

Appendix B: Demographic Characteristics of WIC Families and Their Association with Full Redemptions

Table 1. Demographic Characteristics of WIC Families

	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Total Number of WIC Families	859,198	--	251,978	--	473,186	--	134,034	--	
Family Race/Ethnicity*	857,324		251,978		466,184		134,033		
Non-Hispanic White	449,300	52.4	183,798	72.9	237,906	50.5	27,596	20.6	<.0001
Non-Hispanic Black	160,911	18.8	27,554	10.9	120,397	25.5	12,960	9.7	<.0001
Hispanic	173,535	20.2	24,304	9.6	66,034	14	83,197	62.1	<.0001
Non-Hispanic American Indian/Alaska Native	2,115	0.3	172	0.1	1,123	0.2	820	0.6	<.0001
Non-Hispanic Asian/Pacific Islander	12,192	1.4	1,972	0.8	7,101	1.5	3,119	2.3	<.0001
Non-Hispanic Native Hawaiian/Other Pacific Islander	1,505	0.2	291	0.1	173	0.0	1,041	0.8	<.0001
Non-Hispanic Multiple Races	57,766	6.7	13,887	5.5	38,579	8.2	5,300	4.0	<.0001
Geographic Location	844,335		251,687		465,990		126,658		
Urban	584,849	69.3	103,561	41.1	364,215	78.2	117,073	92.4	<.0001
Large rural	106,259	12.6	55,500	22.1	45,653	9.8	5,106	4.0	
Small rural	89,266	10.6	49,697	19.7	36,064	7.7	3,505	2.8	
Isolated	63,953	7.6	42,921	17.1	20,058	4.3	974	0.8	
Household Size	858,507		251,841		473,186		133,472		
1-2 persons	147,090	17.13	37,751	15.0	92,158	19.5	17,181	12.9	<.0001
3-4 persons	461,525	53.76	142,648	56.6	250,525	52.9	68,352	51.2	
5-6 persons	204,904	23.87	59,436	23.6	106,605	22.5	38,863	29.1	
7 persons or more	44,980	5.24	12,006	4.8	23,898	5.1	9,076	6.8	
Number of WIC Family Members									
1 participant	493,553	57.4	151,949	60.3	267,696	56.6	73,908	55.1	<.0001
2 participants	274,589	32.0	76,599	30.4	153,242	32.4	44,748	33.4	
3 participants	77,021	9.0	19,583	7.8	44,419	9.4	13,019	9.7	
4 participants or more	14,035	1.6	3,847	1.5	7,829	1.7	2,359	1.8	

*Family race/ethnicity is mutually exclusive.

Table 2. Food Package Makeup of WIC Families (Percent of Families Prescribed Each Food Package)

	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Food Packages Represented in Families (N and % of families with at least one...)									
Pregnant woman	144,287	16.8	45,327	18	79,048	16.7	19,912	14.9	<.0001
Breastfeeding woman	55,235	6.43	10,595	4.2	31,282	6.6	13,358	10.0	<.0001
Postpartum woman (not breastfeeding)	108,208	12.59	31,078	12.3	61,808	13.1	15,322	11.4	<.0001
Infant (aged 0-5 months)	130,761	15.22	29,533	11.7	80,534	17.0	20,694	15.4	<.0001
Infant (aged 6-11 months)	171,811	20.0	58,645	23.3	86,963	18.4	26,203	19.5	<.0001
Child (aged 1-5 yrs.)	574,429	66.86	164,097	65.1	318,158	67.2	92,174	68.8	<.0001

Table 3: Percent of WIC Families Issued Each Food Category

	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Fruit and Vegetable Cash Value Benefit	767,046	89.3	221,752	88.0	423,986	89.6	121,308	90.5	<.0001
Cereal	766,664	89.2	221,636	88.0	423,800	89.6	121,228	90.4	<.0001
Cheese	715,028	83.2	185,648	73.7	413,440	87.4	115,940	86.5	<.0001
Eggs	765,917	89.1	221,541	87.9	423,516	89.5	120,860	90.2	<.0001
100% Fruit Juice	766,398	89.2	221,634	88.0	423,795	89.6	120,969	90.3	<.0001
Beans and Peanut Butter	765,697	89.1	221,341	87.8	423,742	89.6	120,614	90.0	<.0001
Whole Grains	699,106	81.4	199,058	79.0	383,869	81.1	116,179	86.7	<.0001
Canned Fish	30,125	3.5	5,808	2.3	19,306	4.1	5,011	3.7	<.0001
Fluid Milk	750,424	87.3	218,855	86.9	413,135	87.3	118,434	88.4	<.0001
By type									
Whole milk	209,988	24.4	60,621	24.1	115,074	24.3	34,293	25.6	<.0001
Lowfat milk	629,265	73.2	182,448	72.4	347,192	73.4	99,625	74.3	<.0001
By container size									
Gallon	750,079	87.3	218,822	86.8	412,933	87.3	118,324	88.3	<.0001
Half gallon	170,133	19.8	57,175	22.7	104,715	22.1	8,243	6.1	<.0001
Quart	673,958	78.4	161,647	64.1	401,648	84.9	110,663	82.6	<.0001
Milk Substitutions									
Lactose free milk	17,107	2.0	3,027	1.2	11,421	2.4	2,659	2.0	<.0001
Soy milk	5,254	0.6	1,123	0.4	3,029	0.6	1,102	0.8	<.0001
Goat milk	396	0.1	--	--	328	0.1	68	0.1	<.0001
Evaporated milk	217	0.0	8	0.0	168	0.0	41	0.0	<.0001
Tofu	156	0.0	120	0.0	--	--	36	0.0	
Nutritional Supplement	12,597	1.5	3,286	1.3	6,102	1.3	3,209	2.4	<.0001

Infant Foods									
Infant formula	293,497	34.2	87,402	34.7	160,966	34.0	45,129	33.7	<.0001
Infant cereal	154,137	17.9	43,920	17.4	86,238	18.2	23,979	17.9	<.0001
Infant fruits and vegetables	153,940	17.9	43,901	17.4	86,044	18.2	23,995	17.9	<.0001
Infant jarred meats	10,857	1.3	2,150	0.9	6,870	1.5	1,837	1.4	<.0001

Table 4. Family Shopping Patterns during Average WIC Benefit Month (n=813,621)

	Total		Kentucky		Michigan		Nevada		p-value
	Mean(SD)	Min-Max	Mean(SD)	Min-Max	Mean(SD)	Min-Max	Mean(SD)	Min-Max	
# of Shopping Trips	3.2 (1.85)	1–25	3.1 (1.82)	1–24	3.2 (1.90)	1–25	3.1 (1.73)	1–16	<.0001
# of Vendors Visited	1.8 (0.92)	1–11	1.7 (0.84)	1–11	1.8 (0.95)	1–10	1.8 (0.91)	1–9	<.0001

