

# STAIR PROMPTS

Stair prompts are motivational signs placed near stairwells, elevators, or escalators to encourage individuals to increase stair use. The prompts can inform people about the health or weight loss benefits from routinely taking the stairs. Use them in worksites or public venues, such as gyms as a reminder to be active every day.

## THE BENEFITS

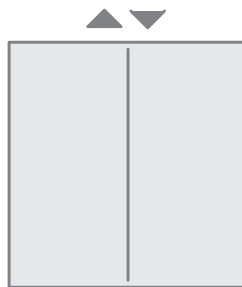
Regular stair use is linked to numerous health benefits, including reduced stroke risk, greater lower limb strength, reduced cholesterol levels, and improved cardiovascular health. Stair use in the worksite is also a great way to cope with job-related stress. Using the stairs helps burn calories and assists in weight management. Just two minutes of stair climbing per day can burn enough calories to prevent the average annual weight gain in adults.

## HOW TO BEGIN

To implement stair prompt signage in your worksite, follow these steps:

- Pick a stair prompt template:
  - CDC Motivational Signs
  - StepJockey Signs
- Customize and print.
- Post near elevators and stairs. Don't forget to include directional signage if the stairs are hidden!

Stair climbing requires 8-9 times more energy expenditure than sitting and burns about **7 times more calories than taking an elevator.**



STAIRS



# 2x

Using the stairs burns twice as many calories as walking.



Workers with worksite stair prompts are **72% more likely** to report being **active while at work.**

# 29%

Men climbing 20-34 flights of stairs per week have a **29% lower risk of stroke.**



In **10 of 11 studies**, more people used the stairs after prompts were posted.

The Guide to Community Preventive Services (2014). Environmental and policy approaches to physical activity: point-of-decision prompts to encourage use of stairs. Center for Disease Control and Prevention. || Whitby, N. (2014). StepJockey: Twenty amazing stair climbing facts. || Paffebarger, R.S., Hyde, R.T., Wing, A.L., and Hsieh, C.C. (1997). Physical activity, all-cause mortality, and longevity of college alumni. New England Journal of Medicine, 314, 605-613. || Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. IJBNPA. 14(1): 79. <http://rdcu.be/tsJy>

Primary and secondary research by J. Aaron Hipp, PhD, and Margaret van Bakergem, MPH, NC State University. Designed by Jacquie Goyena, Lindsay Frank, NC State University.

# PHYSICAL ACTIVITY PROMOTIONALS


Physical activity promotionals are information such as posters, brochures, emails, or lectures encouraging workers to be active. They are designed to increase activity through awareness and motivation.

## THE BENEFITS

Physical activity promotionals can decrease barriers, increase participation, and increase readiness to participate in worksite physical activity. Studies using informational media saw a 25% increase in energy expenditure when worksites provide access to places to be physically active. Informationals do not need to be expensive or time consuming. Adding humor, statistics, weekly healthful tips, and quotes into physical activity promotional sources makes the message more meaningful.

## TIPS

- Post in highly visible areas.
- Change information regularly.
- Provide relevant and timely information.
- Use an active email headline that will attract readers' attention.



A worksite health promotion program with informational media saw an 84% increase in exercise frequency.

# 84%

Informational media in worksites encouraging bicycle commuting can lead to **workers cycling to work more than once per week.**



Workers with access to promotional materials were **38% more likely to meet physical activity guidelines.**



# 20%

WOMEN

20% of women and 30% of men saw significant health improvements associated with worksite health newsletters and information displays.

# 30%

MEN

Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. IJBNPA. 14(1): 79. <http://rdcu.be/tsJy> | Kahn, E.B., Ramsey, L.T., Brownson, R.C., Heath, G.W., Howze, E.H., Powell, K.E., Stone, E.J., Rajab, M.W. and Corso, P. (2002). The effectiveness of interventions to increase physical activity: A systematic review. American Journal of Preventive Medicine, 22,73-107. | Ickes, M., and Sharma, M. (2009). Worksite health promotion: A practical strategy for obesity prevention. American Journal of Health Studies, 24,343-352. | Kahn, E.B., Ramsey, L.T., Brownson, R.C., Heath, G.W., Howze, E.H., Powell, K.E., Stone, E.J., Rajab, M.W. and Corso, P. (2002). The effectiveness of interventions to increase physical activity: A systematic review. American Journal of Preventive Medicine, 22,73-107.

