turkey, but trahana in Greece, and couscous on the south shores of the Mediterranean. It has other names in other languages, as pasta is widely enjoyed from country to country.

To be eaten, pasta must be boiled in water. However, consumers rarely (if ever) eat pasta alone. They eat a "pasta meal" – pasta with other ingredients.

A pasta meal has countless variations, but it always has "partners" for the pasta: a fat (olive oil, vegetable oil, or butter); a vegetable and/or legume (tomato, zucchini, eggplant, or beans); dairy (cheese); and often an animal protein (shellfish, fish, meat or poultry).

Traditional healthy pasta meals are modest in size and thus in total calories. The "westernized" versions of pasta meals are often large in size and thus in total calories, and also often contain over-large amounts of saturated fats.

Pasta meals are usually accompanied by a glass of water, wine or juice, vegetables, bread, fruit or other sweet, and coffee or tea. The presence of multiple ingredients in a pasta meal modulates glucose uptake by delaying gastric emptying and prolonging glucose absorption. This offers an explanation for the central place of pasta meals in the traditional healthy Mediterranean diet, and also in other traditional dietary patterns, such as Asian, Latin American and vegetarian. The multiple ingredients carry with them their own health-promoting benefits, providing essential macronutrients in desirable forms. The carbohydrate itself is slowly digested, because it is traditionally a durum wheat pasta or another pasta with a low glycemic index, and is boiled for a short time (only until "al dente").

In this respect, pasta is itself a healthy ingredient, and is also an efficient "delivery system," or "carrier," of additional health-promoting ingredients.

Pasta is affordably priced, widely available, and culturally adaptable. Because dry pasta requires no refrigeration, it presents no food-safety challenges in either developed or developing countries. Pasta's health benefits, universal cultural acceptance, and its easy accessibility, combine to ensure that pasta meals are not part of the problem that confronts public health officials, but part of the solution for educating consumers to adopt healthy eating patterns for lifelong good health.

6. Notes

"Slow-release carbohydrates" are contained in foods with a low glycemic index and contribute to "prolonged carbohydrate absorption." Credible dietary recommendations for upper limits of the percent of calories from dietary fats vary from below 15% to as high as 40%, so long as the quality of the fat is health-promoting, macronutrients are in sound ratios, and overall energy balance is maintained. An example of a healthy diet at about 40% of calories is that of a physically-active Greek population where olive oil is the principal fat. Examples of lower levels of fats recommended for healthy diets are the 2000 US Dietary Guidelines at below 30%; the 2001 WHO/FAO EURODIET at below 30% (below 35% for active persons); and a 2003 Technical Report of the WHO/FAO at between 15%-30% of fat.

8. Signatories of the Scientific Consensus Statement

Consensus Committee Members

Sara Baer-Sinnott, Oldways (Boston, United States)

Nuno Borges, PhD, University of Porto (Porto, Portugal)

Hector Bourges, MD, PhD, National Inst. of Medical Sciences & Nutrition (Mexico City, Mexico)

Sergio Britos, University of Buenos Aires (Buenos Aires, Argentina)

Rosamaria Da Re, PhD, Mauá Technology Institute (São Paulo, Brazil)

Marta Garaulet Aza, PhD, Dr.PH, University of Murcia (Murcia, Spain)

Cynthia Harriman, Oldways (Boston, United States)

Oscar F. Herrán, MSc, Industrial University of Santander (Bucaramanga, Colombia)

Cyril Kendall, PhD, University of Toronto (Toronto, Canada)

Vanderli Marchiori, Nutritionist-Private Practice (São Paulo, Brazil)

Kathy McManus, MS, RD, Brigham and Women's Hospital (Boston, United States)

Pietro Antonio Migliaccio, MD, Società Italiana di Scienze dell'Alimentazione (Rome, Italy)

Gülden Pekcan, PhD, Hacettepe University (Ankara, Turkey)