Table 6: Fruit and vegetable cash value benefit redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada										
	Total		Kentucky		Michigan		Nevada		p-value	
	N	%	N	%	N	%	N	%		
Fruit and Vegetable Cash Value Benefit										
All benefits redeemed	281,680	36.7	71,912	32.4	154,165	36.4	55,603	45.8	<.0001	
Some benefits redeemed	373,478	48.7	110,367	49.8	213,801	50.4	49,310	40.7		
No benefits redeemed	111,889	14.6	39,473	17.8	56,020	13.2	16,396	13.5		
ALL BENEFITS REDEEMED										
Family Race/Ethnicity*										
Non-Hispanic White	141,220	35.4	49,139	30.4	82,973	38.8	9,108	37.8	<.0001	
Non-Hispanic Black	40,374	28.8	7,137	30.5	29,483	27.9	3,754	33.5	0.2970	
Hispanic	75,141	46.9	10,639	47.1	25,696	42.3	38,806	50.5	<.0001	
Non-Hispanic American Indian/Alaska Native	556	30.7	56	41.8	261	26.2	239	34.9	0.0878	
Non-Hispanic Asian	5,960	54.2	1,017	57.3	3,597	55.2	1,346	49.8	<.0001	
Non-Hispanic Native Hawaiian/Other Pacific Islander	555	41.0	125	47.7	59	40.4	371	39.3	0.0290	
Non-Hispanic Multiple Races	17,452	33.6	3,799	31.6	11,674	33.4	2,924	40.4	<.0001	
Geographic location										
Urban	201,879	38.8	33,209	37.0	119,320	36.7	49,350	46.5	<.0001	
Large rural	32,083	33.8	16,262	33.3	14,074	34.0	1,747	38.2		
Small rural	25,482	31.6	12,441	28.0	11,852	35.9	1,189	36.9		
Isolated	17,153	29.8	9,940	25.9	6,930	37.7	283	31.6		
Number of persons in household										
1-2	36,845	29.8	9,240	29.6	22,350	28.7	5,255	36.2	<.0001	
3-4	148,257	36.1	40,378	32.2	80,022	35.7	27,857	45.3		
5-6	78,672	41.4	18,525	34.3	41,701	41.9	18,446	50.7		
7 or more	17,665	42.2	3,722	33.9	10,092	45.1	3,851	45.4		

Number of WIC family members									
1	152,501	37.8	41,814	34.2	81,548	37.1	29,139	47.4	<.0001
2	97,237	35.7	23,333	30.7	54,074	35.5	19,830	44.6	
3	27,275	35.4	5,808	29.7	15,805	35.6	5,662	43.5	
4 or more	4,667	33.3	957	24.9	2,738	35.0	972	41.2	
Dollars prescribed									
Up to \$10	141,124	39.7	38,128	35.8	75,579	39.1	27,417	49.2	<.0001
\$10-\$15	95,714	33.3	24,110	28.9	52,604	33.2	19,000	42.2	
\$16-\$19	36,763	36.2	8,032	31.0	21,155	36.0	7,576	45.1	
\$20 or more	8,079	35.3	1,642	27.8	4,827	36.5	1,610	42.8	

Table 7: Cereal redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Cereal									
All benefits redeemed	407,184	53.1	104,350	47.1	227,456	53.7	75,378	62.2	<.0001
Some benefits redeemed	150,585	19.6	48,569	21.9	84,142	19.9	17,874	14.7	
No benefits redeemed	208,895	27.3	68,717	31.0	112,202	26.5	27,976	23.1	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	211,842	53.1	77,732	48.2	120,890	56.6	13,220	54.9	<.0001
Non-Hispanic Black	60,812	43.4	9,256	39.5	46,577	44.2	4,979	44.5	<.0001
Hispanic	100,227	62.6	11,398	50.4	36,742	60.5	52,087	67.9	<.0001
Non-Hispanic American Indian/Alaska Native	951	52.6	61	45.5	504	50.7	386	56.8	0.148
Non-Hispanic Asian	7,108	64.8	860	48.5	4,555	70.1	1,693	62.6	<.0001
Non-Hispanic Native Hawaiian/Other Pacific Islander	726	53.5	124	47.3	84	57.5	518	54.6	0.1232
Non-Hispanic Multiple Races	24,752	47.7	4,919	40.9	17,338	49.5	2,495	50.9	<.0001
Geographic location									
Urban	283,313	54.4	42,332	47.2	174,328	53.7	66,653	62.9	<.0001
Large rural	46,850	49.4	22,265	45.6	22,048	53.2	2,537	55.5	
Small rural	40,629	50.4	21,133	47.5	17,695	53.7	1,801	55.9	
Isolated	29,227	50.7	18,506	48.3	10,247	55.7	474	52.8	
Number of persons in household									
1-2	61,930	50.0	14,709	47.2	39,154	50.1	8,067	55.6	<.0001
3-4	210,173	51.2	57,861	46.1	115,403	51.6	36,909	60.1	
5-6	108,718	57.3	26,011	48.2	58,329	58.6	24,378	67.1	
7 or more	25,992	62.1	5,706	52.0	14,570	65.1	5,716	67.3	
Number of WIC family members									
1	237,270	58.9	64,020	52.4	130,879	59.6	42,371	69.0	<.0001
2	133,314	48.9	32,353	42.5	75,224	49.4	25,737	57.9	
3	31,502	40.9	6,807	34.8	18,399	41.5	6,296	48.4	
4 or more	5,098	36.3	1,170	30.4	2,954	37.8	974	41.3	

Ounces of cereal prescribed									
36 ounces or less	313,260	57.3	83,292	50.8	173,497	58.1	56,471	67.0	<.0001
>36 to 72 ounces	81,977	43.7	18,461	37.4	46,916	44.0	16,600	52.5	
>72 to 108 ounces	10,980	37.5	2,347	31.3	6,471	38.2	2,162	44.1	
>108 ounces	967	34.1	250	27.7	572	37.8	145	34.3	

TABLE_08: Cheese redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Cheese									
All benefits redeemed	489,637	68.5	112,603	60.7	287,584	69.6	89,450	77.2	<.0001
Some benefits redeemed	65,825	9.2	22,635	12.2	40,083	9.7	3,107	2.7	
No benefits redeemed	159,566	22.3	50,410	27.2	85,773	20.7	23,383	20.2	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	249,925	68.7	82,984	62.7	150,327	72.0	16,614	73.0	<.0001
Non-Hispanic Black	82,545	61.4	10,205	48.3	65,881	64.3	6,459	59.6	<.0001
Hispanic	116,144	75.8	12,774	63.7	42,711	71.8	60,659	82.3	<.0001
Non-Hispanic American Indian/Alaska Native	1,149	66.6	68	56.7	652	66.9	429	68.0	0.6147
Non-Hispanic Asian	6,492	64.7	605	50.2	4,204	66.4	1,683	67.3	<.0001
Non-Hispanic Native Hawaiian/Other Pacific Islander	730	57.6	136	56.9	82	57.3	512	57.9	0.7538
Non-Hispanic Multiple Races	31,762	64.6	5,831	55.4	22,838	67.2	3,093	66.8	<.0001
Geographic location									
Urban	346,705	69.3	49,006	60.2	218,980	69.1	78,719	77.5	<.0001
Large rural	56,106	65.5	24,605	59.7	28,337	70.4	3,164	74.9	
Small rural	46,783	67.0	21,512	62.0	23,056	71.7	2,215	75.1	
Isolated	31,190	66.4	17,347	61.6	13,250	73.8	593	72.9	
Number of persons in household									
1-2	74,439	64.5	15,274	58.9	49,681	65.6	9,484	68.9	<.0001
3-4	256,251	67.1	62,701	59.9	149,160	68.3	44,390	75.7	
5-6	129,092	72.6	28,510	62.6	71,981	73.8	28,601	82	
7 or more	29,439	74.7	6,063	64.9	16,762	76.5	6,614	80.9	
Number of WIC family members									
1	264,010	71.7	61,962	63.5	156,370	73.4	45,678	78.9	<.0001
2	171,217	66.3	38,690	58.3	99,733	66.9	32,794	76.4	
3	46,364	62.2	10,012	55.4	26,991	61.8	9,361	73.3	
4 or more	8,046	58.7	1,939	53.1	4,490	58.1	1,617	69.4	
Pounds of cheese prescribed									
1 pound or less	355,956	70.6	88,550	62.4	205,505	72.7	61,901	77.6	<.0001
>1 to <3 pounds	105,698	64.6	20,654	55.6	62,036	64.2	23,008	77.2	
3 pounds or more	279,983	59.5	3,399	52.4	20,043	58.7	4,541	71.2	

