**Key Takeaways – Nutrition, Physical Activity, & Weight in Yellowstone County**

- Among Yellowstone County adults:
  - 27.7% eat five or more servings of fruits and/or vegetables per day, a significant decrease since 2005 (and especially 2010 and 2014). This is below the national figure and less common among men.
  - 44.7% spend three or more hours on screen time for entertainment (whether television or computer, Internet, video games, etc.), a significant improvement since 2017. This is more common among older and low-income adults.
  - 16.6% had no leisure-time physical activity in the past month, a significant improvement since 2005.
  - 23.3% regularly participate in adequate levels of both aerobic and strengthening activities (meeting physical activity recommendations), but this is less common among women and seniors.
  - 16.3% say poor weather “always” or “nearly always” negatively affects their decision to be physically active outdoors.
  - 63.9% “never” walk, bike, or use public transportation for their daily commute.
  - 68.2% have attempted to increase their physical activity through changes to everyday behavior, such as taking the stairs, parking further from destinations, walking or biking instead of driving, etc. in the past year. This is less common among men, seniors, and low-income adults.
  - 32.7% drink an average of at least one sugar-sweetened beverage per day in the past week, but the habit is less common among older adults.
  - 72.7% are overweight and 36.9% are obese, worse than Montana and a significant increase since 2005 (but similar to 2010). Obesity is notably higher among men in Yellowstone County.

- Among Yellowstone County children age 2 to 17:
  - 66.2% are physically active 60 minutes daily, better than the US and a significant increase since 2014.
  - 25.4% spend three or more hours on screen time (television, computer, Internet, video games, etc.) for entertainment on an average school day.
  - 34.3% are considered overweight and 21.7% are obese.

- In 2016, Yellowstone County had 24.3 recreation/fitness facilities for every 100,000 population, well above state and national ratios.

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**Community Feedback:**

*Select Key Informant Survey Responses*

*We have significant concerns with poverty in this county. That often contributes to inadequate nutrition. All we have to do is look around and we can see we have issues with weight in our community.* – Healthcare Provider

*Much of Yellowstone County isn’t friendly to walking, running and biking. The community is set up for driving to most things.* – Business Leader
First year gardening at Amend Park Community Garden has been awesome... Made my ability to provide fresh fruits and veggies to my house throughout the growing season possible....

– Streetwyze Participant
Had Seven or More Sugar-Sweetened Beverages in the Past Week

Yellowstone County

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellowstone County</td>
<td>32.7%</td>
<td>29.0%</td>
</tr>
<tr>
<td>US</td>
<td>29.8%</td>
<td>32.7%</td>
</tr>
</tbody>
</table>

Sources:  
- 2020 PRC Community Health Survey, PRC, Inc. [Item 327]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:  
- Asked of all respondents.

Had Seven or More Sugar-Sweetened Beverages in the Past Week (Yellowstone County, 2020)

<table>
<thead>
<tr>
<th>Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>30.4%</td>
</tr>
<tr>
<td>Women</td>
<td>34.9%</td>
</tr>
<tr>
<td>18 to 39</td>
<td>40.9%</td>
</tr>
<tr>
<td>40 to 64</td>
<td>33.7%</td>
</tr>
<tr>
<td>65+</td>
<td>16.7%</td>
</tr>
<tr>
<td>Low Income</td>
<td>41.8%</td>
</tr>
<tr>
<td>Mid/High Income</td>
<td>32.0%</td>
</tr>
<tr>
<td>Yellowstone County</td>
<td>32.7%</td>
</tr>
</tbody>
</table>

Sources:  
- 2020 PRC Community Health Survey, PRC, Inc. [Item 327]

Notes:  
- Asked of all respondents.
- Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. "Low Income" includes households with incomes up to 200% of the federal poverty level. "Mid/High Income" includes households with incomes at 200% or more of the federal poverty level.
No Leisure-Time Physical Activity in the Past Month

Healthy People 2020 = 32.6% or Lower

Yellowstone County

<table>
<thead>
<tr>
<th></th>
<th>Yellowstone County</th>
<th>MT</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>16.6%</td>
<td>22.7%</td>
<td>26.2%</td>
</tr>
</tbody>
</table>

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 69]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.

