



Research Article

A realist evaluation of healthy food retailing interventions in small food stores in rural Newfoundland and Labrador, Canada

Rebecca LeDrew^a, Peter Wang^b, Holly Etchegary^c, Kris Aubrey-Bassler^d, Delphine Grynspan^e, Shabnam Asghari^f, Rachel Prowse^{g*}

^a Memorial University of Newfoundland

^b Memorial University of Newfoundland, University of Toronto; ORCID: [0000-0002-0682-6861](https://orcid.org/0000-0002-0682-6861)

^c Memorial University of Newfoundland; ORCID: [0000-0001-9673-0726](https://orcid.org/0000-0001-9673-0726)

^d Memorial University of Newfoundland; ORCID: [0000-0001-8680-6838](https://orcid.org/0000-0001-8680-6838)

^e Memorial University of Newfoundland; ORCID: [0009-0002-8931-5676](https://orcid.org/0009-0002-8931-5676)

^f Memorial University of Newfoundland; ORCID: [0000-0002-4970-0978](https://orcid.org/0000-0002-4970-0978)

^g Memorial University of Newfoundland; ORCID: [0000-0002-3015-2385](https://orcid.org/0000-0002-3015-2385)

Abstract

We aimed to evaluate the core factors affecting feasibility and impact of community-based healthy food retailing interventions in two private food retailers in rural Newfoundland and Labrador. We conducted a case study realist evaluation which investigates the complexities, effects, components, and inner workings population health interventions (i.e. healthy food retailing). We conducted qualitative, semi-structured interviews with stores before (November 2022) and after (February 2024) self-selected healthy food retailing interventions were implemented. Content analysis was used to code interview transcripts and create Context-Mechanisms-Outcome (CMO) statements representing how actions to create healthy food retailing work. Participating stores designed food retailing interventions aimed to increase healthy food availability,

accessibility, affordability, and acceptability through new online ordering and delivery services with healthy food recipes (S1) and changes to store equipment and food packaging (S2). CMO statements highlighted determining factors of (i) community mindedness and feedback, (ii) store status in the food system, (iii) bulk buying, (iv) advertising and communication, and (v) level of establishment. Various concepts of smallness influence the ways in which the outcomes of interventions manifest in the store's operations and its relationship with its customers. Success of healthy food retailing interventions were related to factors beyond the 'food' itself. The potential 'mix' of contextual and mechanistic factors that will generate the ideal outcome must be adequately appreciated to advance healthy food availability, accessibility, affordability, and

Keywords: food, food supply, rural population, community-based participatory research, health promotion, population health intervention

*Corresponding author: rprowse@mun.ca

© 2026 by the Author. Open access under CC-BY-SA license.

DOI: [10.15353/cfs-rcea.v13i2.763](https://doi.org/10.15353/cfs-rcea.v13i2.763)

ISSN: 2292-3071

acceptability in rural food stores and communities. These explanatory findings can inform future design, adoption,

adaptation, and implementation of healthy retailing interventions in NL and Canada.

Résumé

Notre objectif est d'évaluer la faisabilité d'interventions communautaires favorisant la vente d'aliments sains dans deux commerces de détail privés de Terre-Neuve-et-Labrador et d'en déterminer les impacts. Au moyen d'une étude de cas, nous avons mené une évaluation réaliste des difficultés, des effets, des composantes et des mécanismes internes de certaines interventions en matière de santé publique, plus précisément dans la vente au détail d'aliments sains. Nous avons réalisé des entretiens qualitatifs semi-structurés avec les propriétaires des commerces avant (novembre 2022) et après (février 2024) les interventions qu'ils avaient eux-mêmes choisies. Une analyse de contenu a permis de coder les transcriptions d'entretiens et de formuler des énoncés « contexte-mécanismes-résultats » (CMR) qui puissent illustrer le fonctionnement des actions visant à promouvoir la vente d'aliments sains. Les commerces participants ont mené des actions liées à la distribution avec pour but d'accroître la disponibilité, l'accessibilité, l'abordabilité et l'acceptabilité des aliments sains : un nouveau service de commande en ligne et de livraison offrant des recettes santé (S1) et des changements dans les équipements des magasins

et les emballages alimentaires (S2). Les énoncés CMR ont mis en lumière les facteurs déterminants que sont (i) l'ouverture d'esprit et la rétroaction de la communauté, (ii) le statut du magasin dans le système alimentaire, (iii) l'achat en gros, (iv) la publicité et les communications, et (v) le niveau de l'établissement. Les diverses conceptions de la petitesse du commerce influencent la manière dont les résultats des interventions se concrétisent dans son fonctionnement et dans ses relations à la clientèle. Le succès des interventions a été relié à des facteurs qui dépassent la nourriture elle-même. La combinaison potentielle de facteurs contextuels et mécaniques susceptible de produire le résultat idéal doit être soigneusement considérée pour faire progresser la disponibilité, l'abordabilité et l'acceptabilité des aliments sains dans les commerces alimentaires et les communautés des milieux ruraux. Ces explications pourront contribuer aux futures interventions axées sur la santé dans le commerce de détail à Terre-Neuve-et-Labrador et au Canada, que ce soit pour la conception, l'adoption, l'adaptation ou la mise en œuvre.

Mots-clés : alimentation, approvisionnement alimentaire, population rurale, recherche communautaire participative, promotion de la santé, population, intervention en santé

Introduction

Newfoundland and Labrador (NL) has a small but dispersed population of half a million persons (Statistics Canada, 2023). Linked to historical coastal fishing communities, NL maintains a high rural population (Statistics Canada, 2022). Unfortunately, rural communities experience economic, social, and health inequities compared to urban areas. People who live in rural communities in NL have greater risks of chronic disease (Kettle et al. 2005); higher prevalence of disease (Lukewich et al., 2020), and worse disease management (Lukewich et al., 2020). For example, there was a higher

prevalence of diabetes among all age and sex groups in rural communities compared to urban communities in NL, and rural residents living with diabetes had worse HbA1c and LDL cholesterol levels, and higher rates of hospitalization than urban residents living with diabetes (Lukewich et al., 2020). In 2025, total per capita health care costs in NL exceeded all other provinces, except Nova Scotia (Canadian Institute for Health Information, 2025). The cost of dietary intakes misaligned with national dietary guidelines was estimated to be \$15.8 billion in direct and indirect costs

per year in Canada, highly driven by inadequate intakes of healthy foods (whole grains, nuts and seeds, fruit and vegetables) (Loewen et al., 2019).

The causes of diet-related chronic diseases in NL are both economic and social (Health Accord NL, 2022). As such, interventions to reduce dietary risks require population-level actions, beyond individuals, that exist outside the health sector. Food environments, the physical, economic, and communication factors that influence food choices, are recommended targets for population-based interventions to create communities that support and facilitate healthy eating (Raine, 2005). When considering how food stores impact population diets, the International Network for Food and Obesity / Non-communicable Diseases Research, Monitoring and Action Support (INFORMAS) Food Environment and Policy Index (Food-EPI) recommends healthy food promotion and availability (and restrict unhealthy food promotion and availability) in stores as a “good practice” in support of healthy eating (Vanderlee et al., 2023). In 2023, NL ranked “low” in its achievement of this benchmark (Vanderlee et al., 2023).

