

Let us Talk about Social Connections and Aging

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Canadian Longitudinal Study on Aging

*Age-Friendly Niagara Region
February 13, 2019*

**Canadian
Longitudinal Study
on Aging (CLSA)**

**MIRA and
LABARGE CENTRE**

#AgingReimagined

“Population aging is unquestionably the most important demographic force of the first half of the twenty-first century”.

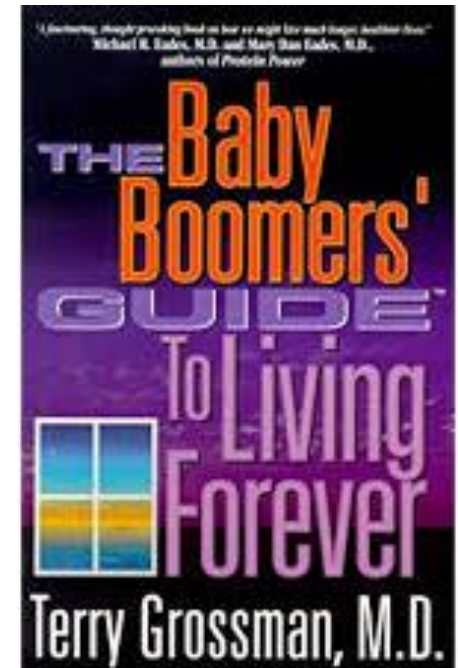
(Schoeni FR, Ofstedal MB. “Key Themes in research on the Demography aging” Demography, 47, 2010: S5-S15)

The Bridge of Life



The Chances of Death by Karl Pearson (1897)

Healthy Aging or Anti-Aging?



SPECIAL
HEALTH
DOUBLE
ISSUE

TIME

THIS
BABY
COULD
LIVE
TO BE
142
YEARS
OLD

Dispatches From the
Frontiers of Longevity

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TIME

VOL. 185, NO. 6-7 | 2015



HOW OLD CAN WE LIVE TO BE?

That remains to be seen, but if a promising drug does to humans what it does to mice—a big if—the answer is **142**. Mice have a median survival time of **27 MONTHS**, but with treatment, the longest-living mouse hit **48 MONTHS**, a life **1.77 TIMES LONGER**. The median human lifespan is **80 YEARS**—so if the oldest person lived **1.77** times longer, he or she would reach **142**.



Inside Novartis's
quest for the
world's first
anti-aging drug

Healthy Aging or Anti-Aging?

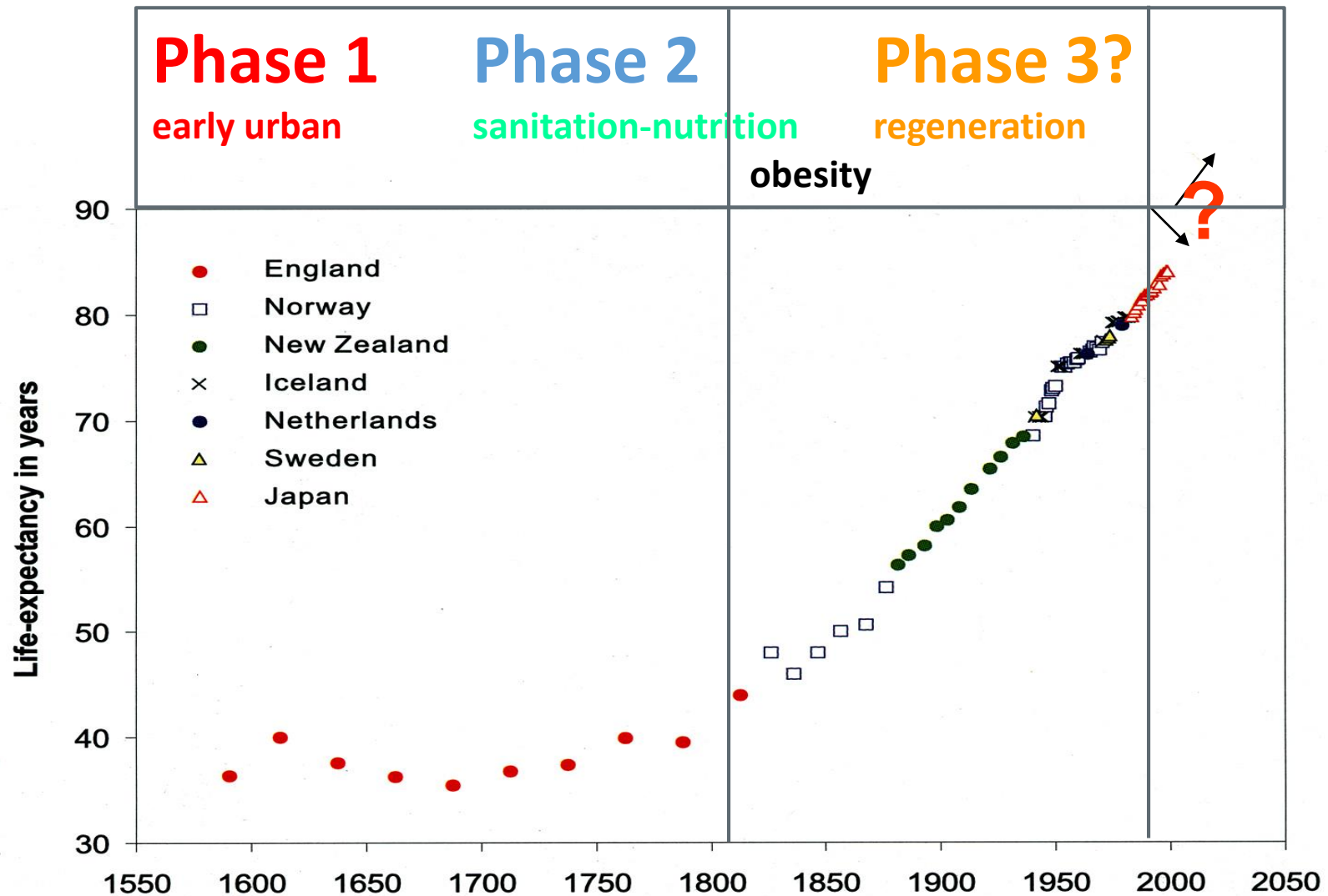
The three basic rules of anti-aging medicine:

