

# How to Boil the Ocean: Addressing Multiple Modifiable Risk Factors in Clients who Smoke.

Centre for Addiction and Mental Health  
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# Disclosures

- No disclosures to report.



# Learning Objectives

- Describe the relationship between tobacco use and other modifiable risk factors.
- Explain strategies for engaging clients who use tobacco and have other modifiable risk factors.
- Apply strategies for addressing other modifiable risk factors in clients who use tobacco.

If you don't stop  
smoking and drinking,  
slowly slowly you going to die.

I am not  
in rush doctor!

You need to  
mind your  
weight...

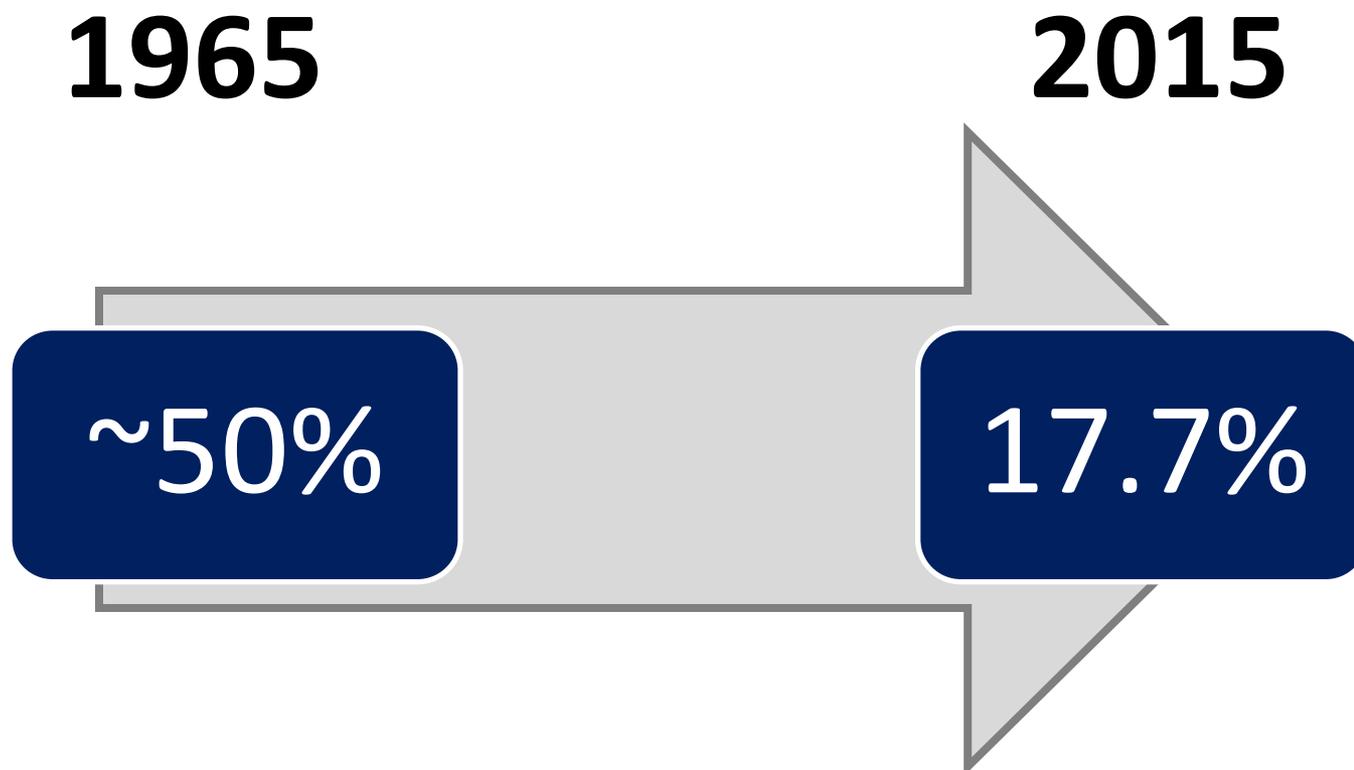
You should  
exercise  
some  
more...