TABLE_09: Eggs redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Eggs									
All benefits redeemed	578,621	75.6	161,130	72.7	320,798	75.7	96,693	80.0	<.0001
Some benefits redeemed	37,685	4.9	10,711	4.8	23,639	5.6	3,335	2.8	
No benefits redeemed	149,611	19.5	49,700	22.4	79,079	18.7	20,832	17.2	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	298,363	74.8	117,090	72.6	163,850	76.7	17,423	72.6	<.0001
Non-Hispanic Black	97,984	70.0	16,175	69.1	74,159	70.4	7,650	68.8	0.0601
Hispanic	131,518	82.3	17,784	78.7	49,192	81.1	64,542	84.3	<.0001
Non-Hispanic American Indian/Alaska Native	1,326	73.5	97	72.4	734	73.8	495	73.2	0.5916
Non-Hispanic Asian	9,349	85.4	1,444	81.6	5,634	86.8	2,271	84.4	0.2791
Non-Hispanic Native Hawaiian/Other Pacific Islander	1,046	77.5	205	78.2	114	78.1	727	77.3	0.952
Non-Hispanic Multiple Races	38,012	73.3	8,335	69.4	26,093	74.6	3,584	73.4	<.0001
Geographic location									
Urban	396,734	76.3	65,682	73.2	245,993	75.8	85,059	80.5	<.0001
Large rural	69,230	73.0	34,774	71.2	31,061	75.0	3,395	74.4	
Small rural	59,580	73.9	32,302	72.7	24,835	75.4	2,443	76.2	
Isolated	42,982	74.6	28,188	73.6	14,167	77.0	627	69.9	
Number of persons in household									
1-2	89,698	72.6	22,440	72.1	56,791	72.9	10,467	72.5	0.0187
3-4	306,958	74.8	90,622	72.3	167,873	75.0	48,463	79.2	
5-6	148,180	78.1	39,724	73.6	78,124	78.5	30,332	83.7	
7 or more	33,297	79.6	8,252	75.2	18,010	80.5	7,035	83.1	
Number of WIC family members									
1	313,957	78.0	91,654	75.1	172,846	78.8	49,457	80.9	<.0001
2	201,779	74.1	53,883	70.9	112,459	73.9	35,437	79.9	
3	53,739	69.9	13,168	67.3	30,498	68.7	10,073	77.6	
4 or more	9,148	65.2	2,425	63.1	4,997	63.9	1,726	73.2	
Dozens of eggs prescribed									
1 dozen	410,387	77.5	119,675	74.6	225,464	78.4	65,248	80.4	<.0001
2 dozen	140,219	72.2	34,815	68.6	79,219	71.5	26,185	80.3	
3 dozen	24,702	66.6	5,831	65.0	14,199	64.9	4,672	74.7	
4 dozen or more	3,314	64.0	809	61.0	1,916	62.9	589	73.4	

TABLE_10: 100% Fruit Juice redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Juice (any size/any container)									
All benefits redeemed	504,492	65.8	136,890	61.8	291,838	68.9	75,764	62.6	<.0001
Some benefits redeemed	101,304	13.2	33,219	15.0	53,380	12.6	14,705	12.2	
No benefits redeemed	160,602	21.0	51,525	23.2	78,577	18.5	30,500	25.2	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	262,425	65.8	99,907	61.9	148,514	69.5	14,004	58.3	<.0001
Non-Hispanic Black	88,699	63.3	13,918	59.5	68,932	65.4	5,849	52.4	<.0001
Hispanic	108,631	67.9	14,257	63.1	43,791	72.1	50,583	66.0	<.0001
Non-Hispanic American Indian/Alaska Native	1,124	62.1	820	61.2	658	66.1	384	56.5	<.0001
Non-Hispanic Asian	7,979	72.7	1,218	68.7	5,088	78.2	1,673	62.2	<.0001
Non-Hispanic Native Hawaiian/Other Pacific Islander	775	57.4	170	64.9	86	58.9	519	55.0	0.0167
Non-Hispanic Multiple Races	33,924	65.4	7,338	61.0	23,835	68.1	2,751	56.3	0.5023
Geographic location									
Urban	347,243	66.7	56,235	62.7	224,302	69.0	66,706	63.1	<.0001
Large rural	60,384	63.7	29,696	60.8	28,014	67.6	2,674	58.7	
Small rural	51,543	63.9	27,198	61.2	22,452	68.1	1,893	58.9	
Isolated	36,922	64.1	23,599	61.6	12,818	69.8	505	56.4	
Number of persons in household									
1-2	77,735	62.9	18,874	60.6	50,816	65.1	8,045	55.7	<.0001
3-4	266,704	65.0	76,765	61.2	152,573	68.2	37,366	61.0	
5-6	130,343	68.7	34,027	63.0	71,893	72.2	24,423	67.3	
7 or more	29,328	70.1	7,149	65.1	16,556	74.0	5,623	66.4	
Number of WIC family members									
1	283,214	70.3	77,697	63.6	163,335	74.4	42,182	68.9	<.0001
2	170,568	62.6	45,994	60.5	98,423	64.7	26,151	58.9	
3	43,541	56.6	11,155	57.0	25,951	58.5	6,435	49.5	
4 or more	7,169	51.1	2,044	53.2	4,129	52.8	996	42.2	
Number of containers prescribed									
1 container	5,095	56.3	1,392	59.5	3,456	55.3	247	54.1	<.0001
2 containers	301,201	70.7	82,611	64.9	173,275	74.8	45,315	67.4	
3 or 4 containers	149,562	60.9	40,695	58.3	86,066	63.0	22,801	58.4	
5 or more containers	48,634	56.9	12,192	54.8	29,041	59.2	7,401	51.9	

TABLE_11: Juice in cans redemptions, by family characteristics

	Total		Michigan		Nevada	
	N	%	N	%	N	%
Juice in cans (i.e., frozen/concentrate)						
All benefits redeemed	128,884	58.55	104,057	60.6	24,827	51.4
Some benefits redeemed	17,583	7.99	15,011	8.7	2,572	5.3
No benefits redeemed	73,669	33.47	52,778	30.7	20,891	43.3
ALL BENEFITS REDEEMED						
Family Race/Ethnicity*						
Non-Hispanic White	61,633	60.9	56,002	62.1	5,631	50.7
Non-Hispanic Black	24,952	52.5	22,908	54.0	2,044	39.8
Hispanic	30,018	59.6	14,836	66.2	15,182	54.3
Non-Hispanic American Indian/Alaska Native	345	53.4	225	58.0	120	46.5
Non-Hispanic Asian	2,491	67.4	1,877	74.3	614	52.4
Non-Hispanic Native Hawaiian/Other Pacific Islander	224	44.0	30	43.5	194	44.1
Non-Hispanic Multiple Races	9,088	57.3	8,046	58.9	1,042	47.2
Geographic location						
Urban	101,561	58.3	79,812	60.3	21,749	51.9
Large rural	11,263	59.2	10,387	60.5	876	47.0
Small rural	8,565	59.4	7,971	60.6	594	46.6
Isolated	4,636	62.8	4,486	63.8	150	43.4
Number of persons in household						
1-2	23,409	53.5	20,526	55.2	2,883	44.1
3-4	67,004	57.6	54,307	59.7	12,697	50.3
5-6	30,626	63.5	23,300	66.2	7,326	56.3
7 or more	7,585	66.0	5,804	70.2	1,781	55.3
Number of WIC family members						
1	35,216	58.7	28,667	60.0	6,549	53.7
2	61,933	58.8	49,786	60.9	12,147	51.6
3	26,499	58.1	21,329	60.5	5,170	49.8
4 or more	5,236	57.1	4,275	60.8	961	44.9

