

21. TWO OR MORE FRUITS PER DAY

Measure Definition: “How often do you eat fruit? How often do you drink juices such as orange, grapefruit, or tomato juice?” [Eat at least two fruits per day]

Why is eating two or more fruits per day important to public health?

The 2005 Dietary Guidelines for Americans recommends a person eat 5 to 13 servings of fruits and vegetables each day, depending on their caloric level, for better health.¹⁷ Two cups of fruit per day are recommended for a reference 2,000-calorie intake. Fruits provide a variety of micronutrients and phytochemicals that help the body fight off infection and aid in cell reproduction, and other cell functions. The guidelines recommend that whole fruits, such as fresh, canned, frozen, or dried fruits be consumed rather than fruit juice to ensure adequate fiber intake. Fruits are good sources of nutrients such as vitamin A (carotenoids), which is found in orange fruits; vitamin C, which is found in citrus fruits, kiwi fruit, strawberries, guava, papaya, and cantaloupe; folate, which is found in oranges; and potassium, which is found in bananas, oranges, cantaloupe, honeydew melons, and many dried fruits.¹⁷

Comparisons between people who include few fruits and vegetables in their diet, and people who include generous amounts of fruits and vegetables as part of a healthful diet show that a higher intake of fruits and vegetables is likely to reduce the risk for chronic diseases, type 2 diabetes, and cancers in specific sites (oral cavity and pharynx, larynx, lung, esophagus, stomach, and colon-rectum).¹⁷ Also, diets rich in foods containing fiber, like fruits, may reduce the risk of coronary heart disease by helping to remove cholesterol from the bloodstream and reduce blood lipid levels.^{17,46}

Risk factors for fewer than two fruits per day

Only 20% of Americans eat five or more servings of vegetables and fruits a day. Teen boys, men 45 and older, and women 55 and older are the heaviest fruit and vegetable consumers. Older people consume fruits and vegetables more frequently, partially because they consume more meals at home, and men and teen boys consume larger portions. Among families with children, only 13% eat at least five or more servings. It appears that both parents and children drive this non-achievement; all members of the family eat about 10% fewer fruits and vegetables when the mother works outside the home.⁴⁷

Two or more fruits per day in Utah

Rates of people who eat at least two fruits a day have remained relatively unchanged over the past decade. Between 2001–2005, the age-adjusted percentage of Utah adults who ate at least two fruits per day was 31.2%. The rate varied by local health district, from a low of 25.3% to a high of 34.5%. None of the local health districts had an age-adjusted rate that was higher than the state rate, but four had rates lower than the state rate. Summit County and Tooele County health districts had the highest and lowest rates in the state, respectively. Seven of Utah’s 61 small areas had age-adjusted rates that were significantly lower than the state rate, and three small areas had rates that were significantly higher than the state rate. Overall, Utah’s rate was lower than the U.S. rate.

Women were significantly more likely to eat at least two fruits per day ($p < 0.001$) across all age groups. Consumption of at least two fruits per day also increased with age for people 35 years and older.

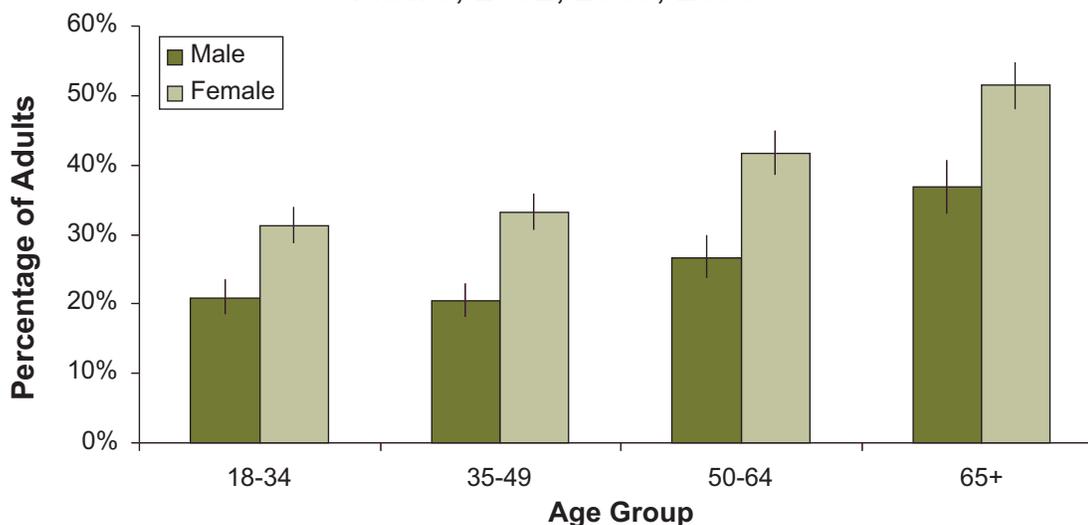
Utah Objective: Same as HP2010 objective.