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# WALKING MAPS

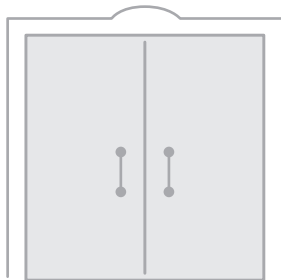
Walking maps are signs or maps of walking routes within the worksite or the surrounding neighborhood. They are of varying distances and often provide information such as number of steps, time, or calories burned in completing a route. Use them for new employee orientation, getting to know the best destinations and lunch spots around the worksite, routes for walking meetings, walking groups, and walking breaks.

## THE BENEFITS

Walking maps are great resources to increase the likelihood workers will make walking part of their regular routine, especially when they include elements such as wayfinding, marked distances, varying lengths, and destination points. They provide safe, accessible, and convenient routes and act as a cue-to-action to get moving while at work.

## TIPS

- Identify safe and accessible routes.
  - Measure distance, time, calories burned on each route.
  - Mark distance along route.
- Create a map for posting and available online.
- Host a kick-off event or worksite competition to increase awareness, encourage tracking.
- Update routes and information as needed.<sup>1</sup>

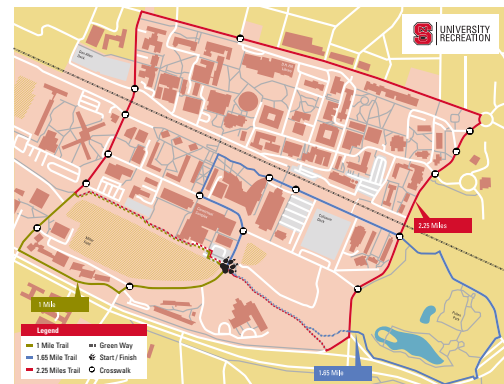


Post walking maps in visible places, such as bulletin boards, main entrances, or elevators to encourage use.

# 2x

Using walking maps can double the likelihood of meeting weekly physical activity recommendations.

Use internet mapping programs to create maps for safe walking routes, which include distance information.<sup>2</sup>



# 38%

Workers with accessible walking maps take 38% more steps while at work.

<sup>1</sup> [http://www.eatsmartmovemorenc.com/WalkingMapGuide/Texts/WalkingMapGuide\\_lowrez.pdf](http://www.eatsmartmovemorenc.com/WalkingMapGuide/Texts/WalkingMapGuide_lowrez.pdf) || Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. IJBNPA. 14(1): 79. <http://rdcu.be/tsJy> || Warren, B.S., Maley, M., Sugarwala, L.J., Wells, M.T., and Devine, C.M. (2010). Small steps are easier together: A goal-based ecological intervention to increase walking by women in rural worksites. Preventive Medicine, 50, 230-234. || <sup>2</sup> <https://recreation.dasa.ncsu.edu/wellness-2/walking-maps/>

# HEALTH FAIRS

One of the most common starting points for a worksite health promotion program is a health fair. At these events, various booths are set up to educate workers about a variety of health issues. Educational topics include health screenings, general health, fitness, and lifestyle improvements. Health fairs are advertised and promoted ahead of time and are usually an annual or semi-annual event.

## THE BENEFITS

Health fairs can be a fun, interactive, and informative way to encourage a healthier and more productive workforce. Health fairs provide value as an opportunity to expose a large number of workers to health promotion activities and goals, decrease resistance, increase knowledge, and create awareness of health options. In one evaluation of a worksite health fair, almost 80% of workers reported lifestyle changes as a result of attending the health fair, while most also reported sharing information with family and friends.

## HOW TO BEGIN

To provide a successful health fair at your worksite:

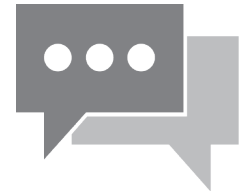
- Start planning far in advance<sup>1</sup>.
- Coordinate with local service providers.
- Assess employee interests and needs.
- Collect survey feedback after the event is over.
- Find a detailed toolkit for examples.

Health fairs can raise the profile of a worksite's health activities and provide an opportunity for workers to become immediately engaged through **screenings, assessments, or interventions** that are available at the event.