TABLE_12: Juice in bottles redemptions, by family characteristics

	Total		Michigan		Nevada	
	N	%	N	%	N	%
Juice in bottles						
All benefits redeemed	309055	75.38	243121	76.4	65934	71.8
Some benefits redeemed	34131	8.32	26660	8.4	7471	8.1
No benefits redeemed	66819	16.3	48381	15.2	18438	20.1
ALL BENEFITS REDEEMED						
Family Race/Ethnicity*						
Non-Hispanic White	132,343	76.2	121,210	77.1	11,133	67.4
Non-Hispanic Black	61,907	73.1	56,954	74.0	4,953	64.2
Hispanic	83,384	75.9	38,081	77.7	45,303	74.4
Non-Hispanic American Indian/Alaska Native	831	69.2	530	72.9	301	63.5
Non-Hispanic Asian	5,411	79.3	4,121	82.3	1,290	71.0
Non-Hispanic Native Hawaiian/Other Pacific Islander	511	68.2	61	72.6	450	67.7
Non-Hispanic Multiple Races	23,844	75.1	21,341	76.2	2,503	66.6
Geographic location						
Urban	244,514	75.6	186,581	76.8	57,933	72.1
Large rural	25,494	74.1	23,177	74.7	2,317	68.0
Small rural	20,800	74.9	19,073	75.4	1,727	69.5
Isolated	11,262	75.3	10,783	75.8	479	66.1
Number of persons in household						
1-2	36,893	73.1	31,490	74.6	5,403	65.6
3-4	161,162	74.7	128,914	75.9	32,248	70.3
5-6	89,345	77.1	66,591	77.8	22,754	75.0
7 or more	20,602	78.1	15,307	79.2	5,295	75.1
Number of WIC family members						
1	170,303	77.2	134,670	78.4	35,633	72.7
2	89,854	72.9	70,148	73.5	19,706	71.0
3	42,072	75.2	33,016	76.4	9,056	71.3
4 or more	6,826	67.3	5,287	67.8	1,539	65.4

TABLE_13: Beans and Peanut Butter redemptions, by family characteristics

Percent of WIC Families									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Beans and Peanut Butter									
All benefits redeemed	392,721	51.3	90,552	40.9	237,089	56.0	65,080	54.0	<.0001
Some benefits redeemed	76,384	10.0	34,374	15.5	32,250	7.6	9,760	8.1	
No benefits redeemed	296,593	38.7	96,415	43.6	154,403	36.4	45,775	38.0	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	214,448	53.8	67,587	41.9	135,001	63.2	11,860	49.5	<.0001
Non-Hispanic Black	52,710	37.7	7,167	30.6	41,691	39.5	3,852	34.8	<.0001
Hispanic	91,329	57.2	10,778	47.8	35,705	58.8	44,846	58.7	<.0001
Non-Hispanic American Indian/Alaska Native	908	50.4	62	46.3	541	54.4	305	45.3	0.0194
Non-Hispanic Asian	6,870	62.8	768	43.3	4,491	69.1	1,611	60.3	<.0001
Non-Hispanic Native Hawaiian/Other Pacific Islander	589	43.5	93	35.5	76	52.1	420	44.4	0.0716
Non-Hispanic Multiple Races	25,088	48.4	4,097	34.1	18,806	53.7	2,185	44.9	<.0001
Geographic location									
Urban	269,941	51.9	34,880	38.9	177,624	54.7	57,437	54.4	<.0001
Large rural	45,972	48.5	19,054	39.1	24,696	59.6	2,222	49.1	
Small rural	40,668	50.5	19,192	43.2	19,956	60.5	1,520	47.7	
Isolated	29,182	50.7	17,340	45.3	11,431	62.1	411	45.9	
Number of persons in household									
1-2	57,234	46.4	12,163	39.1	38,237	49.0	6,834	47.5	<.0001
3-4	204,734	49.9	50,403	40.2	122,538	54.7	31,793	52.0	
5-6	106,171	56.0	23,040	42.8	61,755	62.0	21,376	59.1	
7 or more	24,260	58.1	4,892	44.6	14,559	65.1	4,809	57.1	
Number of WIC family members									
1	217,433	54.0	53,238	43.7	128,959	58.8	35,236	57.7	<.0001
2	134,045	49.2	29,585	38.9	81,746	53.7	22,714	51.4	
3	35,363	46.0	6,589	33.7	22,651	51.0	6,123	47.2	
4 or more	5,880	41.9	1,140	29.6	3,733	47.7	1,007	42.8	
Number of units prescribed									
1 unit	237,979	55.4	61,488	47.7	137,401	58.9	39,090	58.1	<.0001
2 units	116,122	47.0	23,206	33.2	73,577	53.3	19,339	49.6	
3 units	32,130	43.7	4,916	26.7	21,579	50.0	5,635	47.1	
4 or more units	6,490	40.9	942	23.4	4,532	48.1	1,016	41.8	

TABLE_16: Canned fish redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Canned fish									
All benefits redeemed	18,334	60.9	3,175	54.7	12,311	63.8	2,848	56.8	0.0015
Some benefits redeemed	2,124	7.1	564	9.7	1,064	5.5	496	9.9	
No benefits redeemed	9,667	32.1	2,069	35.6	5,931	30.7	1,667	33.3	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	12,166	62.7	2,417	55.6	8,768	66.4	981	52.8	0.0318
Non-Hispanic Black	1,568	49.6	162	43.5	1,255	50.9	151	46.5	0.4014
Hispanic	3,190	62.6	409	56.6	1,305	66.2	1,476	61.4	0.061
Non-Hispanic American Indian/Alaska Native	42	42.4	1	25.0	34	50.7	7	25.0	0.0756
Non-Hispanic Asian	265	52.9	30	34.1	162	55.5	73	60.3	0.0007
Non-Hispanic Native Hawaiian/Other Pacific Islander	43	58.1	5	83.3	4	36.4	34	59.6	0.9724
Non-Hispanic Multiple Races	1,039	59.6	151	55.7	762	60.8	126	57.5	0.3298
Geographic location									
Urban	12,005	59.9	1,582	53.4	8,043	62.3	2,380	57.1	0.0296
Large rural	2,734	60.3	689	52.6	1,913	64.3	132	53	
Small rural	2,027	63.1	500	56.5	1,434	67.1	93	49.2	
Isolated	1,239	69.1	404	62.7	794	73.7	41	57.7	
Number of persons in household									
1-2	1,685	52.8	226	47.3	1,282	56.2	177	40.9	0.1009
3-4	9,950	59.6	1,737	52.4	6,798	63.3	1,415	53.6	
5-6	5,404	64.6	978	58.8	3,390	66.6	1,036	64.5	
7 or more	1,282	68.9	234	67.4	841	70	207	66.1	
Number of WIC family members									
1	5,598	55.6	921	47.4	3,802	59	875	51.9	0.0017
2	8,166	63.2	1,447	57.3	5,437	66.3	1,282	58.5	
3	3,787	63.7	656	58.9	2,547	65.8	584	60.6	
4 or more	783	66.1	151	67.4	525	66.3	107	63.3	

