

**APRIL 2014** 

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Citation: Stehouwer, L. (2014). Seniors and social dining: A brief summary. Guelph, ON: Institute for Community Engaged Scholarship. <a href="https://dspace.lib.uoguelph.ca/xmlui/handle/10214/8902">https://dspace.lib.uoguelph.ca/xmlui/handle/10214/8902</a>





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## **PURPOSE**

The purpose of this report is to provide a brief overview of a selection of the current literature surrounding congregate dining programs. This report focuses mainly on local research, and will also explore a sample of international research. For the purposes of this summary older adults, or seniors, will refer to those aged 60 years and over, the cutoff agreed upon by the United Nations (WHO, 2014); and congregate or social dining refers to a dining experience where individuals eat together, often "cafeteria style".

## INTRODUCTION

## **BACKGROUND**

Older adults and seniors are one of the most rapidly growing demographics in North America. According to 2011 census data, adults aged 65 years and over account for nearly 15% of Canada's population (Statistics Canada, 2011) and it is estimated that by 2025, one of every five Canadians will be aged 65 years or older (Payette, 2005). Most of these seniors remain living in their homes in the community, as opposed to being institutionalized or living in a retirement home (Keller, 2007). With the increase in the number of seniors the services provided to older adults will be under pressure unless they are expanded to meet the needs of a larger group of users.

A healthy, balanced, nutrient-rich diet, as well as exercise, play a large role in the management of symptoms and in slowing the progression of chronic illnesses such as diabetes and cardiovascular disease (Payette, 2005). It is clear that proper nutritional intake is important for seniors' health, highlighting the need to address and lessen the impact of these identified barriers to, and predictors of, nutritional risk.

Keller (2007), a prominent Canadian nutrition researcher, identifies three patterns of aging: successful, usual, and accelerated aging. Seniors aging successfully continue to experience good health and have little interaction with acute care systems. Older adults experiencing usual aging are those who enter their retirement years with some symptoms of chronic illnesses (e.g., high blood pressure and/or cholesterol, diabetes, cataracts) and see their primary care physician frequently for management and prevention of further illness. Accelerated aging is used to describe seniors who are in frequent contact with the health care system, be it through home care or acute hospitalization; they are frailer and more functionally dependent due to chronic disease or rapid disease progression. Decreasing the number of seniors experiencing





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accelerated aging and increasing the number experiencing successful aging should be of great interest to service providers working with an elderly clientele, and one of the ways to stave off accelerated aging is through healthy eating and exercise practices.

#### **NUTRITION DEFICIENCIES IN OLDER ADULTS**

With age, particularly accelerated aging, come certain challenges that make it more difficult for seniors to live a healthy life. It is generally known that food intake decreases as one ages; this is partly due to changes in physical function and metabolism, and is also attributable to social and environmental factors (Drewnoski & Evans, 2001). There are a number of factors that have the potential to decrease food and nutrient intake in older adults, which include: decreased mobility (e.g., arthritis, use of a wheelchair) and transportation issues (e.g., loss of driver's license), dependence on others for foodrelated activities (e.g., grocery shopping, cooking), bereavement (e.g., an elderly widow may no longer see the value in cooking for herself when she used to cook for her husband), health-related barriers (e.g., poor oral health requiring soft foods, or food options limited due to disease), as well as poor appetite and changing food preferences, as, for example, medications have been known to alter food taste and smell (Callen & Wells, 2003; Drewnowski & Evans, 2001; Keller & Allen, 2002; Payette, 2005; Winkler et al., 1999). Due to these changes many seniors do not experience the same level of sensory enjoyment of food as they experienced previously and accelerated aging often results in many of the positive and fulfilling aspects of mealtime being reduced, decreasing the drive (or ability) to prepare and consume a healthy amount of energyand nutrient-rich foods. Other predictors of nutritional risk include being female, living alone, having a low income, low education, fair or poor perceived health, depression, and dissatisfaction with life (Keller, 2006).

It is evident that seniors can face a number of challenges when it comes to meeting the recommended intake of healthy food. To address malnutrition and food or exercise-related challenges in this population, many community groups have implemented meal programs aimed at increasing nutrition intake and exercise in the elderly. A summary of selected research concerning these types of programs will be provided below.





## SOCIAL DINING/MEAL PROGRAM RESEARCH

As previously mentioned, congregate or social, dining involves individuals eating together "cafeteria-style" in a manner intended to facilitate a sense of community. This section will provide a brief summary of some of the possible benefits that social dining programs have.

