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## **Empowering Indigenous Youth as Leaders:**

Creating Pathways to Wellness

iymp.ca

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## Vision

To create a world where Indigenous children and youth have safe, healthy places to be, belong, grow, and give of themselves. We seek to build on the strengths of youth and their communities to support their journeys toward selfdetermination.

## Mission

To develop and deliver relationship-based, communal mentor programs involving Indigenous youth and adult allies to nurture healthy inclusive communities.



IYMP is tackling severe health inequities that exist among Indigenous youth – a group that is growing at a rate 4x faster than the rest of Canada.

60% more likely have at least one known to develop chronic Type 2 condition Diabetes chance of not more likely completing high to die of school on a suicide reserve

IYMP is committed to doing things in a good way and is guided by the Leadership circle, Elder and Advisory circle and youth advisory circles.

## Elder advisory members are:

- Respected elders with traditional knowledge and life experiences living on the land.
  - Speak fluent in their Native language.
  - Community Elders and Youth from across Turtle Island.

## IYMP is a community-based healthy living program, delivered by Indigenous youth for Indigenous children.



Once per week for 90 minutes throughout the school year



Delivering healthy snacks and vigorous intensity physical activity



Offering covered post-secondary education application fees, bursaries, and high school credits in certain communities

80%

reduction in waist circumference

65%

improvement in emotional well-being

70%

improvement in healthy food self-efficacy and quality of life

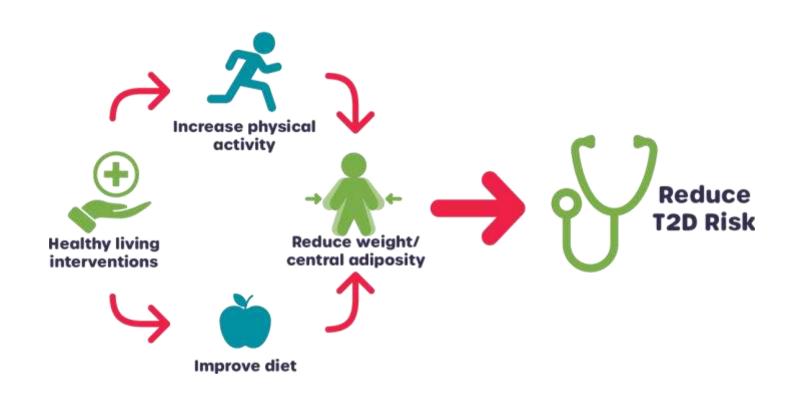
12%

in Type 2 Diabetes risk factors

With proven health outcomes, **IYMP** has demonstrated the strongest health outcomes in comparison to peer interventions

## Western/Conventional Model

The Canadian approach to health issues is segmented and fails to consider the social determinants of health and unique challenges facing Indigneous youth.



## Rooted in Western values

Based on Western research where findings often fail to consider Indigenous values and perspectives

## Lacking holistic approach

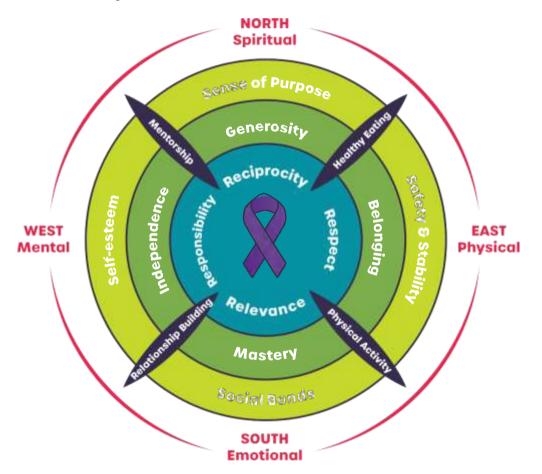
With the emergence of socio-ecological approaches, there is a need to understand the interconnectivity of health which is not yet considered

#### Ineffective for Indigenous groups

Interventions are often education focused, which are less effective within Indigenous communities

## IYMP Model

IYMP drives positive health outcomes **through** a **holistic Indigenous approach** that enhances cultural identity and connection with school, community, land, and local traditions.



#### **Research backed**

nodel has been piloted through published research with proven evidence of results

#### Grounded in Indigenous theory

The program is centered on the Circle of Courage and the Four R's, which are rooted in Indigenous worldview.