TABLE_17: Whole grains redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Whole grains									
All benefits redeemed	358,717	51.3	78,148	39.3	213,133	55.5	67,436	58.0	<.0001
Some benefits redeemed	102,395	14.7	33,103	16.6	53,011	13.8	16,281	14.0	
No benefits redeemed	237,994	34.0	87,807	44.1	117,725	30.7	32,462	27.9	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	186,844	51.6	58,638	40.6	115,843	59.5	12,363	54.8	<.0001
Non-Hispanic Black	55,404	44.4	7,036	33.7	43,451	46.6	4,917	46.4	<.0001
Hispanic	85,404	56.3	7,935	37.6	32,014	57.0	45,455	61.1	<.0001
Non-Hispanic American Indian/Alaska Native	878	51.8	53	42.4	486	51.9	339	53.4	0.4317
Non-Hispanic Asian	6,344	61.5	709	42.8	4,104	67.2	1,531	60.1	<.0001
Non-Hispanic Native Hawaiian/Other Pacific Islander	628	48.6	97	37.5	68	51.1	463	51.4	<.0001
Non-Hispanic Multiple Races	22,568	48.7	3,680	34.9	16,520	52.9	2,368	51.4	<.0001
Geographic location									
Urban	252,564	53.2	32,218	40.2	160,801	54.9	59,545	58.5	<.0001
Large rural	40,687	47.3	16,920	38.7	21,476	56.4	2,291	54	
Small rural	34,809	47.1	15,447	38.3	17,774	58.4	1,588	51.1	
Isolated	24,041	45.8	13,472	38.9	10,131	59.6	438	50.9	
Number of persons in household									
1-2	51,222	48.1	10,897	40.5	33,193	50.0	7,132	53.5	<.0001
3-4	185,582	49.7	43,159	38.5	109,281	54.0	33,142	56.5	
5-6	98,595	55.0	19,741	39.6	56,952	60.7	21,892	61.7	
7 or more	23,005	58.3	4,302	42.6	13,697	64.9	5,006	60.7	
Number of WIC family members									
1	209,458	52.3	49,438	40.8	123,040	56.3	36,980	60.6	<.0001
2	104,784	50.3	20,133	36.8	61,965	54.4	22,686	56.9	
3	38,126	50.3	7,326	38	24,087	55.3	6,713	52	
4 or more	6,349	45.3	1,251	32.6	4,041	51.7	1,057	44.8	
Number of pounds prescribed									
1 pound	76,797	60.0	19,783	53.0	40,128	61.2	16,886	67.3	<.0001
2 pounds	193,140	50.3	42,421	37.2	117,550	55.3	33,169	57.2	
3 pounds	30,972	50.4	5,549	39.0	18,223	53.4	7,200	54.8	
4 pounds	46,477	46.4	8,394	31.0	30,012	52.8	8,071	49.7	
5 pounds	11,331	43.9	2,001	31.1	7,220	49.3	2,110	44.5	

TABLE_19: Milk redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Fluid milk prescribed									
All benefits redeemed	283,381	37.8	78,169	35.7	147,537	35.7	57,675	48.7	<.0001
Some benefits redeemed	403,656	53.8	120,909	55.2	234,427	56.7	48,320	40.8	
No benefits redeemed	63,387	8.4	19,777	9.0	31,171	7.5	12,439	10.5	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	150,083	38.3	60,039	37.6	81,366	39	8,678	37.1	0.018
Non-Hispanic Black	34,160	25.2	5,229	22.9	26,103	25.6	2,828	26.2	0.0024
Hispanic	75,408	48.0	8,477	38.1	24,129	40.6	42,802	56.8	<.0001
Non-Hispanic American Indian/Alaska Native	593	33.5	45	33.6	289	29.9	259	38.6	0.4349
Non-Hispanic Asian	5,344	50.3	722	41.8	3,542	56.1	1,080	41.9	0.0496
Non-Hispanic Native Hawaiian/Other Pacific Islander	424	32.4	71	27.5	39	30.2	314	34.1	0.177
Non-Hispanic Multiple Races	16,845	33.3	3,586	30.3	11,545	33.9	1,714	36.1	<.0001
Geographic location									
Urban	191,708	37.7	28,734	32.6	111,697	35.3	51,277	49.5	<.0001
Large rural	33,334	35.8	16,527	34.2	14,783	36.5	2,024	45.1	
Small rural	30,344	38.2	17,053	38.7	11,986	37.3	1,305	41.2	
Isolated	23,142	40.6	15,775	41.4	6,994	38.9	373	42.7	
Number of persons in household									
1-2	35,075	29.3	9,594	31.3	20,560	27.4	4,921	35.2	<.0001
3-4	144,458	35.9	43,213	34.9	73,827	33.8	27,418	45.8	
5-6	83,359	44.6	20,723	38.8	42,263	43.3	20,373	57.0	
7 or more	20,224	49.0	4,589	42.1	10,887	49.5	4,748	56.7	
Number of WIC family members									
1	159,722	40.9	46,666	38.9	81,613	38.6	31,443	52.9	<.0001
2	94,186	35.0	24,169	32	50,174	33.5	19,843	45.4	
3	25,301	33.1	6,306	32.3	13,499	30.6	5,496	42.5	
4 or more	4,172	29.8	1,028	26.7	2,251	28.9	893	38.0	

TABLE_20: Whole milk redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Whole Milk									
All benefits redeemed	93,840	44.7	25,365	41.8	49,918	43.4	18,557	54.1	<.0001
Some benefits redeemed	96,356	45.9	29,102	48.0	55,424	48.2	11,830	34.5	
No benefits redeemed	19,792	9.4	6,154	10.2	9,732	8.5	3,906	11.4	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	48,165	44.9	19,192	44.3	25,949	45.5	3,024	43.7	0.5582
Non-Hispanic Black	12,915	33.8	1,837	28.1	9,957	34.9	1,121	35.5	<.0001
Hispanic	24,188	54.2	2,742	42.8	8,322	49.7	13,124	61.0	<.0001
Non-Hispanic American Indian/Alaska Native	188	39.8	13	29.5	91	38.2	84	44.2	0.2296
Non-Hispanic Asian	1,792	59.5	229	50.7	1,154	63.0	409	56.0	0.3727
Non-Hispanic Native Hawaiian/Other Pacific Islander	166	41.4	24	28.2	4	18.2	138	46.9	0.006
Non-Hispanic Multiple Races	6,189	40.1	1,328	35.4	4,204	41.2	657	44.4	<.0001
Geographic location									
Urban	64,200	44.6	9,704	38.2	38,040	43	16,456	54.9	<.0001
Large rural	10,760	42.4	5,295	40.1	4,843	44.3	622	48.9	
Small rural	9,818	45.5	5,479	46.1	3,920	44.6	419	46.7	
Isolated	7,354	47.6	4,865	48.2	2,350	46.3	139	46.5	
Number of persons in household									
1-2	9,955	35.9	2,588	35.6	5,943	35.1	1,424	41.0	0.3411
3-4	48,498	42.6	13,851	40.8	25,692	41.1	8,955	51.5	
5-6	28,149	50.9	7,207	45.4	14,455	50.2	6,487	60.8	
7 or more	7,166	55.1	1,706	49.1	3,828	55.7	1,632	61.3	
Number of WIC family members									
1	48,090	42.8	13,491	40.1	25,278	41.4	9,321	52.7	<.0001
2	32,055	48.1	8,316	44.8	17,157	46.8	6,582	57.6	
3	10,808	44.4	2,751	41.9	5,929	43.3	2,128	51.8	
4 or more	2,887	44.0	807	44.3	1,554	42.5	526	48.7	

