

DOES YOUR BREAKFAST MAKE YOU AMAZING?



An amazing morning starts with an **A.M.A.Z.I.N.G.** breakfast – not empty bellies or empty calories. Quaker is **(A)**nnouncing 3 *new ways* to start each day in the right direction – each ready in just 3 minutes or less. With **(M)**outhwatering instant oatmeal varieties for all ages at an **(A)**ffordable 37 cents per bowl, there’s just no reason to skip out on the most important meal of the day. Our new flavors feature **(Z)**ero trans fat and cholesterol and are low in saturated fat, they’re anything but boring. **(I)**nspired new varieties include flavors like “Apple Cranberry Almond” for adults and “Banana Slamma” for kids. In addition, three classic Quaker favorites* are **(N)**ow made with 25 percent less sugar and a simpler list of ingredients. Like all instant Quaker oatmeal, these new products are **(G)**ood sources of fiber from heart-healthy whole grains. That’s Quaker’s recipe for an **AMAZING** morning...

**Maple Brown Sugar, Cinnamon & Spice, and Apples & Cinnamon*



THE BENEFITS OF OATMEAL: GREAT TASTE MEETS SOUND SCIENCE

At Quaker, we realize that equipping people with the knowledge and resources they need to make positive lifestyle changes is an important part of your job as a health professional. We also understand the importance of providing patients with evidence-based, solutions-based advice. As the first grain recognized by the FDA to help reduce cholesterol, backed by more than 25 years of clinical research and mounting evidence of breakfast's potential health benefits, we can help you do just that.

As far as whole grains go, the general public remains largely misinformed: according to a survey by the International Food Information Council (IFIC), one in five consumers believes that eating carbohydrates contributes to weight gain, yet the 2010 Dietary Guidelines for Americans Committee reported that a low-carbohydrate diet is not significantly different than a moderate-carbohydrate, low-calorie diet to achieve weight loss and numerous studies suggest that whole grains may play a positive role in weight management.⁽¹⁾ From food intake surveys, the USDA's Economic Research Service (ERS) found that 40 percent of respondents did not consume a single serving of whole-grains in the course of a day.⁽²⁾

The average American is also missing out on the benefits of breakfast. Although most people (85 percent) agree that eating breakfast is important, Quaker's national poll revealed that nearly half of the respondents felt they were too busy or did not have enough time to eat in the morning. This is where we want to help fill in the gaps.

There are so many reasons to make breakfast a regular part of your morning. Check out the research below on how breakfast helps us live up to our most amazing health potential.

Oatmeal's Heart-Health Advantage

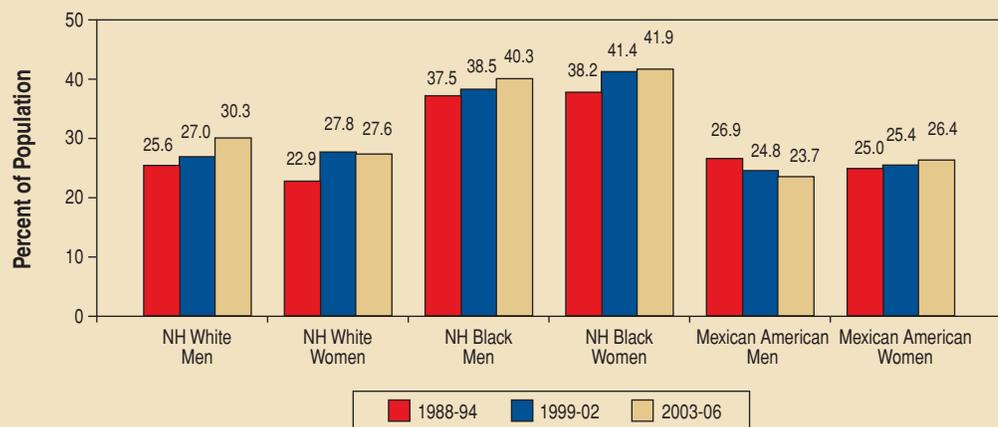
We've known about the cholesterol-lowering benefits of beta-glucan (the soluble fiber found in oats and other fruits, vegetables, and whole grains) and its ability to trap and eliminate cholesterol in the gastrointestinal tract. Now, preliminary in vitro studies point out that the link between oats and heart health may go beyond the role of beta-glucan. Oats contain a large number of flavonoids known as avenanthramides. Some early in vitro studies suggest that avenanthramides may act as antioxidants, which may play an additional role in heart health. In these two ways, oats may offer unique advantages in the prevention and management of heart disease. Findings from these studies include:

- Everyday consumption of three grams of soluble fiber from oatmeal, in conjunction with a diet low in saturated fat and cholesterol, may reduce the risk of heart disease.⁽³⁾
- According to the National Heart, Lung, and Blood Institute, increasing intake of soluble fiber by just 5-10 grams can lead to a 3-5% reduction in LDL cholesterol. When combined with a diet low in saturated fat and cholesterol, LDL levels may decrease by as much as 20%.⁽⁴⁾

Did you know?