Meets Physical Activity Recommendations

Healthy People 2020 = 20.1% or Higher

Yellowstone County

<table>
<thead>
<tr>
<th></th>
<th>Yellowstone County</th>
<th>MT</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>23.3%</td>
<td>21.1%</td>
<td>22.8%</td>
</tr>
</tbody>
</table>

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 69]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents.
- Meeting both guidelines is defined as the number of persons age 18+ who report light or moderate activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.
Meets Physical Activity Recommendations
(Yellowstone County, 2020)
Healthy People 2020 = 20.1% or Higher

- Men: 29.3%
- Women: 17.6%
- 18 to 39: 23.3%
- 40 to 64: 27.8%
- 65+: 13.8%
- Low Income: 27.2%
- Mid High Income: 24.0%
- Yellowstone County: 23.3%

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 152]

Notes:
- Income categories reflect respondent's household income as a ratio to the federal poverty level (FPL) for their household size. "Low income" includes households with incomes up to 200% of the federal poverty level; "Mid High Income" includes households with incomes at 200% or more of the federal poverty level.
- Missing both guidelines is defined as the number of persons age 18 who report light or moderate-intensity physical activity for at least 150 minutes per week or who report vigorous physical activity 75 minutes per week or an equivalent combination of moderate and vigorous-intensity activity and report doing physical activities specifically designed to strengthen muscles at least twice per week.

Yellowstone County Children

2 out of 3
Meet physical activity recommendations

1 out of 4
3+ hours per day of screen time

Child Is Physically Active for One or More Hours per Day
(Parents of Children Age 2-17)

- Boys: 66.1%
- Girls: 66.4%
- Yellowstone County: 66.2%
- US: 50.5%

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 124]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents with children age 2-17 at home.
- Includes children reported to have one or more hours of physical activity on each of the seven days preceding the survey.
44%
3+ hours per day of screen time

Daily Screen Time for Entertainment
(Yellowstone County, 2020)

Three or More Hours of Total Screen Time (TV, Computer, Video Games, Etc.) per Day for Entertainment
(Yellowstone County, 2020)

Sources:
- 2020 PRC Community Health Survey, Professional Research Consultants, Inc. [Item 318]

Notes:
- Asked of all respondents.
- Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with income up to 200% of the federal poverty level. “MidHigh Income” includes households with incomes at 200% or more of the federal poverty level.
- “Three or more hours” includes reported screen time of 180 minutes or more per day.

53.8% in 2017
Children’s Screen Time for Entertainment on an Average School Day
(Parents of Children Age 5-17; Yellowstone County, 2020)

<table>
<thead>
<tr>
<th>Time Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 Hour</td>
<td>18.3%</td>
</tr>
<tr>
<td>1 Hour</td>
<td>19.4%</td>
</tr>
<tr>
<td>2 Hours</td>
<td>36.3%</td>
</tr>
<tr>
<td>3+ Hours</td>
<td>25.4%</td>
</tr>
</tbody>
</table>

Sources: 2017 Public Health Survey, Professional Research Consultants, Inc. (Item 323)
Notes: Asked of respondents with a child aged 5 to 17 in the household

Population With Recreation & Fitness Facility Access
(Number of Recreation & Fitness Facilities per 100,000 Population, 2016)

<table>
<thead>
<tr>
<th>Location</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellowstone County</td>
<td>24.3</td>
</tr>
<tr>
<td>MT</td>
<td>15.8</td>
</tr>
<tr>
<td>US</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Sources: US Census Bureau, County Business Patterns. Additional data analysis by CARES.
Notes: Retrieved October 2019 from CARES Engagement Network at https://engagementnetwork.org
Recreation and fitness facilities are defined by North American Industry Classification System (NAICS) Code 713940, which include Establishments engaged in operating facilities which offer "exercise and other active physical fitness conditioning or recreational sports activities." Examples include athletic clubs, gymnasiums, dance centers, tennis clubs, and swimming pools. This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.
Decision to be Physically Active Outdoors is Negatively Affected by Poor Weather (Yellowstone County, 2020)

- Never 18.8%
- Always 7.8%
- Nearly Always 8.5%
- Sometimes 42.2%
- Seldom 22.7%

Sources: 2020 PRC Community Health Survey, Professional Research Consultants, Inc [Item 315]
Notes: Asked of all respondents.

Frequency of Walking, Biking, or Using Public Transportation for Daily Commute (Yellowstone County, 2020)

- Never 63.9%
- Daily 3.4%
- More than Weekly 5.5%
- Weekly 9.9%
- Monthly 9.3%
- Less than Monthly 8.0%

Sources: 2020 PRC Community Health Survey, Professional Research Consultants, Inc [Item 317]
Notes: Asked of all respondents.
“Never” Walked, Biked, or Used Public Transportation to Commute in the Past Year (Yellowstone County, 2020)

2 out of 3 People are trying to increase their daily physical activity

Made an Attempt in the Past Year to Increase Activity Through Changes to Everyday Behavior (Yellowstone County, 2020)
Community Feedback:
Select Key Informant Survey Responses

We are seeing more and more obese patients, their health is bad, they cannot always get into a facility if they need it for additional strengthening due to their size and the issues of caring for them. – Healthcare Provider

Billings is virtually a food desert with little local, organic food available and even less available to indigent communities – Community Leader

Winter makes exercise difficult and not all sidewalks and streets are walk or bike friendly. – Healthcare Provider
Prevalence of Obesity
Healthy People 2020 = 30.5% or Lower

Yellowstone County

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 154]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:
- Based on reported heights and weights, asked of all respondents.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.