TABLE_21: Lowfat Milk redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Lowfat Milk									
All benefits redeemed	236,522	37.6	65,416	35.9	122,503	35.3	48,603	48.8	<.0001
Some benefits redeemed	337,006	53.6	99,979	54.8	196,869	56.7	40,158	40.3	
No benefits redeemed	55,737	8.9	17,053	9.3	27,820	8.0	10,864	10.9	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	125,994	38.3	50,022	37.5	68,847	39.0	7,125	36.9	0.0100
Non-Hispanic Black	26,666	23.9	4,256	22.8	20,221	24.1	2,189	24.5	0.5176
Hispanic	64,105	48.1	7,344	39.0	20,217	40.0	36,544	57.2	<.0001
Non-Hispanic American Indian/Alaska Native	474	32.4	35	35.7	238	28.7	201	37.4	0.6836
Non-Hispanic Asian	4,272	49.2	598	41.7	2,835	55	839	40.1	0.0047
Non-Hispanic Native Hawaiian/Other Pacific Islander	341	32.0	57	30.3	35	32.4	249	32.4	0.7430
Non-Hispanic Multiple Races	14,298	33.3	3,104	31.2	9,738	33.7	1,456	35.3	0.0454
Geographic location									
Urban	159,616	37.5	23,971	32.8	92,425	34.8	43,220	49.6	<.0001
Large rural	27,884	35.6	13,710	34.2	12,453	36.1	1,721	45.6	
Small rural	25,455	38.0	14,309	38.6	10,036	36.9	1,110	41.4	
Isolated	19,591	40.8	13,352	41.6	5,912	38.8	317	43.4	
Number of persons in household									
1-2	25,870	27.6	7,140	30.2	15,098	25.5	3,632	33.7	<.0001
3-4	118,588	35.4	35,602	34.6	60,325	33.1	22,661	45.4	
5-6	73,531	45.0	18,454	39.8	37,227	43.3	17,850	57.4	
7 or more	18,309	49.8	4,180	43.6	9,853	49.9	4,276	57.7	
Number of WIC family members									
1	111,848	40.1	33,179	38.4	56,356	37.4	22,313	53.1	<.0001
2	93,904	36.1	24,242	33.3	49,907	34.4	19,755	46.5	
3	26,340	34.6	6,828	35.2	13,898	31.7	5,614	43.7	
4 or more	4,430	31.7	1,167	30.4	2,342	30.1	921	39.3	

TABLE_26: Gallons of Cow's Milk redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Milk in Gallon sizes (Whole/LF Cow's Milk)									
All benefits redeemed	488,283	62.3	155,511	61.7	255,284	61.8	77,488	65.5	<.0001
Some benefits redeemed	229,847	30.6	76,016	34.7	125,589	30.4	28,242	23.9	
No benefits redeemed	65,105	8.7	20,451	9.3	32,060	7.8	12,594	10.6	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	240,628	61.4	92,223	57.7	135,226	64.8	13,177	56.5	<.0001
Non-Hispanic Black	67,183	49.6	9,740	42.7	52,665	51.7	4,778	44.4	<.0001
Hispanic	108,602	69.2	13,244	59.6	40,741	68.6	54,617	72.5	<.0001
Non-Hispanic American Indian/Alaska Native	978	55.3	74	55.2	543	56.3	361	53.8	0.0791
Non-Hispanic Asian	7,300	68.8	1,004	58.1	4,749	75.2	1,547	60.2	0.3105
Non-Hispanic Native Hawaiian/Other Pacific Islander	726	55.5	143	55.4	68	52.7	515	56.0	0.9271
Non-Hispanic Multiple Races	28,876	57.0	5,927	50.1	20,456	60.1	2,493	52.5	<.0001
Geographic location									
Urban	309,784	61.0	47,507	53.9	193,969	61.3	68,306	66.0	<.0001
Large rural	54,489	58.5	26,363	54.6	25,344	62.7	2,782	62.2	
Small rural	48,043	60.5	25,665	58.2	20,429	63.6	1,949	61.6	
Isolated	35,061	61.6	22,685	59.6	11,846	65.8	530	60.8	
Number of persons in household									
1-2	64,475	53.9	15,976	52.2	40,857	54.5	7,642	54.8	0.9879
3-4	237,584	59.1	68,219	55.1	131,671	60.3	37,694	63.0	
5-6	123,731	66.3	31,302	58.6	66,629	68.3	25,787	72.2	
7 or more	28,967	70.2	6,790	62.3	16,114	73.3	6,063	72.4	
Number of WIC family members									
1	252,609	64.7	71,072	59.3	139,962	66.2	41,575	70.1	<.0001
2	155,729	57.9	40,043	53.0	88,408	59.1	27,277	62.4	
3	40,093	52.4	9,509	48.7	23,187	52.6	7,397	57.3	
4 or more	6,699	47.9	1,731	45.1	3,729	47.9	1,239	52.7	

TABLE_27: Half Gallons of Cow's Milk redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Milk in Half Gallon sizes (Whole/LF Cow's Milk)									
All benefits redeemed	275,799	75.6	217,956	86.5	53,774	51.4	4,069	49.4	<.0001
Some benefits redeemed	134	0.1	36	0.1	51	0.0	47	0.6	
No benefits redeemed	89,003	52.3	33,986	59.4	50,890	48.6	4,127	50.1	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	51,142	48.9	17,760	41.9	31,955	54.1	1,427	45.3	<.0001
Non-Hispanic Black	11,043	38.0	1,741	29.2	9,175	40.4	127	33.0	<.0001
Hispanic	12,308	53.0	2,318	42.8	7,771	56.5	2,219	54.7	<.0001
Non-Hispanic American Indian/Alaska Native	176	45.6	16	36.4	123	46.6	37	47.4	<.0001
Non-Hispanic Asian	1,419	59.5	232	48.4	1,099	63.2	88	53.0	0.9119
Non-Hispanic Native Hawaiian/Other Pacific Islander	71	38.8	18	39.1	19	43.2	34	36.6	<.0001
Non-Hispanic Multiple Races	4,791	47.0	1,068	37.8	3,586	50.9	137	42.8	<.0001
Geographic location									
Urban	52,538	48.2	9,474	39.5	39,912	50.7	3,152	49.2	<.0001
Large rural	11,358	45.7	4,896	39.6	5,957	51.9	505	48.9	
Small rural	9,441	46.8	4,663	41.3	4,622	53.6	156	56.9	
Isolated	6,784	47.8	4,100	43.4	2,622	56.7	62	47.3	
Number of persons in household									
1-2	13,768	41.8	2,756	36.6	10,638	43.4	369	38.9	<.0001
3-4	41,459	46.4	12,244	39.4	27,077	50.4	2,104	47.4	
5-6	20,429	52.8	6,499	43.09	12,656	59.3	1,273	55.8	
7 or more	5,320	58.7	1,644	47.3	3,363	66.9	313	56.5	
Number of WIC family members									
1	31,891	43.8	8,939	36.7	21,448	47.3	1,504	47.9	<.0001
2	33,045	50.5	9,140	44.1	22,060	53.5	1,845	51.7	
3	13,563	50.9	4,216	42.6	8,715	56.5	632	47.3	
4 or more	2,497	48.0	858	38.2	1,551	56.2	88	44.0	