Did you know that in the last two decades, certain CVD risk factors, such as hypertension, have continued to rise or remain stable across both genders and nearly all ethnic groups? According to the NHANES data from 1988 to 2006, only Mexican American men have seen a modest decrease in hypertension.

Age-adjusted prevalence trends for high blood pressure in Adults age 20 and older by race/ethnicity, sex and survey



Source: (NHANES: 1988-94, 1999-02 and 2003-06). Source: National Center for Health Statistics (NCHS) and National Heart Lung and Blood Institute (NHLBI). NH- non-Hispanic.

ADDRESSING AMERICA'S BREAKFAST DEFICIT

Fact or Fiction?

- Oats were the **FIRST** whole grain recognized by the FDA to help reduce cholesterol. **FACT!**
- Oats in any form — old-fashioned, quick, steel-cut, instant — are whole grains. **FACT!** **All 3 parts of the whole grain (bran, germ, and endosperm) are kept intact during the milling process, so the same amounts provide the same basic nutrients regardless of taste and texture.**
- The majority of Americans are getting the recommended 3+ servings of whole grains per day. **FICTION!** **According to a USDA ERS survey, only 7 percent of Americans meet the whole-grain recommendations outlined by the dietary guidelines.**⁽²⁾

- While research regarding the potential role of avenanthramides in human subjects is limited, in vitro studies at the Jean Mayer USDA Human Nutrition Research Center on Aging at Tufts University suggest that the avenanthramides found in oats may help reduce the number of molecules that stick to the cells. The study found that these flavonoids may help stop or slow plaque formation on the arterial walls at the very early stages of atherosclerosis.⁽⁵⁾
- Cytokines or proteins that trigger inflammation as part of the body's immune system response, are another factor in the development of heart disease. Some cell studies have shown that avenanthramides may slow down atherogenesis because of their anti-inflammatory properties. Further in vivo and clinical studies are needed to confirm a direct link between avenanthramides and atherogenesis.⁽⁵⁾

Oats & Weight Management

It is well known that obesity represents the most pressing public health problem in America. It can increase the risk of concomitant chronic diseases and impact quality of life in countless ways. While there is no silver-bullet way to solve this crisis, oatmeal may be a part of the solution. Epidemiological research suggests that both breakfast and soluble fiber may help with weight and blood glucose management:

- In 2010 a study published by *Public Health Nutrition* found that older adolescents skipped breakfast more than younger adolescents and girls skipped more than boys. The study also discovered that those who ate breakfast had lower BMIs than those who skipped.⁽⁶⁾
- A recent study from the *Journal of the American Dietetic Association* found that children and adolescents who skipped breakfast had higher body mass index-for-age and a higher waist circumference than those who ate breakfast.⁽⁷⁾
- In a 2003 literature review, the Nutrition Society reported that both clinical and observational studies have shown an inverse relationship between the intake of whole grains and chemical biomarkers of obesity, including insulin, leptin, and C-peptide.⁽⁸⁾ Last year, the *European Journal of Clinical Nutrition* published findings to further support this inverse association.⁽⁹⁾
- That same year, another study found that participants who skipped breakfast were 4.5 times more likely to be obese.⁽¹⁰⁾

The 2010 Dietary Guidelines Committee has emphasized the need for Americans to choose fiber-rich carbohydrate foods such as whole grains. MyPyramid recommends getting half of your grain from whole grain sources.

One serving of grains = 16 grams and it is recommended that people consume at least 48 grams each day.

- Quaker Hearty Medleys provides 18 grams of whole grains per serving, which is more than a serving of whole grain.
- Quaker Mix-In Creations provides anywhere from 26-33 grams of whole grains per serving (depending on which flavors are mixed), which is about half of their recommended daily intake (or 1.5 - 2 servings whole grains).
- Quaker Oatmeal Squares cereal has 48 grams of whole grains per serving — more than most other oat-based, ready-to-eat cereals.



- Soluble fiber — primarily found in oats, barley, fruits, and vegetables — may play a particularly important role in weight management. Research has found that the viscous nature of soluble fiber may promote delayed gastric emptying and prolonged satiety and positively alter glycemic/insulin response so as to potentially help with appetite control.⁽¹¹⁾
- According to a 2010 review, dietary fiber may also positively influence body weight through hormonal effects. These outcomes result in the reduction of insulin secretion in addition to metabolic effects that cause increased fat oxidation and decreased fat storage.⁽¹²⁾

Skippers by Segment: Who is the most likely to skip breakfast? (Quaker poll)

- Women are more likely to eat breakfast every day than are men (58% versus 49%).
- Married people are more likely to eat breakfast than single people (58% versus 49%).
- African Americans are less likely to eat breakfast every day than either Caucasians or Hispanics (39% vs. 56% Caucasians and 52% for Hispanics).
- The older a respondent, the more likely she or he is to have breakfast every day (48% for 18 to 24 year olds vs. 61% for 55 to 64 year olds).