Jaime Rozowski, PhD, Catholic University of Chile (Santiago, Chile)

Maria Teresa Strumendo, MD, Società Italiana di Scienze dell'Alimentazione (Rome, Italy)

Emilce Ulate, MSc., University of Costa Rica (San Jose, Costa Rica)

Nidia Solbeyh Vargas, NutricionTotal.org (Caracas, Venezuela)

HEALTHY PASTA MEALS

SCIENTIFIC CONSENSUS STATEMENT & SIGNATORIES

IV World Pasta Congress

Agreed in Rio de Janeiro, 26 October, 2010

Healthy Pasta Meal Scientific Consensus Statement

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2. Pasta is a key component of many of the world's traditional healthy eating patterns, such as the scientifically-proven Mediterranean Diet. Traditional dietary patterns 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 carb diets may not be safe, especially in the long term.

Refeições Saudáveis com Massas Alimentícias Declaração Científica de Consenso

1. Pesquisas científicas apóiam cada vez mais a importância da dieta como um todo ao invés de alimentos ou nutrientes individualmente considerados.
2. As refeições saudáveis com massas alimentícias são um componente chave de muitos padrões alimentares saudáveis em todo o mundo, como a Dieta Mediterrânea, já comprovada cientificamente. Os padrões alimentares tradicionais conferem mais benefícios para a saúde do que os atuais padrões ocidentais.
3. Muitos ensaios clínicos confirmam que é o excesso de calorias, e não de carboidratos, o responsável pela obesidade. As dietas com sucesso em promover a redução de peso baseiam-se em proporções variáveis, adequadas e saudáveis de carboidratos, gorduras e proteínas. Todos estes três macronutrientes em equilíbrio são essenciais para uma dieta individualizada e que pode ser seguida ao longo da vida. Além disso, dietas muito pobres em carboidratos podem não ser seguras a longo prazo.

La Pasta Dichiarazione di Consenso

1. La ricerca scientifica sostiene sempre di più l'importanza del regime alimentare nel suo complesso, piuttosto che dei singoli alimenti e nutrienti.
2. La pasta è una componente chiave di molti modelli alimentari tradizionali, come ad esempio la Dieta Mediterranea, la cui validità è stata scientificamente provata. I modelli alimentari tradizionali conferiscono maggiori benefici per la salute rispetto agli attuali modelli occidentali.
3. Molti studi clinici confermano che non sono i carboidrati, bensì le calorie in eccesso, ad essere responsabili dell'obesità. Anche nel caso in cui si debba perdere peso una dieta a ridotto apporto calorico deve comunque prevedere, nel giusto rapporto, l'introduzione di carboidrati, proteine e grassi. Questi tre macronutrienti, ben bilanciati, sono essenziali per impostare un regime alimentare salutare e personalizzato che possa essere seguito per tutta la vita. Inoltre, le diete a ridotto contenuto di carboidrati potrebbero non essere salutari, soprattutto nel lungo periodo.

La Pasta: un alimento saludable Consenso del Comité Científico

1. La investigación científica defiende la importancia de la dieta como un "todo", más que como los alimentos o los nutrientes individuales.
2. La pasta es un componente esencial de muchos estilos tradicionales de dieta saludable, tales como la científicamente demostrada Dieta Mediterranea. Los patrones de alimentación tradicionales aportan mayores beneficios de salud que la actual dieta occidental.
3. Muchos estudios científicos han confirmado que el exceso de calorías es responsable de la obesidad, y no los carbohidratos por sí mismos. Las dietas que son efectivas para la pérdida de peso promueven un rango saludable de carbohidratos, proteínas y grasas. Estos tres macronutrientes en equilibrio, son esenciales para el diseño de una dieta saludable e individualizada que pueda ser mantenida durante toda la vida. Más aún las dietas muy bajas en carbohidratos no son saludables, especialmente a largo plazo.