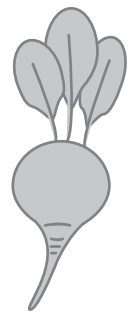


# 71%

71% of workers report attending worksite health fairs if available.



Health fairs with nutrition and cancer assessments and education effectively influence **positive behavior changes** in adults and children.



Workers are up to 55% more likely to meet physical activity guidelines if their worksite hosts a health fair.

# 55%



<sup>1</sup>[http://www.projecthealth.ca/sites/default/files/files/Planning\\_A\\_Health\\_Fair\\_-\\_Project\\_Health\\_-\\_April\\_2014.pdf](http://www.projecthealth.ca/sites/default/files/files/Planning_A_Health_Fair_-_Project_Health_-_April_2014.pdf) | Tabak, R.G., Hipp, J.A., Marx, C.M., Yang, L., and Brownson, R.C. (2016). Which worksite incentives for healthy weight do workers use? *Environment and Behavior*, 48,131-149. | Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. *IJBNPA*. 14(1): 79. <http://rdcu.be/tsJy> | Matkke, S., Schnyer, C. and van Busum, K.R. (2012). A review of the U.S. worksite health market. Rand Health.Prepared for the U.S. Department of Labor and the U.S. Department of Health and Human Services, Rand Corporation. | Carter, K.F. (1991). The health fair as an effective health promotion strategy. *American Association of Occupational Health Nurses*, 39,513-516.

# WORKSITE CHALLENGES

Worksite challenges encourage exercise or weight loss by emphasizing social support and having fun through interactive competition. They usually include total team steps taken or percent of weight loss.

## THE BENEFITS

Evidence suggests that team-based competitions are more effective than individual worksite interventions. Implementation of worksite challenges improve health and morale, reduce absenteeism, and increase productivity. In a CDC worksite challenge, 75% said the challenge created a sense of social support and 79% met their physical activity goals.

## HOW TO BEGIN

To create your own worksite challenge follow these steps:

- Plan who, what, when, where, and how employees will participate.
- Use existing templates to get started.<sup>1</sup>
- Communicate and recruit.
- Implement including incremental recognition and achievements.
- Evaluate your success.
- Build on existing worksite challenges.

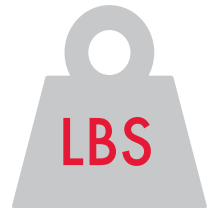
# 40%

EMPLOYEES



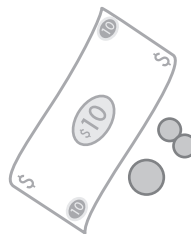
In a statewide worksite weight-loss contest, almost 40% of employee participants lost 10 or more pounds.

# 114,511 LBS



In a 2014 statewide worksite weight-loss contest, 114,511 total lbs were lost.

**Cost Effective:** A worksite health team competition resulted in an estimated cost of **\$1.45 to lose 1% of body weight.**



71% of workers participating in a worksite weight-loss competition reported improved worksite morale.



# 71%



Workers with access to worksite challenges were over 5x more likely to meet physical activity guidelines.

# 5x MORE LIKELY

<sup>1</sup>[https://www.durham.ca/departments/health/physical\\_activity/resources/worksite/wpActivityChallenge.pdf](https://www.durham.ca/departments/health/physical_activity/resources/worksite/wpActivityChallenge.pdf) || Anderson, L.M., Quinn, T.A., Glanz, K., Ramirez, G., Kahwati, L.C., Johnson, D.B., .....and Katz, D.L. (2009). The effectiveness of worksite nutrition and physical activity interventions for controlling employee overweight and obesity: A systematic review. *American Journal of Preventive Medicine*, 37, 340-357. || Breaux-Shropshire, T., Whitt, L., Oster, R.A., Lewis, D., and Shropshire, T.S. (2015). Results of an academic, health care worksite weight loss contest for Southeastern Americans: Scale Back Alabama 2011-2013. *Worksite Health and Safety*, 63, 165-169. || Brownell, K.D., Cohen, R.Y., Stunkard, A.J., Felix, M.R., and Cooley, N.B. (1984). Weight loss competitions at the work site: Impact of weight, morale and cost-effectiveness. *American Journal of Public Health*, 74, 1283-1285. || Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. *IJBNPA*. 14(1): 79. <http://rdcu.be/tsJy> || Hammond, S.L., Leonard, B., and Fridinger, F. (2000). The Centers for Disease Control director's physical activity challenge: An evaluation of a worksite health promotion intervention. *American Journal of Health Promotion*, 15, 17-20.



