OVERWEIGHT AND OBESITY PREVALENCE

This first graph shows the overall percentiles of overweight and obesity among all children across all grades in the county. These data include boys and girls combined. The thinner bars and corresponding values reflect the national averages of overweight and obesity among children ages 6–11 years as measured and calculated using the same protocol used to measure the children in Clackamas County.

In Clackamas County, approximately 61.6% of the children measured would be classified in the “healthy weight” category.

You can see from these data that Clackamas County is above the national prevalence for overweight – and among those children who are overweight, Clackamas County has more children who are obese, compared to the national averages.

Healthy People 2020 has established a goal of reducing the obesity rate among children ages 6–11 to 15.7% by 2020. This is an achievable goal for Clackamas County!

OVERWEIGHT AND OBESITY SEX DIFFERENCES

This graph also shows overweight and obesity rates for the county, this time separated by sex. These data show that contrary to the general belief, Oregon’s children are very similar as it pertains to their weight status compared to the rest of the nation.

Note the characteristics of your county’s data. For example, there are marginal differences between boys and girls for the combined prevalence of overweight and obesity as well as the prevalence of obesity. While the GROW–HKC program does not focus on increased efforts toward one sex group or another based on the data, all efforts are conducted with an intent to reduce the rates for all children.

Efforts should focus on the whole school providing every student with an optimal environment to eat healthfully and be physically active!
This graph shows the upward trend of overweight and obese prevalence for both boys and girls. As a reminder – this includes all children who are in the 85th percentile or greater of BMI for age and sex. This highlights the need for early intervention. Specifically, it draws attention to the importance of ensuring that children are inhabiting healthy environments from the moment they enter school!

These data are presented by grade and sex.

This graphic shows the prevalence of obesity. This includes all children who are in the 95th percentile or greater, sorted by grade and sex.
**PHYSICAL ACTIVITY BEHAVIORS**

These data show that Clackamas County children spend an average of 51 minutes per day of total activity. It’s important to define total activity so this number makes sense.

Total activity is a combined measure that includes light activity (defined as activities that require little effort such as sitting, standing and stretching), moderate activity (defined as activities that require more effort and elevate the heart rate such as brisk walking, some active play, and dancing), and vigorous activity (defined as activities that require quite a bit of effort, and elevate heart rate and breathing rate such as running, jumping, climbing, very active play).

Moderate to vigorous physical activity (MVPA) is a combined measure of moderate and vigorous activities only. MVPA is the measure that is most highly related to most health outcomes.

We measured children during the entire school day (approximately 6.5 hours/per day) and found that children in Clackamas County were doing 17 minutes/day of MVPA on average.

Increasing recess time, increasing the amount of active time in physical education, and providing classroom physical activity breaks are some ways that schools can help children achieve more MVPA during the school day!

The federal guidelines recommend that children should be doing at least 60 minutes of MVPA every day.

**PHYSICAL ACTIVITY BEHAVIORS BY GRADE**

This graph presents the average daily total physical activity time and average daily combined moderate and vigorous activity time (MVPA) of children attending school in Clackamas County. The data are shown across grades from first grade through sixth grade.

Please note the amount of time children were measured doing MVPA drops as grade level increases. This is a consistent trend nationwide that is observed in both boys and girls.

These data provide strong evidence that children are not being active enough during the school day. In addition, studies examining the relationship between physical activity and academic achievement have shown that students who engage in moderate and vigorous physical activity experience the greatest gains in academic performance.
This graph shows differences in total activity and MVPA between boys and girls in Clackamas County. In general, we observed that girls are doing less MVPA and total activity compared to boys. We observed this phenomenon in all the schools where we measured physical activity during the school day. However, in terms of actual minutes, the differences are not very large.

The most important message when considering these data is that all children would benefit from more opportunities to be active during the school day.
**PHYSICAL ACTIVITY TOOLKITS**
Balanced Energy Physical Activity Toolkits (BEPAT) provisioned in partnered elementary schools to increase students’ physical activity time during the school day.

**RUNNING & WALKING TRAILS**
Molalla: Running, walking, and gardening trails funded from Healthy Eating Activite Living and General Mills Foundation grants serve the local elementary school and create a safe pathway to the only full-service grocery store in town.

**FARM TO SCHOOL**
Molalla River School District; Farm to School program, tasting tables, and local foods in the school cafeteria.

**FAMILY STORY WALK**
Molalla; Implementation of a community StoryWalk promoting families walking together and reading stories about healthy eating and physical activity.

**OTHER IMPROVEMENTS**
Fuel Up & Play 60, school running and walking program startup, school garden and microenterprise development, and refrigeration of school garden produce for distribution are just a few of the many advancements the study has helped inspire.
SUBMITTED GRANTS IN 2014

Urben, S., B. Halverson. (2014) B, Molalla River Academy Elementary School Running and walking trail, Clackamas County HEAL Grant, $8,000 competitive grant. Funded.


Halverson, B. (2014) Molalla High School, 4-H Culture Club, Youth School garden produce refrigeration for school distribution, Clackamas County Small Grants program, $2,500 competitive grant. Funded.


COMMUNITY ENGAGEMENTS IN 2014


Halverson, B., Devlin E., (December 4th, 2014). Molalla GROW Action Team Steering Committee Meeting, (Molalla Community Members). 1 session of 1 hour, 2 participants.

Halverson, B., Devlin E., (November 25th, 2014). Molalla GROW Action Team Steering Committee Meeting, (Molalla Community Members). 1 session of 2 hours, 100 participants.

Devlin E., (November 21st, 2014). Molalla Elementary Bingo Night, GROW outreach event, (Molalla Elementary Parents and Staff). 1 session of 2 hours, 47 participants.

