

## Question

[Eduard Lebedyuk](#) · Jun 4, 2021

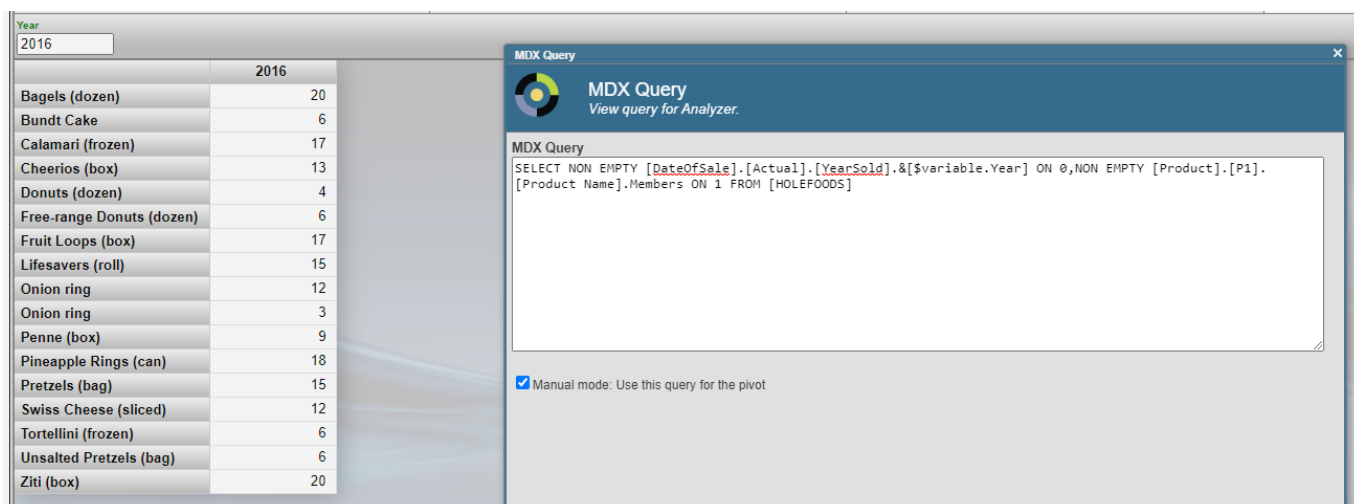
## BI (DeepSee) - calculate on pivot variable value

Is there a way to add/subtract from a pivot variable?

I have this MDX:

```
SELECT
    NON EMPTY [DateOfSale].[Actual].[YearSold].&[$variable.Year] ON 0,
    NON EMPTY [Product].[P1].[Product Name].Members ON 1
FROM [HOLEFOODS]
```

And with pivot variable Year equal to, say, 2016 it works:



Year	2016
Bagels (dozen)	20
Bundt Cake	6
Calamari (frozen)	17
Cheerios (box)	13
Donuts (dozen)	4
Free-range Donuts (dozen)	6
Fruit Loops (box)	17
Lifesavers (roll)	15
Onion ring	12
Onion ring	3
Penne (box)	9
Pineapple Rings (can)	18
Pretzels (bag)	15
Swiss Cheese (sliced)	12
Tortellini (frozen)	6
Unsalted Pretzels (bag)	6
Ziti (box)	20

MDX Query

View query for Analyzer.

MDX Query

```
SELECT NON EMPTY [DateOfSale].[Actual].[YearSold].&[$variable.Year] ON 0, NON EMPTY [Product].[P1].[Product Name].Members ON 1 FROM [HOLEFOODS]
```

☒ Manual mode: Use this query for the pivot

Now I want to add previous year first with one pivot variable and one explicit reference. It also works:

```
SELECT
    NON EMPTY
    {
        [DateOfSale].[Actual].[YearSold].&[$variable.Year],
        [DateOfSale].[Actual].[YearSold].&[2015]
    } ON 0,
    NON EMPTY [Product].[P1].[Product Name].Members ON 1
FROM [HOLEFOODS]
```

Year		
2016		
	2016	2015
Bagels (dozen)	20	13
Bundt Cake	6	11
Calamari (frozen)	17	20
Cheerios (box)	13	8
Donuts (dozen)	4	2
Free-range Donuts (dozen)	6	4
Fruit Loops (box)	17	10
Lifesavers (roll)	15	5
Onion ring	12	11
Onion ring	3	8
Penne (box)	9	8
Pineapple Rings (can)	18	20
Pretzels (bag)	15	7
Swiss Cheese (sliced)	12	7
Tortellini (frozen)	6	6
Unsalted Pretzels (bag)	6	8
Ziti (box)	20	16

Finally, I want both values to be taken from a pivot variable:

```
SELECT
  NON EMPTY
  {
    [DateOfSale].[Actual].[YearSold].&[$variable.Year],
    [DateOfSale].[Actual].[YearSold].&[$variable.Year-1]
  } ON 0,
  NON EMPTY [Product].[P1].[Product Name].Members ON 1
FROM [HOLEFOODS]
```

Year		
2016		
	2016	
Bagels (dozen)	20	
Bundt Cake	6	
Calamari (frozen)	17	
Cheerios (box)	13	
Donuts (dozen)	4	
Free-range Donuts (dozen)	6	
Fruit Loops (box)	17	
Lifesavers (roll)	15	
Onion ring	12	
Onion ring	3	
Penne (box)	9	
Pineapple Rings (can)	18	
Pretzels (bag)	15	
Swiss Cheese (sliced)	12	
Tortellini (frozen)	6	
Unsalted Pretzels (bag)	6	
Ziti (box)	20	

However the second set [\$variable.Year-1] is empty. How do I add/subtract from the value of a pivot variable?

[#Analytics](#) [#Analyzer](#) [#InterSystems](#) [IRIS](#)

Product version: IRIS 2020.1

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