#### CONGREGATE DINING RESEARCH: NUTRITIONAL OUTCOMES

In this section, I will outline the key components of four research projects examining congregate dining and/or meal programs for the community's senior population. Two of the studies were conducted in southwestern Ontario (Guelph area), and two were conducted in the northern United States.

In 2001, Heather Keller conducted a longitudinal study aimed at determining nutritional risk and its association with health outcomes in community-dwelling elderly persons in a southwestern Ontario region. Specifically, she investigated whether participants in meal programs (with or without a social component) were at a different level of nutritional risk than non-meal-program participants. Three hundred and sixty-seven vulnerable seniors (those requiring informal or formal supports for activities of daily living) completed the baseline assessment; 135 were recruited for the study from a meal and socialization program (congregate dining), 124 were recruited from meal-only programs, and 108 were recruited from a non-meal program. Approximately three-quarters of the sample was female with an average age of 79.3 years; the majority of participants were widowed and lived alone. Trained interviewers went to the seniors' homes, where they administered a number of quantitative measures (e.g., the 15-item Seniors in the Community: Risk Evaluation for Eating and Nutrition (SCREEN) questionnaire, Survey on Aging and Independence, National Population Health Survey, etc). It was determined that participants from programs that provide meals with socialization appear to be healthier, at less nutritional risk, and more socially active than the other two groups. This research did not include measures specific to social activity or the quality of relationships, however.

In a similar follow-up study by Keller (2006), community-dwelling seniors (those not residing in a retirement facility, institution, hospital, etc.) in Guelph, Ontario were recruited from one of three community programs—a meal program with socialization (e.g., half-day program ending or beginning with communal lunch), a meal program without socialization (e.g., Meals on Wheels), or a non-meal program. Participants were





interviewed in their homes, with a telephone follow-up 18 months after the study. Quantitative measures, primarily the 15-item SCREEN, were used to capture participants` nutritional risk, It was found that seniors in the meal program with socialization were generally experiencing less nutritional risk than those without socialization, with a trend towards increased nutritional risk for those in non-meal programs. Those not involved in a meal program were also more likely to describe their health as fair or poor. Reports of depression and overall life satisfaction did not differ significantly across groups.

From 2004-2009, Wunderlich and colleagues conducted a longitudinal study of a cohort of 139 community-dwelling seniors who were enrolled in congregate meal and exercise programs in New Jersey, USA. The mean ages ranged from 72-79 years, with the majority of participants being female and Caucasian. In these government-sponsored programs, nutrition education sessions were conducted approximately every three months and focused on subjects of interest to the seniors (e.g., foot care, managing diabetes, etc). The physical fitness components were aimed at improving and/or maintaining the individuals' physical health and increasing lean muscle mass. The exercise programs were delivered for 30 to 45 minutes three times a week. Throughout the course of the study, measures of blood pressure, pulse rate, strength and balance were taken, and improvements were seen for both genders. Their findings indicated that a combined program of nutrition education and exercise enhances the overall health and well-being of older adult participants; however, the direct impact of the communal dining experience was not taken into account, and indicators of emotional and/or mental health were not included in this study.

Working out of Massachusetts, USA, Millen and colleagues (2002) endeavored to evaluate the influence and impact of The Elderly Nutrition Program (ENP) on nutritional health. The ENP is a national framework for service provision for the elderly that involves two service delivery systems: one providing "community-based services to the ambulatory older population, and one that provides services to frail, home-bound elderly persons" (235). A nationally representative sample of ENP recipients who participate congregate meals (1,040 participants in total) and received home-delivered meals (818 people) were interviewed; as a control, a demographically similar matched sample of eligible nonparticipants (841 people) was included. The average ages were 72-78 years, with 58-70% of the samples being female. It is also noted that the ENP targets those with greatest need: those who are poor, a minority, and/or frail. All participants involved in the study were interviewed and administered a scale to assess physical





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functioning, BMI, and Adequate Intake; records of nutrition intake were based on participant recall. It was found that ENP participants had consistently higher levels of essential nutrient intake than non-participants, and that ENP participants reported more monthly social contact than non-participants. Again, the impact of this increased sociality was not taken into consideration in this study.