Halverson, B., Devlin E., (November 20th, 2014). Molalla GROW Action Team Steering Committee Meeting, (Molalla Community Members). 1 session of 2 hours, 5 participants.


Devlin E., (October 29th, 2014). Molalla Adult Center Fair, GROW outreach event. (Molalla Adult Center). 1 session of 4 hours, 17 participants.

Halverson, B., Devlin E., (October 28th, 2014). Wellness Committee Meeting GROW Project. (Molalla Elementary School). 1 session of 1 hour, 5 participants.

Halverson, B., Devlin E., (October 22nd, 2014). Presentation about Farm to School Program, (Molalla High School Faculty, Students). 1 session of 1 hour, 10 participants.

Halverson, B., Devlin E., (October 22nd, 2014). Presentation about 100 Mile Club, (Molalla High School Faculty, Students). 1 session of 1 hour, 10 participants.

Smith, R. (October 18th, 2014). Molalla River Trail Race Event, GROW outreach event (Molalla Community Members). 1 session of 1 hour, 10 participants.

Halverson, B., Devlin E., (September 26th, 2014). Wellness Committee Meeting GROW Project, (Clackamas Elementary School, Estacada Staff). 1 session of one half hour, 11 participants.

Halverson, B., Devlin E., (September 23rd, 2014). Wellness Committee Meeting GROW Project, (Molalla Elementary School). 1 session of 1 hour, 8 participants.

Halverson, B., Devlin E., Witrock Laccino S. (September 18th, 2014). Molalla GROW Action Team Steering Committee Meeting, (Molalla Community Members). 1 session of 2 hours, 2 participants.

Devlin E., Witrock Laccino S. (September 12th, 2014). Molalla 2nd Friday Outreach Event, (Health advocacy outreach for GROW project). 1 session of 3 hours, 42 participants.


Devlin E., Witrock Laccino S. (August 8th, 2014). Molalla 2nd Friday Outreach Event, (Health advocacy outreach for GROW project). 1 session of 2 hours, 50 participants.


Halverson, B., Devlin E., Witrock Laccino S. (July 11th, 2014). Molalla 2nd Friday Outreach Event, (Health advocacy outreach for GROW project). 1 session of 3 hours, 50 participants.

Halverson, B., Devlin E., Witrock Laccino S. (July 7th, 2014). Molalla GROW Action Team Steering Committee Meeting, (Molalla Community Members). 1 session of 1 hour, 4 participants.

Halverson, B., Devlin E., Witrock Laccino S. (June 16th, 2014). Molalla GROW Action Team Meeting, (Health Advocacy Coalition Meeting, Molalla Community Members). 1 session of 2 hours, 10 participants.

Halverson, B., Devlin E., (May 27th, 2014). Wellness Committee Meeting GROW Project, (Molalla Elementary School). 1 session of 1 hour, 7 participants.
COMMUNITY ENGAGEMENTS (CONT.)

Halverson, B., Devlin E., Witrock Laccino S. (May 19th, 2014). Molalla GROW Action Team Meeting, (Health Advocacy Coalition Meeting, Molalla Community Members). 1 session of 2 hours, 8 participants.

Halverson, B, Devlin E, (May 2nd, 2014). Molalla GROW Action Team Steering Committee Meeting, (Molalla Community Members). 1 session of 1 hour, 4 participants.

Halverson, B., Devlin E., (April 29th, 2014). Wellness Committee Meeting GROW Project. (Molalla Elementary School). 1 session of 1 hour, 8 participants.


Halverson, B., Devlin E., (March 18th, 2014). Wellness Committee Meeting GROW Project. (Molalla Elementary School). 1 session of 1 hour, 8 participants.


Devlin E., (March 5th, 2014). Playworks Games Training (Molalla Elementary School Staff) 1 session of 1 hour, 2 participants.

Halverson, B., Devlin E., Wittrock Laccino S. (February 28th, 2014). Presentation on the results of the physical activity assessments and BEPA Tool Kit Training. (Clackamas River Elementary (Estacada) Staff) 1 session of 1 hour, 15 participants.

Halverson, B., Devlin E., (February 25th, 2014). Wellness Committee Meeting GROW Project. (Molalla Elementary School) 1 session of 1 hour, 7 participants.


Halverson, B., Devlin E., (January 22nd, 2014). Presentation on the GROW Project. (Molalla Kiwanis Club) 1 session of 1 hour, 9 participants.

Halverson, B., Devlin E., (January 10th, 2014). Presentation on the results of the physical activity assessments and BEPA Tool Kit Training. (Molalla Elementary School Teachers) 1 session of 1 hour, 14 participants.


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**CLACKAMAS COUNTY TEAM**

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GROW Healthy Kids & Communities
Generating Rural Options for Weight (GROW) Healthy Kids and Communities is a 5-year, multi-level research project that seeks to inspire children, families, schools, and communities to create opportunities to eat healthfully and be physically active most every day. Our overarching goal is to prevent overweight and obesity in rural children. GROW Healthy Kids and Communities uses evidence-based research, community-engagement methods and tools, and innovative technology to explore the obesogenic rural environment and develop strategies that families and communities can use to lead a healthy lifestyle.

Figures and data presented in this report were collected 2013/2014 by GROW Healthy Kids and Communities, supported by USDA NIFA, grant number 2011-68001-30020.

ACKNOWLEDGEMENTS
Images displayed in the footer of “Clackamas County Summary of Study Impacts” and on our “Community Engagements” page provided courtesy from the following valued supporters of GROW Healthy Kids & Communities:

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