Food retail interventions for healthy eating promotion are an emerging research area (Hartmann-Boyce et al., 2018; Slapø et al., 2021). Low quality studies (Slapø et al., 2021) and high heterogeneity (Hartmann-Boyce et al., 2018) in retail intervention research create uncertainty around the success of these interventions. A recent systematic review

found success of interventions in simulated settings but not in real life settings (Hartmann-Boyce et al., 2018). Real-life population health interventions that aim to understand the process by which interventions work, and how they work, are needed (Hawe & Potvin, 2009). In particular, high-quality, rural-specific studies are needed to assess the context-dependent impact of such interventions (Slapø et al., 2021). Recent research on food stores in NL has identified multiple, complex factors impacting healthy food retailing in rural communities whereby independent ownership increases capacity to meet community needs but conventional food systems disadvantage small, rural stores (Le Drew et al., 2025). More research is needed to understand how these factors may affect the success of healthy food retailing interventions.

In partnership with Food First NL, a provincial non-profit organization, we conducted a community-based retail intervention project called Great Things in Store (GTiS). Based on community needs, rural food stores participating in GTiS co-designed and implemented healthy food retailing interventions for their own stores, supported by Food First NL. This study aimed to evaluate core factors affecting the feasibility and impacts of GTiS healthy food retailing interventions in food stores in rural communities in NL. We considered the impacts of interventions to be related to storeowner perceptions of food availability, accessibility, acceptability, affordability, consumer attitudes, and purchasing behaviours as per our conceptual model developed with Food First NL (Figure 1).

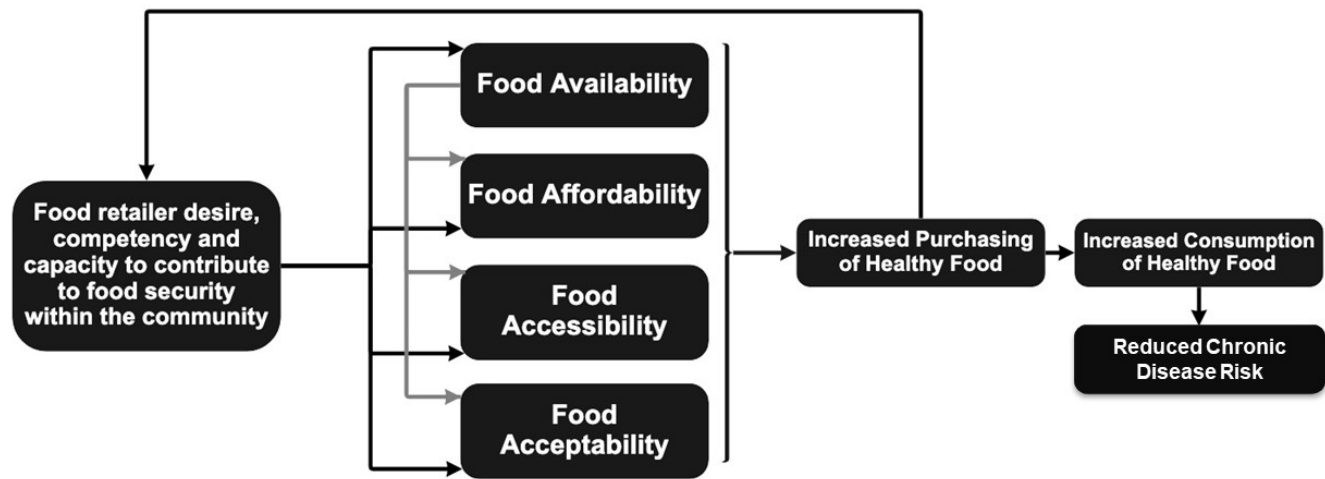


Figure 1: Conceptual Model of Healthy Food Retailing Interventions in Community Food Stores in Rural Newfoundland and Labrador (Stuckless, Wang & Prowse, 2022)

Methods

We conducted a case study realist evaluation of food store interventions within the project. Realist evaluations are valuable for population health intervention research (Hawe & Potvin, 2009) and investigate the complexities (Marchal et al., 2012), effects, components, and inner workings of interventions (Kazi, 2003). This study was approved by the Health Research Ethics Authority of NL (20222741).

Participants and sampling

Food First NL recruited food stores through advertisements on social media, and through email listservs and community networks. A total of 35 retailers applied to participate, of which only eight were considered eligible. The requirements were as follows: sole proprietor of a conventional food store that sold whole, unprepared food and offered a range of food categories, had control over store features and operations, amenable to a healthy food retailing intervention, and located within rural regions. We defined rural as having less than 1000 persons with a low population density (<400 persons per square kilometer) within census subdivision areas according to Statistics Canada (2023), aligning with provincial and national definitions of rurality (Simms & Greenwood, 2021; Statistics Canada, 2022). From these eight, the research team selected three retailers using maximum variation purposive sampling (Palinkas et al., 2015) whereby stores were evaluated based on their store offerings, interest level, goals, location, knowledge of determinants of diet, and awareness of clientele. Consensus decision-making was used with the research team to select three stores that offered variation in location, ownership, and operating style along with high interest and motivation to participate. Two eligible stores in Labrador were not considered due to logistical, financial, and ethical challenges. Stores were first contacted by Food First NL to confirm participation in GTiS and then contacted by the study team to obtain consent to participate in the research study. Stores signed a general study consent form covering all study information and activities; verbal consent was sought prior to each data generating activity.

Study procedures and timelines

The study design, tools, and procedures were co-developed and executed with Food First NL as study partners (Stuckless et al., 2022). Stores were supported by Food First NL staff during the intervention planning and implementation period who provided capacity-building, regular check-ins, and on-demand support. Funding of \$17,500 was provided to each store for necessary purchases and expenses associated with their intervention. The stores were given full control to design a healthy food retailing intervention they felt best supported health in their community. Intervention parameters were minimal as the project intended to support community-based decision making. Goals for intervention were informed by public meetings in each community held with the food store, research team, and Food First NL. At these community meetings, attended by members of the public and local stakeholders, we explored the communities' explanations of factors that make it harder or easier to purchase healthy foods through brainstorming, storytelling, mind maps and a "dotmocracy" priority setting activity. An example of a mind map is provided in Supplemental File 1. If needed, participants were prompted to explore the topics of food availability, accessibility, affordability, and acceptability as per our conceptual model for the project (Figure 1). The participating stores then self-selected actions to improve food-related factors that they felt met their community's needs. Intervention planning took place between January–June 2023, followed by a six-month implementation period (July 2023–January 2024).

Data collection

Storeowners completed semi-structured interviews with a trained research assistant before (November 2022) and after (February 2024) the interventions. Interviews explored the store, its role in the community, relationship with customers, expectations of GTiS, healthy food retailing, most and least successful changes, and factors impacting healthy food retailing (Supplemental File 2). Interviews were conducted in person at baseline and by video at follow-up, and were audio recorded and transcribed verbatim both times. All owners in each store

were interviewed at baseline (two owners in stores one and two, and the singular owner from store three); at follow-up, only the most active owner was interviewed in stores one and two as per participants' decisions. Notes from the project coordinator, team meetings, and baseline community meetings held during intervention planning were included as supplemental qualitative data. One store voluntarily withdrew during the intervention period due to insufficient capacity; all data from that store has been excluded from this analysis.

Data analysis

Qualitative data was managed in NVivo 12 (QSR International) and Microsoft Office. Data were coded by the research team using content analysis to identify concepts relevant to understanding the design, feasibility, implementation, and impact of healthy food retailing in participating stores. Codes were then classified as contexts (C), mechanisms (M), and outcomes (O) and used in collaborative research team discussions to generate CMO configurations. A CMO is a heuristic that is used to explain causation in program theory and helps identify explanatory factors to better understand and describe what works, for whom, and in what circumstances (De Brún & McAuliffe, 2020; De Weger et al., 2020; Slater & Kothari, 2014).