Mehanda

# Why look beyond your client's smoking status?

Smoking rates have declined significantly in Canada over the past 50 years:



# Why look beyond your client's smoking status?

Prevalence of tobacco use across 49 primary care practices in Ontario:

Overall: **18.2%**

Range: **12.4%** to **36.1%**



# Why look beyond your client's smoking status?

The burden of smoking is not shared equally among the nation

- 1) Low socio-economic status
- 2) Mental illness and addictions
- 3) Ethnic minorities

**These populations may also have other modifiable risk factors**

# Why look beyond your client's smoking status?

When we address smoking as well as additional health risk behaviours, we

- 1) Optimize overall health outcomes
- 2) Increase chances of quitting successfully

# Clustering of Risk Behaviours

**Clustering:** *'the risk behaviour combination is more frequent than predicted if they were independent'*

Compared to non-/ex-smokers, smokers were more likely present with additional risk behaviours:



**Low-leisure time physical activity**



**Low fruits/vegetables intake**



**High alcohol consumption**

# Clustering of Risk Behaviours

Type of Smoker	Odds Ratio* (95% Confidence Interval)
Ex-smokers	1.14 (0.97, 1.33)
Light smokers (1-9cpd)	1.24 (0.93, 1.64)
Moderate smokers (10-19cpd)	1.72 (1.36, 2.17)
Heavy smokers ( $\geq 20$ cpd)	3.07 (2.59, 3.64)

\*Odd ratios of multiple ( $\geq 2$ ) risk behaviours other than smoking when compare to non-smokers. OR adjusted for age, nationality, and educational level.

RESEARCH ARTICLE

# Heavy Smoking Is More Strongly Associated with General Unhealthy Lifestyle than Obesity and Underweight

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Click for updates

## Abstract

### Background

Smoking and obesity are major causes of non-communicable diseases. We investigated the associations of heavy smoking, obesity, and underweight with general lifestyle to infer which of these risk groups has the most unfavourable lifestyle.

### Methods

## OPEN ACCESS

**Citation:** Lohse T, Rohrmann S, Bopp M, Faeh D (2016) Heavy Smoking Is More Strongly Associated with General Unhealthy Lifestyle than Obesity and Underweight. PLoS ONE 11(2): e0148563.

**Conclusion :** “Unhealthy general lifestyle was associated with heavy smoking.... Future smoking prevention measures...should pay attention to improvement of general lifestyle”

# Multiplicative Effect on Health



Daily fruit/vegetable  
intake



Regular Physical  
Activity

=  **40%**

Risk of myocardial  
infarction



=  **~75%**

Daily fruit/vegetable  
intake

Regular Physical  
Activity

Avoid Smoking

Risk of myocardial  
infarction

# The Holistic Approach

Given the strong evidence of the clustering of these behaviours, it is imperative that we take a **holistic approach** to care for our clients

This approach can improve health outcomes and increase chances of quitting successfully

An aerial photograph of a coastline. The top half shows deep turquoise water with white foam from breaking waves. The bottom half shows dark, jagged rocks with white foam crashing against them. A semi-transparent white banner is centered horizontally across the middle of the image.