HP2010 Objective (related) 19-5: Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit to 75% (age-adjusted to the U.S. 2000 standard population).

21. TWO OR MORE FRUITS PER DAY

Two or more fruits per day in Utah (continued)

Figure 21.A: 2+ Fruits per Day by Age and Sex, Utah Adults, 2002, 2003, 2005

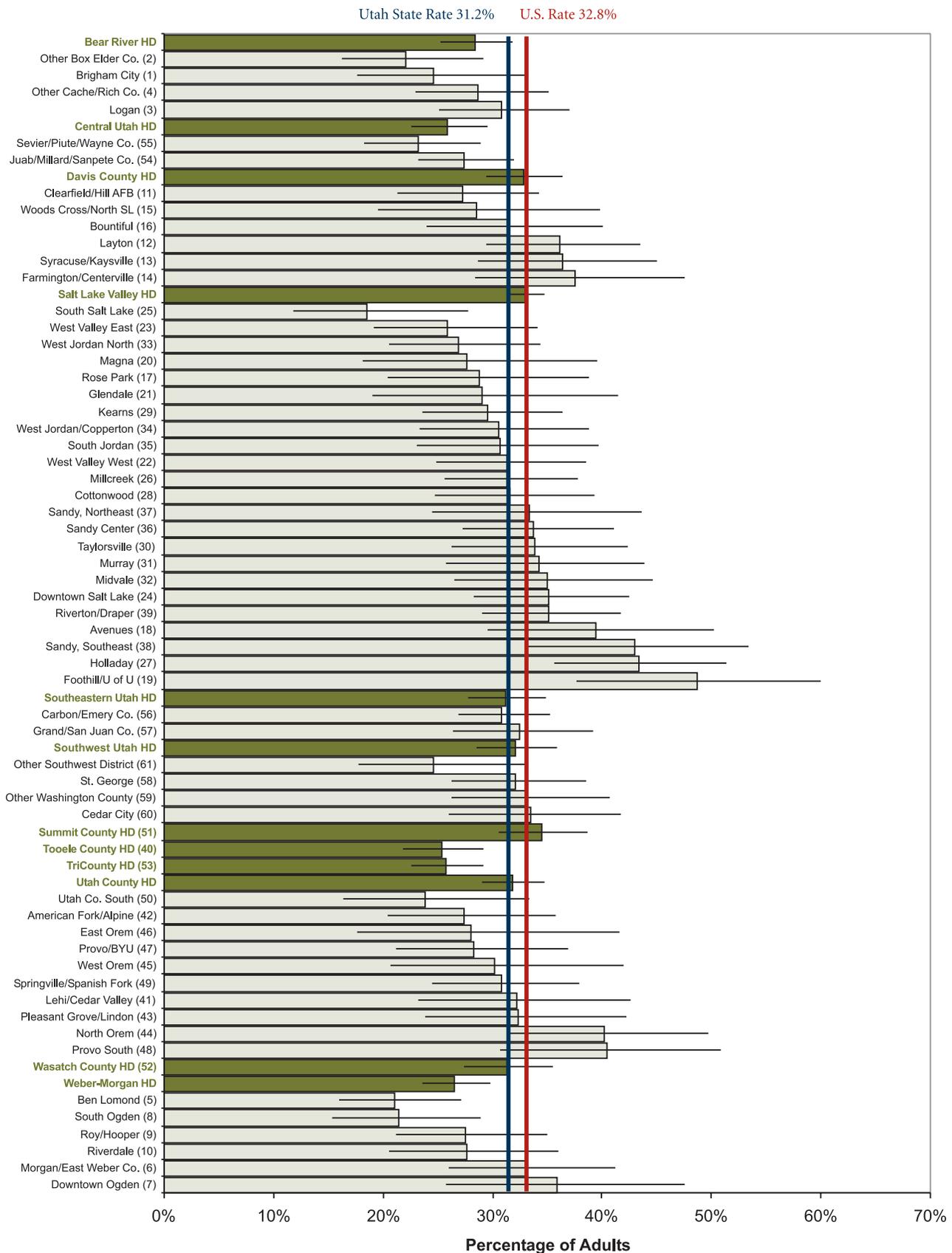


Prevention/Resources

The Heart Disease and Stroke Prevention Program at the Utah Department of Health works with various public and private partners promoting the 5 A Day message in schools, communities, health care settings, and families. The message to increase intake of vegetables is incorporated into the Gold Medal