#### Relationship driven

IYMP builds on the strengths, energy, and talents of youth to meet unique community needs

## **ESSENTIAL CONDITIONS FOR IMPLEMENTING IYMP**

#### **Core Conditions**

**Dedicated Champion(s) to Engage School** 

The project requires at least one person within the school/site to organize IYMP and connect IYMP team members. However, one person cannot do it alone. They need to be supported by a team of people. One member of this team, the Young Adult Health Leader (YAHL) plays an essential role in delivering IYMP. Their primary role is to encourage, support and mentor youth as they develop and

Community

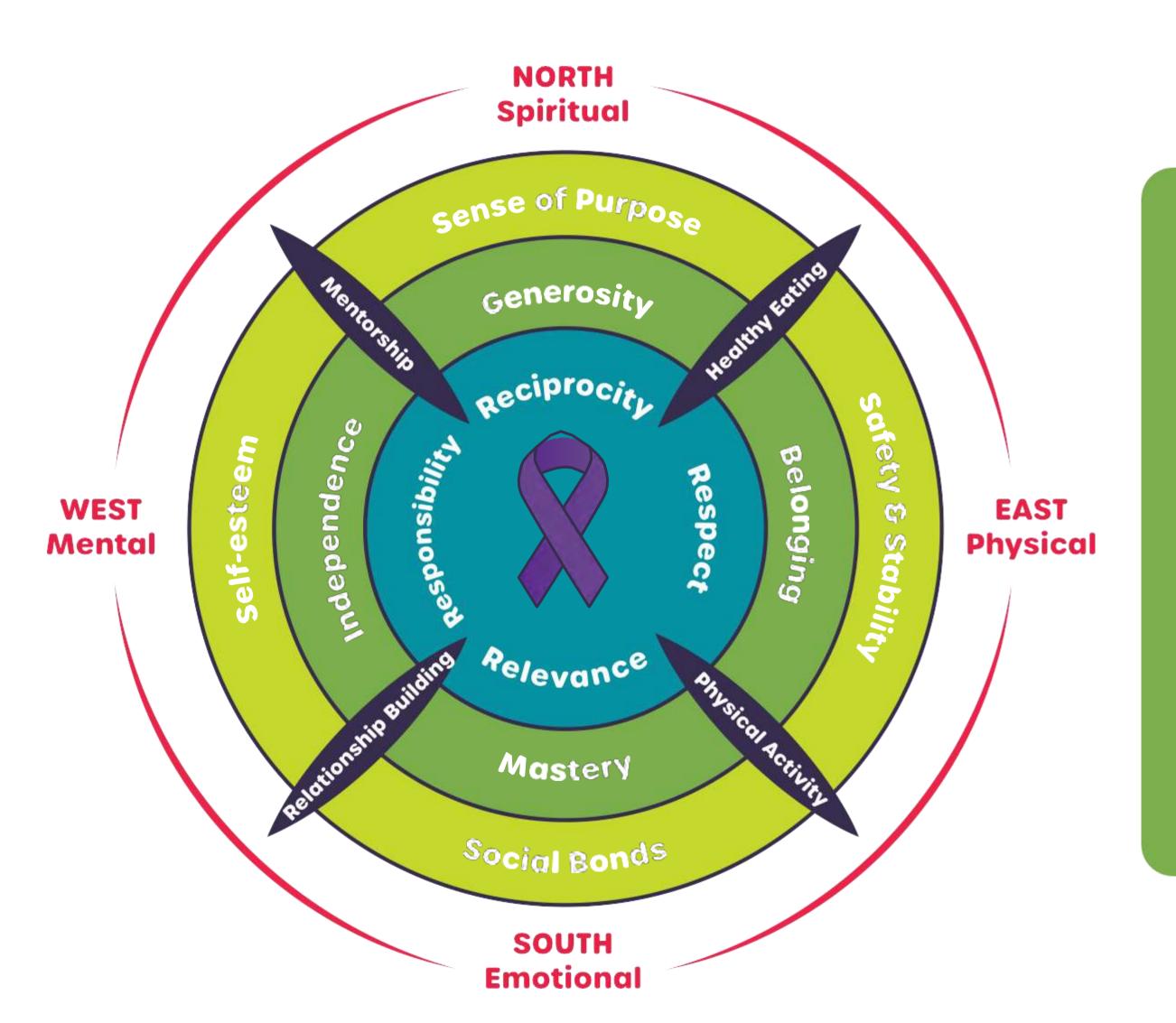
deliver the program.

are the conditions necessary for IYMP to be implemented.