TABLE_28: Quarts of Cow's Milk redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Milk in Quart sizes (Whole/LF Cow's Milk)									
All benefits redeemed	362,038	47.4	147,452	58.52	156,199	38.9	58,387	52.8	<.0001
Some benefits redeemed	14,742	2.2	1,774	1.1	10,913	2.7	2,055	1.9	
No benefits redeemed	387,509	57.5	102,752	63.6	234,536	58.4	50,221	45.4	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	135,7867	40.1	42,486	36.6	85,032	42.2	8,349	39.9	<.0001
Non-Hispanic Black	36,568	28.3	4,675	25.1	28,764	28.7	3,129	30.1	<.0001
Hispanic	75,682	51.8	6,653	39.8	25,515	43.8	43,514	61.1	<.0001
Non-Hispanic American Indian/Alaska Native	596	37.4	42	38.2	305	33.2	249	44.1	0.0007
Non-Hispanic Asian	5,103	53.6	389	36.2	3,629	59.6	1,085	46	0.8746
Non-Hispanic Native Hawaiian/Other Pacific Islander	421	35.8	67	29.9	41	33.9	313	37.7	0.0126
Non-Hispanic Multiple Races	16,935	36.4	2,801	32.1	12,378	37.0	1,748	39.7	<.0001
Geographic location									
Urban	195,505	41.0	24,028	34.3	118,810	38.5	52,667	53.7	<.0001
Large rural	28,799	37.2	12,212	34.0	15,229	39.5	1,358	45.0	
Small rural	25,123	39.0	11,240	36.8	12,661	40.8	1,222	43.8	
Isolated	17,169	39.9	9,558	38.4	7,298	41.9	313	44.0	
Number of persons in household									
1-2	35,280	31.8	8,061	31.8	21,867	30.3	5,093	39.3	<.0001
3-4	137,124	38.3	31,304	34.3	77,783	36.9	27,772	49.9	
5-6	79,593	47.7	14,515	38.9	44,603	46.6	20,469	60.8	
7 or more	19,456	52.3	3,208	42.3	11,416	52.7	4,832	61.0	
Number of WIC family members									
1	153,293	43.0	37,067	38.5	85,442	41.6	30,784	56.2	<.0001
2	89,357	37.4	15,777	29.9	52,981	36.6	20,599	50.2	
3	24,491	37.1	3,283	33.6	15,217	34.8	5,991	47.9	
4 or more	4,566	35.4	994	35.1	2,559	32.9	1,013	43.9	

TABLE_29: Infant Formula redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Infant Formula									
All benefits redeemed	257,164	87.6	73,279	83.8	144,999	90.1	38,886	86.2	<.0001
Some benefits redeemed	22,080	7.5	9,158	10.5	10,308	6.4	2,614	5.8	
No benefits redeemed	14,253	4.9	4,965	5.7	5,659	3.5	3,629	8.0	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	128,914	87.5	52,808	84.3	68,208	90.5	7,898	84.4	<.0001
Non-Hispanic Black	53,751	86.5	8,240	80.2	41,171	88.8	4,340	78.4	0.7426
Hispanic	48,864	89.5	6,282	86.0	19,424	91.6	23,158	88.7	0.0053
Non-Hispanic American Indian/Alaska Native	490	81.7	36	78.3	252	86.3	202	77.1	0.0188
Non-Hispanic Asian	3,539	91.9	514	87.4	1,991	94.9	1,034	88.8	0.2217
Non-Hispanic Native Hawaiian/Other Pacific Islander	412	86.4	51	87.9	45	84.9	316	86.3	0.8624
Non-Hispanic Multiple Races	20,521	86.8	5,348	82.0	13,235	89.5	1,938	82.9	<.0001
Geographic location									
Urban	182,334	88.3	32,366	83.6	115,962	90.3	34,006	86.3	0.5276
Large rural	29,463	85.9	15,746	83.5	12,310	89.1	1,407	85.4	
Small rural	23,674	86.1	13,479	84.1	9,339	89.2	856	85.5	
Isolated	16,947	86.0	11,614	84.5	5,100	89.8	233	84.4	
Number of persons in household									
1-2	40,719	85.7	9,894	81.7	25,899	88.2	4,926	81.8	0.3232
3-4	142,707	87.6	42,105	84.0	80,286	90.1	20,316	85.7	
5-6	59,886	88.8	17,551	84.5	31,611	91.4	10,724	88.8	
7 or more	13,686	89.0	3,710	84.7	7,203	92.0	2,773	87.6	
Number of WIC family members									
1	79,053	87.2	24,531	82.2	43,769	90.4	10,753	86.5	<.0001
2	119,981	87.5	34,062	84.3	67,470	89.8	18,449	85.9	
3	48,076	88.7	12,012	85.8	28,084	90.6	7,980	86.7	
4 or more	10,054	86.9	2,674	84.0	5,676	88.9	1,704	85.1	

TABLE_30: Infant Cereal redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Infant Cereal									
All benefits redeemed	76,218	49.5	19,442	44.3	45,424	52.7	11,352	47.3	<.0001
Some benefits redeemed	21,958	14.2	6,959	15.8	12,053	14.0	2,946	12.3	
No benefits redeemed	55,969	36.3	17,527	39.9	28,761	33.4	9,681	40.4	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	40,623	50.8	14,227	45.3	23,600	54.9	2,796	50.1	<.0001
Non-Hispanic Black	15,014	48.6	2,301	44.0	11,392	49.9	1,321	47.2	0.0016
Hispanic	13,172	46.2	1,358	35.4	5,647	50.4	6,167	45.8	<.0001
Non-Hispanic American Indian/Alaska Native	149	38.4	11	35.5	79	43.4	59	33.7	0.1786
Non-Hispanic Asian	1,355	62.1	199	59.9	774	65.3	382	57.5	0.0471
Non-Hispanic Native Hawaiian/Other Pacific Islander	126	45.3	21	52.5	17	47.2	88	43.6	0.0636
Non-Hispanic Multiple Races	5,502	48.5	1,325	43.8	3,638	50.2	539	49.9	<.0001
Geographic location									
Urban	54,963	50.9	9,148	46.2	35,928	53.4	9,887	47.4	0.0695
Large rural	8,500	45.9	4,065	42.7	4,080	50.1	355	40.6	
Small rural	6,483	44.8	3,193	40.8	3,053	50.6	237	39.8	
Isolated	4,712	46.4	3,006	44.7	1,631	50.1	75	45.2	
Number of persons in household									
1-2	11,750	49.1	2,756	46.3	7,467	50.6	1,347	47.3	0.0405
3-4	41,881	48.8	11,121	44.2	24,720	51.6	6,040	47.1	
5-6	18,299	50.5	4,576	42.8	10,580	55.8	3,143	48.0	
7 or more	4,239	52.7	981	45.9	2,477	58.8	781	46.0	
Number of WIC family members									
1	40,743	48.4	11,433	44.1	23,927	51.5	5,383	46.0	<.0001
2	26,176	50.2	6,085	44.4	15,746	53.4	4,345	48.6	
3	7,892	52.0	1,608	45.0	4,885	56.0	1,399	49.0	
4 or more	1,407	52.1	316	44.6	866	56.9	225	47.9	