**Where and How do we **START**?**

# The **5 STEPS** to Treatment

**STEP 1:** Evaluating Client's Interest

**STEP 2:** Drawing Connections

**STEP 3:** Choosing Goals

**STEP 4:** Assessing Readiness

**STEP 5A:** Assessing Client's Environment, Behaviour & Biology

**STEP 5B:** Developing a Change Plan



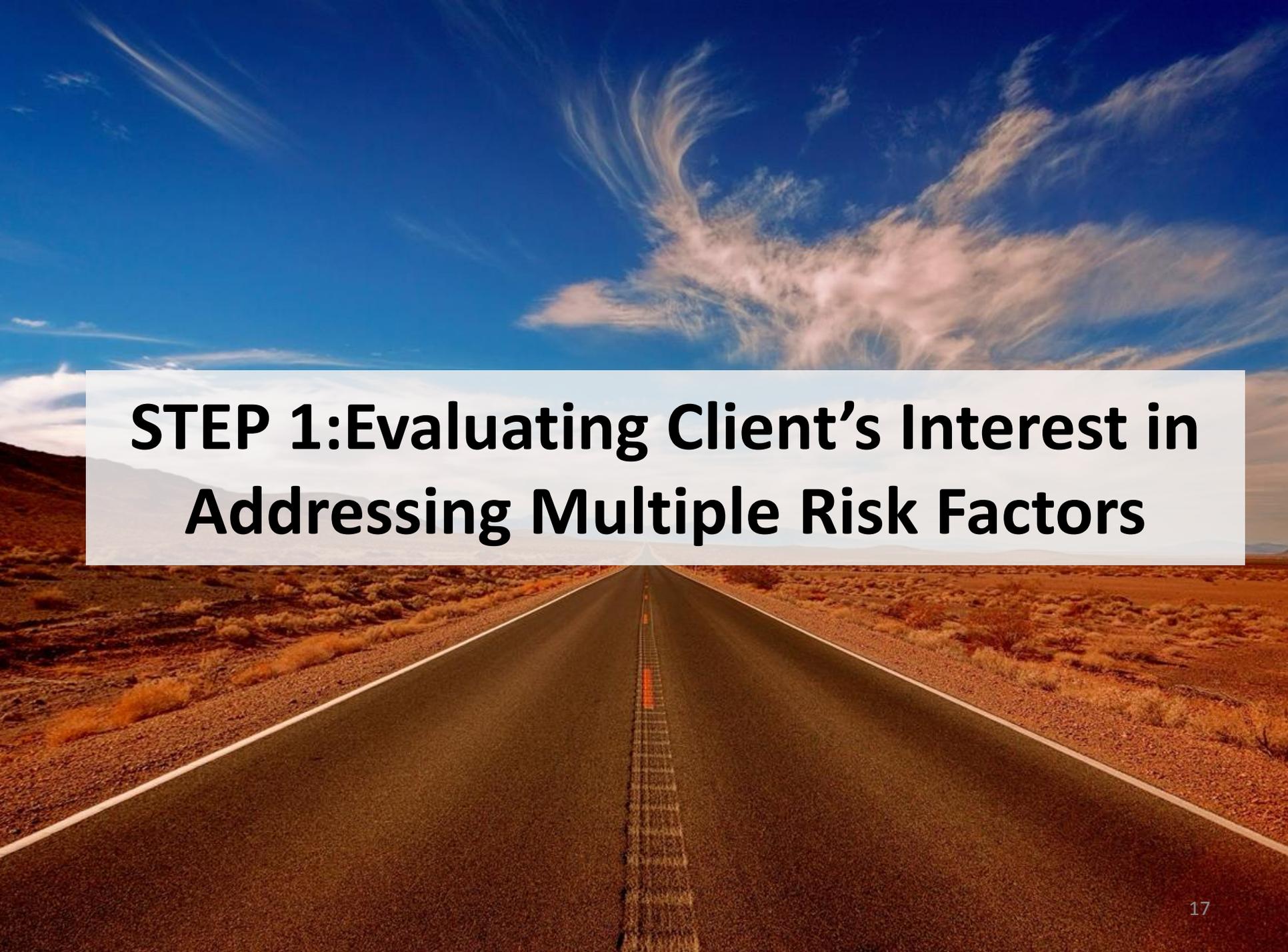
# Meet Melissa

Melissa is a 35 year-old female smoking 50 cpd and has come to you to quit smoking. She began smoking at the age of 15 and started drinking very shortly after. She grew up in Mississauga with her abusive father who had severe alcohol use disorder and her mother who suffered from anxiety. Her father had difficulty staying employed; which meant that the family had trouble making ends meet. She was diagnosed with ADHD at age 8 and took Ritalin for about a year before discontinuing.

She moved out to Toronto shortly after finishing high school to find work and has been living on her own ever since. Melissa currently works part-time as an administrative assistant and is looking for a second job to help pay her rent.

She often spends her evenings at home watching television and binge eating ice cream when she's feeling down. She says she occasionally meets up with her friends at the bar during the weekends to drink.

Melissa has high blood pressure and is 20 pounds overweight. She has chronic back pain and reports taking Tylenol 3 regularly to help manage the pain. She was recently diagnosed with the early signs of COPD; which prompted her to seek help. However, she finds it difficult to stay motivated and reports feelings of worthlessness, has difficulty concentrating and falling asleep.



# **STEP 1: Evaluating Client's Interest in Addressing Multiple Risk Factors**

# Agenda Mapping




**Agenda mapping is a tool that provides structure and a process for joint-decision-making with your client on how to proceed with treatment.**

**Using the spirit of Motivational Interviewing, it helps to guide the way you and the client will engage together**

# How do you discuss the agenda map with your client?

- *Would you like to talk about some of the things that you might find helpful to work on together?*
- *Here are some areas that you noted during your assessment, what do you feel is most important? Least important?*
- *Is there anything missing or anything that you would like to take away?*