- Don't get sick
- Don't get old
- Don't die

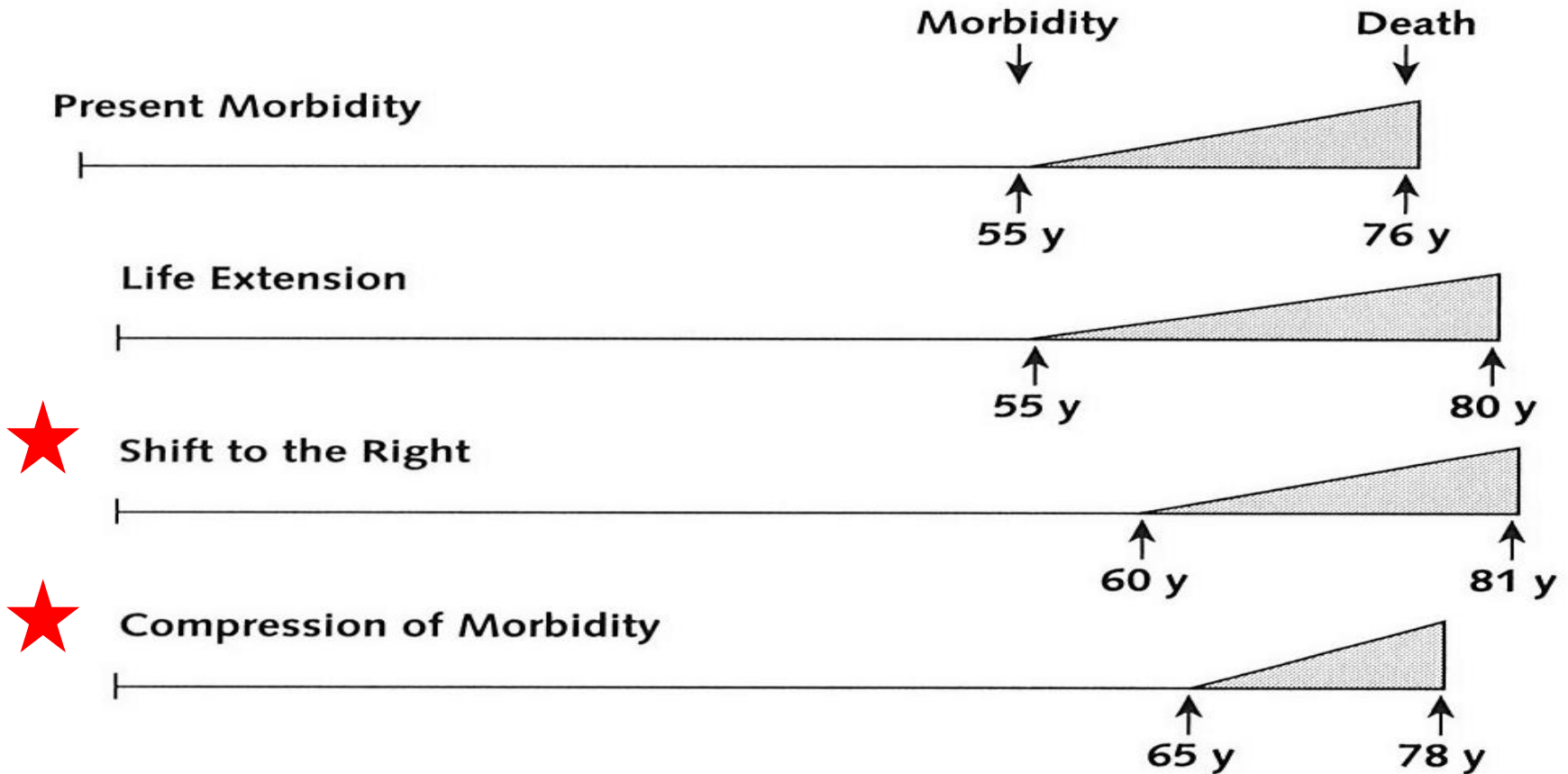


“Bridge the gap to Immortality” by taking good care of your physical and mental self, you will be around to avail yourself of the latest biotechnological advancements to further optimize your life and achieve that triple-digit lifespan.

Historical increases of life expectancy



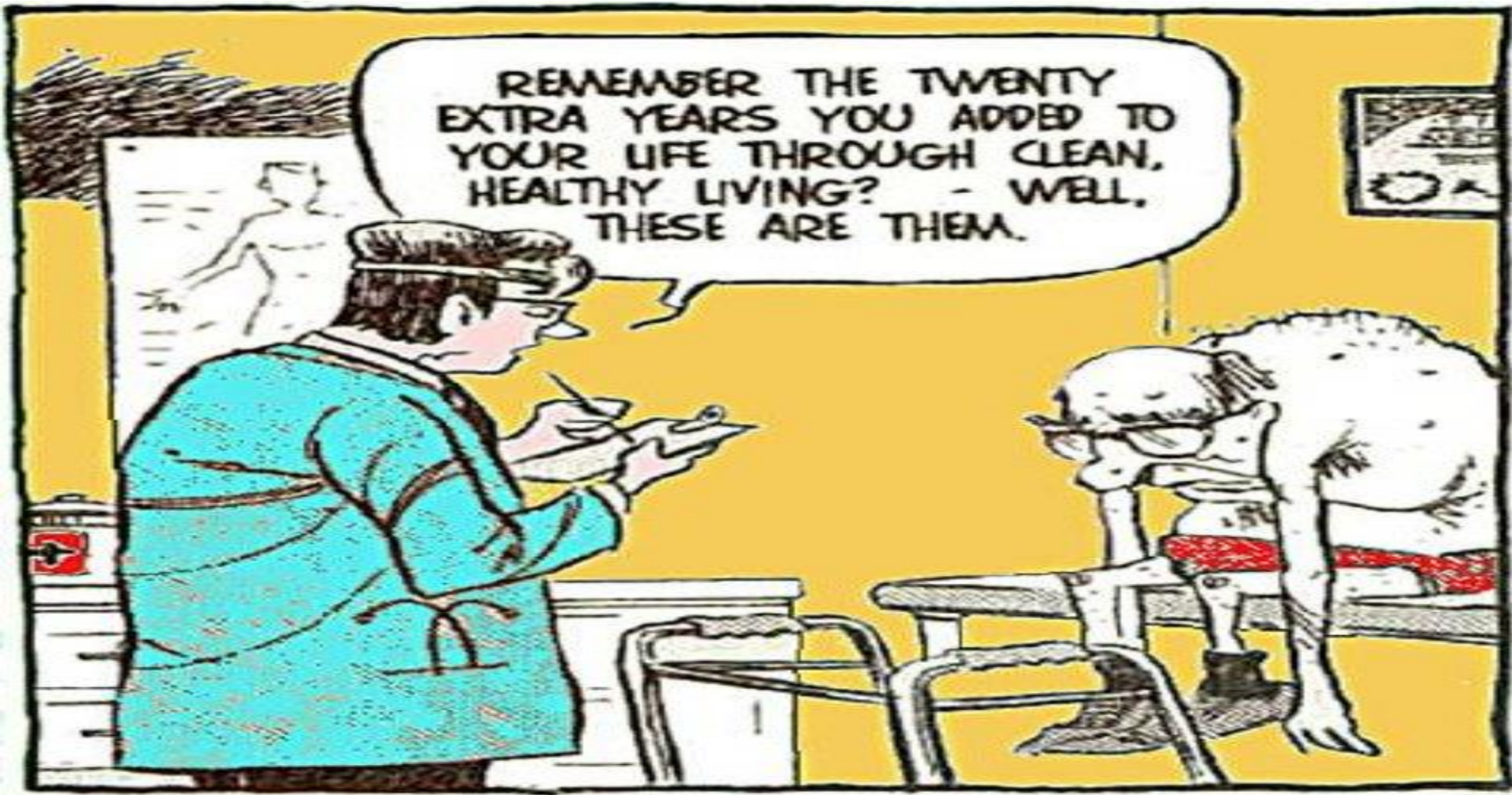
Fries Potential Scenarios



Do You View Aging Like This...