Schools Program, 5 A Day school newsletter, Grocery Store Tours for third grade students, and the website www.hearthishighway.org. The Check Your Health Campaign provides 5 A Day messages intended for families at www.checkyourhealth.org. Additional nutrition information can be found at www.mypyramid.gov.

21. TWO OR MORE FRUITS PER DAY

Figure 21.1: Percentage of Adults Who Reported Two or More Fruits per Day by Local Health District and Small Area, Utah Adults Aged 18+, 2002, 2003, 2005 (Age-adjusted)



21. TWO OR MORE FRUITS PER DAY

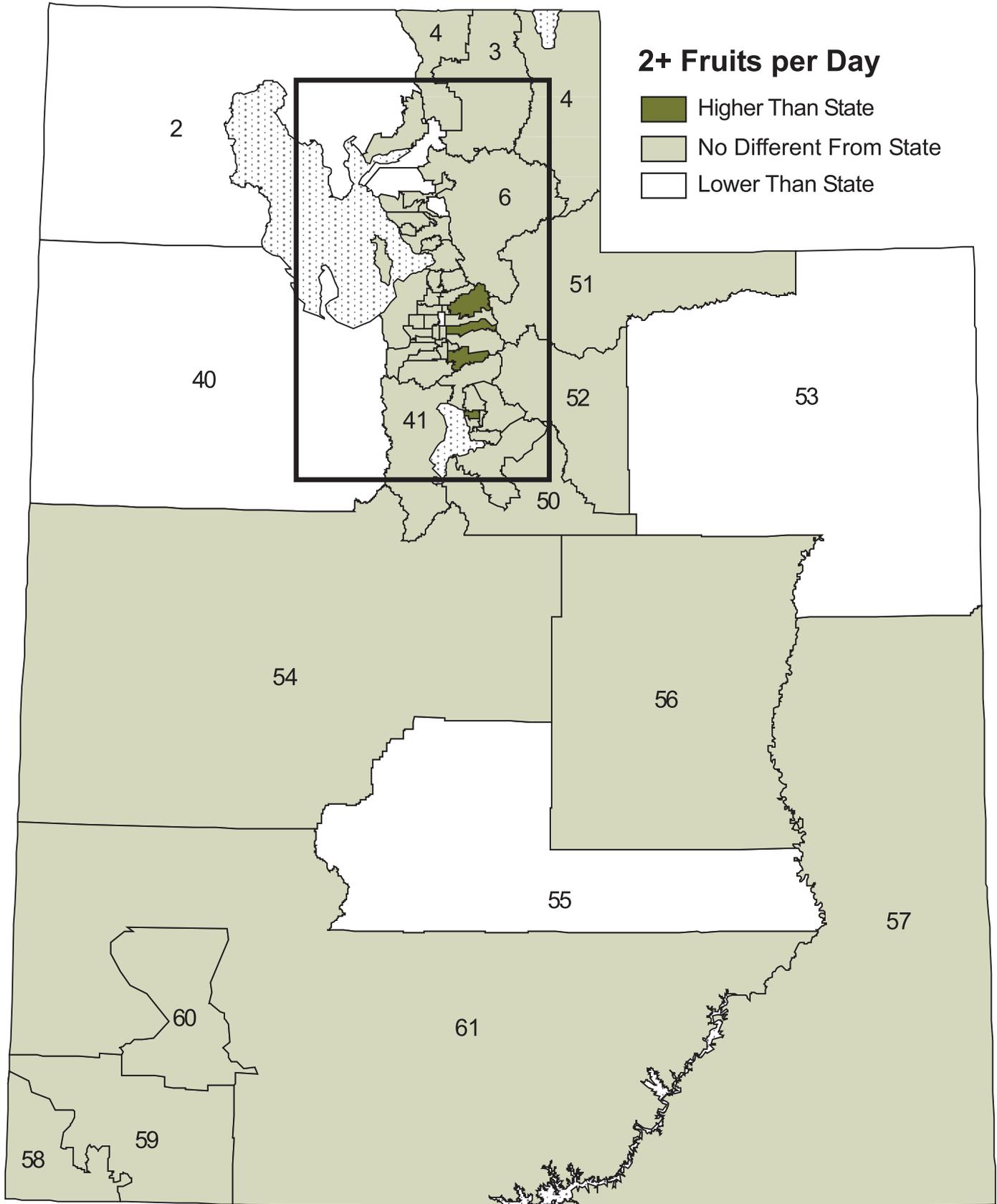
Table 21: 2+ Fruits per Day by Health District, Small Area, Utah, and U.S., 2002, 2003, 2005