CMOs demonstrate underlying contributors to the choice of healthy food retailing, the feasibility of healthy food retailing interventions, and the impact of interventions. We considered outcomes to be items related to intervention design and feasibility, and storeowners' goals and perceived impact of intervention on food availability, accessibility, acceptability, affordability, consumer attitudes, and purchasing behaviours (Figure 1). Contextual and mechanistic factors were not constrained by any a priori model. The CMO configurations are intended to be useful explanations that can inform future design, adoption, adaptation, and implementation of healthy retailing interventions in NL, Canada, and internationally.

Results

Case descriptions

Store 1 (S1) was located in a community of about 650 people (Statistics Canada, 2023), 60 kilometres from St. John's, the capital city of the province. Established over 100 years ago, it is the largest food store within a half hour drive in either direction and receives considerable business from surrounding communities. S1 implemented two interventions: (1) healthy recipe cards placed throughout the store for six weeks (Sept-Oct 2023) to increase purchases of low-sale vegetables and fruits, and (2) an e-commerce website, developed to offer online ordering of any store items with delivery (within 30 kilometres of the store) and pick-up options, established December 2023.

Store 2 (S2) was located in a community of about 300 people (Statistics Canada, 2023), 140 kilometers from St. John's and was established in 2017. The nearest food retailer is 15 minutes further down the highway in another small community with approximately 1000 people (Statistics Canada, 2023); full-service grocers are another 35 minutes further in a larger city. S2's intervention aimed to increase food accessibility and to reduce food waste with its intervention by purchasing equipment (electric meat saw, commercial vacuum sealer, price computing scale, freezer) to repackage foods into smaller portions for customers. The intervention was launched in November 2023.

(C)ontext, (M)echanism, (O)utcome Configurations

Five CMOs identified core factors affecting feasibility and impact of interventions: (i) community mindedness and feedback, (ii) advertising and communication, (iii) bulk buying, (iv) store status, and (v) level of establishment (Figure 2). In the descriptions below, CMO configurations generalized across cases are denoted with capitalized "C", "M", and "O"; descriptions of CMOs by case study are denoted with lower case "c", "m", "o". Numerical annotations attached to CMOs correspond to Figure 2. Table 1 includes exemplar quotes.

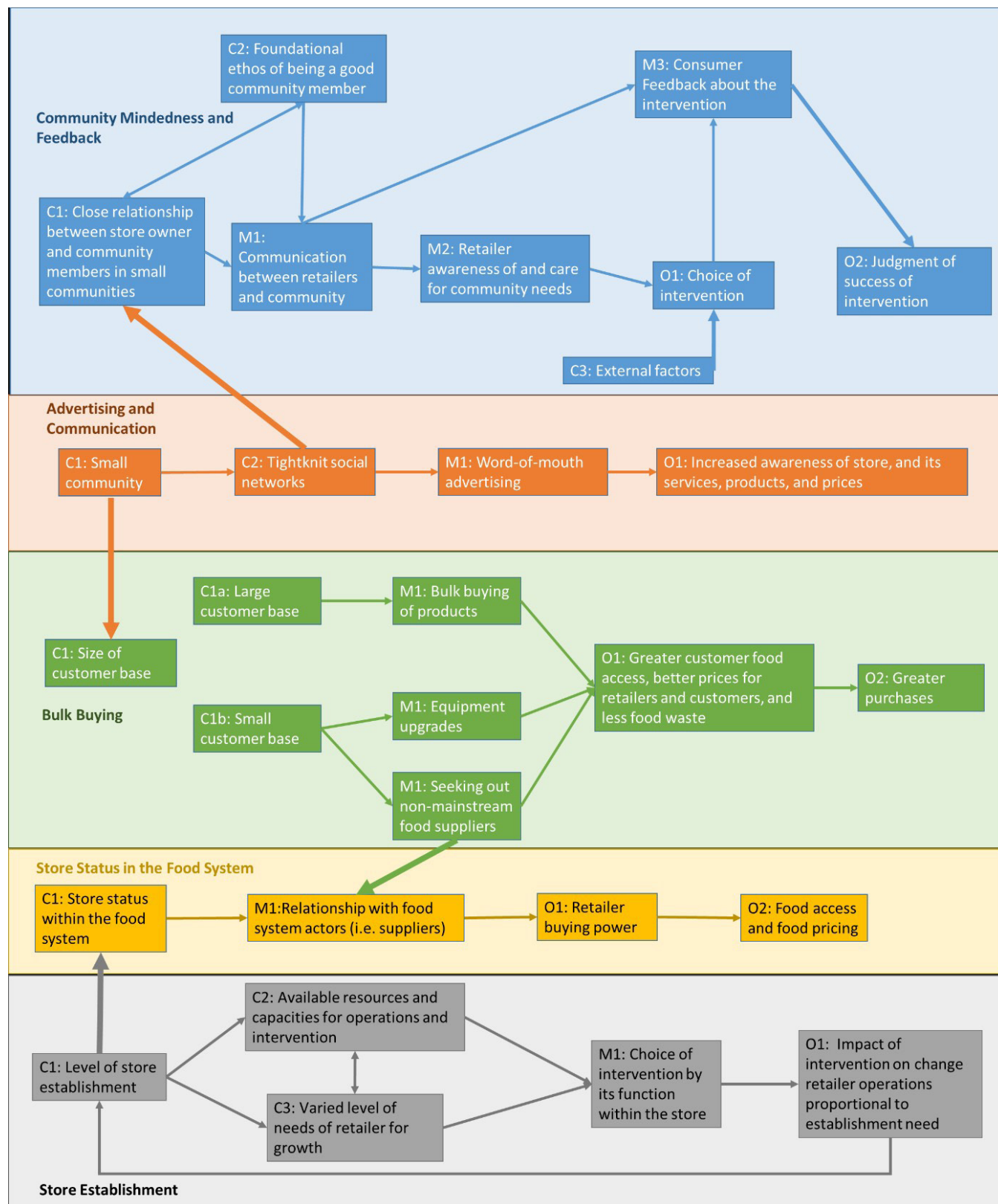


Figure 2: Context-Mechanism-Outcome Configurations Describing the Feasibility and Impact of Healthy Food Retailing in Two Case Study Rural Food Stores in Newfoundland and Labrador (C=context, M=mechanism, O=outcome). Numbers next to C,M,O, denote order of C,M,O factors. Arrows denote theorized relationship between C,M,Os.

Community mindedness and feedback

Stores approached their interventions from a position of community care and valued input from their consumers. Consumer input was weighed against various external factors that impacted business, such as weather, seasonality, and transient consumers. Small stores in small communities meant that owners had greater contact with customers resulting in more customer feedback. Store-owners in small communities had close relationships to community members (C1) and a foundational ethos of being a good community member (C2), which facilitated direct communication between the store and community (M1) leading to store owner awareness of, and care for, community needs (M2), which dictated healthy food retailing intervention choice (O1), moderated by other external limiting factors (space, money, etc.) (C3). After the intervention was implemented, feedback provided by, or solicited from, community members (M3) allowed the stores to judge how successful the intervention was against initial expectations (O2). The storeowners received consumer feedback differently, however. S2 held multiple roles within the community extending beyond the store, providing regular contact with residents. As the manager of a legacy business, S1 had an established role within the community, but not beyond the store.