Or Like This...





BY DAN BUETTNER PHOTOGRAPHS BY DAVID McLAIN

The Secrets of Long Life And Social Connectiona

OKINAWA, JAPAN

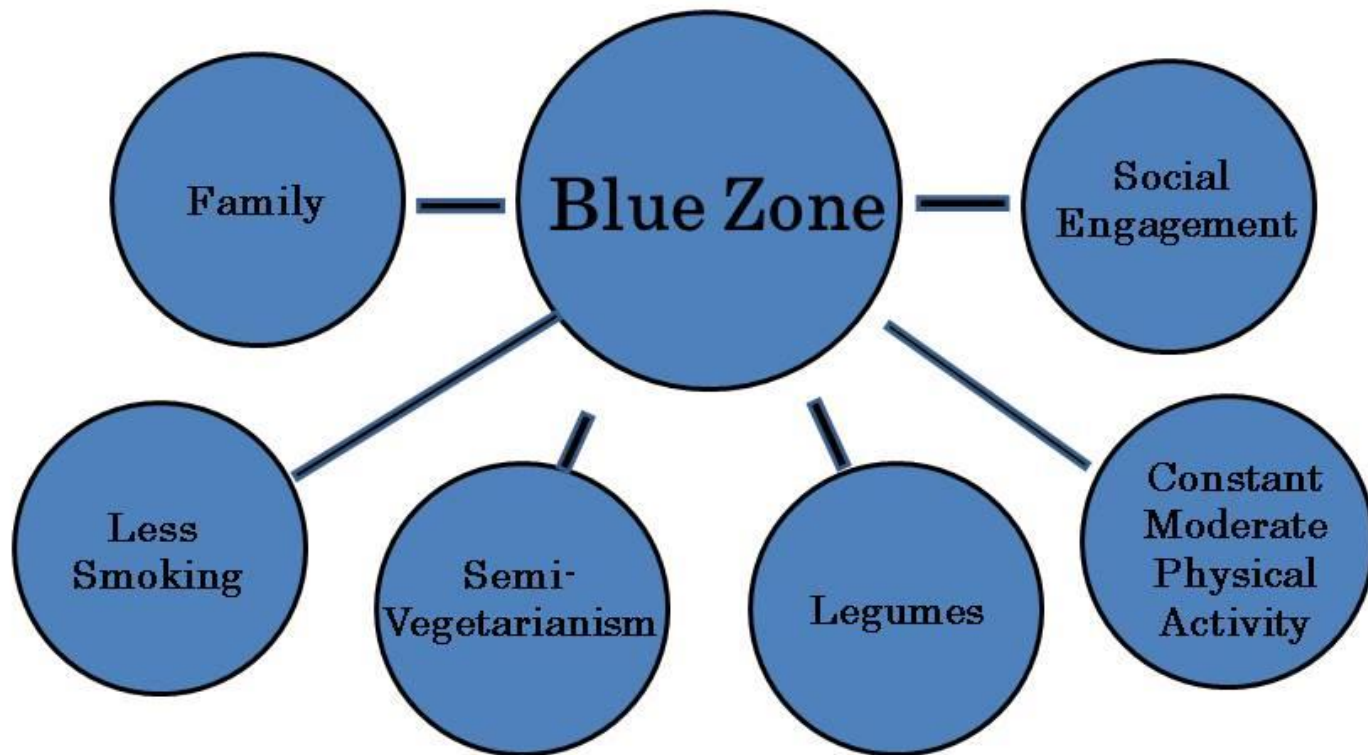
Squatting effortlessly on a slippery embankment, 89-year-old Kame Ogido inspects a pinch of seaweed, part of a low-calorie, plant-based diet that may help give Okinawans an average life expectancy of 82 years, among the longest in the world. These seniors, and others in Italy and California, show how to live longer, healthier lives.

2. NATIONAL GEOGRAPHIC • NOVEMBER 2005

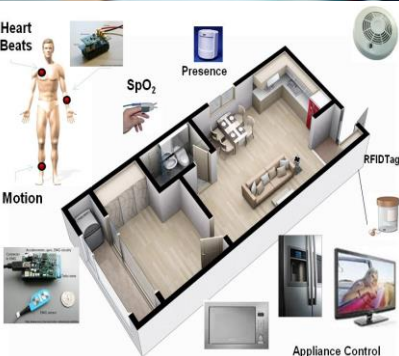


Blue Zone is a concept used to identify a demographic and/or a geographic area of the world where people live measurably longer lives, as discovered by researcher Dan Buettner.

Okinawa, Japan Sardinia, Italy Loma Linda, US Nicoya, Costa Rica Icaria, Greece







Canadian Longitudinal Study on Aging
Étude longitudinale canadienne sur le vieillissement



McMaster
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Optimal Aging
INITIATIVE

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<https://t.co/tkN2i0opus> @MIRAMcMaster @...



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Population Totals in Canada by Age Group and Year

AGE	MALES	BOTH SEXES	FEMALES
80+	229898	670192	440294
75-79	255599	622194	366595
70-74	364298	833991	469693
65-69	497996	1084588	586592
60-64	578596	1190087	611491
55-59	618096	1238387	620291
50-54	673295	1339986	666691
45-49	844194	1674182	829988
40-44	1076892	2138777	1061885
35-39	1173491	2344675	1171184
30-34	1311991	2597873	1285882
25-29	1282190	2528572	1246382
20-24	1067593	2108978	1041385
15-19	984993	1925780	940787
10-14	980292	1912979	932687
5-9	998293	1953079	954786
0-4	1000393	1953280	952887
1991 TOTALS	13938100	28117600	14179500

