### Grocery Price Trends in Nunavik 2016-2023

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### 1. Introduction

While the high cost of living is a definite concern for the people of Nunavik, the national and provincial statistical agencies do not produce data that allow this issue to be reliably documented. In an effort to mitigate this lack of data, the Nunivaat program has previously conducted a number of studies. The 2016 Nunavik Cost of Living Survey was a significant milestone in this process, not only making it possible to better document the issue, but also supporting the negotiation of a new funding agreement for cost-of-living reduction measures between the Government of Quebec and the parties representing Nunavik [2]. This agreement included provisions to promote the development of data that would allow us to better monitor price changes in Nunavik as well as the impact of measures to reduce the cost of living.

New measures comparing Quebec and Nunavik have therefore been calculated as part of the Nunivaat research program<sup>[3]</sup>. Whereas price levels have undergone significant variations in Quebec and the rest of Canada in recent years, the data available to date did not allow us to track price changes in Nunavik. Furthermore, modifications to the programs intended to reduce the cost of living may have affected the level of prices in Nunavik in recent years.

Based on a subset of panel data from the most recent studies conducted within the Nunivaat program, the present analysis aims to measure the trends in grocery prices in Nunavik in recent years and compare them with those observed for Quebec as a whole.

#### 2. METHODOLOGY

To monitor the variations in grocery prices in Nunavik, a sample of comparable data over time was compiled from the Nunivaat data sets. The follow-up period extends from January 2016 to January 2023. The reference year on which the indices are based is 2016. For this period, average price levels were calculated in such a way as to be representative of that year's price level for each of the unique products sold in the various grocery stores and communities of Nunavik.

For each of the periods, the indices were weighted in order to take into account the relative importance of the grocery stores, communities and consumption patterns of the population of Nunavik. The weights were calculated on an annual basis and were used to adjust each of the

measures calculated on a monthly basis. The weightings and the measures of price levels were calculated synchronously, i.e. the monthly measures were calculated on the basis of weightings derived from the data for the current year<sup>[4]</sup>.

The set of reference products was updated at the end of each year of the follow-up period in order to replace products that may have disappeared and thereby ensure the representativeness of the products in the sample. In order to avoid breaks in the time series, the indices were chained when the set of products was updated [5;6]. This methodological approach aims to capture the trends in grocery prices in Nunavik since 2016, while taking into account the potential changes in the supply of products and the consumption patterns of the population during this period.

The data for Quebec as a whole were taken from Statistics Canada's Consumer Price Index program<sup>[7]</sup>. For this study, only the categories of comparable food products were used for the comparative analyses, and the reference period of the time series was converted so as to match the one for Nunavik, which is the year 2016<sup>[8]</sup>.

Since the data for Nunavik and Quebec come from different sources, the comparisons could be biased by methodological differences. In addition, some sources in Nunavik do not include data prior to the current research program; consequently, only the sources that allow us to obtain a panel of data from 2016 to 2023 were retained for this analysis. In this sense, fluctuations specific to particular products or grocery stores may not have been captured by this sample.

#### 3. Results

Taking 2016 as a reference point, we observe that price trends in Nunavik differ significantly from those observed for Quebec as a whole. In Quebec, the price of food has tended to increase and as of 2021, this upward trend has intensified (Figure 1). This trend is not unique to Quebec; the same trend can be observed in the rest of Canada and in a majority of countries around the world [7;9;10].

In Nunavik, the level of food prices did not fluctuate significantly between 2017 and the first half of 2018, and during that period, the price difference with the reference period was small. Price trends in Nunavik during that period were comparable to that observed for Quebec as

Figure 1
Food price indices, Nunavik and Quebec, 2016-2023
(2016 = 100)



a whole. In July 2018, there was a marked decrease in the price of food in Nunavik compared with the reference period, an overall decrease of about 5 index points. This noticeable decrease in food prices coincided with an increase in the subsidy rates of the Food and Other Essentials Program<sup>[11]</sup>. In one month, the price of numerous categories of products fell sharply. The largest differences were for fruit, with a decrease of 22.6 index points; vegetables, with a 22.1 point decrease; and cereal products, with a decrease of 8.4 points.

Other fluctuations in price levels in Nunavik during this period could be due to changes made to the measures intended to reduce the cost of living. The decrease in prices observed in Nunavik at the beginning of 2019 coincides with the expansion of the list of products eligible for the Nutrition North Canada program (Figure 2)<sup>[12]</sup>. One year after the increase in the subsidy rates of the Food and Other Essentials Program, the subsidy rates had to be adjusted downward due to budgetary constraints, which seems to have resulted in a slight increase in the price levels in Nunavik<sup>[13]</sup>. Another decrease in prices was observed around May 2020 which may have resulted from

an enhancement to the Nutrition North Canada program during the time of the COVID-19 pandemic  $^{[14]}$ .

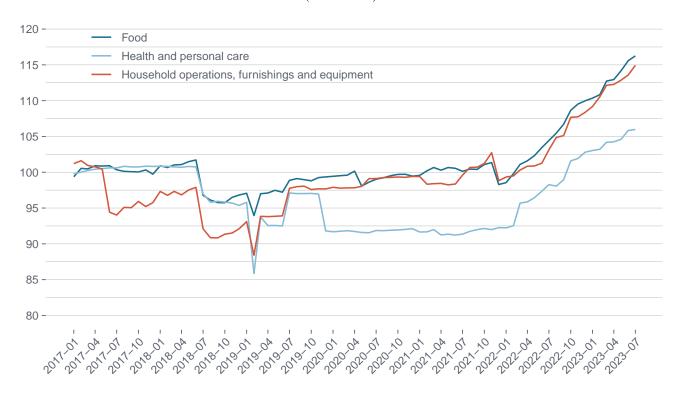
Thus, after July 2018, the level of food prices in Nunavik generally remained below that of the reference period for almost three years, while for Quebec as a whole, the price of food never returned to a level observed for the reference period.

However, beginning in the first months of 2022, just like in Quebec as a whole, inflation arrived in Nunavik, where price increases were observed for the majority of the product categories monitored: from January 2022 to January 2023, price levels increased by more than 10 index points compared to those of the reference period.

#### 4. DISCUSSION

Based on a sample of comparable data over time, this analysis has allowed us to chart recent trends in grocery prices in Nunavik. Although several factors may have influenced the price evolution captured by this analysis, including the methodology or the business context in which Nunavik grocery stores operate, these results nonetheless draw attention once again to the crucial role played by

Figure 2
Price indices by product category, Nunavik
(2016 = 100)



the programs in place to reduce the high cost of living in the region. While previous analyses have shown that an increase in in-store subsidies has helped to reduce the price gap observed between Nunavik and the south of the province of Quebec [15;3], this study suggests that the subsidies may also have slowed price growth in Nunavik. Indeed, following the enhancement of the Food and Other Essentials Program, the level of grocery prices in Nunavik remained relatively stable for almost two years, while price levels in Quebec followed an upward trend. The variations we measured indicate that a decrease in subsidy rates may also have an impact on price levels.

Finally, this analysis shows that food prices have risen sharply in the last year, both in Quebec and in Nunavik. This increase in food prices in Canada and around the world is the result of multiple factors that have affected supply chains, including labour shortages since the COVID-19 crisis, the rising cost of raw materials and energy, poor harvests due to droughts, and the Russian invasion of Ukraine<sup>[16]</sup>. However, given the high cost of living in Nunavik, an increase in prices in the region represents an even greater loss of purchasing power for

Nunavimmiut than for the inhabitants of southern Quebec.

#### NOTES AND REFERENCES

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