## PARTICIPANTS, MEASURES & METHODS: RESEARCH COMMONALITIES

In much of the research examining meal programs and social dining, the research participants often share similar characteristics. Typically, these participants are:

- Female
- Cognitively well
- Caucasian
- Living alone
- Vulnerable

A pattern also noted in the literature consulted for this scan, female participants often outnumber male participants in studies on social dining. This may be because females more often access the social dining services and programs being offered and evaluated, perhaps in part because more of their identity is related to food activities (e.g., Vesnaver & Keller, 2011). Being cognitively well is a consideration for including or excluding participants in these studies, as cognitive wellness suggests that research participants can still recall information clearly. Lastly, vulnerable seniors and those living alone tend to be the ones that make use of community programs, most likely due to reduction in their support networks (they often live farther away from family members and have fewer local friends to provide the assistance they require, so they must turn to external sources of support)

As is clear from the research noted above, quantitative indicators are most commonly used to evaluate the success of congregate dining programs. Participants are given standardized, closed-ended questionnaires, have physiological measures taken, but are rarely given the opportunity to reflect on their experiences in a more open-ended, qualitative way, which may reveal other important factors that contribute to the success of social dining programs.





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While this sample of meal program research clearly demonstrates the positive impact that these programs have on nutritional intake, risk, and health, a very large component of overall health has been quite overlooked: the impact of social dining on mental health. The following section will outline why this added focus is necessary in the congregate dining literature.

#### WHY STUDY THE SOCIAL ASPECTS OF CONGREGATE DINING?

Based on the literature included in this report, the majority of dining program research concerning seniors has focused on their nutritional and physical outcomes, including a focus on whether participants consume more nutrients, experience reduced disease symptomatology, or score lower on indicators of nutritional risk. Comparatively less attention has been paid to the psychosocial impact of these social dining programs. This is surprising, considering that the prevalence of depressive symptoms in older, community-dwelling adults is estimated to be between 8% and 16% (Blazer, 2003; Chippendale, 2013). Studies related to community dining have found that social isolation, as well as mattering to others, are key contributors to poorer mental health; those with increased isolation and a feeling of not being able to contribute or give back to others are at greater risk for depression (Chippendale, 2013; Krondl, Coleman, & Lau, 2008). In fact, social isolation can result in a decline of health, which is accelerated by a decreased interest in food, and can result in a gradual inability to manage self-care activities (Krondl et al., 2008). It has been suggested that mealtime care, especially in contexts where an elderly individual's autonomy may be reduced, needs to be focused on holistic (meet users' physical, social, emotional/psychological, and even spiritual needs) and person-centered care. In fact, a key component of person-centered care is promoting social interaction (Reimer & Keller, 2009). It is clear, then, that physical health, nutrition, and mental health do not exist separately, but rather are interconnected.



#### COMMUNITY, CAMPUS, COLLABORATION.



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There are a number of reasons to focus on older adults' congregate/social dining experiences in addition to the nutritional benefits. Studies relating to the social aspects of food and meals suggest that:

- Over one's lifespan, food preferences and behaviors become part of one's social and personal identity; this is especially true for women, or others, who had or have roles centered around food (e.g., housewife; Vesnaver & Keller, 2011).
- Social isolation has been identified as a key risk factor in predicting poor nutritional health in seniors (Vesnaver & Keller, 2011)
- Social contact and social networks are not often measured or considered in nutrition research (Vesnaver & Keller, 2011)
- Eating alone is associated with heightened nutritional risk (Hetherington et al., 2006)
- Eating in the presence of known others has been shown to enhance energy intake (Hetherington et al., 2006)
- Eating with friends or family can be enhanced (increase nutritional intake and quantity of food consumed) by around 40%–50% compared to eating alone (de Castro, 1994)
- For older adults, close friends and social support are linked to a decreased likelihood of experiencing or developing depression; feeling valued and needed by others is associated with better mental health (Fulbright, 2010)

Research such as the above therefore suggests that there is benefit to studying the psycho-social benefits resulting from social dining experiences.





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## **FUTURE CONSIDERATIONS**

As noted above, research examining the benefits of social dining programs has demonstrated that meal programs (with or without a socialization component) have a positive impact on seniors' nutritional and physical health.

To expand this literature on congregate dining, research focusing on the psycho-social and/or mental health outcomes (e.g., increased quality of life, social functioning, overall wellbeing) of participation in social dining programs would be beneficial (Drewnowski & Evans, 2001; Keller et al., 2004), and would contribute to providing a well-rounded conclusion regarding the value of implementing social dining in facilities and programs catering to older adults. Additionally, incorporating other methodology into the evaluation of meal programs (e.g., qualitative interviews) would richen this body of research.