		can be achieved.
Youth Led  Youth are the heart of IYMP and the reason for running the program.  Their enthusiasm, leadership and voice shape how the program is run.	Community Support  Staff, including teachers, nutrition staff and bus drivers from the school/site where IYMP is implemented, need to be supportive of IYMP in order to engage youth and manage logistics. Support from the broader community can enhance the quality of the program.	Time  Dedicated time to plan, organize and deliver the program facilitates implementation. It was easier to dedicate time to IYMP when it was seen as a role and responsibility of the champion/YAHL as opposed to an additional commitment.
School/Community-specific Autonomy  The way IYMP is run builds on the strengths of the school community and can be adapted to meet the school community's needs. Each school community has autonomy to determine how their program should be implemented, including how best to incorporate local Indigenous culture.	Quality and Use of Evidence  Knowledge generation in the form of measurements and stories supports implementation, rippling, and sustainability. It is important to balance different typesof evidence, including prioritizing voices from those directly involved.	Funding and Project Support  Funding and project support to secure space, equipment and supplies, transportation and food facilitates implementation. How communities go about managing logistics depends on their unique context.
Demonstrated Administrative Leadership School principals are seen to play an invaluable role throughout the implementation process by providing leadership and resources to run the program. Adminstrators' active engagement can drive healthy changes in the school/site where IYMP is run.	Learning Opportunities  Learning opportunities are needed to develop relationships and share knowledge across the wider network. Learning opportunities, especially for youth, are needed to develop the confidence and competence to deliver the program.	Readiness and Understanding  Having a strong understanding of IYMP and why it is important makes it easier to run the program.
Higher-level Support  Leadership and support at local, district, and provincial/territorial levels supports the implementation process. The wider IYMP network of communities, provincial organizations, and academic institutions is critical for supporting implementation, providing learning opportunities, assisting with securing funding, and facilitating research activities.	Rooted in Relationships  Trusting relationships among youth, mentors, champions, administrators, the community and the IYMP team are needed to implement IYMP.	

### **Contextual Conditions**

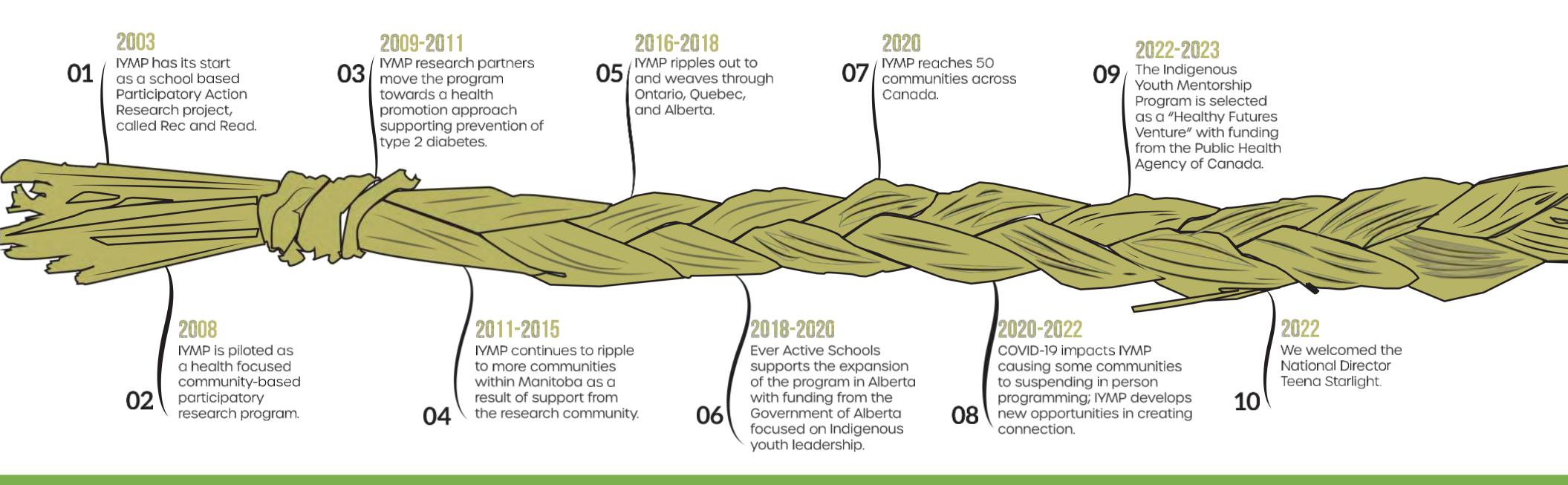
determine whether or not the core conditions can be achieved.



Co-developed with Indigenous youth, educators and researchers, IYMP promotes well-being and overall positive mental health, including Mino-Bimaadiziwin/
Mino-Pimâtisiwin ("living in a good way"). The core components of IYMP are healthy eating, physical activity, relationship building and mentorship.

IYMP is grounded theoretically in teachings of Indigenous scholars Drs. Brokenleg (Circle of Courage) and Kirkness (The Four R's).