# BIKE STORAGE

Bicycle storage facilities include secure locations to lock bicycles, but may include covered parking, lockers, and showers as additional amenities and incentives to bike to work. Surveying workers can help determine the amount of parking needed. Ideal bike facilities are well lit and clearly labeled, accessible by ramp, located close to the worksite building, sheltered from the elements and sufficiently protected from automobile parking.

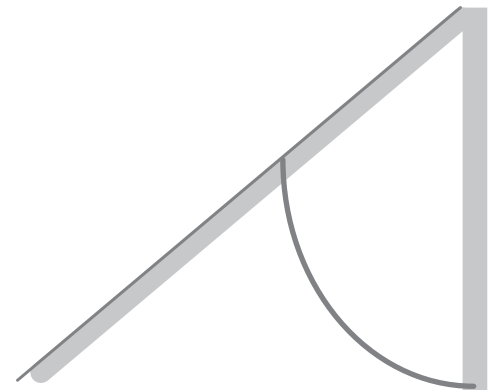
## THE BENEFITS

Bicycle storage increases bike commuting rates and raises perception of bicycling convenience. Studies show that having bicycle storage increases the likelihood of bike commuting, being physically active, and if properly sited, can reduce transition time between commute and work.

Bike storage is more likely to be used if it is covered and includes conveniences for storing helmets and other gear, like an air pump and simple tools.

# 68%

68% of bicycle commuters reported regular use of storage facilities when available at the worksite.

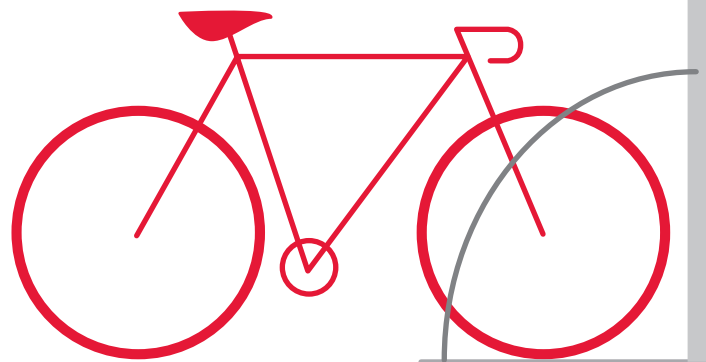


Workers with bike storage facilities available are up to **12x more likely** to bike to work.



# 4.5x

Workers using bike storage are nearly 5 times more likely to meet physical activity guidelines.



Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. IJBNPA. 14(1): 79. <http://rdcu.be/tsJy> || Jackson, M.E., and Ruehr, E.O. (1998). Let the people be heard: San Diego bicycle use and attitude survey. Journal of the Transportation Research Board, 1636, 8-12. || Kaczynski, A.T., Bopp, M.J., and Wittman, P. (2010). Association of worksite incentives with active commuting. Preventing Chronic Disease, 7, A127. || Pucher, J., Dill, J., and Handy, S. (2010). Infrastructure, programs, and policies to increase bicycling: An international review. Preventive Medicine, 50, s106-s125.

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# FLEXTIME FOR HEALTH ACTIVITIES



Flextime for health activities is when employers permit workers to shift their schedules and come in earlier or leave later to allow for physical activity or participation in health promotion programming before, during, or after work. This type of policy is useful in creating opportunities for workers to engage in physical activity, yet maintain their expected number of work hours.

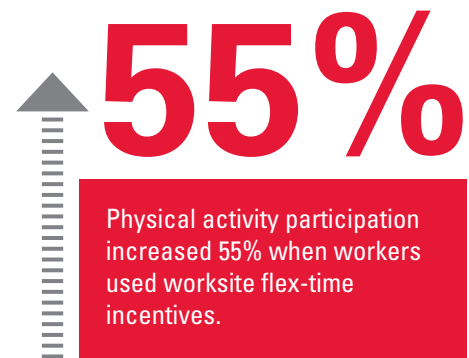
## THE BENEFITS

A flextime policy allows workers to overcome one of the most common barriers to being physically active – time. Benefits include increased participation in physical activity, reduced stress at work, increase in average levels of sleep, and improved worksite morale.