## REFERENCES

- Blazer, D. G. (2003). Depression in late life: Review and commentary. Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 58A, 249-265.
- Callen, B., & Wells, T. J. (2003). View of community-dwelling, old-old people on barriers and aids to nutritional health. Journal of Nursing Scholarship, 35(3), 257-262.
- Chippendale, T. (2013). Factors associated with depressive symptoms among elders in senior residences: The importance of feeling valued by others. Clinical Gerontologist, 36, 162-169.
- De Castro, J. M. (1994). Family and friends produce greater social facilitation of food intake than other companions. Physiology & Behaviour, 56, 445-455.
- Drewnowski, A., & Evans, W. J. (2001). Nutrition, physical activity, and quality of life in older adults: Summary. Journal of Gerontology, Series A, 56, 89-94.
- Hetherington, M. M., Anderson, A. S., Norton, G. N. M., & Newson, L. (2006). Situational effects on meal intake: A comparison of eating alone and eating with others. Physiology and Behaviour, 88(4-5), 498-505.
- Keller, H. H. (2001). Meal-based and non-meal based community services: Comparison of nutritional risk and health of vulnerable Canadian seniors. Journal of Nutrition for the Elderly, 21(2), 23-38.
- Keller, H. H. (2006). Meal programs improve nutritional risk: A longitudinal analysis of community-living seniors. Journal of the American Dietetic Association, 106, 1042-1048.
- Keller, H.H. (2007). Promoting food intake in older adults living in the community: A review. Applied Physiology, Nutrition, and Metabolism, 32, 991-1000.
- Keller, H. H., & Allen, J. (2002). Ontario older adult programs: self-identified interest in and resources for nutritional risk screening. Canadian Journal of Aging, 21, 587-594.
- Keller, H. H., Østbye, T., & Goy, R. (2004). Nutritional risk predicts quality of life in elderly community-living Canadians. Journal of Gerontology Series A Biological Sciences and Medical Sciences, 59(1), 68-74.
- Krondl, M., Coleman, P., & Lau, D. (2008). Helping older adults meet nutritional challenges. Journal of Nutrition for the Elderly, 27(3/4), 205-220.





#### SENIORS AND SOCIAL DINING: A BRIEF SUMMARY

- Millen, B. E., Ohls, J. C., Ponza, M., & McCool, A. C. (2002). The Elderly Nutrition Program: An effective national framework for preventive nutrition interventions. Journal of the American Dietetic Association, 102(2), 234-240.
- Payette, H. (2005). Nutrition as a determinant of functional autonomy and quality of life in aging: A research program. Canadian Journal of Physiology and Pharmacology, 83(11), 1061-170.
- Payette, H., & Shatenstein, B. (2005). Determinants of healthy eating in community-dwelling older people. Canadian Journal of Public Health, 96, 27-31.
- Reimer, H. D., & Keller, H. H. (2009). Mealtimes in nursing homes: Striving for person-centered care. Journal of Nutrition for the Elderly, 28, 327-347.
- Statistics Canada. (May 29, 2012). The Daily: 2011 Census Advisory: Age and sex. (Component of Statistics Canada catalogue no. 11-001-X). Government of Canada. Retrieved from http://www.statcan.gc.ca/daily-quotidien/120529/dq120529a-eng.htm.
- Vesnaver, E., & Keller, H.H. (2011). Social influences and eating behaviour in later life: A review. Journal of Nutrition in Gerontology and Geriatrics, 30, 2-23.
- Winkler, S., Garg, A. K., Mekayarajjananonth, T., Bakeen, L. G., & Khan, E. (1999). Depressed taste and smell in geriatric patients. Journal of the American Dental Association, 130(12), 1759-1765.
- World Health Organization. (2014). Definition of an older or elderly person. Retrieved from http://www.who.int/healthinfo/survey/ageingdefnolder/en/
- Wright, L., Hickson, M., & Frost, G. (2006). Eating together is important: Using a dining room in an acute elderly medical ward increases energy intake. Journal of Human Nutrition and Dietetics, 19, 23-26.
- Wunderlich, S., McKinnon, C., Piemonte, J., & Ahmad, Z. N. (2009). Measuring the impact of nutrition education and physical activity on older adults participating in government sponsored programs. Journal of Nutrition for the Elderly, 25, 255-271.