State Rank*	State, Health District, or Small Area	2003 Population 18+	Number of Adults Reporting 2+ Fruits per Day		Crude Rate	Age-adjusted Rate	95% Confidence Interval	
							Lower	Upper
	U.S.	217,803,051	71,395,840		32.8%	32.8%	32.6%	33.0%
	State of Utah	1,657,454	499,059		30.1%	31.2%	30.2%	32.3%
	Bear River HD	98,027	26,644		27.2%	28.4%	25.2%	31.9%
7	Brigham City (1)	14,566	3,330		22.9%	24.6%	17.6%	33.2%
29	Logan (3)	45,904	13,454		29.3%	30.8%	25.2%	37.1%
4	Other Box Elder Co. (2)	14,636	3,284		22.4%	22.0%	16.3%	29.1%
22	Other Cache/Rich Co. (4)	22,921	6,583		28.7%	28.6%	22.9%	35.1%
	Central Utah HD	47,558	12,237		25.7%	25.9%	22.6%	29.5%
14	Juab/Millard/Sanpete Co. (54)	31,637	8,498		26.9%	27.4%	23.2%	32.0%
5	Sevier/Piute/Wayne Co. (55)	15,921	3,780		23.7%	23.2%	18.3%	28.9%
	Davis County HD	175,027	55,134		31.5%	32.8%	29.4%	36.3%
35	Bountiful (16)	33,318	9,646		29.0%	31.5%	24.0%	40.1%
13	Clearfield/Hill AFB (11)	37,329	9,168		24.6%	27.3%	21.3%	34.2%
55	Farmington/Centerville (14)	19,034	7,496		39.4%	37.5%	28.4%	47.6%
53	Layton (12)	46,815	16,320		34.9%	36.1%	29.4%	43.5%
54	Syracuse/Kaysville (13)	24,542	8,558		34.9%	36.4%	28.6%	45.0%
21	Woods Cross/North SL (15)	13,989	4,044		28.9%	28.6%	19.5%	39.8%
	Salt Lake Valley HD	658,810	210,095		31.9%	32.9%	31.3%	34.7%
56	Avenues (18)	18,959	8,082		42.6%	39.4%	29.6%	50.3%
36	Cottonwood (28)	33,297	10,758		32.3%	31.6%	24.8%	39.3%
50	Downtown Salt Lake (24)	42,808	14,157		33.1%	35.1%	28.3%	42.5%
61	Foothill/U of U (19)	17,778	8,738		49.2%	48.8%	37.7%	60.0%
24	Glendale (21)	18,642	5,891		31.6%	29.0%	19.0%	41.5%
60	Holladay (27)	35,956	16,029		44.6%	43.3%	35.7%	51.4%
25	Kearns (29)	42,995	10,826		25.2%	29.6%	23.6%	36.4%
18	Magna (20)	15,623	4,039		25.9%	27.6%	18.2%	39.6%
49	Midvale (32)	21,672	7,290		33.6%	35.0%	26.5%	44.6%
34	Millcreek (26)	44,008	13,959		31.7%	31.4%	25.6%	37.7%
47	Murray (31)	24,072	8,115		33.7%	34.3%	25.8%	43.9%
51	Riverton/Draper (39)	41,391	13,883		33.5%	35.1%	29.0%	41.8%
23	Rose Park (17)	22,639	7,120		31.5%	28.8%	20.5%	38.9%
45	Sandy Center (36)	36,106	11,742		32.5%	33.8%	27.2%	41.0%
43	Sandy, Northeast (37)	18,245	6,240		34.2%	33.4%	24.5%	43.7%
59	Sandy, Southeast (38)	20,781	8,849		42.6%	43.0%	33.2%	53.5%
28	South Jordan (35)	20,931	6,302		30.1%	30.7%	23.1%	39.7%
1	South Salt Lake (25)	18,456	3,883		21.0%	18.5%	11.8%	27.8%
46	Taylorsville (30)	27,372	8,094		29.6%	33.8%	26.2%	42.3%
12	West Jordan North (33)	30,391	7,440		24.5%	26.9%	20.5%	34.4%
