



The benefits of breakfast



Many dietitians and nutritionists consider breakfast to be the most important meal of the day. After a number of hours without food, our bodies literally need to break the fast to renew our energy reserves and re-fuel the brain and body. There is considerable evidence showing many health benefits to those who regularly eat breakfast.

Breakfast can provide you with essential nutrients that the body needs, such as fibre, vitamins and iron. It has been shown that people who eat breakfast have more balanced diets than those who skip this meal, are less likely to be overweight and have reduced risk of certain diseases.

Evidence shows that missing breakfast may lead you to snack on less healthy foods later on in the morning and you don't necessarily catch up nutritionally later in the day either. Other benefits of tucking into a good breakfast in the morning include improved mental performance and concentration and better mood – something we could all do with in the morning.

According to a European online poll, 38% of people skip breakfast everyday with a further 36% skipping breakfast sometimes. Nearly two thirds of people said that they skipped breakfast more than once a week. The reasons given included having too little time, trying to manage weight and not liking eating in the morning.

Despite this, up to one third of us regularly skip breakfast¹ and this rises to 40% for teenagers. People on average skip breakfast 20% of the time – 71 breakfasts a year. The British are worst, skipping 113 breakfasts a year. One in six children regularly skips breakfast².

So, why not set yourself the simple challenge of improving your health and wellbeing with a regular breakfast? If you cannot face eating as soon as you get up, at least set yourself a target of eating breakfast within two hours of waking. It really will make a difference to you.

¹ CEEREAL

² Association of Cereal Food Manufacturers (ACFM) data

Breakfast and weight control

Breakfast is also important for anyone trying to lose weight or stay in shape. Ironically, many people think that skipping breakfast will help them lose weight but studies consistently show that those who eat breakfast are less likely to be overweight or obese^{3,4,5,6} whereas those who eat breakfast tend to be leaner and more likely to maintain weight over time⁷.

Data from America show that children and adults who eat breakfast have healthier weights than those skip breakfast^{8,9}. Those who skip breakfast on a regular basis are nearly five times more likely to be obese¹⁰. A recent summary of nine studies involving both adults and children found that people who eat breakfast cereals regularly tend to have a lower body mass index (BMI) and are less likely to be overweight than those who do not eat breakfast cereals frequently¹¹.

Control over appetite

Having breakfast helps to stabilise blood sugar levels and this regulates appetite and energy. People who eat breakfast are less likely to be hungry and overeat during the rest of the day¹².

³ Hunty DL & Ashwell M. 2007. Are people who regularly eat breakfast cereals slimmer than those who don't? A systematic review of the evidence. *Nutrition Bulletin* 2007, 32: 118-128.

⁴ Sjoberg A, Hallberg L, Hoglund D & Hulthen L. 2003, Meal pattern, food choice, nutrient intake and lifestyle factors in The Goteborg Adolescence Study, *European Journal of Clinical Nutrition*, 57 (12) 1569-1578.

⁵ Siega-Riz A, Popkin B & Carson T. 1998, Trends in breakfast consumption for children in the United States from 1965-1991, *American Journal of Clinical Nutrition*, 67 (4): 748S-756.

⁶ Bertrais S, Luque MLP, Preziosi P, Fieux B, De Flot MT, Galan P & Hercberg S. 2000, Contribution of ready-to-eat cereals to nutrition intakes in French adults and relations with corpulence, *Annals of Nutrition and Metabolism*, 44 (5-6): 249-255.

⁷ Gibson SA & O'Sullivan KR. 1995, Breakfast cereal consumption patterns and nutrient intakes of British schoolchildren. *The Journal of the Royal Society for the Promotion of Health*, 115 (6): 366-370.

⁸ Wolfe WS, Campbell CC, Frongillo EA, Haas JD, & Melnik TA. 1994, Overweight schoolchildren in New York State: Prevalence and characteristics. *American Journal of Public Health* 84(5): 807-813.

