



Scoping out the key ingredients to achieve change at the societal level:

Perspectives on interventions aimed at physical activity and sedentary behaviour

Lise Gauvin PhD

Department of Social & Preventive Medicine, School of Public Health, Université de Montréal Associate Scientific Director, Population Health Research, CRCHUM



Presenter Disclosure Information

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- Speakers Bureau: N/A
- Advisory Board: Member, Institute Advisory Board-Institute for Nutrition, Metabolism, and Diabetes,(CIHR); Mission Advisory Panel (MAP) Committee, Heart & Stroke Foundation of Canada.

Reducing the Rising Tide of Societal Cardiometabolic Diseases: From Why to How

- Over the past few days, leading international speakers have provided evidence that:
 - Increasing PA and reducing SB (the <u>WHAT</u>) can lessen the burden of CMD (the <u>WHY</u>)
 - Despite this, a majority of citizens across the world (WHO) are still (WHEN) not meeting PA guidelines.
 - So we know <u>WHERE</u> we want to be but <u>HOW</u> do we get there?'





Reducing the Rising Tide of Societal Cardiometabolic Diseases: From Why to How

- How can we get there
 - Scope out some of the key ingredients for achieving change in physical activity at the societal level
 - Share some examples of programs and policies that have had an impact
 - Share some resources that can collectively allow for progress







... can a societal change in cardiometabolic diseases even occur ... ?





BMJ 2013;346;11515 doi: 10.1136/bmj.f1515 (Published 9 April 2013)

age 1 of 9

RESEARCH

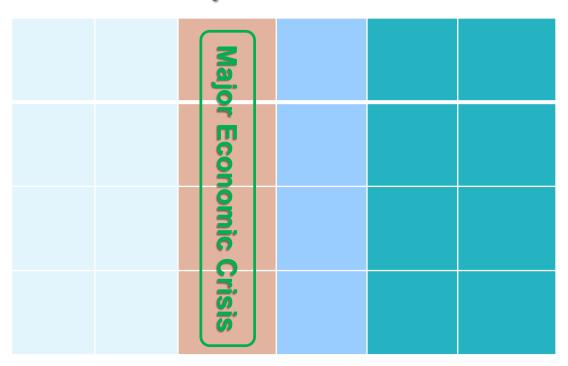
Population-wide weight loss and regain in relation to diabetes burden and cardiovascular mortality in Cuba 1980-2010: repeated cross sectional surveys and ecological comparison of secular trends

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Manuel Franco associate professor¹ adjunct associate professor² visiting researcher³, Usama Bilal research assistant¹ visiting researcher³, Pedro Orduñez regional adviser⁵ professor³, Mikhail Benet professor³, Alain Morejón assistant professor³, Benjamin Caballero professor⁵, Joan F Kennelly research assistant professor⁻, Richard S Cooper professor and chair⁵