  
Average levels of sleep were significantly higher for workers who agreed that their employer provided sufficient time flexibility in contrast to workers who felt the company flexibility did not meet their needs.



The use of stress management techniques were higher for workers provided with time flexibility.



Providing worktime for physical activity improved the fitness of workers onsite.



Sallis, J.F., Bauman, A., and Pratt, M. (1998). Environmental and policy interventions to promote physical activity. *American Journal of Preventive Medicine*, 15, 379-397. || Wigand, D., Welton, M., Spaulding, A., and Coles, C. (2004). *Healthy Maine Partnerships: Good Work! Resource Kit*. Maine Department of Health and Human Services and Maine Center for Disease Control and Prevention. || Grzywacz, J.G., Casey, P.R., and Jones, F.A. (2007). The effects of worksite flexibility on health behaviors: A cross-sectional and longitudinal analysis. *Journal of Occupational & Environmental Medicine*, 49, 1302-1309. || Kruger, J., Yore, M.M., Bauer, D.R., and Kohl, H.W. (2007). Selected barriers and incentives for worksite health promotion services and policies. *American Journal of Health Promotion*, 21, 439-447. || Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. *IJBNPA*. 14(1): 79. <http://rdcu.be/tsJy>

# BIKE & WALK INCENTIVES

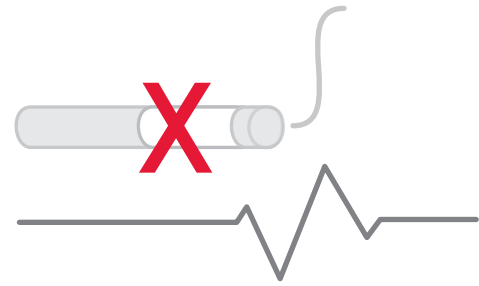
Incentives can increase motivation and participation in activities that support healthy behaviors. They send a message that the organization is committed to employee health. Worksite incentives to encourage active commuting to work include commuter tax benefits, cash or financial incentives, bicycle gear discounts, and guaranteed ride home (e.g., due to bad weather, employee illness).

## THE BENEFITS

The benefits of including bike/walk incentives include a decrease in health care costs as well as a decrease in obesity, high cholesterol, and smoking. Worksites that implement bike/walk incentives have seen an increased interest in bicycling to work.

## TIPS

- Ask workers what rewards are motivational.
- Ensure every participant that achieves a goal receives recognition.
- Focus on on behavior change and avoid rewards for biometric changes (i.e., pounds lost).
- Provide each person who enrolls with a small thank you, such as a bike bell, ankle band, reflective gear, or light.



The implementation of monetary rewards for staff who engage in healthy behaviors resulted in a **decrease of obesity, high cholesterol, smoking, and high blood pressure prevalence** during the course of the study.



45% of survey respondents reported they would be more likely to commute to work if financial incentives were implemented at their worksite.



When bicycle commuting is incentivized using health care costs, health care premiums decrease by 4.4%, compared to an average increase of 25% for similar companies that do not offer such incentives.



Workers are up to 5 times more likely to meet recommended levels of weekly physical activity if they use worksite incentives to bike or walk.

Pronk, N.P., Simon, B.C. and Gaikowski, J. (2014). Bicycling to work at Quality Bicycle Products: A case example for active transportation in the business and industry sector. Health & Fitness Journal, 18, 49-52. || Poole, K., Kumpfer, K., and Pett, M. (2001). The impact of an support-based worksite health promotion program on modifiable health risk factors. American Journal of Health Promotion, 16, 21-26. || Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. IJBNPA. 14(1): 79. http://rdcu.be/tsJy || Reasons why bicycling and walking are and are not being used more extensively as travel modes. U.S. Department of Transportation: Federal Highway Administration. Publication No. FHWA-PD-92-041

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# PUBLIC TRANSIT INCENTIVES

Public transportation can include buses, subway systems, trains, trams, trolleys, or rapid transportation systems. Transit users may achieve 30 minutes of physical activity daily solely by walking to and from transit stops. Worksite incentives that encourage this type of commute include free or discounted bus, rail, or transit passes, reimbursements, partial payments, or pre-tax payroll deductions offered through subsidy programs. Offering incentives to encourage workers to use existing public transit options decreases costs for individual vehicular transport as well as helps workers achieve weekly physical activity recommendations.