# Activity #1 (10 min)

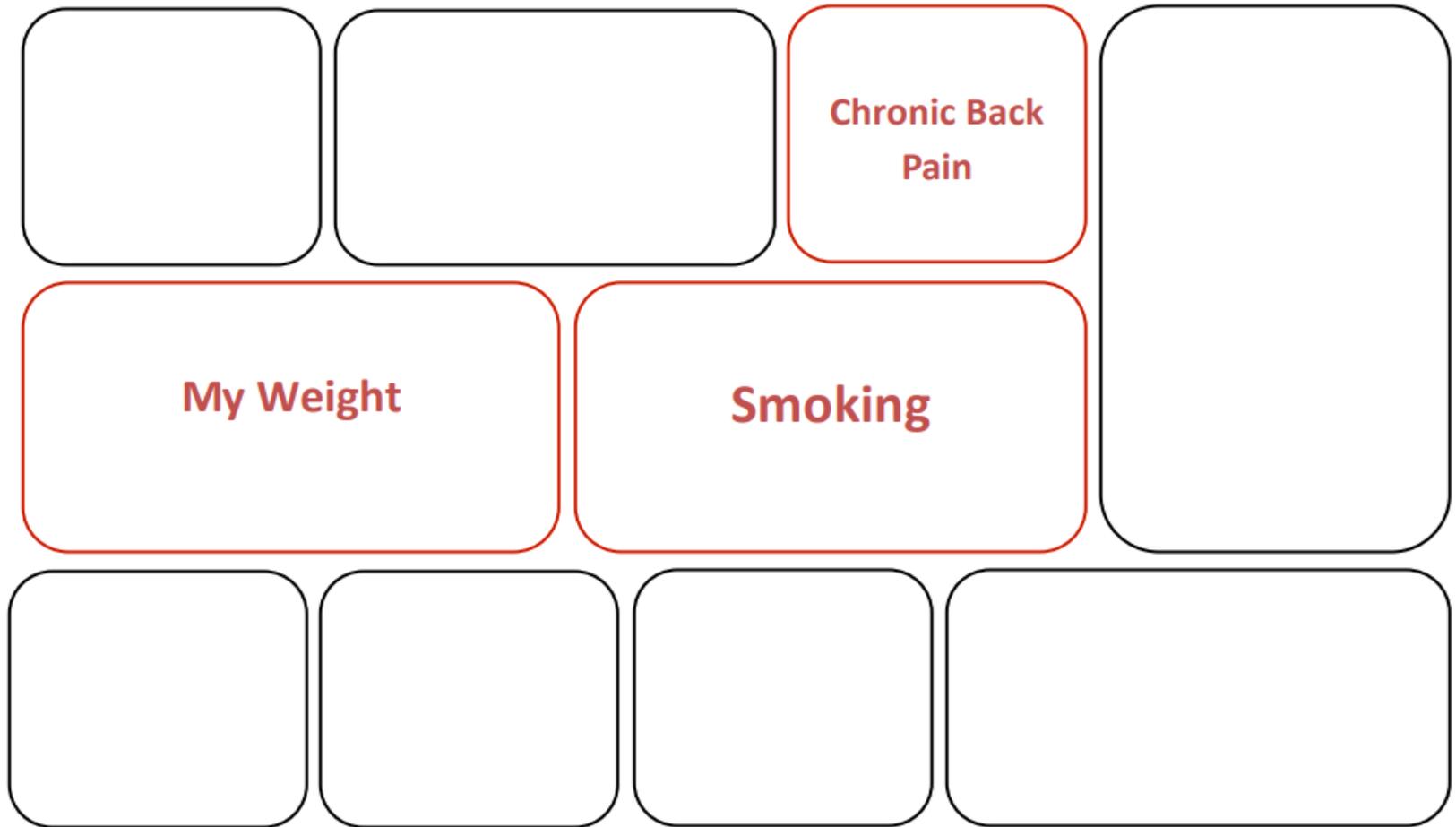
## Agenda Mapping with Melissa

Using Melissa's case (page 1 of your worksheet). Fill out the agenda map with what you think are Melissa's areas of priorities.

**Please note:** In practice, this exercise is meant to be done *in collaboration* with the client.



# Melissa's Agenda Map



# Activity #1 Review (5 min)

## Agenda Mapping with Melissa

- What are the same or different about the two agenda maps?
- How would you approach differences between the agenda maps?



**STEP 2: Drawing Connections  
Between the Risk Factors**

# The Client's Perspective

A client may come to your practice with the intent of focusing only on their tobacco use. You might get a question like this when you try to explore their other risk factors:

*“What does this have to do with my smoking?”.*

While the answer to this may be obvious to you, the client may not have enough information to see understand why it may be important to them.

# Elicit – Provide – Elicit

	Steps	Example
<b>Elicit</b> 	Elicit existing knowledge and interest	What do you already know about ____? What would you like to know more about?
<b>Provide</b> 	Provide affirmation of existing knowledge and offer clarification of misconceptions and additional information.	Would you like me to share a little more information about ____?
<b>Elicit</b> 	Elicit reaction to information and ask if there are additional things they may want to learn.	How do you feel about what you've learned? What more would you like to learn about?