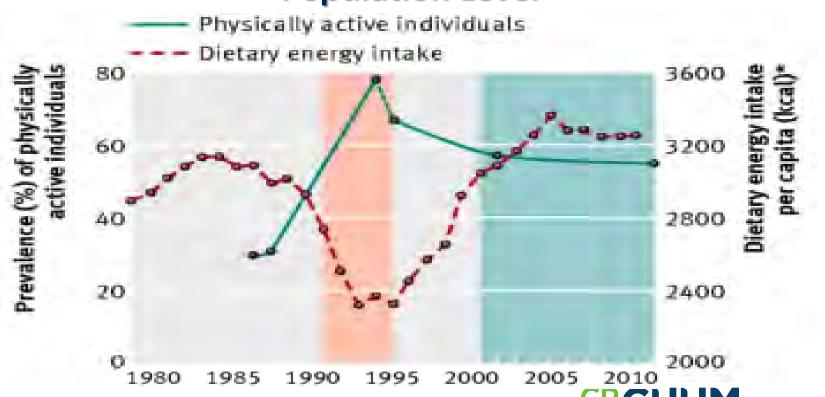


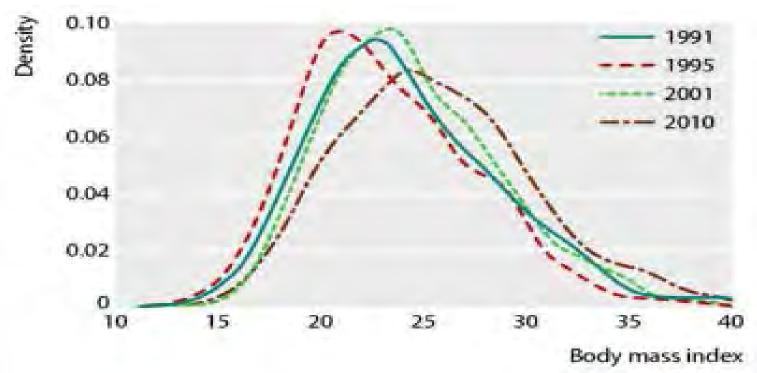






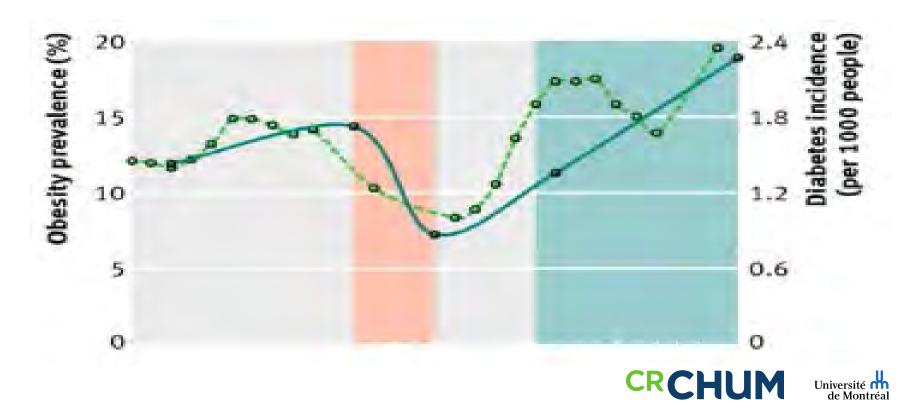














... OK... so, let's just get people <u>MOVING</u>
<u>MORE</u> and <u>EATING</u>
<u>BETTER</u>!!!





Myths around Getting People to Move

MORE and EAT BETTER according to Michael Kelly from NICE

... just have to share info on health benefits ...

It's just common sense!!!

... just have to get the message through...



... It's possible and <u>easy</u> to predict behaviour ...

http://www.youtube.com/user/UCLBehaviourChange
CBC Launch Part 4: Talk by Professor Mike Kelly

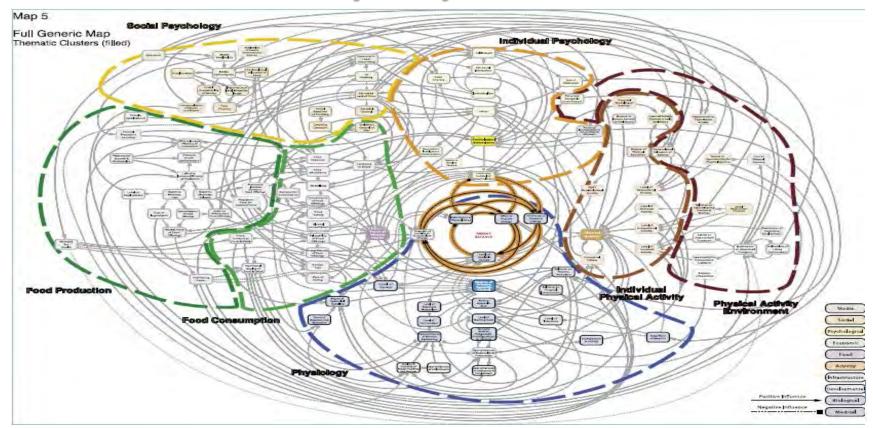
... people are rational...