English (continued)

4. 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 is one of many factors that impact the healthfulness of foods.
5. 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.
6. Healthy pasta meals are a delicious way to eat more vegetables, legumes and other healthy foods often underconsumed.
7. Pasta meals are enjoyed in cultural traditions worldwide, as they are versatile and easily adaptable to national / regional seasonal ingredients.
8. Doctors, nutritionists and other health professionals should recommend varied and balanced pasta meals for good health.

Português (continuação)

4. Num momento em que a obesidade e diabetes aumentam em todo o mundo, as refeições com massas alimentícias e outros alimentos de baixo índice glicêmico podem ajudar a controlar a glicemia e o peso corporal, especialmente em indivíduos com sobrepeso ou obesidade. O índice glicêmico é um dos vários fatores que influenciam a saudabilidade dos alimentos.
5. As massas alimentícias constituem uma alternativa saudável e econômica em quase todas as sociedades. Promover a acessibilidade e o baixo custo das massas alimentícias pode ajudar a combater o preconceito de que alimentos saudáveis são demasiadamente caros.
6. As refeições saudáveis com massas alimentícias são uma deliciosa maneira de se incluir ou aumentar o consumo de vegetais, leguminosas e outros alimentos considerados saudáveis e que não são consumidos em quantidades e ou frequência suficiente.
7. As refeições saudáveis com massas alimentícias são apreciadas em várias culturas no mundo inteiro, uma vez que são versáteis e facilmente adaptáveis a ingredientes locais ou sazonais.
8. Médicos, nutricionistas e outros profissionais de saúde devem recomendar refeições saudáveis com massas alimentícias que sejam variadas e balanceadas.

Italiano (continua)

4. In un'epoca in cui sono in aumento in tutto il mondo l'obesità ed il diabete, la pasta ed altri alimenti a basso indice glicemico potrebbero contribuire al controllo della glicemia e del peso, in particolare per le persone in sovrappeso. L'indice glicemico è uno dei molti fattori che caratterizzano gli alimenti dal punto di vista nutrizionale.
5. La pasta rappresenta una scelta alimentare economicamente accessibile e nutrizionalmente valida, per tutte le categorie sociali. Valorizzando l'economicità e l'accessibilità della pasta si può sfatare l'errata convinzione che i cibi sani siano anche troppo costosi.
6. Un piatto di pasta è un buon sistema per consumare più alimenti di origine vegetale, compresi i legumi ed altri cibi salutari spesso poco consumati.
7. La pasta è presente nelle abitudini alimentari di tutto il mondo, grazie alla sua versatilità e alla facilità con la quale essa si abbina ad ingredienti stagionali tipici delle varie regioni e nazioni.
8. I medici, i nutrizionisti e gli altri operatori sanitari dovrebbero raccomandare il consumo di piatti vari e bilanciati a base di pasta per una sana e corretta alimentazione.

Español (continúa)

4. En estos tiempos en que la obesidad y la diabetes están aumentando en todo el mundo, las pastas y otros alimentos de bajo índice glicémico pueden ayudar a controlar los niveles de azúcar en sangre y el peso, especialmente en personas con sobrepeso. El índice glucémico es uno de los muchos factores que hacen saludable a los alimentos.
5. La pasta es una elección saludable que está disponible y accesible en casi todas las sociedades. Promover la disponibilidad y el acceso a las pastas puede ayudar a superar la percepción errónea acerca de que los alimentos saludables son muy caros.
6. La pasta es una forma deliciosa para consumir más vegetales, leguminosas y otros alimentos saludables que generalmente son de bajo consumo.
7. La pasta se disfruta en la cultura tradicional mundial ya que es un alimento versátil y fácilmente combinable con todo tipo de ingredientes propios de cada país o región.
8. Es aconsejable que médicos, nutricionistas y otros profesionales de la salud recomienden una dieta variada y equilibrada que incluya pasta.

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