Population Aging

THE GLOBE AND MAIL 



Canada shows its age as seniors outnumber children for first time

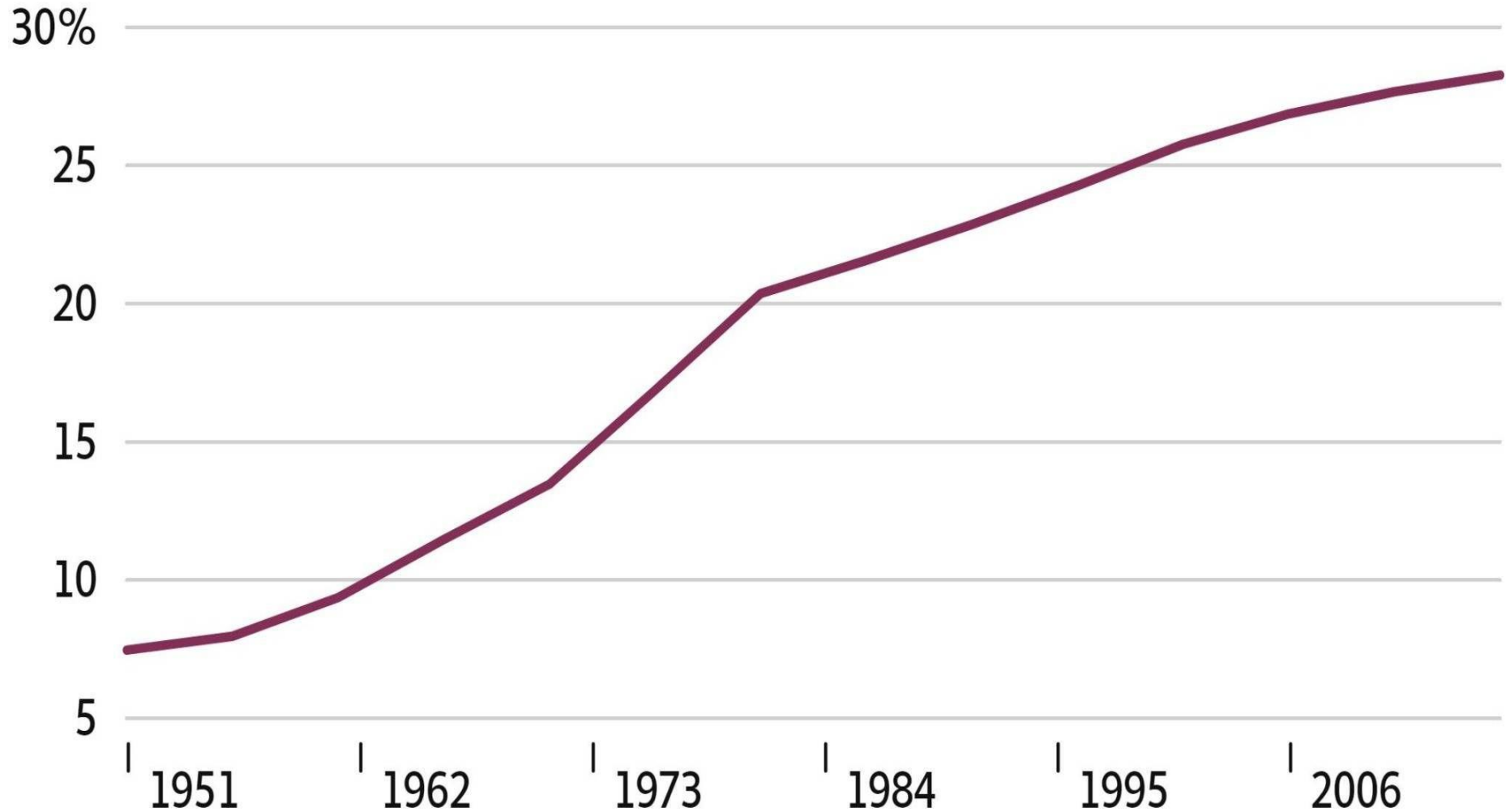
ERIC ANDREW-GEE

The Globe and Mail

Published Tuesday, Sep. 29, 2015 9:50PM EDT

Last updated Wednesday, Sep. 30, 2015 8:07AM EDT

Percentage of one-person households in Canada, 1951 to 2016



THE GLOBE AND MAIL





Isolation and Loneliness

The terms **isolation** and **loneliness** are often used interchangeably, but they refer to two distinct concepts.

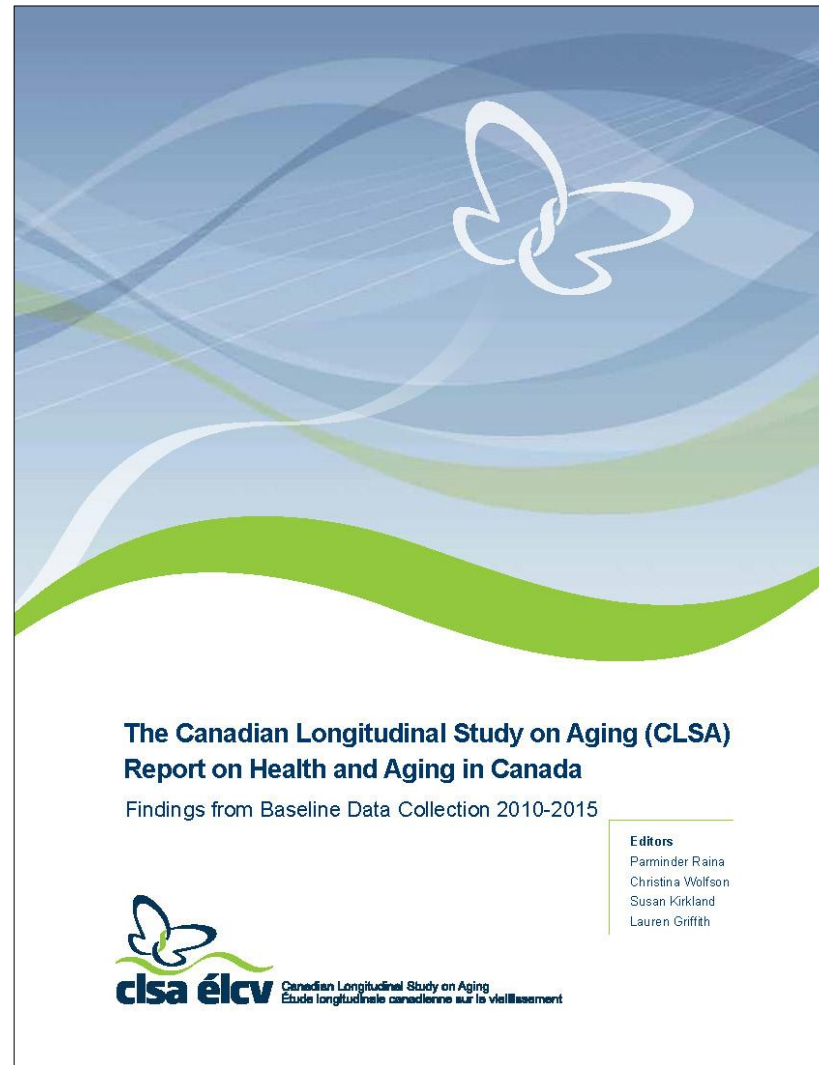
Isolation

- Separation from social or familial contact, community involvement or access to services

Loneliness

- An individual's personal, subjective sense of lacking these things to the extent that they are wanted or needed

Select Findings



Demographics

84.1

% of participants report being born in Canada

91.8

% of participants self-identify as white

3.7

% of participants self-identify as indigenous

68.7

% of participants are married or live in a common-law relationship

Demographics

74

% of participants report having a post-secondary degree or diploma

33.4

% report their total annual household income is \$50,000 to \$100,000

5.7

% of participants indicate their total annual income is less than \$20,000

45.3

% of participants report they are completely retired

Loneliness, Social Isolation, and Social Engagement: Canadian Data



More **women** than men of all ages in the CLSA reported being **lonely** at least some of the time.