# Melissa's Perspective

*"I recently found out that I have COPD and so I really have to quit but I find it really hard to do anything about it. Smoking is my source of comfort, my relief from it all. My work is super stressful and my boss barely lets me go out on a break.*

*At least with smoking, I'm able to use it as an excuse to get out and I find that it relaxes me. I've tried quitting before but I could barely get through a day though – I was ready to pull my hair out. It certainly doesn't help that I have a bit of weight on me. I just keep eating whenever I'm stressed out. I know smoking can help you lose weight and so it's only going to get worse when I quit.*

*I barely go out anywhere as it is – I mostly just stay at home, watch TV and drink beer. I can't sleep much either. Honestly, I don't know what I'm going to do. I can't deal with the weight gain, it makes me really upset."*

# Activity #2 (5 min)

## Helping Melissa Draw Connections

Take a moment to answer the following questions on page 2 of your worksheet:

1. What is a misattribution Melissa has about her smoking?  
How would you proceed to correct it?
2. What are some other factors (if any) she may not be acutely aware of that are affecting her smoking behaviour?



# Helping Melissa Draw Connections

Melissa believe smoking helps to relieve her stress (Elicited).  
Using EPE you can ask the following questions:

- **Provide:** Could I share a little bit about how stress and smoking are linked together?
- **Elicit:** What have you understood from what we've discussed about stress and smoking? What more would you like to know?



# Helping Melissa Draw Connections

What are some other factors that may affect her smoking behaviour and ability to quit?



**Sleep**



**Stress**



**Alcohol**



**Weight Gain**



## **STEP 3: Choosing Goals**

# SMART Goals

Having goals that are **quantifiable** and **manageable** make it less likely for your client to experience failure with behaviour change.

SMART goals are:

**S**pecific

**M**easurable

**A**ttainable

**R**elevant

**T**imely

# Helping Melissa Choose SMART Goals

You now start discussing goals with her and she shares the following goals:

- *“I will stop smoking cigarettes by the end of the week.”*
- *“I’m going to go to the gym every day after work.”*
- *“I’m going to stop eating junk food.”*
- *“I’m not going to drink as much alcohol when I’m with my friends.”*
- *“I will exercise for a half hour in the evening at home on Fridays, every week.”*