## THE BENEFITS

When workers receive free public transit passes, car usage is reduced by up to 20% and can lead to a 50% increase in usage of public transport. Additionally, using public transit can lower crash rates, improve air quality, and reduce traffic congestion and related rush hour stress.

# 2.5x

When workers use incentives for public transit, they are about 2.5 times more likely to meet total physical activity recommendations at work.

Workers who reported ever having used worksite incentives to use public transit were **24 times more likely to use public transit** modes compared to those whose worksites provide no such support.

# 24x

## MORE PUBLIC TRANSIT USE



Public transit use in older workers was associated with a **21% lower chance of being obese.**



Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. IJBNPA. 14(1): 79. <http://rdcu.be/tsJy> || Martin, A., Suhrcke, M., and Ogilvie, D. (2012). Financial incentives to promote active travel. American Journal of Preventive Medicine, 43, e45-e57. || Yang, L., Hipp, J.A., Adlaka, D., Marx, C., Tabak, R., and Brownson, R.C. (2015). Factors influencing choice of commuting mode. 2015 Active Living Research Conference, San Diego, CA. || Martin, A., Suhrcke, M., and Ogilvie, D. (2012). Financial incentives to promote active travel. American Journal of Preventive Medicine, 43, e45-e57.

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# PHYSICAL ACTIVITY BREAKS

Get up from your desk! Implementing active breaks in the worksite is a way to incorporate customizable physical activity into the workday. Even three short periods of brisk walking in bouts of 10 minutes or more accumulated throughout the day is as effective as one continuous 30 minute brisk walk in reducing cardiovascular risk and improving mood in people who were previously sedentary.

## THE BENEFITS

Workers show increased work performance and productivity with active breaks. There are multiple health improvements, such as lower blood sugar, lower waist circumference, and improved perception of personal health status. Using physical activity breaks within the worksite are shown to decrease feelings of stress and depression.

## ACTIVE BREAK EXAMPLES

- Standing and walking meetings
- Meeting spaces designed to encourage standing without blocking view, such as height tables, standing desks, or treadmill desks
- Chair yoga
- Smartphone apps and computer programs to remind you to stand and stretch
- Find existing activity break examples in other worksites for reference<sup>1</sup>

Taking **non-sedentary breaks** at work is associated with a smaller waist size, up to **2.5 inches**.



# 70%

70% of workers believe employers should provide time during the workday to exercise.



An increase in work performance related to increased physical activity was found after introducing physical activity breaks in the worksite.



# 3x

MORE LIKELY



Workers are up to 3x more likely to meet physical activity guidelines when they use physical activity breaks at work.

<sup>1</sup>[https://www.ccohs.ca/oshanswers/psychosocial/active\\_living.html](https://www.ccohs.ca/oshanswers/psychosocial/active_living.html) || Healy, G.N., Dunstan, D.W., Salmon, J., Cerin, E., Shaw, J.E., Zimmet, P.Z., and Owen, N. (2008). Breaks in sedentary time. *Diabetes Care*, 31, 661-666. || Taylor, W.C. (2005). Transforming work breaks to promote health. *American Journal of Preventive Medicine*, 29, 461-465. || Hipp, J.A. et al. (2017) Mixed methods analysis of 18 worksite policies, programs, and environments for physical activity. *IJBNPA*. 14(1): 79. <http://rdcu.be/tsJy> || Barr-Anderson, D.J., AuYoung, M., Whitt-Glover, M.C., Glenn, B.A., and Yancey, A.K. (2011). Integration of short bouts of physical activity into organizational routine: A systematic review of the literature. *American Journal of Preventive Medicine*, 40, 76-93. || Canadian Society for Exercise Physiology. (2011). *Canadian Physical Activity Guidelines – Adults (18-64 years)*. Retrieved November 7, 2012 from the World Wide Web. <http://www.csep.ca/guidelines>