Champions of Breakfast

How Cereal-Makers Can Help Save Our Soil, Support Farmers, and Take a Bite out of Climate Change www.ucsusa.org/champions-of-breakfast

Appendix: Data Tables and Notes

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Table A1. Corn Dominates US Production and Use Relative to Other Grains

	Corn	Oats	Wheat	Rice
Domestic use (billion pounds) ¹	692.2	4.7	64.7	13.5
Imports (billion pounds) ¹	2.0	2.8	9.4	2.7
Production (billion pounds) ¹	818.1	1.6	104.5	17.8
Domestic use from imports (%)	0.3	61.0	14.6	20.0
Area planted (million acre) ¹	90.2	2.6	46.1	2.5
Area harvested (million acre) ¹	82.7	0.8	37.6	2.4
Yield (bushels/acre) ¹	177	62	46	167
Standard weight (pounds/bushel) ²	56	32	60	45
Yield (pounds/acre)	9,890	1,974	2,784	7,507

Notes: Other grains included in breakfast cereals less frequently were not included in this analysis (for example, barley, flax, amaranth, millet, buckwheat, and quinoa).

Table A2. Healthy Soil Practices in the United States and Iowa, 2012—2017, With Critical Soil-Health Practices **Remaining Rare**

		United States		Iowa	
		2017	2012	2017	2012
Acres	Total farmland operated	900,217,576	914,527,657	30,563,878	30,622,731
	Total cropland harvested	320,041,858	314,964,600	24,347,862	24,507,219
	No-till	104,452,339	96,476,496	8,196,199	6,950,836
	Conservation till	97,753,854	76,639,804	10,132,599	8,760,348
	Cover crop planted	15,390,674	10,280,793	973,112	379,614
# Operations	Total farming operations	2,042,220	2,109,303	86,104	88,637
	Total cropland operations	1,245,548	1,288,875	61,495	63,214
	No-till	279,370	278,290	24,025	22,621
	Conservation till	217,069	195,738	26,532	24,911
	Cover crop planted	153,402	133,124	8,729	7,195
	Agroforestry	30,853	2,725	822	13

Notes: The USDA tracks a limited subset of healthy-soils practices through the Census of Agriculture, which is conducted every five years. The most recent Census of Agriculture suggested that some healthy-soils practices are being used on more acres and by a greater number of operations, but they remain relatively rare as compared to total farmland and cropland operations within both the United States and Iowa (NASS 2019). The agroforestry category changed between 2012 and 2017. In 2012 the category included only alley cropping and silvopasture. In 2017 the category was expanded to include operations that practiced forest farming or had riparian forests, buffers, or windbreaks. Agroforestry data are only available by number of operations, not by acres.

Source: NASS 2019

¹USDA 2019

² NASS 2018

Table A3. Estimated Acres Needed to Produce Popular Corn- and Oat-Based Cereals and Oatmeal

Brand	2017 Sales (million \$)	Estimated servings (million)	Serving size (g)	Grain product per serving (g) ¹	Grain product per year (million pounds)	Grain per year (million bushels)	Grain per year (acres)
Frosted Flakes	400.10	1745	29	19	73	2.3	12,817
Froot Loops	253.00	764	29	19	32	1.0	5,611
Cheerios	320.00	966	28	27	58	2.8	45,930
Honey Nut Cheerios	496.60	1833	28	19	77	3.8	61,304
Lucky Charms	244.20	901	27	17	34	1.7	26,973
Honey Bunches of Oats	404.90	864	56	44	84	4.1	66,923
Quaker Oatmeal	n/a	1800 ²	40	40	159	8.6	139,063

¹ Grain products and sugar were the top two ingredients for the cereals used in this analysis, with salt, vitamins, minerals, and preservatives making up the remaining ingredients. For ready-to-eat cold cereals, we assumed that grain accounted for the weight of all non-sugar ingredients.

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² Quaker Old Fashioned Oatmeal was not among the top 10 cereals from 2017. Therefore, for this breakfast product we did not calculate the number of servings sold and consumed each year. Instead, for comparison, we estimated how many acres of oats would be needed to produce a similar number of breakfast servings as were sold for the top corn- and oat- based cereals. Sources: Sales values for the most popular 10 cold cereals from 2017 were from Statista (2019). We used prices for standard-sized (10 to 18 ounce) cereal boxes at a Walmart in Des Moines, Iowa; prices were \$2.98 per box for all cereals except Honey Bunches of Oats, which was \$3.28 per box. We assumed that one bushel of oats was equivalent to 32 pounds of unprocessed oats, 20.3 pounds of oat flour, or 18.5 pounds oatmeal, and that one bushel of corn was equivalent to 56 pounds of shelled corn or 32.3 pounds of milled corn (ERS 1992).