Loneliness, Social Isolation and Social Engagement

Patterns of Loneliness & Social Isolation

- Perceived loneliness is significantly higher among widowed, divorced/separated, single, and married/partnered in that order
- Loneliness is higher among married women than men, but this sex difference reverses for all other non-coupled marital statuses
- Loneliness decreases across the three age groups, except for married women
- Loneliness affects older women most

Patterns of Loneliness & Social Isolation

- Overall, the pattern of feeling lonely is most pronounced for widowed individuals, especially widowed men aged 45-64, although the other age groups also experience high rates of loneliness

Patterns of Loneliness & Social Isolation

- The lowest reported loneliness occurs for married men aged 75+
- But the highest loneliness rates among married individuals are reported among women aged 75+

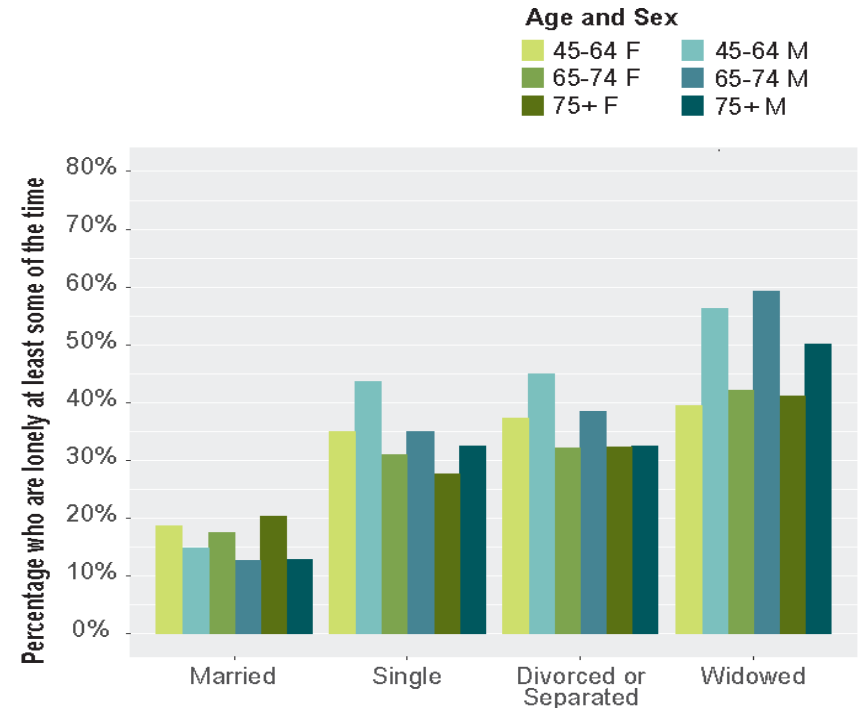


Figure 1a – Percentage who are lonely at least some of the time stratified by marital status, age, and sex

Patterns of Loneliness & Social Isolation

- Perceived loneliness is considerably more prevalent among persons living alone versus those who live with somebody. This pattern is more pronounced among men, and is maintained across age groups with only slight variations.

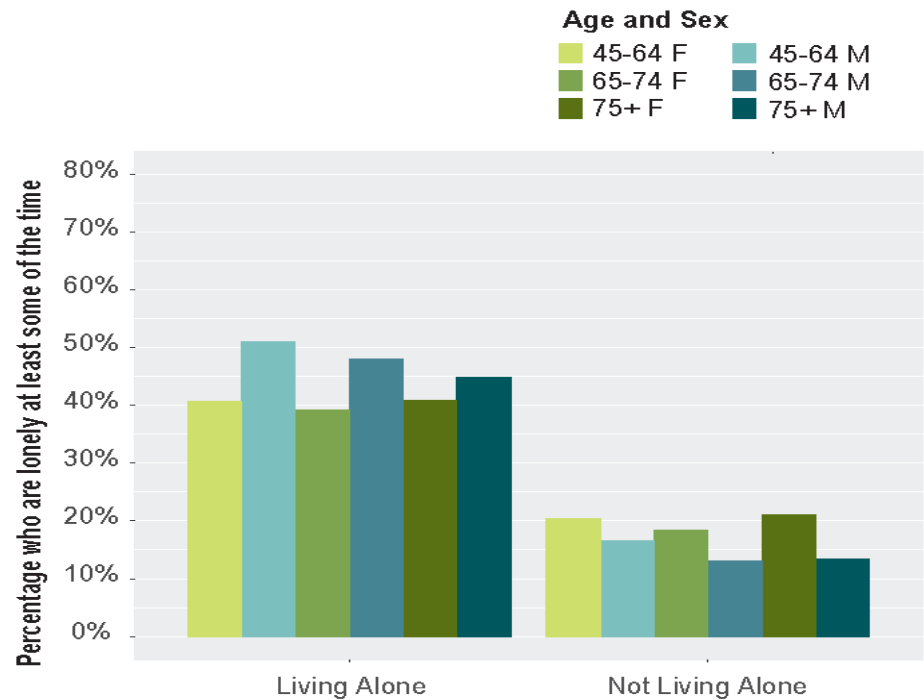


Figure 1c – Percentage who are lonely at least some of the time stratified by living arrangement, age, and sex

Patterns of Loneliness & Social Isolation

- Individuals who report being lonely at least some of the time report lower life satisfaction than those stating that they are rarely or never lonely.
- Loneliness is strongly associated with depression (scores on the CES-D depression screen).

Patterns of Loneliness & Social Isolation

- Individuals reporting they are lonely at least some of the time are considerably less likely to report being happy and this trend decreases with age.
- Those who report being rarely or never lonely also report high levels of happiness; this finding is constant across the age and sex groups.

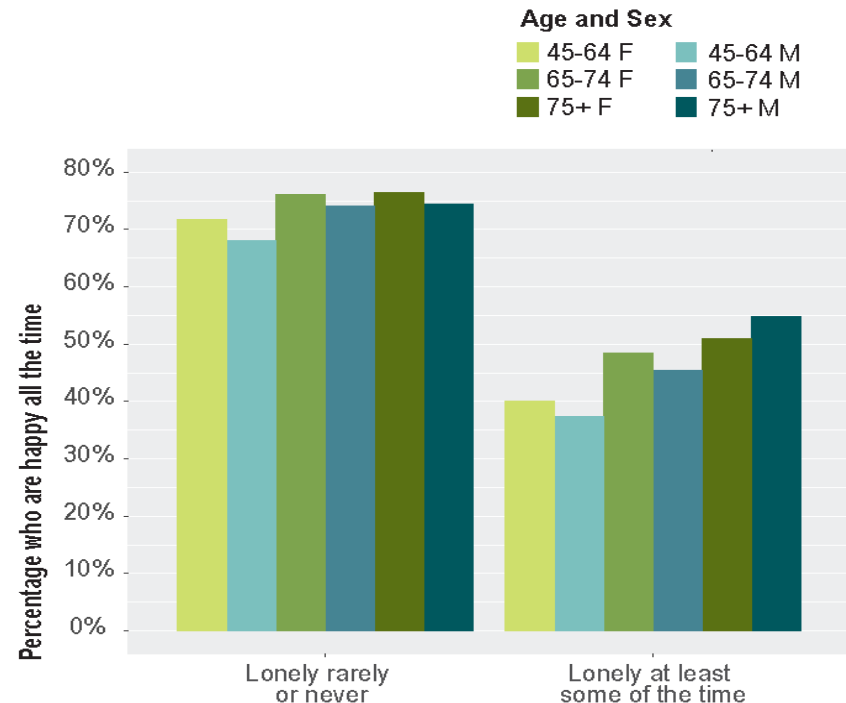


Figure 2a – Percentage who report being happy all of the time, stratified by reported loneliness, age, and sex

Social Engagement & Participation

- The desire for more participation in activities is:
 - Highest among the divorced/separated individuals
 - Declines with age
- The preference to participate in more activities is highest for middle-aged persons (45-64) compared to 65-74 and 75+ age groups, and is consistent across living alone or not.