Prevalence of Obesity
(Yellowstone County, 2020)
Healthy People 2020 = 30.5% or Lower

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 154]

Notes:
- Based on reported heights and weights, asked of all respondents.
- Income categories reflect respondent’s household income as a ratio to the federal poverty level (FPL) for their household size. “Low Income” includes households with incomes up to 200% of the federal poverty level; “Mid/High Income” includes households with incomes at 200% or more of the federal poverty level.
- The definition of obesity is having a body mass index (BMI), a ratio of weight to height (kilograms divided by meters squared), greater than or equal to 30.0, regardless of gender.
Relationship of Overweight With Other Health Issues
(Yellowstone County, 2020)

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 154]

Notes:
- Based on reported heights and weights, asked of all respondents.

Prevalence of Overweight in Children
(Parents of Children Age 5-17)

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 192]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents with children age 5-17 at home.
- Overweight among children is determined by children’s Body Mass Index status at or above the 85th percentile of US growth charts by gender and age.
Community Feedback:
Select Key Informant Survey Responses

This is a serious and complex problem. Many people in Yellowstone County are at higher risk for major illness (e.g. heart attacks, diabetes) because of their health habits. In 2017 16,030 people were found to be food insecure. Lack of good nutrition for this many people poses a serious risk of causing illness.

– Government Representative

We don’t have a friendly, walkable city. Bike paths are nice, but biking around town is touch, cars don’t like bikes on the streets and the drivers are terrible to cyclists. I know, I try to bike around town and it’s scary.

– Community Leader

Prevalence of Obesity in Children
(Children Age 5-17 Who Are Obese; BMI in the 95th Percentile or Higher)

Healthy People 2020 = 14.5% or Lower

Yellowstone County

US

Sources:
- 2020 PRC Community Health Survey, PRC, Inc. [Item 155]
- 2017 PRC National Health Survey, PRC, Inc.

Notes:
- Asked of all respondents with children age 5-17 at home.
- Obesity among children is determined by children’s Body Mass Index status equal to or above the 95th percentile of US growth charts by gender and age.
Perceptions of Nutrition, Physical Activity, and Weight as a Problem in the Community (Key Informants, 2020)

<table>
<thead>
<tr>
<th>Problem Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Problem</td>
<td>35.5%</td>
</tr>
<tr>
<td>Moderate Problem</td>
<td>44.0%</td>
</tr>
<tr>
<td>Minor Problem</td>
<td>13.5%</td>
</tr>
<tr>
<td>No Problem At All</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Sources: PRC Online Key Informant Survey, PRC, Inc.  
Notes: Asked of all respondents.

Community Feedback: Top concerns of Key Informants
- Contributing Factors
- Built Environment
- Lifestyle
- Obesity
- Awareness/Education
- Access to Care/Services
- Affordable Care/Services
- Access to Healthy Food
- Care/Services
- Diagnosis/Treatment

Community Feedback: Select Streetwyze Responses

Billings needs to find a better way to connect [Coulson Park] to the public. The untapped potential for this place to be a Billings icon is huge! Get the public to interact with this place. Allow for more access across the interstate, railroad, and industrial park.
– Streetwyze Participant

[Sidewalk along S 27th St] stinks! Too close to road, unsafe, unpleasant, and cars are way too fast! - Streetwyze Participant

Top Opportunities to Improve Resident Health Based on Streetwyze Responses
- Food Outlets/Gardens
- Parks and Green Spaces
- Community Centered Spaces, Recreational Clubs and Activities
- Street Safety Improvements
- Public Art and Beautification
### 2020 CHNA Data Packet: Nutrition, Physical Activity, & Weight