... people are IRrational...





Why Do People Move the Way they Do and Eat the Way they Do? (from the Foresight Project UK)





... GOOD GRIEF
...how do we
figure this one
out ? ...





Starting Point: Know What It Means to Move More and Eat Better?







(The Toronto Charter for Physical Activity, a tool built on an international consensus)



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は、保険、交通、現場

Big. Sales Big.

身体活動一人

を想定した都らけ渡り

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La Charte de Toronto pour l'activité physique : un appel mondial à l'action

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Pourguoi une charte de l'activité physique?

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L'activité physique : un formidable investissement dans l'être humain, dans la santé, dans l'économie et dans le développement durable

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(The Toronto Charter for Physical Activity, a tool built on an international consensus)





The Toronto Charter for Physical Activity: A Global Call for Action

Physical activity promotes withhosis physical and mental health, prevents discious improves social conventedness and easily of life, previous convent benefits and contributes to environmental sudainability. Commission that support health enhancing physical activity in a printy of accessible sudainability. Commission to support health enhancing physical activity in a printy of accessible and dischable ways account different self-layer and throughout for concluder more picture and dischable ways account for the self-layer and throughout disc concluder more picture printing to the contribution of the printing of the contribution of the problem of a concernibution to support health enciously applical activity for all considerant to support health encionage physical activity for all considerant to support health encionage layers activity for all the considerant to support activity from a position of the printing of the pri

Why a Charter on physical activity?

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Physical activity – a powerful investment in people, health, the economy and sustainability

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Transference & transference







... GREAT
...let's see
some of that
evidence ...!!!







Multitude of Sources of Information





Face-to-face interventions for promoting physical activity

Justin Richards , Melvyn Hillsdon , Margaret Thorogood and Charles Foster
Online Publication Date: September 2013

Online Publication Date: September 2013

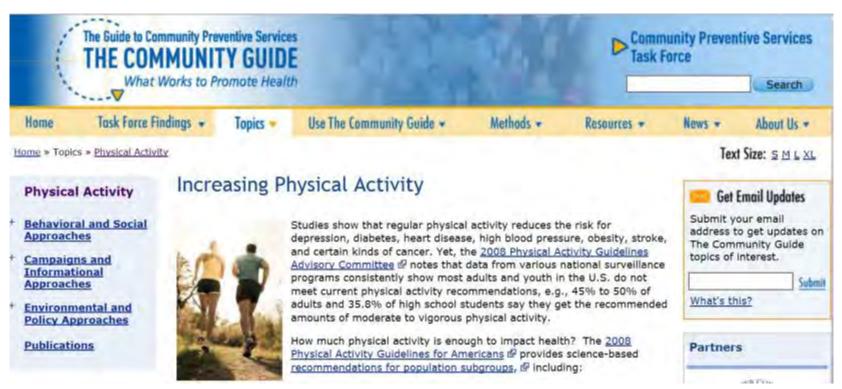
Incentive-based **interventions** for increasing **physical activity** and fitness Grace C O'Malley, Philip RA Baker, Daniel P Francis, Ivan Perry and Charles Foster Online Publication Date: January 2012

Charles Foster, Melvyn Hillsdon, Margaret Thorogood, Asha Kaur and Thamindu Wedatilake

Interventions for promoting physical activity

Online Publication Date: January 2005

Multitude of Sources of Information







Multitude of Sources of Information









Standards and indicators



Sign in

Behaviour change: individual approaches (PH49)

Exercise referral schemes to promote physical activity (PH54)

Physical activity: brief advice for adults in primary care (PH44)

Behaviour change: the principles for effective interventions (PH6)

Community engagement (PH9)

Physical activity and the environment (PH8)

Obesity: working with local communities (PH42)

Promoting physical activity in the workplace (PH13)

Promoting physical activity for children and young people (PH17)