TABLE_31: Infant Jarred Fruits and Vegetable redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada									
	Total		Kentucky		Michigan		Nevada		p-value
	N	%	N	%	N	%	N	%	
Infant Jarred Fruits and Vegetables									
All benefits redeemed	58,529	38.0	17,695	40.3	32,866	38.2	7,968	33.2	<.0001
Some benefits redeemed	63,044	41.0	16,769	38.2	35,689	41.5	10,586	44.1	
No benefits redeemed	32,369	21.0	9,437	21.5	17,489	20.3	5,443	22.7	
ALL BENEFITS REDEEMED									
Family Race/Ethnicity*									
Non-Hispanic White	32,265	40.4	13,125	41.8	17,105	39.9	2,035	36.5	0.1928
Non-Hispanic Black	10,223	33.1	1,739	33.2	7,753	34.0	731	26.1	0.0002
Hispanic	10,544	37.0	1,473	38.3	4,602	41.2	4,469	33.1	<.0001
Non-Hispanic American Indian/Alaska Native	110	28.4	9	29.0	70	38.5	31	17.7	0.022
Non-Hispanic Asian	1,064	49.0	160	48.2	631	53.8	273	41	0.0078
Non-Hispanic Native Hawaiian/Other Pacific Islander	83	29.7	14	35.0	10	27.8	59	29.1	0.2228
Non-Hispanic Multiple Races	4,067	35.9	1,175	38.8	2,522	34.9	370	34.3	0.0075
Geographic location									
Urban	41,229	38.2	8,239	41.7	26,039	38.8	6,951	33.3	<.0001
Large rural	6,833	36.9	3,704	39.0	2,861	35.2	268	30.6	
Small rural	5,401	37.4	2,983	38.1	2,273	37.9	145	24.3	
Isolated	3,989	39.3	2,743	40.8	1,200	36.9	46	27.5	
Number of persons in household									
1-2	8,470	35.4	2,377	40.0	5,196	34.3	897	31.6	<.0001
3-4	32,375	37.8	10,133	40.3	17,900	37.5	4,342	33.9	
5-6	14,356	39.7	4,293	40.2	7,863	41.5	2,200	33.5	
7 or more	3,292	41.0	885	41.5	1,907	45.5	1,907	45.5	
Number of WIC family members									
1	31,167	37.1	10,097	39.0	17,207	37.1	3,863	33.0	<.0001
2	20,313	39.0	5,770	42.1	11,539	39.2	3,004	33.6	
3	5,977	39.5	1,506	42.1	3,506	40.3	965	33.7	
4 or more	1,072	39.7	322	45.5	614	40.4	136	28.9	

TABLE_32: Infant Jarred Meat redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada										
	Total		Kentucky		Michigan		Nevada		p-value	
	N	%	N	%	N	%	N	%		
Infant jarred meats										
All benefits redeemed	3,357	30.9	570	26.5	2,384	34.7	403	21.9	0.0719	
Some benefits redeemed	2,511	23.1	529	24.6	1,483	21.6	499	27.2		
No benefits redeemed	4,989	46.0	1,051	48.9	3,003	43.7	935	50.9		
ALL BENEFITS REDEEMED										
Family Race/Ethnicity*										
Non-Hispanic White	2,246	33.4	438	29.0	1,658	36.0	150	24.1	0.7411	
Non-Hispanic Black	191	23.4	23	23.2	153	24.8	15	15.3	0.0941	
Hispanic	556	25.7	62	17.3	305	34.9	189	20.4	0.5784	
Non-Hispanic American Indian/Alaska Native	8	29.6	0	0.0	8	42.1	0	0.0	0.6951	
Non-Hispanic Asian	57	26.4	11	27.5	36	29.8	10	18.2	0.6992	
Non-Hispanic Native Hawaiian/Other Pacific Islander	3	18.8	0	.	0	0.0	3	23.1		
Non-Hispanic Multiple Races	291	33.2	36	25.5	219	35.2	36	31.6	0.1153	
Geographic location										
Urban	2,156	30.0	271	25.1	1,570	34.5	315	20.3	0.001	
Large rural	552	32.0	129	24.7	408	35.9	15	22.4		
Small rural	326	30.9	98	33.4	214	30.7	14	21.9		
Isolated	243	35.2	72	28.6	159	38.2	12	54.5		
Number of persons in household										
1-2	282	30.8	39	27.9	219	33.5	24	19.5	0.0929	
3-4	1,853	30.9	308	26.1	1,356	35.1	189	20.1		
5-6	961	29.8	179	25.9	620	32.8	162	25.4		
7 or more	258	35.4	44	31.4	189	40.7	25	20.0		
Number of WIC family members										
1	3	8.6	2	8.0	1	12.5	0	0.0	0.7229	
2	1,942	31.8	344	27.7	1,360	35.6	238	22.8		
3	1,173	30.3	189	25.5	849	34.3	135	20.7		
4 or more	239	28.2	35	24.6	174	30.6	30	22.1		

TABLE_33: Nutritional Supplement redemptions, by family characteristics

Percent of WIC Families in Kentucky, Michigan, and Nevada										
	Total		Kentucky		Michigan		Nevada		p-value	
	N	%	N	%	N	%	N	%		
Nutritional Supplement										
All benefits redeemed	6,802	54.0	1,607	48.9	2,914	47.8	2,281	71.1	<.0001	
Some benefits redeemed	3,992	31.7	1,135	34.5	2,318	38.0	539	16.8		
No benefits redeemed	1,803	14.3	544	16.6	870	14.3	389	12.1		
ALL BENEFITS REDEEMED										
Family Race/Ethnicity*										
Non-Hispanic White	2,906	49.3	1,043	48.5	1,546	47.7	317	63.0	<.0001	
Non-Hispanic Black	961	43.1	228	40.6	595	42.1	138	53.9	0.1536	
Hispanic	2,208	68.7	200	58.5	338	50.2	1,670	75.9	<.0001	
Non-Hispanic American Indian/Alaska Native	7	46.7	0	.	4	44.4	3	50.0		
Non-Hispanic Asian	274	84.3	29	80.6	182	87.5	63	77.8	0.2327	
Non-Hispanic Native Hawaiian/Other Pacific Islander	9	69.2	1	50.0	1	100.0	7	70.0	0.9645	
Non-Hispanic Multiple Races	425	49.8	106	54.6	236	46.5	83	54.6	0.3286	
Geographic location										
Urban	5,132	56.1	872	49.0	2,218	48.8	2,042	72.3	<.0001	
Large rural	621	46.0	301	46.2	247	44.0	73	53.3		
Small rural	538	50.3	250	53.5	248	46.6	40	57.1		
Isolated	328	45.6	182	47.5	137	42.0	9	81.8		
Number of persons in household										
1-2	755	46.5	204	46.7	367	41.2	184	62.4	0.0074	
3-4	3,440	52.7	845	47.5	1,495	47.1	1,100	69.8		
5-6	2,065	58.4	447	51.5	801	50.5	817	75.3		
7 or more	537	61.4	111	55.0	251	58.4	175	72.0		
Number of WIC family members										
1	3,830	54.3	951	49.2	1,657	48.2	1,222	72.7	<.0001	
2	2,044	53.4	436	46.6	845	46.8	763	70.3		
3	742	53.9	168	52.7	342	47.5	232	68.8		
4 or more	186	53.6	52	52.0	70	50.0	64	59.8		