

How to do a Question by Question (QxQ) Analysis on the Healthy Youth Survey

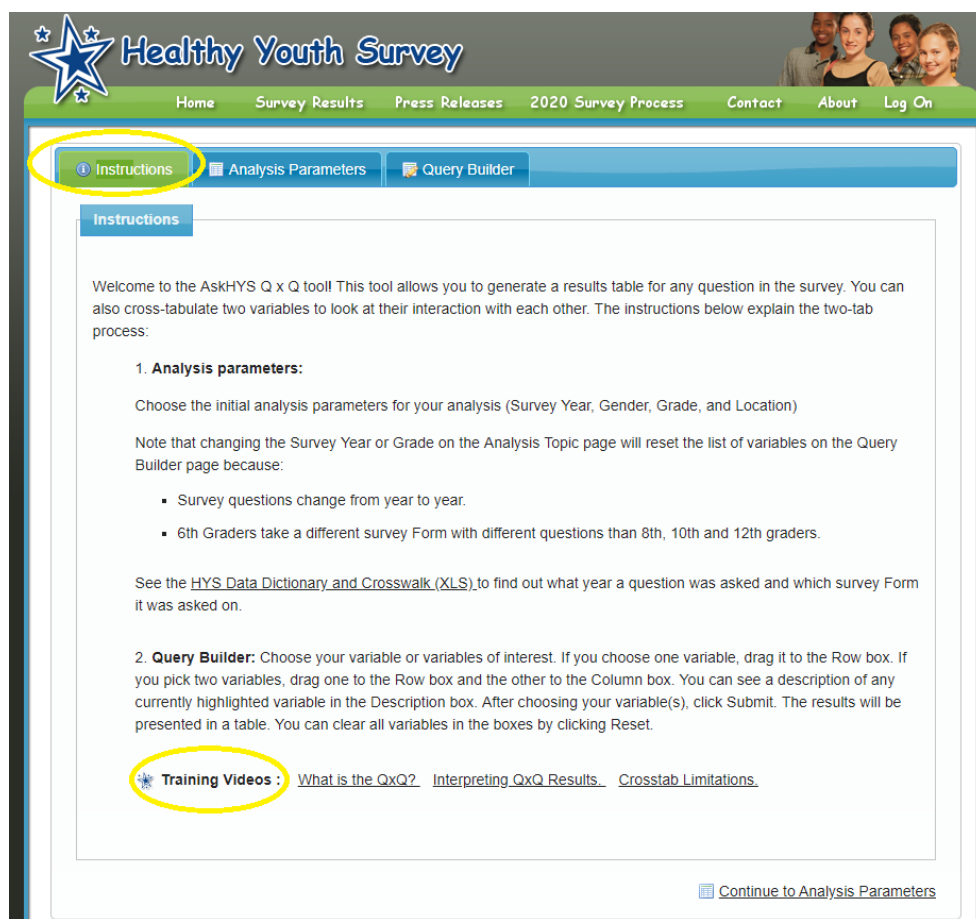
What is a Q x Q Analysis?

This tool found on the askhys.net website, allows you to compare the results of two questions (variables) to see how they relate to each other. When reviewing the results, it is important to note that while it may look like the two variables are in some way related, it is inappropriate to make statements pertaining to causation.

For example, if students who report eating breakfast also report that they consume more fruits and vegetables than students who don't eat breakfast, it does not mean that eating breakfast causes you to eat more fruits and vegetables or vice versa.

How do I do a Q x Q Analysis?

Go to www.askhys.net/Analyzer, which will automatically bring you to the **Instructions** page.



The screenshot shows the 'Healthy Youth Survey' website interface. The top navigation bar includes 'Home', 'Survey Results', 'Press Releases', '2020 Survey Process', 'Contact', 'About', and 'Log On'. Below this is a secondary navigation bar with 'Instructions', 'Analysis Parameters', and 'Query Builder'. The 'Instructions' page content includes a welcome message, a section for '1. Analysis parameters' with instructions on choosing survey year, gender, grade, and location, and a section for '2. Query Builder' with instructions on selecting variables. At the bottom, there is a 'Training Videos' section with links to 'What is the QxQ?', 'Interpreting QxQ Results', and 'Crosstab Limitations'. A 'Continue to Analysis Parameters' button is located at the bottom right of the page.

There are instructional videos posted at the bottom of this page that you can watch.



From the **Instructions** page, click on the **Analysis Parameters** tab or **Continue to Analysis Parameters** at the bottom.