S1's long history was an apparent function of its ability to adapt in ways to meet community needs. S1 approached GTiS with the desire to be a good community member and judged the success of the intervention on the basis of community input: "...my goal from this whole start was to be a better community member, so it's listening to community and hoping that the community keeps feeding back and keeps giving us ideas if there's something we're not doing...That's the whole point of this". For S1, the storeowner's desire to be a good community member (c) made them open to feedback (m) which they incorporated into store operations, including choice of, and evaluation of, their intervention (m) through the degree of community approval (o).

S1 was aiming to design their recipe intervention based on community feedback: "...you always hear the comment, especially from some of the senior ones, 'I don't know what to cook.'" They felt that the interven-

tion had been well received and slowed declining sales related to inflation. Further, they started a delivery service attached to a new online ordering system after hearing that access to the store was a barrier for some customers, such as seniors. While S1 believed the community welcomed the website, greater use of the website and delivery service was needed to make the return on investment.

Unlike S1 (who stepped into a managerial role in a well-established family business), S2 was driven by their established leadership role in the community and concern for their community; S2 said "that kind of drags us to the store, really... just watching stuff that was leaving the community...listening to so many people say, 'Well, there's nothing in the community, what are we here staying for? We got nothing to keep our children here for'...so then we decided to, we were talking about it one night...from the time we started and got done I think we're, well the time I actually started building the store we were three months had her open. And if I was told, it probably was 5 months altogether by the time we got all the permits and everything in place". Specifically, they were inspired by observed challenges with outmigration from the town and aging populations with growing health and mobility challenges: "I looked at it as, some way we could help the people, and especially I thought about seniors, people with disabilities, ... seems like there's a lot more sick people around than healthy people..." For S2, the storeowner was well known and approachable (c), leading to several individual consumer requests (m), resulting in retailing changes to meet consumer demand (o). S2 also believed that their choice of intervention was guided by community input, which was reinforced by positive feedback.

Advertising and communication

In small communities (C1) where there are tightknit social networks (C2), such networks can be leveraged for word-of-mouth advertising for greater reach beyond conventional advertising (M1) to increase awareness of the store, and its services, products, and prices (O1). Beyond online strategies to inform consumers about their stores' products and services, stores employed more organic communication strategies to reach other individuals.

S1 introduced a new website and appeared to have

been successful in attracting new customers and increasing sales; it has drawn “a couple of new customers to me now that I know of...but they’re new with regards to taking a bit of a bigger order...they probably had been in the store before and...got an item here or there, but...with the website...they can actually see...more in depth as to what we have in stock and pricing, so it allows them to do some shopping and do some comparison to what’s on the go around...”. Despite this success, S1 postulated that non-digital social networks might be a way to increase reach. Seniors were the target population for the delivery intervention, but they were not being reached by traditional advertising channels (e.g. television, radio, social media) (c), leading the storeowner to believe that family networks need to be leveraged (m) to increase awareness and uptake of the intervention (o). As the “webpage is now a part of our business”, S1 hoped that with “a bit more pushing it, a bit more prodding, we’ll hopefully get more and more people taking it”.

In S2, the owner was also concerned with informing their consumers about the store’s offerings, but they took a less direct approach to communication believing in the value of word-of-mouth, which they described as “little fires”. S2 remarked that once they started stocking items like broccoli and cauliflower, customers would come in, saying things like, “I heard you have broccoli!”. They recounted an anecdote about a customer telling another customer in a [nearby community] grocery store that S2 had better prices on meat products, a fact which they believed had led to more people coming in to shop there.

Bulk buying

In the context of creating successful healthy food retailers, bulk buying is a strategy that is used effectively when there are sufficient customers to support the purchases without producing waste: Larger customer base (C1a) leads to buying products in bulk amounts (M1), which supports greater customer access to food and better prices for both retailer and customers without food waste (O1) and leads to greater purchases (O2). Where bulk buying was not possible, retailers turned to less conventional strategies such as cultivating relationships with small-scale local suppliers who furnished them with goods at a reason-

able price and in practical quantities. For S2, the smaller customer base (C1b) led the storeowner to seek out non-mainstream food suppliers that do not have the same minimum purchase requirements (M1) and equipment upgrades to portion and store perishable products (M2). This approach supports greater customer access to food and better prices for retailer and customers and reduces food waste (O1) and increased purchases (O2). The strategies S2 used to overcome minimum purchasing requirements are part of an overall intimate local food system the store participates in where there is a close relationship between retailers and producers.

S1 appeared to have an adequate consumer base to justify bulk buying, boasting “500 rings” (sales) a day. S1’s large customer base supported the development of an online ordering system and pick-up or delivery options, which reinforced their customer base through greater purchases. The interventions seemed to further their capacity to buy more food, and higher quality food: “...there’s more of a demand, especially for fresh produce. I’m bringing in a bit more variety of fresh produce. A better-quality product, too, because I’m able to order a little bit more in bulk, because sales increase of it. So that gives us better quality. And then it also helps us reduce the price of it, too. Buying in bulk is a lot cheaper than buying single pick items.”

The customer base of S2 is much more limited than S1 and perceptions of bulk buying were more negative. S2’s experience with bulk buying through traditional suppliers was challenging due to food waste and associated financial loss, especially with fresh produce. The quality of produce S2 was receiving, particularly fruit, was already quite poor and getting larger quantities just left the store with more spoilage: “...you used to order so much in bulk and then it would spoil on you before you got a chance to sell it all.” S2 was continuously navigating restrictions of minimum purchase orders, which often forced them to buy in bulk even if the demand was not there. A 40lb box of cabbage received at the store one day turned into only 24lbs of sellable cabbage after damaged, wilted, and mouldy cabbage was discarded. During the intervention, in which S2 purchased a vacuum sealer, meat saw, and freezer, they were able to procure meat from a local beef farmer. Here, bulk buying became an advantage: they

bought quarters of beef, cut it up and packaged it, declaring that they were able to secure better prices with that strategy. Further, having the freezer allowed them to reduce waste. The increased capacity of S2 to bring in bulk items appears to be linked to the increase in business due to the equipment upgrades to package and offer single, “perfect portions” to customers.

Store status

Stores’ experiences with procuring supplies depended on their ownership model. A store with a consistent supplier, as is the case with a banner program which is linked to a corporate grocery store (S1), can readily access information, cheaper prices, and greater variety products. Stores without any corporate ties (S2) are neither guaranteed consistent supply nor consistent pricing. In general, store status within the corporate food system (C1) fosters relationships with food system actors (i.e. suppliers) (M1), which have variable impacts on retailer buying power (O1) and food access and pricing (O2).

S1 joined a corporate banner which “allowed independents to come together under one umbrella and give them better buying power”. Their corporate partnership allowed them to choose the items they stock and also allowed them to set their own in-store sale prices. They typically relied on their corporate partner because they received better prices and product variety than with other suppliers. Being part of a corporate banner (c) provides an established supply chain for the retailer (m), which generates buying power and access to produce variety (o1), which leads to improved food availability and in-store pricing (o2).

In S2, the owner noted differences between suppliers pertaining to price, quality, minimum purchasing requirements and even visibility of stock items on the wholesaler website. This resulted in inconsistencies affecting S2’s operations and prompted alternative solutions to increase buying power, such as price shopping between suppliers, networking within the food system, and advocacy. As an independent, rural convenience-style food store (c1), S2 experienced challenges with food availability, prices, quantity, quality, and consistency from suppliers (c2) which encouraged network-building with local food

system actors (m) to increase store buying power to secure food products (o1) and allowed the storeowner to increase access to a greater variety and better priced foods (o2).