Social Engagement & Participation

- Persons who express a desire to participate in more activities tend to report lower levels of happiness than those who have no desire for more activities, regardless of age or sex.

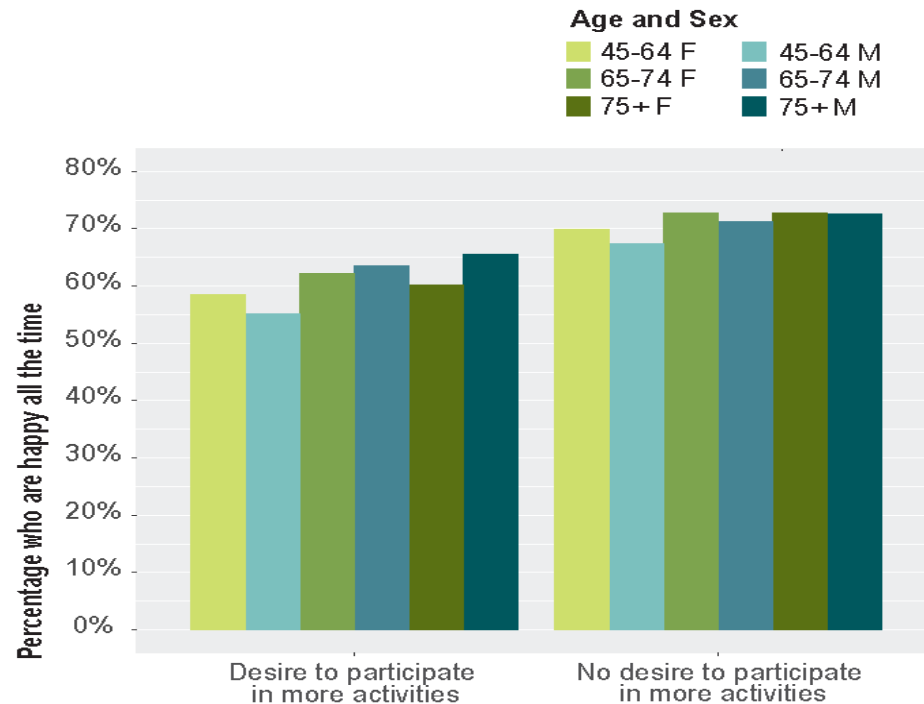


Figure 2b – Percentage who report being happy all of the time, stratified by desire to participate in more activities, age, and sex

Key Insights

- Strong associations emerge between social isolation measures and marital status and living alone/not living alone
- Robust associations found between selected social isolation variables and happiness, life satisfaction, depression score and a depression clinical screen
- CLSA data offers potential opportunities to further examine and understand loneliness, social isolation, social engagement and aging

Risk Factors

- Factors related to personal circumstances
 - E.g. people who are widowed or have no children
- Life events
 - E.g. bereavement or having to move into residential care
- Poor physical and mental health
- (And expectation of future poor health)

Risk Factors for Loneliness

■ Personal

- Poor health
- Sensory loss
- Loss of mobility
- Lower income
- Bereavement
- Retirement
- Becoming a carer
- Other changes
(E.g. giving up driving)

■ Wider society

- Lack of public transport
- Physical environment
(E.g. no public toilets or benches)
- Housing
- Fear of crime
- High population turnover
- Demographics
- Technological changes

Social Relations and Mortality Risk

Holt-Lunstad J, Smith TB, Layton JB (2010)

Multiple studies show association – but how?

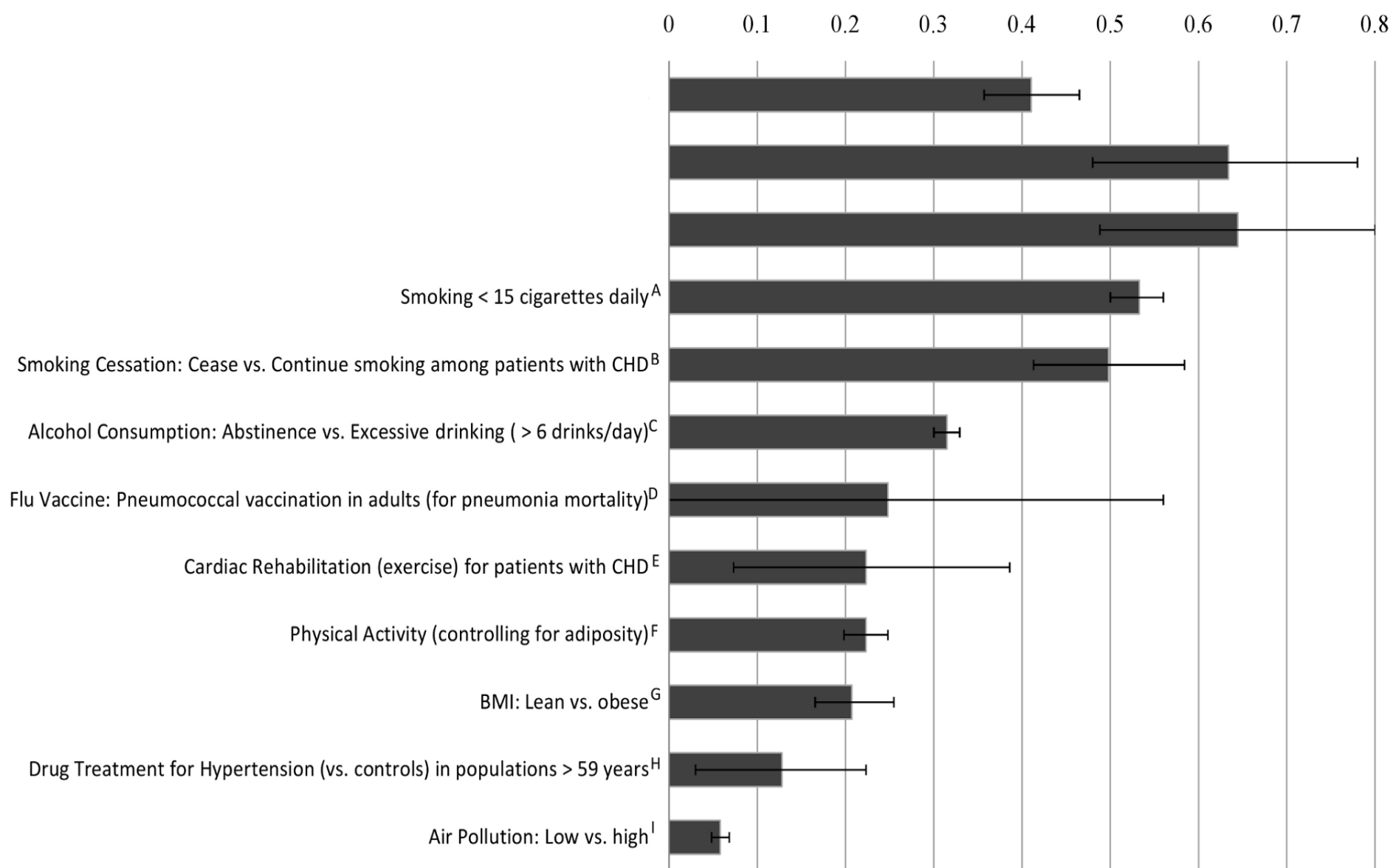
- Caring network encourages healthful practices
- Caring network improves adherence to treatments
- Groups or individuals provide actual physical or financial help
- Effects on immune function
- Effects on neuro endocrine function