Occupational therapy and physical activity interventions to promote the mental wellbeing of older people in primary care and residential care (PH16)

Preventing type 2 diabetes: population and community-level interventions (PH35)

Physical activity: encouraging activity in all people in contact with the NHS \OS8

Multitude of Sources of Information



Registration no. =	Title 5	Status :
CRD42015024116	Systematic review of the mechanisms responsible for the effects of physical activity and fitness on mental health in young people	Ongoing
CRD42015024086	Does an activity monitor based intervention increase daily physical activity of adults with overweight or obesity? A systematic review and meta-analysis	Ongoing
CRD42015024004	Effectiveness of theory-based behavioral interventions to increase physical activity in children with chronic disease; a systematic review	Ongoing
CRD42015023875	Effectiveness of eHealth interventions promoting physical activity in older adults: a systematic review and meta-analysis	Ongoing
CRD42015023731	Aging-related biomarkers associated with sedentary behaviour in older adults: a systematic review (and meta-analysis)	Ongoing
CRD42016023351	Physical activity interventions during treatment for children and adolescents with cancer, a systematic review	Ongoing

Conference Board of Canada and Canadian Alliance for Sustainable Health Care

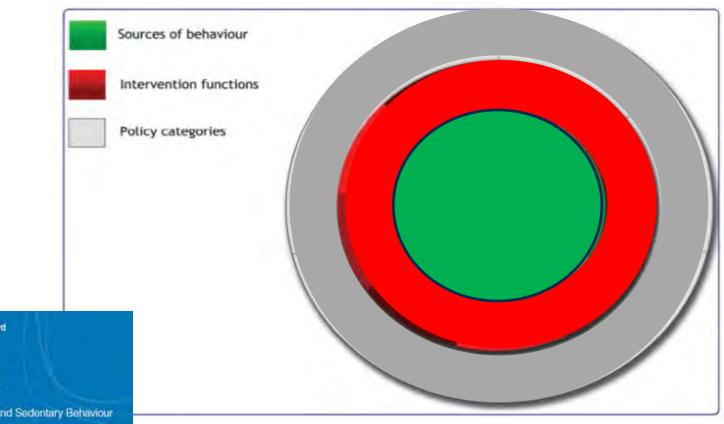
- Spence, John C., & Thy Dinh. <u>Moving Ahead: Taking Steps to Reduce Physical Inactivity and Sedentary Behaviour</u>. Ottawa: The Conference Board of Canada, 2015 (see www.conferenceboard.ca)
 - Cost-effectiveness
 - Scalability
 - Sustainability







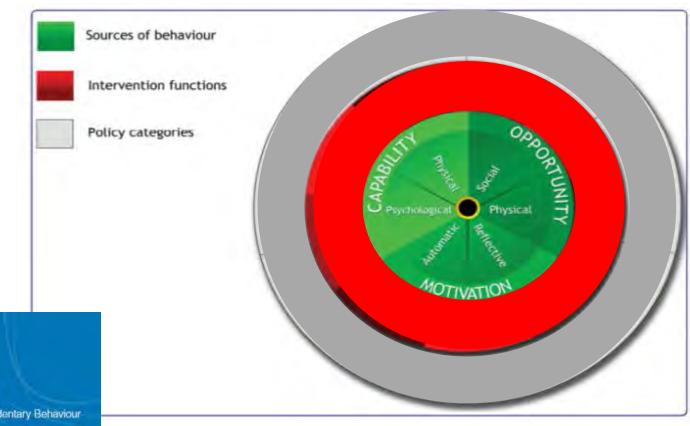
The Behaviour Change Wheel (see Michie et al., Implementation Science, 2011)



The Conference Board Le Conference Board du Canada

Moving Ahead.