⁹ Haines PS, Guilkey DK, & Popkin B. 1996, Trends in breakfast consumption of US adults between 1965 and 1991. *Journal of the American Dietetic Association* 96(5): 464-470.

¹⁰ Ma Y, Bertone ER, Stanek EJ III, Reed GW, Hebert JR, Cohen NL, Merriam PA & Ockene IS. 2003, Association between eating patterns and obesity in a free-living US adult population, *American Journal of Epidemiology*, 158 (1): 85-92.

¹¹ Hunty D.L. & Ashwell M. 2007, Are people who regularly eat breakfast cereals slimmer than those who don't? A systematic review of the evidence. *Nutrition Bulletin*, 32: 118-128.

¹² Taylor Nelson, Sofres Out of Home Survey, UK. 2003; John Hopkins Bloomberg School of Public Health, *American Journal of Epidemiology* Advance Access, December 2007.

Children and learning

Many studies have shown that children who skip breakfast in the morning perform less well at school. More than 1,300 children took part in an online study as part of Farmhouse Breakfast Week 2004 and the results showed that children who ate breakfast had superior cognitive function, paid more attention and responded more quickly to tasks they were given. Research also shows that children are better at problem-solving after having breakfast¹³. Eating breakfast helps children to perform better in school, in both mathematical and creative tasks^{14,15}.

Another study with 64 children aged 6 to 11 found that decline in performance throughout the morning can be significantly reduced by eating a low glycaemic index (GI) breakfast, such as porridge, muesli or bran-enriched cereal compared to a high GI breakfast, such as white toast¹⁶.

Studies which looked at school breakfast programmes found that children who take part achieve better grades in maths, take less time off school and are late less frequently^{17,18}.

¹³ Pollitt E. & Mathews R. 1998, Breakfast and cognition: an integrative summary, *American Journal of Clinical Nutrition*, 67 (4): 804S-813.

¹⁴ von DP, Abrahamsson L, Järtelius M, Fletcher RJ. 1997, An experimental study of the effects of energy intake at breakfast on the test performance of 10-year-old children in school. *International Journal of Food Sciences and Nutrition*, 48 5-12.

¹⁵ Kleinman RE, Hall S, Green H, Korzec-Ramirez D, Patton K, Pagano ME, Murphy JM. 2002, Diet, breakfast, and academic performance in children. *Annals of Nutrition and Metabolism*, 46 (suppl 1): 24-30.

¹⁶ Ingwersen J, Defeyter MA, Kennedy DO, Wesnes KA & Scholey AB. 2007, A low glycaemic index breakfast cereal preferentially prevents children's cognitive performance from declining throughout the morning *Appetite*, 49 (1): 240-244.

¹⁷ Chandler, AMK, Walker SP, Connolly K & Grantham-McGregor SM. 1995, School breakfast improves verbal fluency in undernourished Jamaican children, *Journal of Nutrition*, 125 (4): 894-900.

¹⁸ Kleinman R.E, Hall S, Green H, Korzec-Ramirez D, Pattonb K, Pagano ME & Murphy JM. 2002, Diet, breakfast, and academic performance in children", *Annals of Nutrition and Metabolism*, 46 (suppl 1):24-30.

Breakfast and improved nutrition

Research shows that essential nutrients missed at breakfast are not compensated for during the other meals of the day^{19,20,21}. There is also evidence to suggest that eating a nutritious breakfast develops good eating habits that will last a lifetime²².

¹⁹ Gibson SA & O'Sullivan KR 1995, Breakfast cereal consumption patterns and nutrient intakes of British schoolchildren. *The Journal of the Royal Society for the Promotion of Health*, 115 (6): 366-370.

²⁰ Preziosi P, Galan P, Deheeger M, Yacoub N, Drewnowski A & Hereberg S. 1999, Breakfast type, daily nutrient intakes and vitamin and mineral status of French children, adolescents and adults. *Journal of the American College of Nutrition*, 18 (2):171-178.