The Impact of Loneliness - Mortality

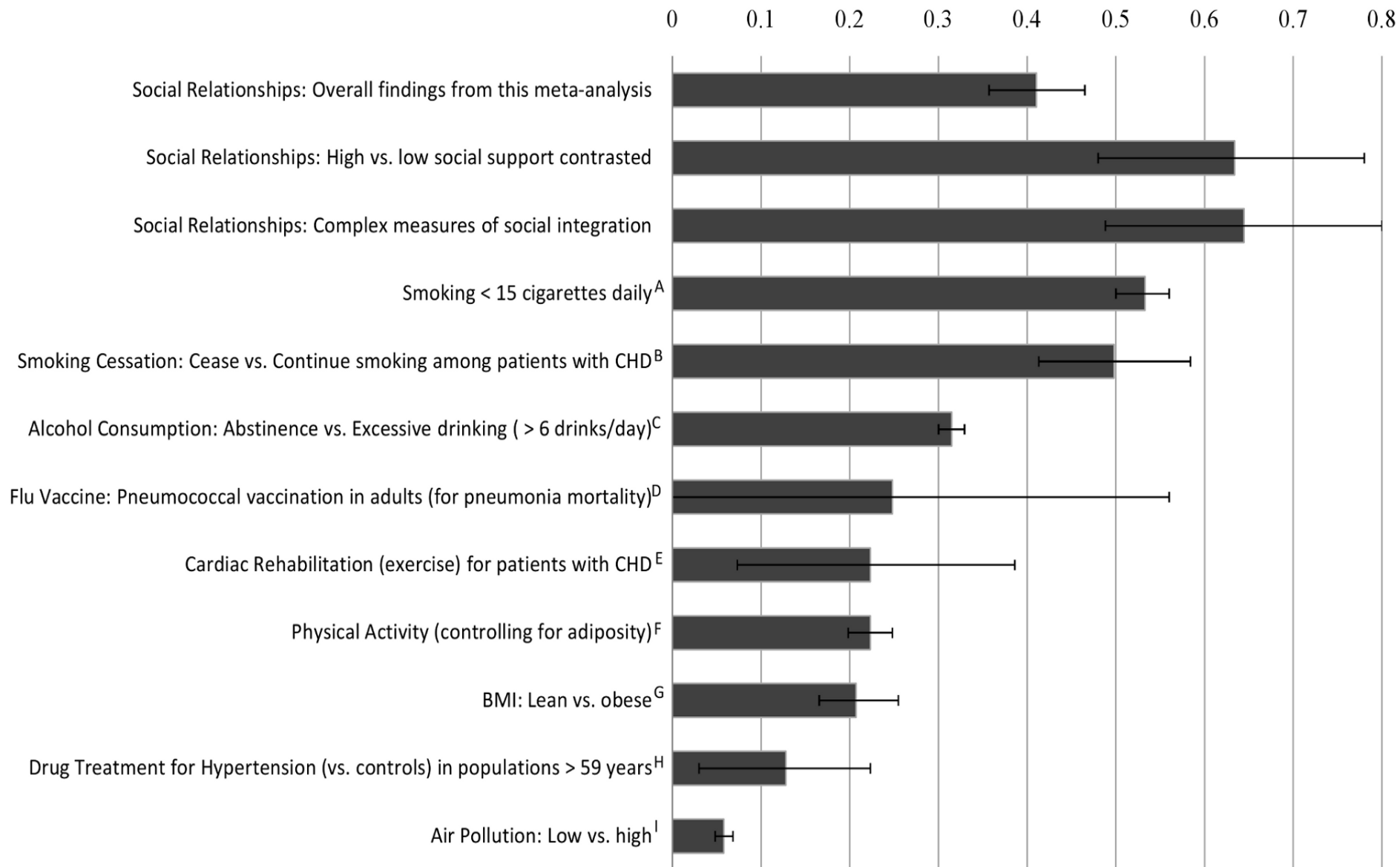
- A meta-analysis of 148 studies of social relationships and mortality
 - 50% increase in survival for those with strong social connections after an average of 7½ years.
 - Having weak social connections carries a health risk:
 - **Equivalent to smoking 15 cigarettes a day**
 - **Equivalent to being an alcoholic**
 - **More harmful than not exercising**
 - **Twice as harmful as obesity**
- These correlations are likely to be greater for social connections if the positive effects of relationships were isolated.

The Impact of Loneliness – Mental Health

- Depression affects 1 in 5 older people living in the community and 2 in 5 in care homes
- Lonely individuals are more prone to depression
 - This has been shown to be causal
 - The more lonely someone is the more likely they are to experience depressive symptoms
- Loneliness affects cognition
 - Lonely people become more vigilant for threats and focussed on self-preservation
 - They can become less attentive to others' feelings
 - They exaggerate negative and positive interactions
 - All this can impact relationships



Holt-Lunstad J, Smith TB, Layton JB (2010) Social Relationships and Mortality Risk: A Meta-analytic Review. PLoS Med 7(7): e1000316.



Holt-Lunstad J, Smith TB, Layton JB (2010) Social Relationships and Mortality Risk: A Meta-analytic Review. PLoS Med 7(7): e1000316.



Empowering our Citizens to Age Optimally: **McMaster Optimal Aging Portal**

Empowering our Citizens to Age Optimally

McMaster Optimal Aging Portal

■ What is the Portal?

- The world's most comprehensive online source of evidence-based information for older adults
- Health content about how to age optimally (e.g. health and nutrition) and manage health conditions (e.g., diabetes and high blood pressure)
- Content about the social aspects of aging (e.g., social care, elder abuse, volunteering, financial security, and retirement planning)

■ Who is the Portal for?

- Aging people and their caregivers
- Researchers, clinicians, public health professionals and policymakers