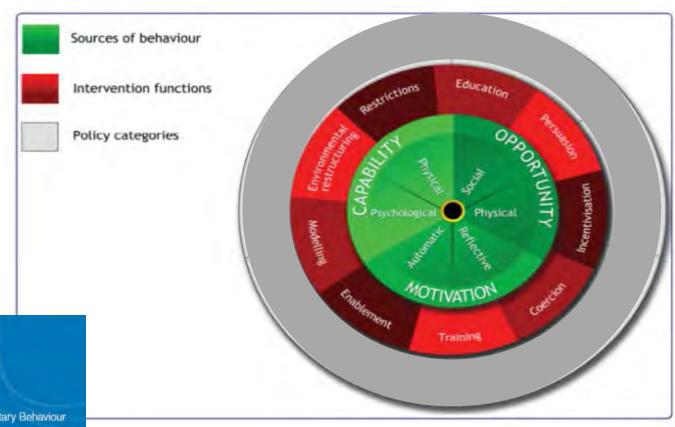
The Behaviour Change Wheel (see Michie et al., Implementation Science, 2011)



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Moving Ahead.

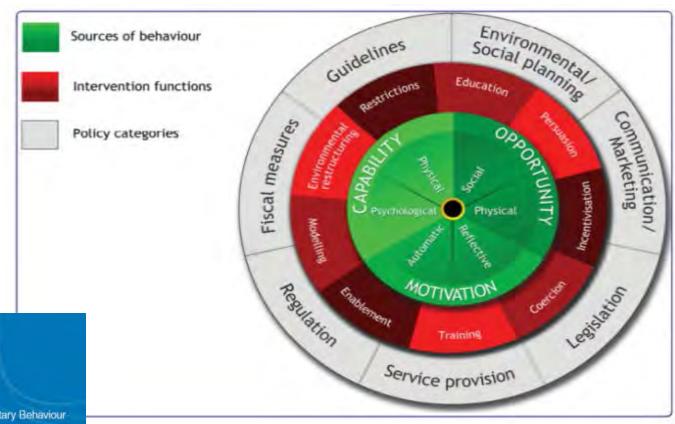
The Behaviour Change Wheel (see Michie et al., Implementation Science, 2011)



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Moving Ahead.

The Behaviour Change Wheel (see Michie et al., Implementation Science, 2011)



The Conference Board Le Conference Board du Canada

Moving Ahead.



... OK ... are there potentially cost-effective, scalable, and sustainable interventions out there?





- Behavioural and Social Approaches
 - Individually adapted health behaviour change programs
 - Social support interventions in community settings
 - Enhanced school-based physical education







- Campaigns and informational approaches
 - Community-wide campaigns







- Environmental and policy approaches
 - Community-scale urban design and land-use policies
 - Creation of, or enhanced access to, places for physical activity combined with informational outreach
 - Street-scale urban design and land-use policies
 - Point-of-decision prompts to encourage use of stairs







- Size of intervention effects
 - Most small to moderate with ES ~ 0.12 0.62
 - about 500 steps/day or 14.7 minutes more of physical activity over a week according to Conn, V.S., Hafdahl, A.R., & Mehr, D.R. (2011). Interventions to Increase Physical Activity Among Healthy Adults: Meta-analysis of Outcomes. <u>American Journal of Public</u> Health 101: 751–58
 - Need to understand variability across populations & contexts









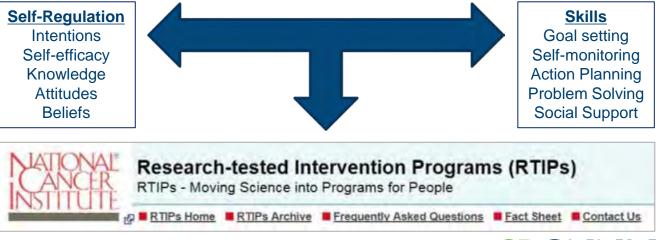
YIKES !!! ...
some examples
please ...