²¹ Cho S., Dietrich M., Brown CJP, Clark CA. & Block G. 2003, The effect of breakfast type on macronutrient intakes and body mass index (BMI) of Americans. *Journal of the American College of Nutrition*, 22:296-302.

²² Kennedy E, Davies C. 1998, US Department of Agriculture School Breakfast Programme. *Proceedings of the Napa Valley Symposium Cognition and School Learning 1995*. *American Journal of Clinical Nutrition*, 67:743S-7455S.

Adults - physical and mental performance

Adults too perform better after a healthy breakfast. Studies show that men and women who eat breakfast tend to work faster, make fewer mistakes in logic tests and have better memory recall than those who skipped breakfast. Several studies show that eating breakfast can help improve mental alertness and physical performance^{23,24,25,26,27,28}.

²³ Wyon, DP, Abrahamsson, L, Järtelius, M, Fletcher, RJ. 1997, An experimental study of the effects of energy intake at breakfast on the test performance of 10-year-old children in school. *International Journal of Food Sciences and Nutrition*, 48 5-12.

²⁴ Kennedy E, Davies C. 1998, US Department of Agriculture School Breakfast Programme. *Proceedings of the Napa Valley Symposium Cognition and School Learning 1995*. *American Journal of Clinical Nutrition*, 67:743S-7455S.

- ²⁵ Pollitt E, Lewis NL, Garza C, Shulman RJ. 1982, Fasting and cognitive function. *Journal of Psychiatric Research*, 17:169-74.
- ²⁶ Murphy JM, Pagano ME, Nachmani J, Sperling P, Kane S, Kleinman RE. 1988, The relationship of school breakfast to psychosocial and academic functioning. *Archives of Pediatric and Adolescent Medicine*, 152:899-907.
- ²⁷ Benton D, Parker PY. Breakfast, blood glucose, and cognition. 1998. *American Journal of Clinical Nutrition*. 67:772S-8S.
- ²⁸ Wesnes, K, Pincock, C, Richardson, D, Helm, G. & Hails, S. 2003, Breakfast reduces declines in attention and memory over the morning in schoolchildren. *Appetite*, 41 (3): 329-331.

Breakfast and other health benefits

It's not just our mental performance that is improved by eating breakfast, some research suggests that we are less likely to suffer from colds and 'flu and are less likely to describe ourselves as stressed or depressed. Depending on what you eat for breakfast, it can also boost digestive and heart health^{29,30,31}.

- ²⁹ Liu S., Sesso HD, Manson JE, Willett WC & Buring J.E. 2003, Is intake of breakfast cereals related to total and cause specific mortality in men? *American Journal of Clinical Nutrition*, 77 (3): 594-599.
- ³⁰ Costabile A, Klinder A, Fava F, Napolitano A, Fogliano V, Leonard C, Gibson GR & Tuohy KM 2008, Whole-grain wheat breakfast cereal has a prebiotic effect on the human gut microbiota: a double-blind, placebo-controlled, crossover study, *British Journal of Nutrition*, 99: 110-120.
- ³¹ Turconi G, Bazzano R, Caramella R, Tagliabue A & Lanzola E 1993, The effects of a high-fibre cereal-based breakfast on daily dietary intakes and bowel function, *Journal of Human Nutrition and Dietetics*, 6 (3): 229-243.

Breakfast and quality time

With so many of us feeling under pressure to fit so much into our busy lives, breakfast can be an excellent occasion to eat together with the family. It need not take much time out of the day and children who eat with their parents in the morning have more nutritious breakfasts. Children are spending £646 million each school year on sweetshop treats on the way to school³².

³² Fags and Peperami: a look at kids' bad breakfast habits in 21st century Britain. Kellogg Company, August 2009.

Breakfast on the run

Making time for breakfast does not have to mean missing precious time in bed. It only takes a few minutes to pour some milk over a bowl of cereal. If time is really short, you can lay a bowl, spoon and packet of cereal out the night before, ready for a quick start next morning. If there really is not time, there are various healthy snacks you could consider eating on the way to work.