#### Yellowstone County Trends

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Eat 5+ Servings of Fruit or Vegetables per Day</td>
<td><img src="image" alt="Cloudy" /> (34.9 vs. 40.6)</td>
<td><img src="image" alt="Cloudy" /> (40.6 vs. 40.1)</td>
<td><img src="image" alt="Cloudy" /> (40.1 vs. 30.8)</td>
<td><img src="image" alt="Cloudy" /> (30.8 vs. 27.7)</td>
<td><img src="image" alt="Cloudy" /> (34.9 vs. 27.7)</td>
</tr>
<tr>
<td>% &quot;Very/Somewhat&quot; Difficult to Buy Fresh Produce</td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
</tr>
<tr>
<td>Population With Low Food Access (Percent)</td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Sunny" /></td>
</tr>
<tr>
<td>% Food Insecure</td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
</tr>
<tr>
<td>% 7+ Sugar-Sweetened Drinks in Past Week</td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
</tr>
<tr>
<td>% Healthy Weight (BMI 18.5-24.9)</td>
<td><img src="image" alt="Cloudy" /> (35.8 vs. 25.4)</td>
<td><img src="image" alt="Sunny" /> (25.4 vs. 31.9)</td>
<td><img src="image" alt="Sunny" /> (31.9 vs. 32.1)</td>
<td><img src="image" alt="Cloudy" /> (32.1 vs. 26.9)</td>
<td><img src="image" alt="Cloudy" /> (35.8 vs. 26.9)</td>
</tr>
<tr>
<td>% Overweight (BMI 25+)</td>
<td><img src="image" alt="Cloudy" /> (62.7 vs. 72.9)</td>
<td><img src="image" alt="Sunny" /> (72.9 vs. 65.7)</td>
<td><img src="image" alt="Sunny" /> (65.7 vs. 65.6)</td>
<td><img src="image" alt="Cloudy" /> (65.6 vs. 72.7)</td>
<td><img src="image" alt="Cloudy" /> (62.7 vs. 72.7)</td>
</tr>
<tr>
<td>% Obese (BMI 30+)</td>
<td><img src="image" alt="Cloudy" /> (23.9 vs. 26.0)</td>
<td><img src="image" alt="Sunny" /> (26.0 vs. 32.6)</td>
<td><img src="image" alt="Sunny" /> (32.6 vs. 34.4)</td>
<td><img src="image" alt="Cloudy" /> (34.4 vs. 36.9)</td>
<td><img src="image" alt="Cloudy" /> (23.9 vs. 36.9)</td>
</tr>
<tr>
<td>% Child [Age 5-17] Healthy Weight</td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
</tr>
<tr>
<td>% Children [Age 5-17] Overweight (85th Percentile)</td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
</tr>
<tr>
<td>% Children [Age 5-17] Obese (95th Percentile)</td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Sunny" /></td>
<td><img src="image" alt="Cloudy" /></td>
<td><img src="image" alt="Cloudy" /></td>
</tr>
</tbody>
</table>
### Nutrition, Physical Activity & Weight (continued)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Yellowstone County</th>
<th>Yellowstone vs. Benchmarks</th>
<th>Yellowstone County Trends</th>
</tr>
</thead>
<tbody>
<tr>
<td>% No Leisure-Time Physical Activity</td>
<td>16.6</td>
<td>☀️ ☀️ ☀️</td>
<td>2005 vs. 2010 (26.3 vs. 22.4)</td>
</tr>
<tr>
<td>% Meeting Physical Activity Guidelines</td>
<td>23.3</td>
<td>☁️ ☁️ ☁️</td>
<td>2010 vs. 2014 (22.4 vs. 23.7)</td>
</tr>
<tr>
<td>Recreation/Fitness Facilities per 100,000</td>
<td>24.3</td>
<td>☀️</td>
<td>2014 vs. 2017 (23.7 vs. 18.0)</td>
</tr>
<tr>
<td>% [Adults] 3+ Hours per Day of Total Screen Time</td>
<td>44.7</td>
<td>☁️</td>
<td>2017 vs. 2020 (18.0 vs. 16.6)</td>
</tr>
<tr>
<td>% Increased Physical Activity Through Everyday Behaviors</td>
<td>68.2</td>
<td>☀️</td>
<td>Baseline vs. Current Data $ (26.3 vs. 16.6)</td>
</tr>
<tr>
<td>% &quot;Never&quot; Walked/Biked/Used Public Transportation for Commute</td>
<td>63.8</td>
<td>☁️</td>
<td>Baseline vs. Current Data $ (24.3 vs. 16.6)</td>
</tr>
<tr>
<td>% Child [Age 2-17] Physically Active 1+ Hours per Day</td>
<td>66.2</td>
<td>☀️</td>
<td>Baseline vs. Current Data $ (72.0 vs. 68.6)</td>
</tr>
<tr>
<td>% Child [Age 5-17] 3+ Hours per Day of Total Screen Time</td>
<td>25.4</td>
<td>☁️</td>
<td>Baseline vs. Current Data $ (70.8 vs. 66.2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Symbols</th>
<th>Better</th>
<th>Similar</th>
<th>Worse</th>
</tr>
</thead>
<tbody>
<tr>
<td>☀️</td>
<td>☁️</td>
<td>🌪️</td>
<td></td>
</tr>
</tbody>
</table>

$ For survey indicators, this represents baseline findings (earliest year available) vs. 2020 (current findings). For secondary data indicators (those marked with ""), data years can vary but typically represent a span of 7 to 10 years.