27	West Jordan/Copperton (34)	26,360	6,877		26.1%	30.5%	23.4%	38.8%
11	West Valley East (23)	35,527	8,949		25.2%	25.9%	19.1%	34.1%
33	West Valley West (22)	44,794	13,752		30.7%	31.3%	24.9%	38.6%
	Southeastern Utah HD	36,828	11,251		30.6%	31.3%	27.9%	35.0%
31	Carbon/Emery Co. (56)	21,451	6,459		30.1%	30.9%	26.8%	35.2%
40	Grand/San Juan Co. (57)	15,377	4,824		31.4%	32.5%	26.4%	39.2%
	Southwest Utah HD	116,150	38,306		33.0%	32.1%	28.5%	35.9%
44	Cedar City (60)	22,401	7,309		32.6%	33.4%	26.0%	41.8%
8	Other Southwest District (61)	15,384	4,617		30.0%	24.6%	17.7%	33.0%
41	Other Washington County (59)	32,503	10,209		31.4%	31.4%	26.3%	40.7%
37	St. George (58)	45,862	16,217		35.4%	32.1%	26.3%	38.6%
48	Summit County HD (51)	24,525	8,142		33.2%	34.5%	30.6%	38.7%
9	Tooele County HD (40)	32,458	7,761		23.9%	25.3%	21.9%	29.1%
10	TriCounty HD (53)	28,023	7,070		25.2%	25.7%	22.5%	29.2%
	Utah County HD	278,832	79,885		28.7%	31.7%	29.0%	34.7%
15	American Fork/Alpine (42)	26,819	7,386		27.5%	27.4%	20.4%	35.8%
19	East Orem (46)	14,955	2,740		18.3%	28.1%	17.6%	41.6%
38	Lehi/Cedar Valley (41)	18,752	5,429		29.0%	32.2%	23.2%	42.6%
57	North Orem (44)	25,965	8,844		34.1%	40.2%	31.4%	49.7%
39	Pleasant Grove/Lindon (43)	24,636	7,578		30.8%	32.3%	23.8%	42.2%
20	Provo/BYU (47)	39,401	11,986		30.4%	28.3%	21.1%	36.8%
58	Provo South (48)	48,138	15,245		31.7%	40.4%	30.7%	50.9%
30	Springville/Spanish Fork (49)	41,036	11,966		29.2%	30.8%	24.5%	38.0%
6	Utah Co. South (50)	17,363	3,424		19.7%	23.8%	16.4%	33.4%
26	West Orem (45)	21,774	6,195		28.5%	30.2%	20.6%	41.9%
32	Wasatch County HD (52)	12,514	3,799		30.4%	31.3%	27.3%	35.5%
	Weber-Morgan HD	148,702	38,588		26.0%	26.5%	23.5%	29.7%
2	Ben Lomond (5)	33,215	6,879		20.7%	21.0%	15.9%	27.2%
52	Downtown Ogden (7)	21,684	7,837		36.1%	35.9%	25.8%	47.6%
42	Morgan/East Weber Co. (6)	24,131	7,845		32.5%	33.1%	26.0%	41.2%
17	Riverdale (10)	15,522	4,484		28.9%	27.6%	20.5%	36.0%
16	Roy/Hooper (9)	27,898	6,757		24.2%	27.5%	21.2%	35.0%
3	South Ogden (8)	26,255	5,563		21.2%	21.4%	15.4%	28.9%

*State rank is by 61 small areas for age-adjusted rate; 1 is always the lowest rate in the state and 61 is always the highest rate in the state.

21. TWO OR MORE FRUITS PER DAY

Figure 21.2: 2+ Fruits per Day by Small Area, Utah Adults Aged 18+, 2002, 2003, 2005 (Age-adjusted)



21. TWO OR MORE FRUITS PER DAY

Figure 21.3: 2+ Fruits per Day by Small Area, Wasatch Front Adults 18+, 2002, 2003, 2005 (Age-adjusted)