On the **Analysis Parameters** page, you will select the parameters you want to look at;

- **Survey Year** (2002-2018)
- **Gender** (Male, Female, Both)
- **Grade** (6,8,10,12, All)
- **Location** (State, ESD, County) which is available for all to see; or (School District or School) if you have permission to view and have signed into the site. To learn more about how to access specific data, view this [document](#). You can only view one location at a time.

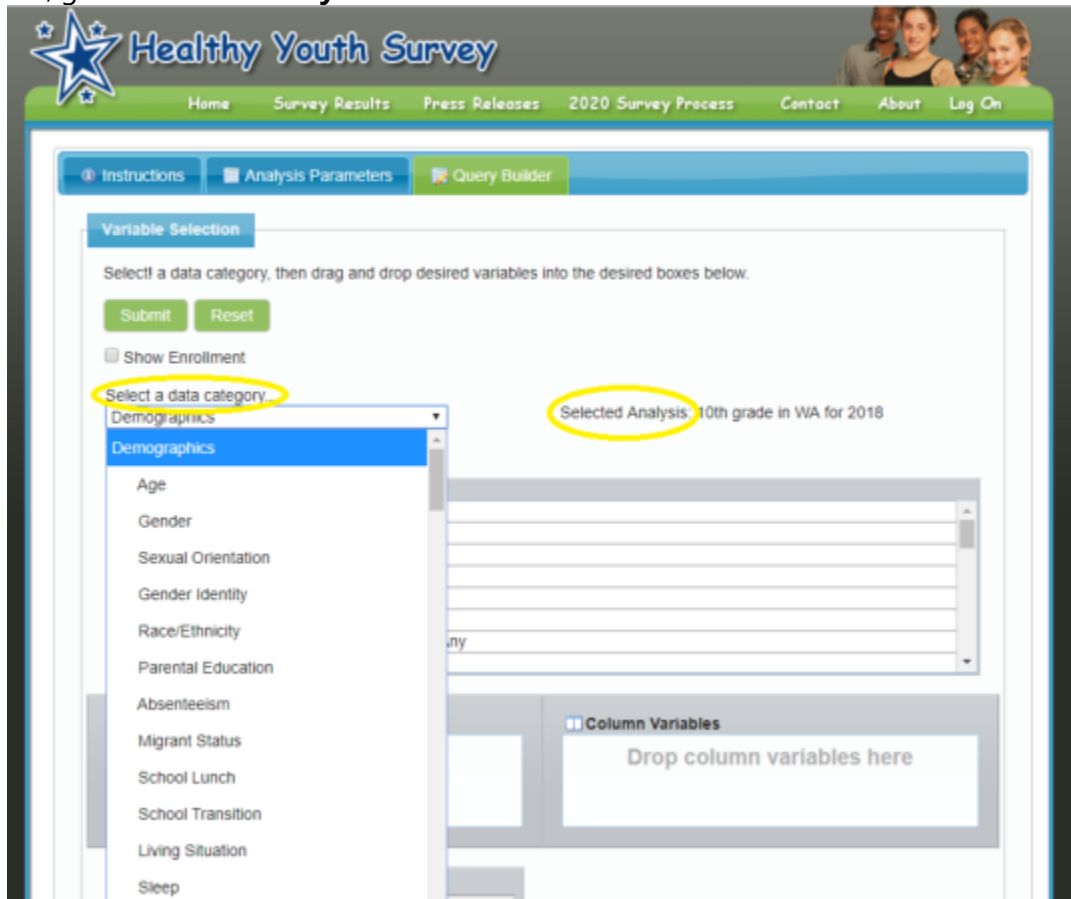
*** Please note that if you do not proactively make a selection from each category, it will default to:

- 2018 Survey
- Both Genders
- 12th Grade
- State of Washington

Once you have finished picking your parameters, click on the **Query Builder** tab or **Continue to Query Builder** at the bottom of the page.

On the **Query Builder** page, you will select the data categories that you would like to look at, by clicking on the dropdown menu.

Notice, that the tool shows you the analysis you have selected. If what is listed on the screen is incorrect, go back to the **Analysis Parameters** tab and make the correct selection.



Once you pick a category, you can see the different questions that are asked in that category. When you click on the question, it will show you the answer options in the **Description** box.

