



CLIMATE-HEALTHY MENUS: MORE PLANTS AND LESS RED MEAT FOR HEALTHIER PEOPLE AND PLANET

Climate change—fueled by greenhouse gas (GHG) emissions—poses a grave threat to our health and planet. As we work to reduce these dangerous emissions, we often overlook the climate footprint of our dietary choices. Yet, producing the animals we eat causes as much climate pollution as all the tailpipe emissions from the world's vehicles combined,¹ so even small reductions in red meat consumption can have a big impact on GHG emissions. As leading sellers of meals in the United States, food service companies can champion climate-healthy menus by purchasing less red meat and more climate- and health-friendly produce and legumes.

SCIENTISTS LINK EATING
TOO MUCH RED MEAT WITH
**OBESITY, HEART
DISEASE, DIABETES,
AND CANCER**

BEEF IS
34 TIMES MORE
CLIMATE POLLUTION-
INTENSIVE THAN LEGUMES
LIKE BEANS AND LENTILS,
POUND FOR POUND

USDA RECOMMENDED RED MEAT CONSUMPTION:

1.8 oz/day

ACTUAL AVERAGE CONSUMPTION IN THE U.S.:

3.1 oz/day²

EATING TOO MUCH RED MEAT IS HARMFUL TO HUMAN HEALTH

Recent findings by the World Health Organization (WHO) and the U.S. government-appointed Dietary Guidelines Advisory Committee (DGAC), highlight the strong connection between high red meat consumption and health problems including obesity, heart disease, diabetes, and cancer.³ The scientific evidence is so solid that the WHO recently classified the consumption of red meat as a probable human carcinogen.⁴ As it turns out, eating less red meat is one of the most effective ways to improve our health.



THE MEAT WE EAT ALSO COMES WITH A BIG ENVIRONMENTAL FOOTPRINT

Producing the animals we eat causes nearly 15 percent of global GHG emissions.⁵ In particular, red meat from ruminant animals (e.g., cows, sheep and goats) and pigs is a major driver of emissions. Producing feed for these animals requires a lot of energy, as well as the clearing and maintenance of land that may otherwise be forested and absorbing carbon from the air. Ruminants themselves are top GHG emitters because their multi-chambered digestive systems cause them to release large amounts of methane, a powerful GHG. That makes beef about five times more GHG-intensive as chicken and 34 times more GHG-intensive as legumes like beans and lentils, pound for pound.⁶

THE SOLUTION IS TO EAT LESS RED MEAT AND MORE PLANTS

If Americans eat 30 percent less beef, it would be like taking the tailpipe emissions from about **10 million cars off the road each year**.⁷

Researchers at the Harvard School of Public Health estimate that substituting **1 serving per day of other foods—like fish, poultry, nuts, legumes, low-fat dairy, and whole grains—for red meat could lower the risk of mortality by 7 to 19 percent**.⁸

PLANT-FORWARD MENUS ARE GOING MAINSTREAM, ESPECIALLY WITH MILLENIALS

In the National Restaurant Association's 2016 "What's Hot" survey, nearly 60 percent of professional chefs listed meatless items among the top culinary trends.⁹ Roughly half of younger consumers and one-third of older people already regularly choose plant-based foods instead of meat.¹⁰ And half of consumers between the ages of 25 and 34 are more likely to visit a restaurant that offers healthy options.¹¹ Food companies that do not respond to these trends or that do not proactively offer plant-forward menu options risk losing market share.

FOOD SERVICE MANAGERS CAN LEAD THE WAY TO CLIMATE-HEALTHY DIETS

The three largest food service companies operate tens of thousands of sites in the United States each day and are the second, third, and fourth sellers of meals domestically. Together, these three companies purchase approximately 183 million pounds of red meat annually.¹² Compass Group, the top food service provider, has already publicly committed to purchasing less red meat and more plants over the next three years. Food service providers and venue managers can play a powerful role in encouraging healthier diets by shifting away from red meat-heavy menus and offering more plant-based foods.



SOME WAYS FOOD SERVICE COMPANIES CAN BECOME RECOGNIZED CHAMPIONS OF CLIMATE-HEALTHY MENUS:

- Moving meat from the center of the plate
- Introducing new, globally inspired dishes
- Blending mushrooms with beef to make burgers
- Reducing portion sizes of meat cuts
- Reducing meat in mixed dishes and adding more plant-based protein or whole grains
- Increasing portions of vegetables and plant-based foods
- Offering (and marketing) more meat-free entrees

ENDNOTES

- 1 Wellesley, L., Froggatt, A., and Happer, C., Changing Climate, Changing Diets: Pathways to Lower Meat Consumption, Chatham House, November 24, 2015, www.chathamhouse.org/publication/changing-climate-changing-diets.
- 2 In 2010, the USDA's Dietary Guidelines Advisory Committee recommended a dietary pattern for Americans that included a maximum of 1.8 ounces of red meat a day. But according to the USDA, the most recent data (2013) show that Americans consume approximately 3.1 ounces of red meat per-capita each day, significantly more than health experts recommend.
- 3 2015 Dietary Guidelines Advisory Committee [Millen, B. (Chair) and Lichenstein, A.H. (Vice Chair)], Scientific Report of the 2015 Dietary Guidelines Advisory Committee, U.S. Department of Agriculture and the Department of Health and Human Services, January 28, 2015, <http://health.gov/dietaryguidelines/2015-scientific-report/PDFs/Scientific-Report-of-the-2015-Dietary-Guidelines-Advisory-Committee.pdf/>
- 4 Gaudin, N., IARC Monographs Evaluate Consumption of Red Meat and Processed Meat, International Agency for Research on Cancer, World Health Organization, October 26, 2015, https://www.iarc.fr/en/media-centre/pr/2015/pdfs/pr240_E.pdf.
- 5 Heller, M.C. and G.A. Keoleian. 2014. Greenhouse gas emission estimates of U.S. dietary choices and food loss. *Journal of Industrial Ecology: Supporting Information*.
- 6 Ibid.
- 7 USDA Economic Research Service, Food Availability (Per Capita) Data System, available at [http://www.ers.usda.gov/data-products/food-availability-\(per-capita\)-data-system.aspx](http://www.ers.usda.gov/data-products/food-availability-(per-capita)-data-system.aspx), and EPA Greenhouse Gas Equivalencies Calculator, available at: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>
- 8 Pan, A., et al, Red meat consumption and mortality: results from 2 prospective cohort studies, Archives of the Journal of Internal Medicine, April 9, 2012, www.ncbi.nlm.nih.gov/pubmed/22412075.
- 9 National Restaurant Association, What's Hot: 2016 Culinary Forecast, National Restaurant Association, 2016, <http://www.restaurant.org/Downloads/PDFs/News-Research/WhatsHot2016>
- 10 Yale Kamila, A., Millennials Lead Food Industry Toward Greener Territory, Portland Press Herald, September 9, 2015, <http://www.pressherald.com/2015/09/09/vegetarian-kitchen-millennials-lead-food-industry-toward-greener-territory/>.
- 11 Restaurant Business, What Health Means Now, Restaurant Business, <http://www.restaurantbusinessonline.com/menu/food-trends/what-healthy-means-now>.
- 12 Deloitte, "Changing Tastes, 2015," presentation to NRDC staff, October 2, 2015.