# Activity #3 (5 min)

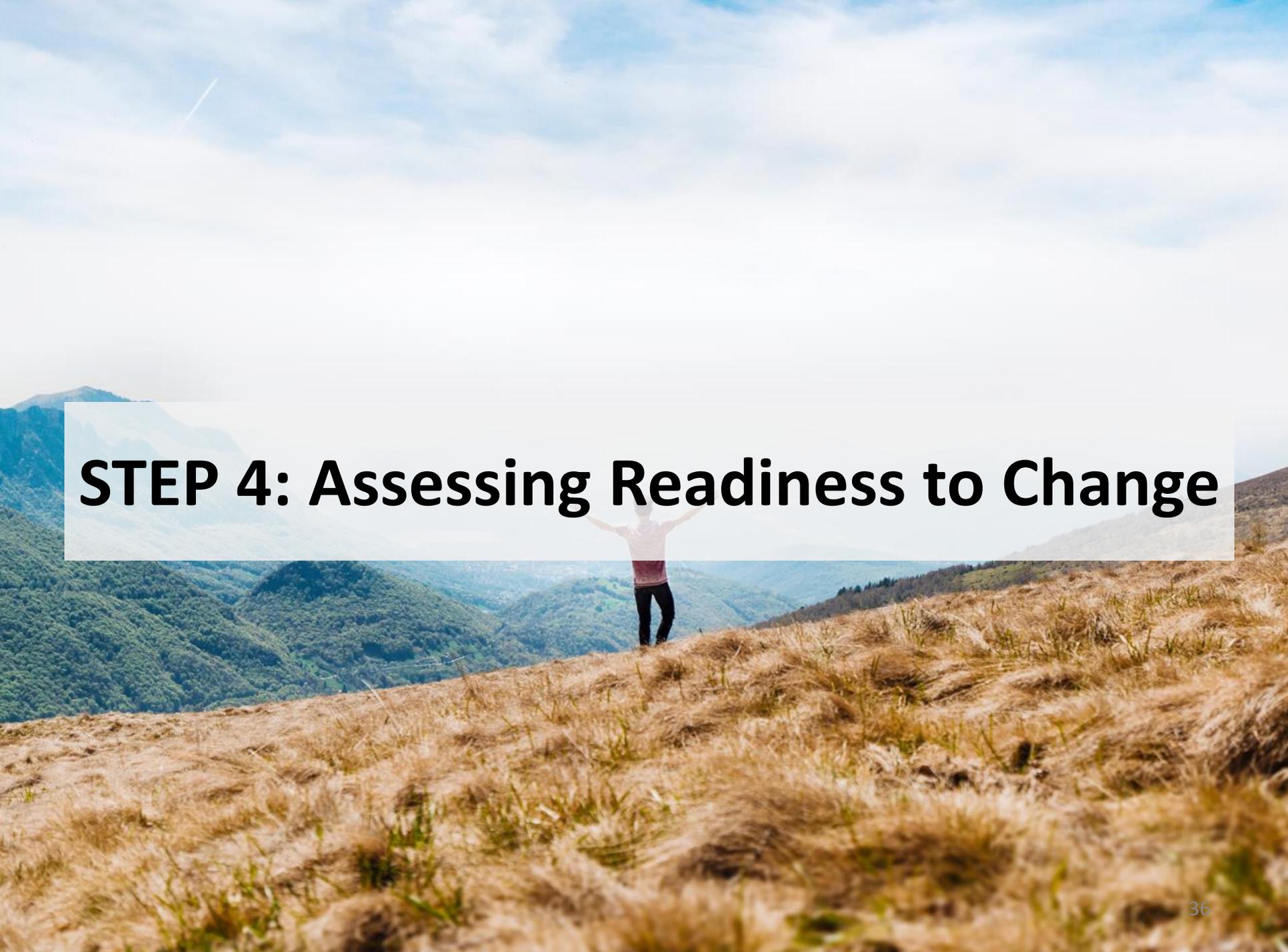
## Helping Melissa Choose SMART Goals

Please answer the following questions in the worksheet:

- Which (if any) of the goals Melissa shared are SMART goals?
- For the ones that aren't, how would you re-frame it as a SMART goal?

# Melissa's Goals made SMART

- I will reduce my cigarette smoking by 1 cigarette each day and will quit smoking completely on June 30<sup>th</sup>
- I'm going to go to the gym on Wednesdays and Fridays from 6pm – 7pm every week
- I will only eat chocolate twice per week. Every other time I crave sweets, I will eat an orange or pear.
- I will only have one alcoholic drink whenever I am out with my friends. The rest of the drinks will be non-alcoholic.

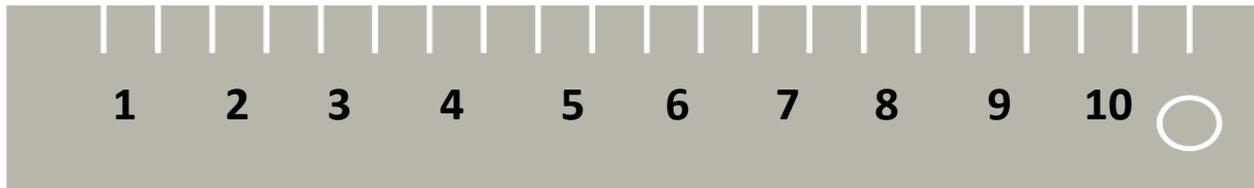
A person stands on a grassy hillside, arms raised in a gesture of triumph or achievement. The background features a vast, hazy mountain valley under a cloudy sky. The text "STEP 4: Assessing Readiness to Change" is overlaid on the image in a large, bold, black font.

# STEP 4: Assessing Readiness to Change

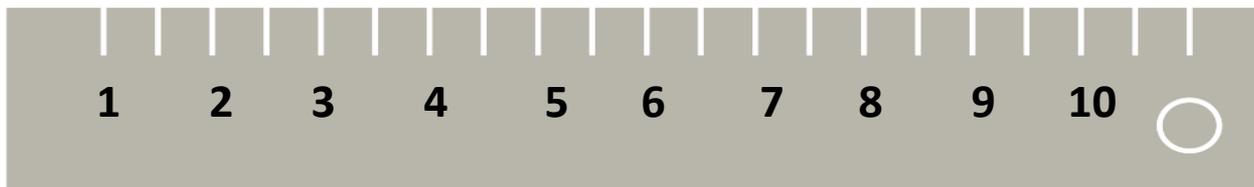
# Readiness Ruler

The Readiness Ruler is a tool designed to elicit change talk and it measures how important and confident the client is in making the change.

On a scale of 1 through 10, how important is it for you to change?



On that same scale, how confident are you in your ability to make this change?



# How do you discuss readiness?

Once you've completed the readiness ruler with your client, here are some questions you can use to discuss their level of readiness:

- *Why are you at your current score and not a zero?*
- *What would it take for you to go from [client's chosen #] to [a higher #].*

# Assessing Melissa's Readiness for Change

When use the Readiness Ruler to ask Melissa questions about her importance and confidence, she tells you the following:

*“Importance is a 10 for me, I can feel myself getting sick and I don't want it to get worse. I want to... I HAVE to quit. But I'm not confident at all that I can make it. Right now, I'd say I'm at a 3 for confidence.”*

# Activity #4 (5 min)

## Assessing Melissa's Readiness for Change

Fill out the answers to the following questions in your worksheet:

- Given Melissa's answers, how might you respond to her?
- What would you do to help change her level of readiness?