While S2 started as a convenience store, stocking primarily those food items that customers typically run out of and need to replace at a moment’s notice, it has been evolving towards carrying a fuller range of groceries. Unfortunately, convenience store status created real or perceived limitations to achieving that goal. S2 cited the example of being unable to bring in a canned good because available stock was reserved for bigger retailers. They also claimed that “[j]ust for being a convenience store, [distributors] charges you more ’cuz they think they can charge you more.” S2 actively cultivated retailer networks and collectively strategized to increase their buying power. With a nearby retailer, S2 agreed to “group buy” certain items, particularly produce, thus, reducing cost and in-store food waste. Working with GTiS gave S2 even more impetus to further their retailer network-building, where the ultimate goal of such a network is to achieve better and more equitable buying power for local and small businesses.

Store establishment

From expanding to evolving: The two stores represent opposite ends of a spectrum: while S1 has operated within the same family since 1886, S2 has existed for less than a decade. The level of store establishment (C1) affected the available resources and capacities of retailers (C2) and needs of retailers for growth (C3). Thus, stores chose interventions by the interventions’ function within the store (M1) and its potential to impact store operations proportional to the level of need (O1). When choosing an intervention, the retailers made decisions based on what would best improve their stores’ operations.

The decision for S1 to develop a website with delivery and pick-up options was influenced by their sense of needing to modernize their well-established business. S1 credited the store’s longevity to an ability to evolve: “We’ve always been willing to change and we’ll always be willing to change...it’s either adapt and move on or stay the same and fall behind.” As an established business, S1, had the advantage of greater resources. Due to their legacy, howev-

er, they also suffered from innovation fatigue and felt that they had limited room left for meaningful growth; S1 felt stagnant: “I guess being around so long for us, we seem, to seem to think that we’ve done it all.” However, being a well-established business offered numerous advantages and opportunities. S1’s intervention, website with online ordering options for delivery or pick-up, appeared to be relatively simple to implement since the store had proof-of-concept of delivery services provided 20-30 years ago, a vehicle, sufficient staff, a fully computerized point of sales system, digitized inventory, and an existing relationship with a company that could integrate these digital features into a website. As a result, they did not have to invest significant resources into the intervention, aside from the cost of web development and monthly hosting fees. As an established store (c), S1 has existing capacity and resources to leverage (m) to implement online ordering systems with pickup and delivery options (o).

As a less established store, S2 was still developing their business model. In this case, interventions effective at building the store’s capacity were as simple as acquiring more equipment. The choice to purchase equipment helped establish the business as a grocery store with more diversified options. S2 described their situation as follows: “[w]e’re expanding, we’re trying to expand right at the moment. More of a demand, first we started out with, like, basically things you might run out of, but now we’re expanding more into a grocery, or trying to go that way.” S2 continuously expressed a number of creative ambitions for the store, including expanding the store to accommodate a mini farmers’ market.

Unfortunately, S2’s ambitions were hampered on several fronts relating to their degree of establishment. Lack of staff and physical space limited their opportunities to operate and expand. Providing a wide selection of healthy food is a top priority for S2; they relayed that customers on numerous occasions have told them that if the store had more stock, they would not leave the community at all to shop. The budget of physically expanding the store is well beyond the scope of GTiS grant, thus, they chose to invest in equipment, including a meat saw, a vacuum sealer and a fridge instead. The small equipment changes through the intervention are believed to have had a major impact on their operations and growth. These increased S2’s capacity to scale up product offering and helped to establish S2 by levelling the playing field of tools and appliances that larger retailers would have as part of their businesses. The rationale behind S2’s intervention choices follows a simple CMO: S2 is building their business (c), therefore, the choices of intervention are focused on establishing the store with features of a conventional retailer (m) which transitions their business towards a full-service grocery retail model (o).

Discussion

This study aimed to evaluate the core factors affecting the feasibility and impact of community-designed healthy food retailing interventions in food stores in small rural communities in NL. Using a case study realist evaluation, we explored contextual and mechanistic factors that give

CMO Statements	Store 1	Store 2
Close relationships to community members (C ₁) + foundational ethos of being a good community member (C ₂) → direct communication (M ₁) → awareness of community needs (M ₂) → healthy food retailing intervention choice (O ₁), moderated by external factors (C ₃). Feedback from community members (M ₃) → storeowner perception of intervention success (O ₂)	“We’ve never been...afraid of change...we’ve been around for 135 years... we’ve changed based on what the community has asked for.” “No trouble for someone, a customer to come up and ask for something or to pass feedback in store too, you know, you gotta be willing to listen and be open to some constructive criticism, so to speak.”	“....this was a good experience of how we work together and trying to figure out the best solutions for people... they still was putting the word around and talking to people in the community about it. As well as people coming into the store and checking on it... It takes a while to get stuff in play and get stuff, introduced to people... Some people were buying into it... I found it good and people found it good.”

Table 1: (C)ontext, (M)echanism, and (O)utcome Configurations and Exemplar Quotes by Store. (*Table continues on following page.*)

CMO Statements	Store 1	Store 2
Tight knit social networks (C ₂) → word-of-mouth advertising (M ₁) → awareness of the store, and its services, products, and prices (O ₁)	"It might be still some, some of the seniors that, uh, we're still not catching for various reasons, but, you know, hopefully with, you know, their family members, you know, it's, it's a tight knit community so, hopefully, their family members will pick up and pass it along." "We're trying to figure out other ways where we can access these people, or get more information in their hands..." "...it's getting the family members to sit down and, and, and bit of patience with them to help them navigate through the website and everything else and how to do it, and stuff like that." "We're looking at other ways where we can get [the website] out... just have a look, you know, you don't have to set up an account [to the website], just have a look. You can go in and you can explore, you can have a look around the web page, and then if you want to place an order, then you can go ahead and set up your account."	"We used to do a little bit on Facebook, but, you know, with the people around...the word of mouth is that some you know, it is good... it's like little fires or something like that, you know, better." "...usually when people sees you're in with something, they're more prone to come to you ...look and see what's there...and then they're talking to their buddies, they're talking to the person down the road and talking to the next community." "...one person come into the store one day. She said she was down in [the nearby city] in the grocery store and there was another lady there. She said, 'get that up to [Store 2]', was bologna it was, and she said 'it's cheaper'. It was cheaper [in Store 2] than what it was down there [in the grocery store]. So then we had them come in looking for the bologna."
Larger customer base (C ₁) → bulk buying (M ₁) → greater customer access to food + better prices without food waste (O ₁) + greater purchases (O ₂)	"Yeah, there's more of a demand, especially for fresh produce. I'm bringing in a bit more of a variety of fresh produce. A better quality product too, because I'm able to order a little bit more in bulk because sales increase of it. So that gives us better quality. And then it also helps us reduce the price of it, too."	"I've been trying to avoid the spoilage and having to bring in so much bulk stuff, trying to find it, trying to find a way to do that." "people like stuff vacuumed up,...like, pork chops. We find fresh pork chops, and then put in, like, 1 or 2 pork chops in the vacuum sealer and vacuum them up. And we found that great too, especially for the workers and stuff. I mean, that worked good, not only for workers, too, but also for people in the community, like the older ones, like, instead of them buying a package of pork chops with four in it or five in it and then it going bad on them. They'll come to the store and buy a couple of pork chops in the vacuum sealer.." "...probably 50% more than it was...more business, more healthy foods and people coming in for the single portions..."