Content for Professionals and Researchers

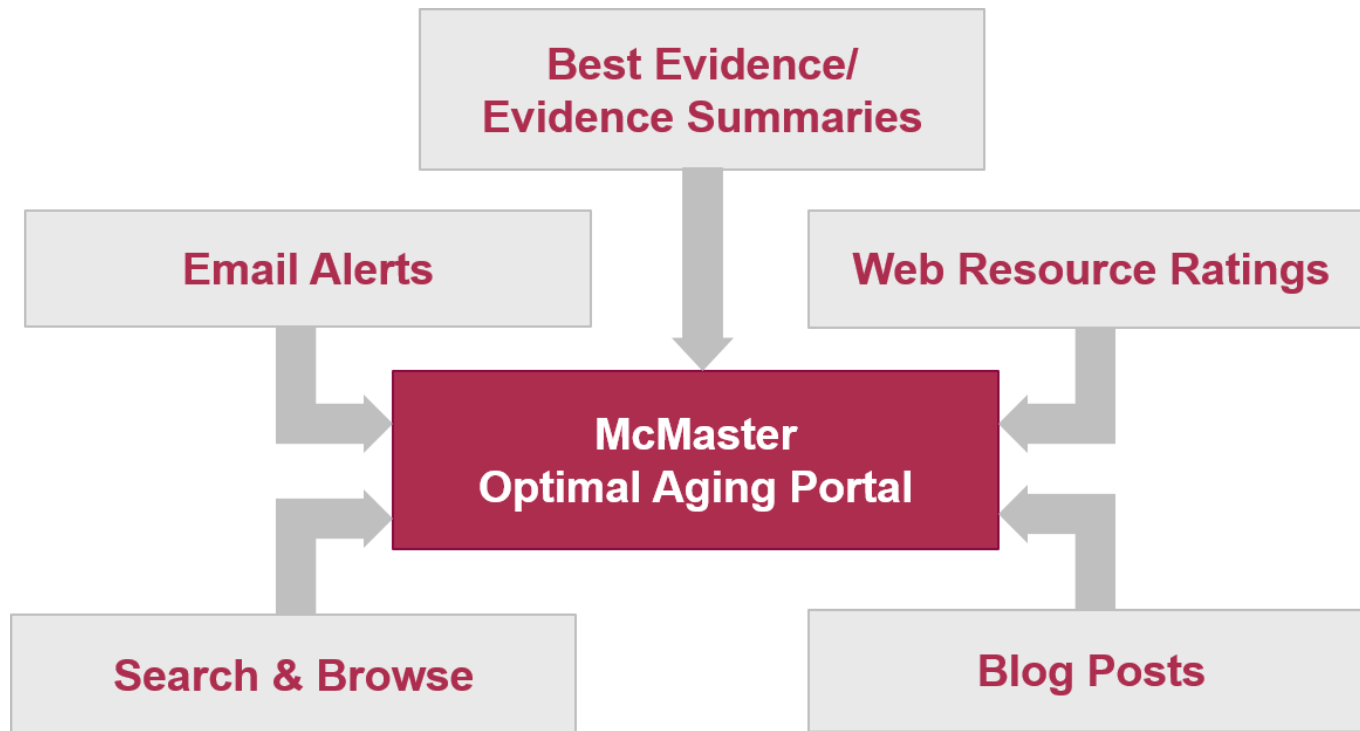
■ What is offered?

- Access to scientific articles for clinicians, public health professionals, policymakers; members of the public can also review the professional materials

■ What is the research potential of the Portal?

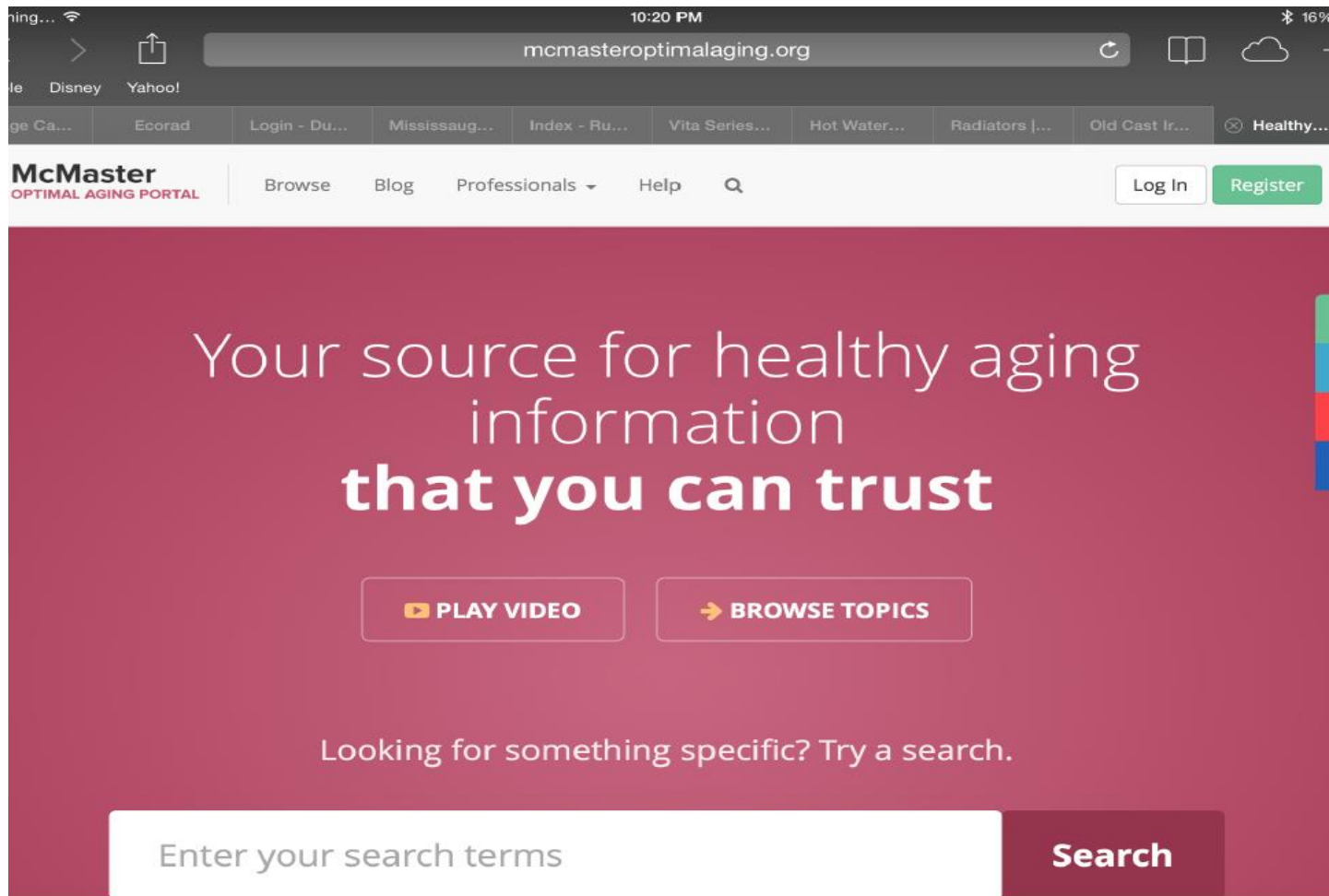
- ~100K unique users per month
- Access to search terms, analytics data
- Identify gaps in evidence for future research opportunities
- Understand different KT approaches and how evidence impacts behaviour and decision-making

Portal Components



→ On health and social aspects of aging

McMaster Optimal Aging Portal



Intergenerational programs: It takes a village to age optimally



The Bottom Line

- Intergenerational programs can have a positive impact on everyone involved.
- They have the potential to improve the well-being of older adults, reduce stigma associated with aging and discrimination against older adults, while also supporting youth development.
- Guides are available to support individuals and groups wishing to develop intergenerational programs.

McMaster Optimal Aging Portal



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Combat loneliness and depression by sharing memories: Relive those glory days!

One of the pleasures in life is spending time with family and friends. Another is getting together to relive those good times and memorable moments. New research shows that group activities involving reminiscing can help relieve loneliness and depression.

[Full story](#)



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