# STEP 5A: Assessing Client's EBB

# Environment, Behaviour, and Biology (EBB)



## Environment

- Environmental determinants can either promote or protect against the risk factor (e.g. having smoke-free spaces)



## Behaviour

- Behaviour dimension include the level of motivation to change and readiness
- Triggers for the behavior



## Biology

- Biological factors that enable or can act as a barrier to their treatment (e.g. other co-morbid conditions)

# Assessing Melissa's EBB

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# Activity #5 (10 min)

## Assessing Melissa's EBB

Returning to Melissa's case description, use the bio-psycho social lens to fill out the chart in your worksheet.

Environmental Factors	
Behavioural Factors	
Biological Factors	

# Activity #5: Assessing Melissa's EBB

Environmental Factors	
<b>Current supports</b>	<ul style="list-style-type: none"> <li>• Her friends who she meets on occasion</li> </ul>
<b>If client had a partner, describe state of relationship</b>	<ul style="list-style-type: none"> <li>• No relationship</li> </ul>
<b>Partner's tobacco use</b>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Other people smoking in the home, workplace. Exposure to SHS.</b>	<ul style="list-style-type: none"> <li>• N/A (Colleagues who smoke at work)</li> </ul>
<b>Current stressors, such as financial, personal, work, relationship etc.</b>	<ul style="list-style-type: none"> <li>• Her work and paying for rent</li> </ul>

# Activity #5:

## Assessing Melissa's EBB

Behavioural Factors	
Triggers to unhealthy behaviours (i.e. smoking, drinking alcohol, binge eating)	<ul style="list-style-type: none"> <li>Dealing with unpleasant emotions with smoking/eating palatable foods. i.e. She smokes when she is stressed.</li> </ul>
Biological Factors	
Mental Health issues (past and present)	<ul style="list-style-type: none"> <li>Reports signs of depression, feelings of worthlessness, difficulty concentrating and falling asleep (insomnia)</li> <li>Childhood trauma (abusive father)</li> </ul>
Other substance use	<ul style="list-style-type: none"> <li>Drinks alcohol,</li> </ul>
Chronic Pain	<ul style="list-style-type: none"> <li>Uses Tylenol 3 for pain</li> </ul>

# **STEP 5B: Develop a Change Plan**



# Developing a Change Plan

Clients can increase their chances of making successful health behavior changes by planning in advance as much as possible.

What should be in the **Change Plan**?

- Goals (reduction, abstinence, etc.)
- Challenges that may present along the way
- Coping strategies to manage the challenges and triggers
- Specific interventions (e.g., counselling, groups, medications)
- Available supports (e.g., helpline, family, friends, etc.)
- A plan for managing relapses or slips
- Follow up schedules

# Activity #6 (15 min)

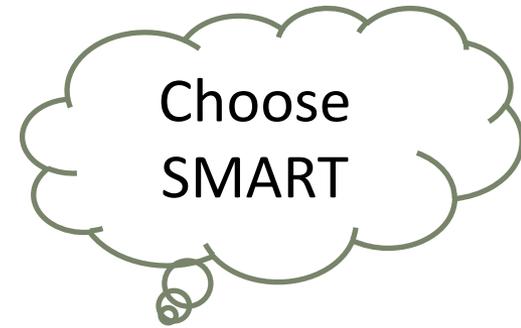
## Developing Melissa's Change Plan

Fill out the **Change Plan** template in your worksheet with plan for Melissa.

**Please note:** In practice, [this](#) would be led by the client. However, this exercise is an opportunity to become familiar with the factors that are important to include in a change plan.

**You will not need to fill out the "Prescriptions" section of the change plan for this activity.**

# Goal Statement



The behaviour I want/need to change is:

*Smoking cigarettes and get more exercise*

---

What is your goal now?