Table 1 (cont'd)

CMO Statements	Store 1	Store 2
Store status within the food system (C ₁) → relationships with food system actors (i.e. suppliers) (M ₁) → retailer buying power (O ₁) and food access and pricing (O ₂)	"[national grocer partner] is our main distributor. They don't limit us as to what we can get or can't get...if they don't have it, then we're free to buy from any other distributor that has." "...as part of the [store banner program] we tend to get the better prices..." "...we tend to have a good variety...we always offer a name brand...and a private label...we tend to offer the main brand and a cheaper alternative."	"One of the biggest challenges we have is we're a convenience. We're not treated the same as the big stores." "...I would call up and say, [nearby retailer], how are you doing for your order this week, like with cauliflower and lettuce...And he'll say...I only need probably 5 or 6, and I'll say, well, I only need 5 or 6, so we'll order in 12 and split the cost" "I'm trying to... with the local businesses and the small businesses, convenience stores about getting together and trying to find out why we can't get access to product and why we have to pay so much for a product, as opposed to the big [grocery chain] stores and stuff, right. To me, I think we should be treated fair in the same thing and be able to offer the same prices."
Store establishment (C ₁) → available resources and capacities of retailers (C ₂) + needs of retailers for growth (C ₃) → interventions choice according to function within the store (M ₁) → impact store operations proportional to the level of need (O ₁)	"we've evolved, obviously, over the years, that's why we're still in business." "It was the challenging at times trying to figure out what to do to help the community, how we can help the community... I guess being around so long for us, we seem to seem to think that we've done it all. It's trying to come up with something new, something different, something that community itself would embrace. So, you know, that, of course is always a challenge."	"[w]e're expanding, we're trying to expand right at the moment. More of a demand, first we started out with, like, basically things you might run out of, but now we're expanding more into a grocery, or trying to go that way." "I'm building on, right, I was going to have to do with some tied in, with my, my fishing and the farmer's market all into one. And I really think that will go over good when people can come in and buy fresh fish, fresh cod, fresh lobster and all fresh fruits and vegetables, right, yeah, getting it off local farmers and that."

Table 1 (cont'd)

rise to outcomes. Five CMOs describe core factors related to the design, feasibility, and impact of retailing interventions: (i) community mindedness and feedback, (ii), advertising and communication, (iii) bulk buying, (iv) store status, and (v) level of establishment.

CMO statements help to answer the question in realist studies of, "what works, for whom, and in what circumstances?" (Slater & Kothari, 2014). Across all CMOs, the size of both the businesses and their respective communities is a common contextual factor that advances our understanding of what intervention strategies were most successful for the individual retailers and why.

There are multiple degrees of smallness revealed in this study—community size, number of sales per day, physical footprint of store, store status, level of establishment, standardized practices and operations—which impact the ways in which the outcomes of interventions manifest in the store's operations and its relationship with its customers and the wider community. While small, rural stores may face numerous challenges, some are better positioned than others to meet those challenges. Smallness is visible throughout the CMOs related to relationships between communities and retailers, and the operations of the store. Displays of smallness in mechanisms and contexts interact

across CMO configurations reinforcing one another and producing outcomes. In Figure 2, arrows that cross one theme into another display how features of smallness (e.g. tightknit social networks, size of customer base, level of establishment) interact with mechanisms (e.g. relationships with food system actors), which subsequently affect product outcomes (e.g. buying power). These factors are evident in other research on business, social enterprises, and communities (Barraket et al. 2019; Frazier & Niehm, 2004; O'Donnell, 2004; Meador, 2019; Siemens, 2010).

Entrepreneurialism has been highlighted as a key component of food retail environments in Canada—important in building local economies and social networks alongside health promotion (Mah et al. 2018). As the retailers strove to make decisions that best serve their customers and build their businesses, they “right-sized” their networking strategies. This entrepreneurial approach is consistent with O'Donnell's (2004) assertion that small-firm networking varies not only according to the owner-manager involved but also according to the individuals with whom they are interacting. His research concluded that owner-managers generally engage in “extensive and proactive” networking and that they modify their approach as required by their circumstances and the needs of their business (O'Donnell, 2004). Following this pattern, our two stores make the “what” (healthy food retailing intervention) work for the “whom” (the stores and their communities) according to their particular circumstances (communities of varying degrees of smallness).

Stores' day-to-day operations were impacted by their physical size and business capabilities, status, and level of establishment. Participating stores, while both small businesses, have differing operational sizes relative to each other yielding a crucial difference in capacities. Further, S1 was established more than a century before S2. Being a smaller, newer store means that S2 may receive a greater benefit from an intervention, as even small changes to its operating capacity should have an outsize impact, relative to its starting point.

Both stores enjoyed the position of being the sole retailers in their communities, but S1 had the further advantage of a formalized relationship with a distributor. This relationship is aligned with what Frazier and Niehm

(2004) term an “Expert” relationship, which gives greater access to resources like customized information and advantageous pricing. S2 may be classified as functioning within a “Merchant” network, comprised of local business owners who exchange information and which creates advantages in terms of cooperation and more effective lobbying efforts (Frazier & Niehm, 2004). The relationships both stores have with Food First NL may be characterized as “Inspiration” and gives them access to customized information and guidance on best practices (Frazier & Niehm, 2004).

The retailers also display evidence of resourcefulness, in line with other research on rural retailers. Barraket et al. (2019) combine notions of networking and resourcefulness in their study of rural social enterprises, citing in particular the practice of bricolage, whereby entrepreneurs draw on a wide variety of available resources to create value in resource-scarce environments. Their research found that access to resources and overall efficacy of these organizations is dependent on local networks and the enterprises' sense of credibility and legitimacy within their respective communities (Barraket et al. 2019). Business owners' mindsets and approaches to meeting challenges are important factors which influence the ways in which they meet their objectives (Siemens, 2010). Rural business owners mitigate many challenges and create value by seeking out resources locally (Siemens, 2010).

In small rural communities, networking is a valuable competency for retailers where residents have stronger primary group relationships and personal ties than in urban areas (Frazier and Niehm, 2004). Retailers leveraged informal interpersonal networks to gain knowledge to improve their operations and marketing approaches. “Grapevine networks” of customers, employees and community residents which can provide valuable guidance in marketing, promotional, and merchandising choices (Frazier & Niehm, 2004), were seen in our cases. Similarly, implicit rural networks, such as those that arise from social interaction and are characterized by reciprocity and trust, are identified as valuable holistic and inclusive tools in community development (Meador, 2019).

Strengths and limitations

As a realist evaluation, this case study deeply examined the factors, mechanisms, and complexity associated with healthy food retailing in rural communities. We ensured quality data through prolonged engagement with the community, member checking, peer debriefing, and memoing (Morse et al., 2002). The nature of this project allowed us to be reflexive and adapt methods to ensure methodological coherence with research purpose and community relevance (Morse et al., 2002). As a project partner, Food First NL contributed invaluable to the design, implementation, and sustainability of the healthy food retailing interventions in this project. The findings of this research have strong practicality and relevance to the NL context.

The loss of one store from the project due to insufficient capacity indicates that not all types of stores are captured in this analysis. Generalizability of the findings may be limited to food retailers with internal capacity, interest, and freedom to invest effort into redesigning their business operations. We did not interview any store staff as part of this project, which may exclude an important perspective. However, since these are small stores, there are few employees (e.g. fewer than five) and owners are highly engaged with staff, minimizing the risk that an important concept or interpretation was missed. The length of the study limits the degree to which impact of interventions could be assessed due to the limited capacity of retailers to design and implement interventions with speed. Most interventions took longer than six months to plan, leaving only a few months for the intervention to be implemented before follow-up. Further, impacts were assessed through storeowners' perceptions; we did not collect objective measures. Although dollars were provided to participating stores, interventions undertaken in this study were restricted by available financial capital; larger interventions may have been desired but were financially unattainable. This factor may have impacted some of the CMO factors and configurations in our study. Financial contributions to stores are important to fund start-up costs and cover any losses during transition or start-up but may not be accessible to small food stores outside of

specialized research or government funding. Additionally, the fit of interventions to goals may have been misaligned in some cases, such as the use of a digital intervention to reach seniors or the use of online grocery shopping, which may have positive or negative impacts on healthy food purchases. It would be wise to consider the strategic alignment of interventions to populations, challenges, and outcomes in future small food store-centered retail activities. Further evaluation that measures the degree of impact of the interventions on outcomes of interest (food availability, food prices, consumer behaviour) would also enhance the understanding of the significance of the contexts and mechanisms.