Some Examples Behavioural and Social Approaches

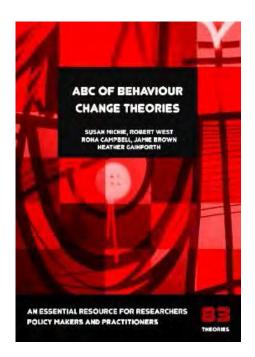
 Individually adapted health behaviour change programs







Some Examples Behavioural and Social Approaches







3 websites:

- www.bct-taxonomy.com
- www.behaviourchangewheel.com/
- · www. behaviourchangetheories.com
- 1 really-cool APP: BCT-Taxonomy







Some Examples Behavioural and Social Approaches

- Social support interventions in community settings
 - one-to-one counseling, advice, or group counseling;
 - self-directed or prescribed physical activity;
 - home- or facility-based physical activity;
 - ongoing face-to-face support;
 - telephone support;
 - written educational and motivational support; and
 - self-monitoring strategies.







Some Examples Behavioural and Social Approaches

Enhanced school-based physical education









Some Examples Campaigns and Informational Approaches

Community-wide campaigns

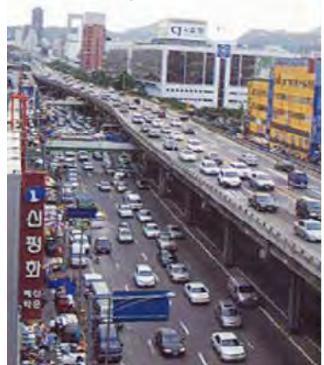




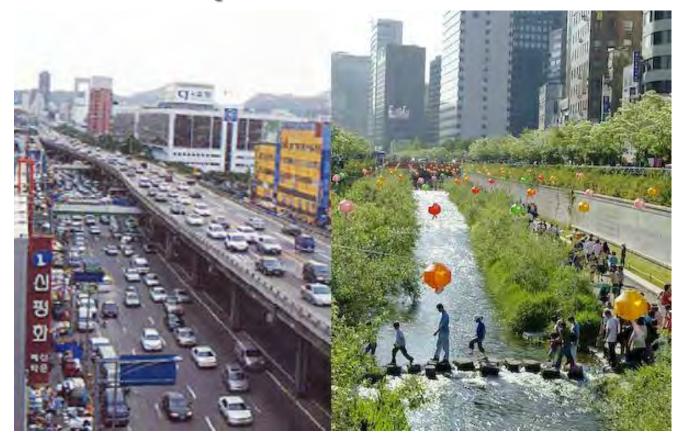




Community-scale urban design and land-use policies









Community-scale urban design and land-use policies













Example Q21 Projects 2010-2013







 Creation of, or enhanced access to, places for physical activity combined with informational outreach















Street-scale urban design and land-use policies





Before



After











 Some projects account for culture (planning of public spaces, « the school thread »)







Point-of-decision prompts to encourage use of stairs

A flight
a day may
keep
chronic
disease
away.









Ok ... I get the picture ... can this be summed up?





Develop a <u>Plan</u> to <u>Implement</u>
Evidence-based and Equity-aimed
Programs & Policies



Evaluate & Share Outcomes











... so ... those are the KEY INGREDIENTS ... gee ... any caveats?





Theory is when we know everything but nothing works.

Praxis is when everything works but we do not know why.

...everything works and now, we know why ...





Collaborators, Partners, and Funders

Researchers

- Tracie Barnett
- Yan Kestens
- Ariane Bélanger-Gravel
- Geetanjali Datta
- Howard Steiger
- Marie-France Raynault
- Jean-Pierre Després

Students/Staff

- ✓ Daniel Fuller
- ✓ Anne-Sophie Dubé
- ✓ Nicoleta Cutumisu
- ✓ Adrian Ghenadenik
- ✓ Annie Bernatchez-Côté
- ✓ Marie-Hélène Poirier
- ✓ Béatrice Nikiéma
- ✓ Mylène Baptista
- ✓ Isabelle Thérien

Policy-makers / practitioners

- Richard Lessard
- Richard Massé
- Louis Drouin
- Sophie Paquin
- François Lagarde
- Marilie Laferté