*I will reduce smoking to no more than 5 a day, I*

---

*will start walking to work every morning*

---



Start date:

*Saturday, June 2<sup>nd</sup>*

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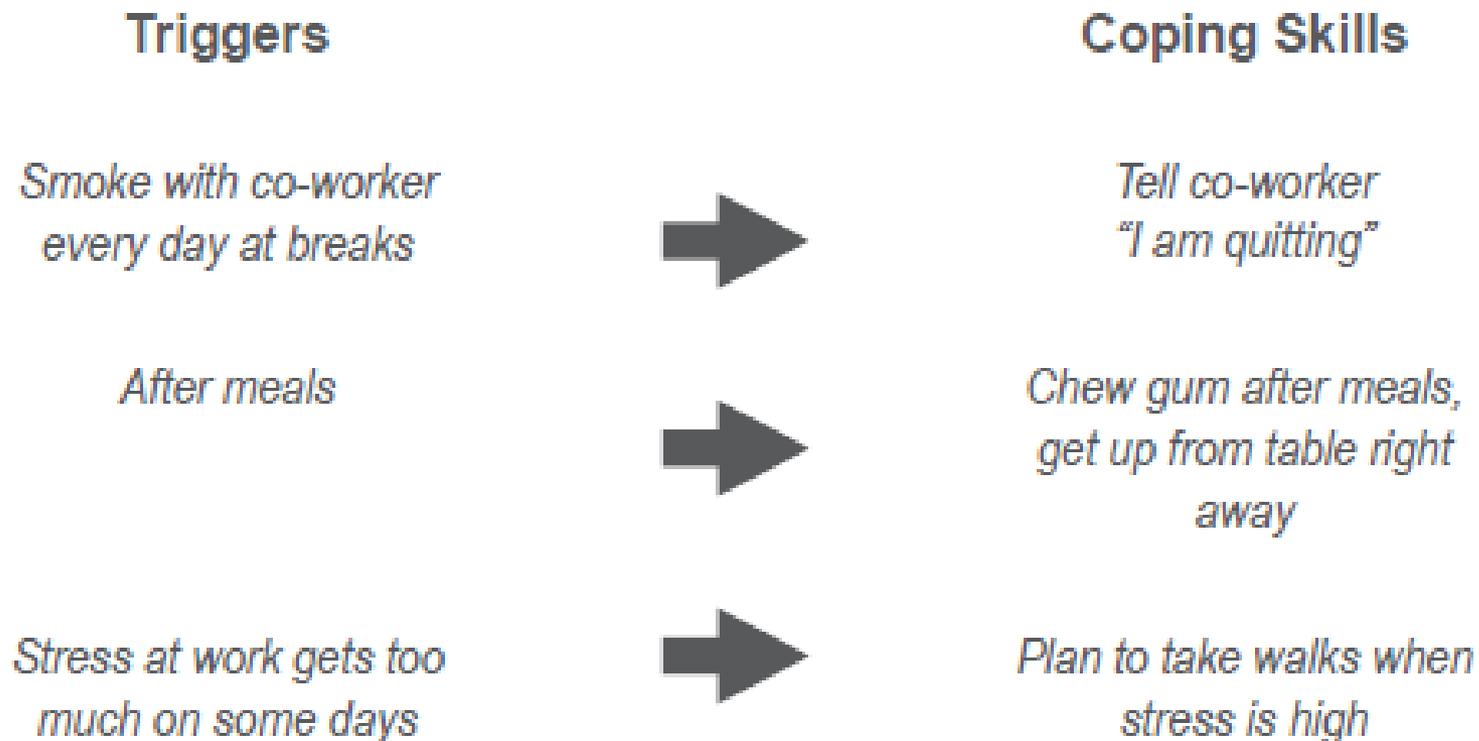
Achievement date:

*Saturday, June 9<sup>th</sup>*

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# Triggers & Coping Skills

## Sample Plan



# Support Systems

## Identify all positive support

- Partner, family, friends, colleagues
- Professionals – physician, pharmacist, dentist, nurse, etc.
- Other support – Smokers' Helpline, groups, websites, self-help

## Identify all negative influences

- Other smokers (partner, family)
- People who don't want you to quit smoking
- Unhelpful "encouragement" to quit

# Daily Diary



What is your goal for this week?

---

	<i>Did you smoke? If yes, how many cigarettes?</i>	<i>Describe the situation (e.g., were you alone or in a social setting etc.)</i>	<i>Thoughts and feelings (What were you thinking and feeling in this situation?)</i>
<i>Monday</i>	7	TV	Bored
<i>Tuesday</i>	3	after lunch	Tired
<i>Wednesday</i>	7		
<i>Thursday</i>	5		
<i>Friday</i>	2		
<i>Saturday</i>			
<i>Sunday</i>			

# Take-Away

- Most individuals who smoke present with multiple modifiable risk factors.
- Taking a holistic approach to addressing smoking cessation treatment can increase their success of quitting and achieving healthy living.
- Empowerment is key – it starts and ends with client.
- Using evidence-based tools can support making a quit plan that works



# References

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My Change plan workbook can be downloaded at  
<https://www.nicotinedependenceclinic.com/English/teach/Pages/Resources.aspx>

**Big thank you for my colleagues in the  
Nicotine Dependence Clinic at CAMH**