Conclusions

This study highlights the entrepreneurial drive of independently owned food stores in small rural communities in NL. A commitment to community wellbeing drove storeowners to engage in healthy food retailing interventions. Success in creating and implementing healthy food retailing interventions and impacts on food availability, accessibility, acceptability, and affordability are related to factors beyond the “food” itself. The store's context is crucial to designing feasible, effective healthy food retailing interventions including their historical status, relationship with community members, and engagement in conventional and non-traditional food system. Business practices undertaken by small food stores in rural communities in NL are comprehensive and the potential “mix” of contextual and mechanistic factors that will generate the ideal outcome must be adequately appreciated to advance healthy food retailing among private businesses.

Acknowledgements: This project was completed in partnership with Food First NL. The authors wish to acknowledge the participating food retailers and their communities for their collaboration on the project.

Rebecca LeDrew was the lead Research Assistant for this study and has two Masters of Arts (Geography; English Literary Studies), a Bachelor of Arts (Joint Honours English and French), and a Bachelor of Education.

Peter Wang, MD, PhD, is a tenured Professor (Epidemiology) in the Faculty of Medicine at Memorial University of Newfoundland, a Professor (status only) at Dalla Lana School of Public Health at the University of Toronto, and the Director of the Centre for New Immigrants Wellbeing.

Holly Etchegary, PhD, is an Associate Professor (Clinical Epidemiology) in the Faculty of Medicine at Memorial University of Newfoundland and the Patient Engagement Academic Lead for the province's CIHR-SPOR NL SUPPORT.

Kris Aubrey-Bassler, MD, CCFP, is an Associate Professor with the Discipline of Family Medicine, the Director of the Primary Healthcare Research Unit, and the Principal Investigator for the province's CIHR-SPOR NL SUPPORT.

Delphine Grynspan, MD, MPH, FFPH, is an Assistant Professor (Public Health) in the Faculty of Medicine at Memorial University of Newfoundland.

Shabnam Asghari, MD, MPH, PhD, is a Professor in the Discipline of Family Medicine, Faculty of Medicine, and Director of the Centre for Rural Health Studies at Memorial University of Newfoundland.

Rachel Prowse, RD, PhD, is an Assistant Professor (Nutrition & Dietetics) in the Faculty of Medicine at Memorial University.

Funding: This study was funded by Proof of Concept Intervention Grants in Primary Prevention of Cancer of the Canadian Cancer Society and the Canadian Institutes of Health Research-Institute for Cancer Research (CCS grant #707242/CIHR-ICR grant #181057). Food First NL's 'Great Things in Store' project was funded by the Public Health Agency of Canada through the Healthy Canadians and Communities Fund (Arrangement # 2122-HQ-000399) and by the Government of Newfoundland and Labrador through the Department of Health and Community Services.

Author Contributions: Conceptualization – PW, HE, KAB, DG, SA, RP; Analysis – RL, RP; Investigation – RL, RP; Methodology – RL, PW, HE, KAB, DG, SA, RP; Writing – original draft – RL, RP; Writing – review & editing – PW, HE, KAB, DG, SA, RP

Conflicts of Interest: None to declare

Ethics approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (Health Research Ethics Authority of NL (#20222741) and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

References

- Barraket, J., Eversole, R., Luke, B. & Barth, S. (2019). Resourcefulness of locally-oriented social enterprises: Implications for rural community development. *Journal of Rural Studies*, 70, 188–197. <https://doi.org/10.1016/j.jrurstud.2017.12.031>
- Canadian Institute for Health Information. (2025, November 27) NHEX trends — Infographics. <https://www.cihi.ca/en/national-health-expenditure-trends/nhex-trends-infographics>
- De Brún, A., & McAuliffe, E. (2020). Identifying the context, mechanisms and outcomes underlying collective leadership in teams: Building a realist programme theory. *BMC Health Services Research*, 20(1), 261. <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-020-05129-1>
- De Weger, E., Van Vooren, N. J. E., Wong, G., Dalkin, S., Marchal, B., Drewes, H.W. & Baan, C.A. (2020). What's in a realist configuration? Deciding which casual configurations to use, how, and why. *International Journal of Qualitative Methods*, 19, 1-8. <https://doi.org/10.1177/1609406920938577>
- Frazier, B. J., & Niehm, L.S. (2004). Exploring business information networks of small retailers in rural communities. *Journal of Developmental Entrepreneurship*, 9(1), 23–42.
- Hartmann-Boyce, J., Bianchi, F., Piernas, C., Riches, S.P., Frie, K., Nourse, R., & Jebb, S.A. (2018). Grocery store interventions to change food purchasing behaviors: A systematic re-view of randomized controlled trials. *The American Journal of Clinical Nutrition*, 107(6), 1004–1016.
- Hawe P., & Potvin L. (2009). What is population health intervention research? *Canadian Journal of Public Health*, 100(1), I8–I14. <https://doi.org/10.1007/BF03405503>
- Health Accord NL. (2022). *Our province. Our help. Our future. A 10-year health transformation: The summary*. Available at: <https://healthaccordnl.ca/final-reports/> (Accessed on May 29, 2024)
- Kazi M. (2003). Realist evaluation for practice. *British Journal of Social Work*, 33(6), 803–818. <https://doi.org/10.1093/bjsw/33.6.803>
- Kettle, S.M., Roebbothan, B.V., & West, R. (2005). Prevalence of specific cardiovascular disease risk factors in young Newfoundland and Labrador adults living in urban and rural communities. *Canadian Journal of Rural Medicine*, 10(2), 81.
- LeDrew, R., Wang, P., Etchegary, H., Aubrey-Bassler, K., Grynszpan, D., Ashgari, S., Bavani, N.G. & Prowse, R. (2025). Balancing economic and social dual bottom-lines: Qualitative inquiry of healthy food retailing in rural Newfoundland and Labrador. *Canadian Food Studies/La Revue canadienne des études sur l'alimentation*, 12(3), 89–110. <https://doi.org/10.15353/cfs-rcea.v12i3.713>
- Loewen, O. K., Ekwaru, J. P., Ohinmama, A., & Veugelers, P. J. (2019). Economic burden of not complying with Canadian food recommendations in 2018. *Nutrients*, 11(10), 2529. <https://doi.org/10.3390/nu11102529>
- Lukewich, J., Buote, R., Asghari, S., Aubrey-Bassler, K., Knight, J., & Mathews, M. (2020). Adults with diabetes mellitus in Newfoundland and Labrador: A population-based, cross-sectional analysis. *Canadian Medical Association Open Access Journal*. 8(4), e895–901.
- Mah, C.L., Hasdell, R., Minaker, L.M., Soo, S.D., Cook, B., & De-maio, A.R. (2018). Entrepreneurialism and health-promoting retail food environments in Canadian city-regions. *Health Promotion International*, 33(6), 1055–1065. <https://doi.org/10.1093/heapro/dax049>
- Marchal B., Van Belle, S., Van Olmen, J., Hoérée T. & Kegels G. (2012). Is realist evaluation keeping its promise? A review of published empirical studies in the field of health systems research. *Evaluation*, 18(2):192–212. <https://doi.org/10.1177/1356389012442444>
- Meador, J. E. (2019). Reaching rural: Identifying implicit social networks in community development programmes. *Journal of Rural Studies*, 68, 285–295. <https://doi.org/10.1016/j.jrurstud.2018.12.006>
- O'Donnell, A. (2004). The nature of networking in small firms. *Qualitative Market Research: An International Journal*, 7(4): 206–217.
- Morse J.M., Barrett M., Mayan M., Olson K., Spiers J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2):13–22. <https://doi.org/10.1177/160940690200100202>
- Palinkas L.A., Horwitz S.M., Green C.A., Wisdom J.P., Duan N. & Hoagwood K. (September 2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services*, 42(5), 533–44. <https://doi.org/10.1007/s10488-013-0528-y>