The Benefits of Breakfast

Starting the day with fiber-full oats may have health implications beyond cardiovascular health and slimmer waistlines. Adults and children alike may experience a health boost from breakfast in several ways. According to the Mayo Clinic, adults who choose a healthy breakfast are not only more likely to successfully manage their weight and cholesterol, but may also

- Consume more vitamins and minerals
- Eat less fat and cholesterol
- Have better concentration and productivity throughout the morning⁽¹³⁾

Children and adolescents benefit from breakfast, too. Experts from the Mayo Clinic also suggest that children who eat breakfast may

- Concentrate better
- Have better problem-solving skills
- Be more alert
- Be more creative
- Miss fewer days of school
- Get more physical activity
- Have better hand-eye coordination

Thus, the ADA recommends that children and adolescents eat a healthful breakfast, at home or school, on a daily basis while not exceeding daily energy requirements.⁽¹³⁾

- (1.) International Food Information Council (IFIC) Foundation *Food & Health Survey: Consumer Attitudes toward Food, Nutrition & Health*. Rep. Washington, D.C.: International Food Information Council Foundation, 2006. Web. http://www.foodinsight.org/Resources/Detail.aspx?topic=Food_Health_Survey_Consumer_Attitudes_toward_Food_Nutrition_Health_2006
- (2.) Mancino, Lisa, and Jean Buzby. *Americans' Whole-Grain Consumption Below Guidelines*. Issue brief. Economic Research Service (ERS), United States Department of Agriculture (USDA), Apr. 2005. Web. http://www.ers.usda.gov/amberwaves/april05/pdf/april05_findings_wholegrainconsumption.pdf
- (3.) United States. Dept. of Health and Human Services. Food and Drug Administration (FDA). "Specific Requirements for Health Claims." 21 CFR 101.81. 2005.
- (4.) National Institutes of Health. National Heart, Lung, and Blood Institute. (2005). *Your Guide to Lowering Your Cholesterol with TLC* [Brochure]. Washington, DC.
- (5.) Liu, L., Zubik, L., Collins, F.C., Marko, M., Meydani, M. (2004). The antiatherogenic potential of oat phenolic compounds. *Atherosclerosis*, 175(1). doi: 10.1016/j.atherosclerosis.2004.01.044.
- (6.) Kapantais, E., Chala, E., Kaklamanou, D., Lanaras, L., & Kaklamanou, M. (2009). Breakfast skipping and its relation to bmi and health-compromising behaviours among greek adolescents. *Public Health Nutrition*, 8. doi: 10.1017/S1368980010000765.
- (7.) Deshmukh-Taskar, P.R., Nicklas, T.A., O'Neil, C.E., Keast, D.R., & Radcliffe, J.D. (2010). The Relationship of breakfast skipping and type of breakfast consumption with nutrient intake and weight status in children and adolescents: the national health and nutrition examination survey 1999-2006. *Journal of the American Dietetic Association*, 110. doi: 10.1016/j.jada.2010.03.023.
- (8.) Koh-Banerjee, P., & Rimm, E.B. (2003). Whole grain consumption and weight gain: a review of the epidemiological evidence, potential mechanisms and opportunities for future research. *Proceedings of the Nutrition Society*, 62. doi: 10.1079/PNS2002232.
- (9.) van de Vijver, L.P., van den Bosch, L.M., van den Brandt, P.A., & Goldbohm, R.A. (2009). Whole-grain consumption, dietary fibre intake and body mass index in the Netherlands cohort study. *European Journal of Clinical Nutrition*, 63(1), doi: doi:10.1038/sj.ejcn.1602895
- (10.) Ma, Y., Bertone, E.R., Stanek, E.J., Reed, G.W., & Herbert, J.R. (2003). Association between eating patterns and obesity and a free-living us adult population. *American Journal of Epidemiology*, 158(1), doi: 10.1093/aje/kwg117.
- (11.) Slavin, J.L. (2005). Dietary fiber and body weight. *Nutrition*, 21. doi: 10.1016/j.nut.2004.08.018.
- (12.) Fardet, A. (2010). New hypotheses for the health-protective mechanisms of whole-grain cereals: what is beyond fibre?. *Nutrition Research Reviews*, 1. doi: 10.1017/S09544224100000041.
- (13.) "Healthy Breakfast: Quick, Flexible Options to Grab at Home — MayoClinic.com." *Mayo Clinic Medical Information and Tools for Healthy Living — MayoClinic.com*. Mayo Clinic, 13 Feb. 2009. Web. 10 Sept. 2010. <<http://www.mayoclinic.com/health/food-and-nutrition/NU00197>>.

For more information about Quaker Oatmeal, visit www.QuakerOats.com.

© 2010 The Quaker Oats Company