The screenshot shows the 'Query Builder' interface with the following elements:

- Navigation tabs: Instructions, Analysis Parameters, Query Builder.
- Section: Variable Selection.
 - Instruction: Select a data category, then drag and drop desired variables into the desired boxes below.
 - Buttons: Submit, Reset.
 - Checkbox: Show Enrollment.
 - Dropdown: Select a data category... (Value: Nutrition).
 - Text: Selected Analysis: 10th grade in WA for 2018.
- Available Variables list:
 - [H08] Eating Dinner with Family
 - [H118] Drinking Sweetened Drinks
 - [H07] Fruit and Vegetable Consumption (highlighted)
 - [H81] Eating Snack Foods at School
 - [H79] Usual Source of Chips or Snacks at School
 - [H84] Breakfast Eating
 - [H82] Drinking Sweetened Drinks at School
 - [H83] Usual Source of Sweetened Drinks at School
- Row Variables: Drop row variables here.
- Column Variables: Drop column variables here.
- Description panel (circled in yellow):
 - Variable: [H07] Fruit and Vegetable Consumption.
 - Text: Number of times fruits and vegetables were eaten per day.
 - Radio buttons: Collapsed, Surveyed (selected).
 - Options: 5 or more, less than 5.
- Table Variables: Drop table variables here (optional).
- Buttons: Submit, Reset.

You can either look at the results as “Collapsed” which will show them broken down into just a few categories (as shown above), or you can look at the answers as “Surveyed” which will show all the answer options (see below).

This close-up shows the 'Description' panel for the variable [H07] Fruit and Vegetable Consumption. It includes the following details:

- Text: Number of times fruits and vegetables were eaten per day.
- Radio buttons: Collapsed, Surveyed (selected and highlighted in yellow).
- Options: a. Less than 1, b. 1 to less than 3, c. 3 to less than 5, d. 5 or more.

You will need to decide which way you would like to look at the answers before you submit the query. Click on the corresponding button to choose your view.

Once you have decided how you want to view the answers, you can drag one variable into the **Row Variables** section and one into the **Column Variables**.

***When choosing the question you to put as the “Row Variable”, you want to choose the group that you are interested in. or “Among X group, how many of them also do Y.” In this example, we are interested in the students who eat breakfast (so that goes in the row), how many of them eat fruits and vegetables (column variable).

The variables you chose do not need to be from the same category, although in this example they are.

Variable Selection

Select! a data category, then drag and drop desired variables into the desired boxes below.

Show Enrollment

Select a data category...
Nutrition

Selected Analysis: 10th grade in WA for 2018

Available Variables

- [H08] Eating Dinner with Family
- [H118] Drinking Sweetened Drinks
- [H81] Eating Snack Foods at School
- [H79] Usual Source of Chips or Snacks at School
- [H82] Drinking Sweetened Drinks at School
- [H83] Usual Source of Sweetened Drinks at School

Row Variables

- [H84] Breakfast Eating

Column Variables

- [H07] Fruit and Vegetable Consumption

Description

[H84] Breakfast Eating

Did you eat breakfast today?

a. Yes

b. No

Table Variables

Drop table variables here (optional)

*** In order to cross tab two questions, the questions need to be on the same survey form. View the HYS [Data Dictionary and Crosswalk \(XLS\)](#) to find out what form a question was on as well as to see what year the question was asked. Some of the questions on the survey change from year to year.

With variables in place, you can now hit to view your answers. Results are broken down by grade level.


**Washington State
Healthy Youth Survey Online Analysis - 2018**

Statewide - Grade 10

Breakfast Eating and Fruit and Vegetable Consumption

		Fruit and Vegetable Consumption		
		less than 5	5 or more	Total
Breakfast Eating	No	85.8% ± 2.2% 1,342	14.2% ± 2.2% 223	100.0% 1,565
	Yes	80.1% ± 1.8% 1,782	19.9% ± 1.8% 442	100.0% 2,224

Interpretation: Among 10th grade students who reported eating breakfast, about 20% reporting eating 5+ servings of fruits and vegetables (FV) in a day. About 14% students who reported not eating breakfast reported eating 5+ servings of FV in a day.

If you want to do another query, go back to the **Query Builder** tab and click  .

Clicking reset will keep the analysis parameters you selected but will reset the questions.

If you want to change your analysis parameters, go back to the **Analysis Parameters** tab.

*** Note, that if you change the Survey Year or Grade on the **Analysis Parameter** page, it will reset the list of questions (variables) on the **Query Builder** page because;

- Survey questions change from year to year.
- 6th Graders take a different survey Form (C) than 8th, 10th & 12th graders who take Form A&B.

View the HYS [Data Dictionary and Crosswalk \(XLS\)](#) to find out what year a question was asked as well as to see what Form it is on.

Limitations to the QxQ :

- The two questions you want to cross-tab must be on the same [Form](#).
- If there are less than 10 responses in a single cell, an error message will pop-up and you will not be able to do the analysis. If this happens when you are trying to do the analysis with the "surveyed answers", try it with "collapsed answers".
- Always remember you are looking at potential associations between the questions and not causation.