Slater K.L., & Kothari A. (2014) Using realist evaluation to open the black box of knowledge translation: A state-of-the-art review. *Implement Science*. 9(1), 1–14. <https://doi.org/10.1186/s13012-014-0115-y>

Siemens, L. (2010). Challenges, responses and available resources: Success in rural small businesses. *Journal of Small Business and Entrepreneurship*, 23(1), 65–80. <https://doi.org/10.1080/08276331.2010.10593474>

Simms, A., & Greenwood, R. (2021). State of Rural Canada Report. 2.10 Newfoundland and Labrador. <https://sorc.crrf.ca/nl/>

Slapø, H., Schjøll, A., Strømgren, B., Sandaker, I., & Lekhal, S. (2021). Efficiency of in-store interventions to impact customers to purchase healthier food and beverage products in real-life grocery stores: A systematic review and meta-analysis. *Foods*, 10(5), 922.

Statistics Canada. (2022). Rural area. [Dictionary, Census of Population, 2021]. <https://www12.statcan.gc.ca/census-recensement/2021/ref/dict/az/Definition-eng.cfm?ID=geo042>

Statistics Canada (2023, November 15) Census Profile: 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

Stuckless, K. D., Wang, P. P., & Prowse, R. (2022). Primary cancer prevention: Developing multi-level food retailer intervention assessment tools. *Annals of epidemiology*, 75(9). Advance online publication. <https://doi.org/10.1016/j.annepidem.2022.08.037>

Raine K.D. (2005). Determinants of healthy eating in Canada: An overview and synthesis. *Can J Public Health*. 96 Suppl 3, S8–S8–15.

Vanderlee L., McLaughlin A., Vaillancourt C., Olstad D.L., Mah C., & L'Abbé M.R. (2023). Actions to cultivate healthier food environments in Canada: Newfoundland and Labrador policies and progress. <https://www.informascanada.com/food-epi-canada-2023>

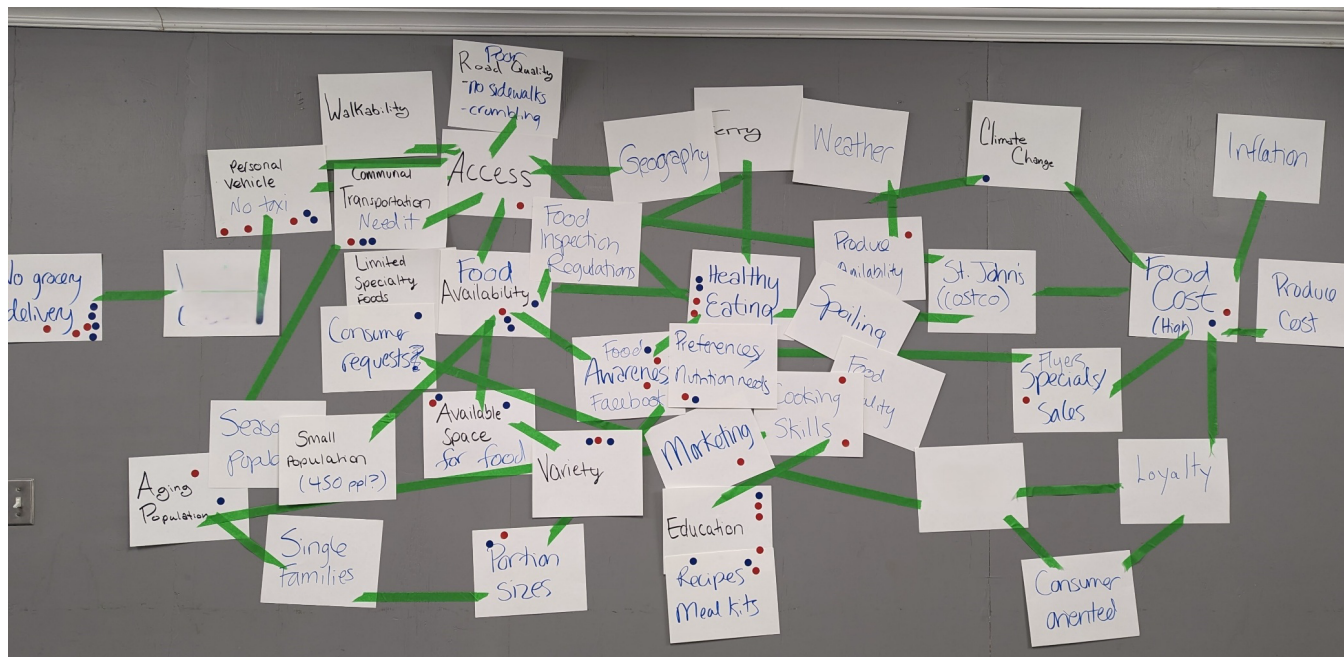
Appendices

See following pages for Supplementary Material for:

“A realist evaluation of healthy food retailing interventions in small food stores in rural Newfoundland and Labrador, Canada”

Supplemental File 1

Example mind map from community meeting to identify the factors that make it easier or harder to purchase healthy food using brainstorming and story telling



Supplemental File 2

Semi-Structured Interview Script

Thank you for agreeing to participate in this interview for our study on healthy eating and food retail in Newfoundland and Labrador. Food stores play a key role in determining food practices of their communities. Your answers to our questions will help us develop an example case study for other researchers and communities to address this issue.

This interview will take approximately an hour to complete. If at any point you would like us to stop, or skip a question, please let us know.

Baseline Interview Questions:

1. Tell me about your [store].
 - a. Probe for types of: ownership model, foods sold, other goods/services offered, customers, community, distributors/suppliers, unique features, rural location, competition
2. What role does your store play in your community?
3. Let's talk about your customers. What attracts customers to shop at your [store]?
 - a. Probe: transportation
4. What factors influence the foods and beverages customers purchase in your [store]?
5. What do you believe healthy food options comprise?
6. What factors make healthy retailing difficult for you?
7. What factors make engaging in healthy retailing easier for you?

Follow-up Interview Questions

1. What would you tell your friends about your experience working with the [BLINDED] project over the last 6 months.
2. What types of changes did you plan to undertake as part of this project? Did you (and how did you) accomplish them?
3. Can you describe how your changes contribute to healthy eating and disease prevention in your community?
4. How would you define the success of your efforts to promote healthy eating?
5. Which changes were the most/least successful? Why?
6. If you had to do things again, what would you do the same/different?
7. What factors were most significant in making it easier or harder for you to implement changes in your business?
8. What's next?
9. Based on this experience, would you volunteer to be a part of other healthy food retailing initiatives in the future?
10. What else would you like to tell me?