## From research to rippling, IYMP has seen tremendous growth...



## ...with the potential to expand and create deeper impact by 2024.

Child Champion Community **Youth** Reach Reach Reach Reach 1,500 3,000 100 100 from 1,470 in 2021 from 73**5 in 2021** fro**m 50 in 2021** fro**m 50 in 2**021

## IYMP and its leadership have been recognized nationally for their lasting impact and innovative, community-driven approach.

#### **PUBLICATIONS**































Systematic reviews and publications have demonstrated IYMP's ability to improve healthy behaviours of students

# IYMP is creating a lasting impact in the communities they serve, changing the lives of children and youth.

"This program is helping the community to heal by breaking down barriers between families that have prevented children from relating positively to one another."

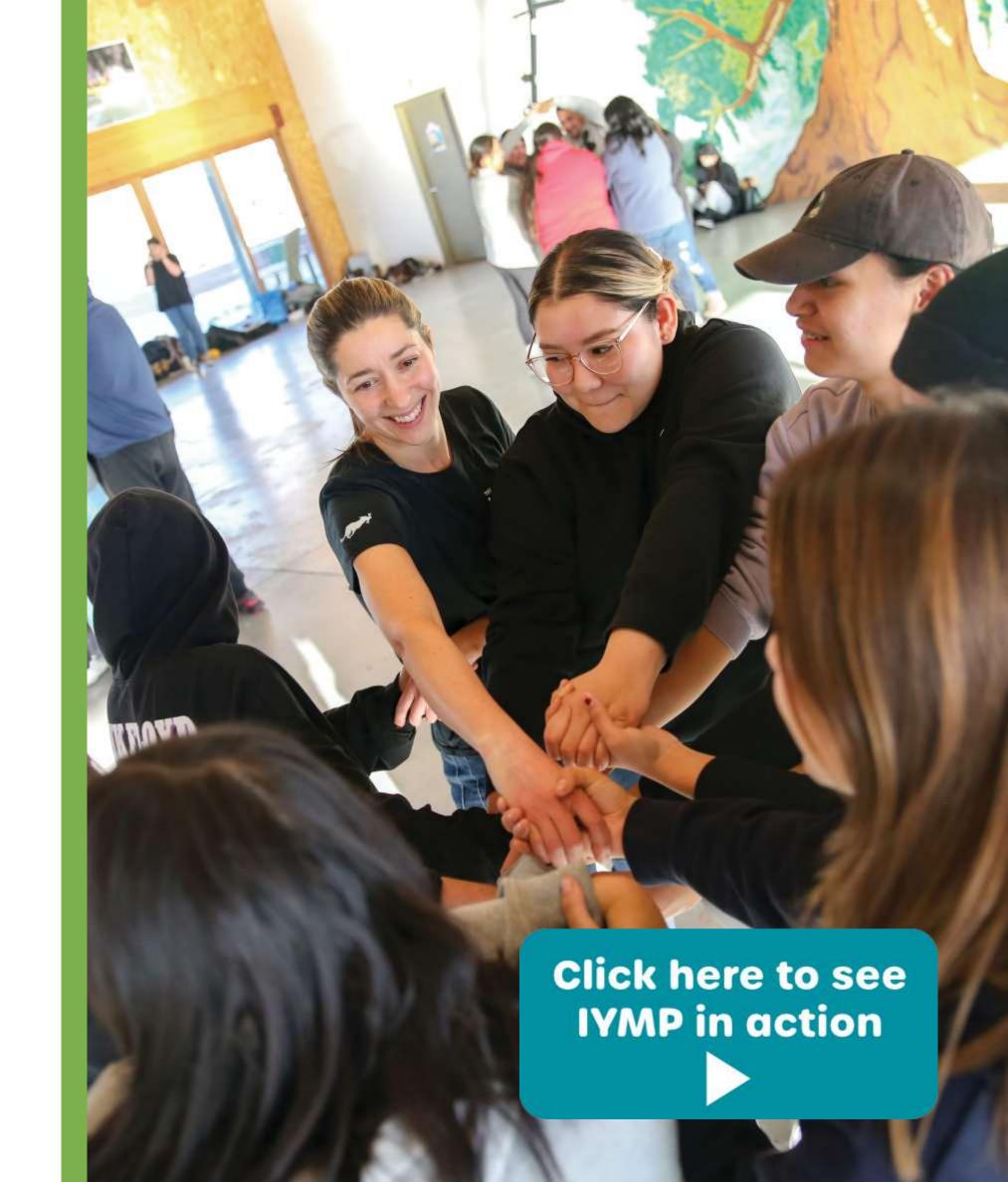
- Principal in a partner school

"I have seen a tremendous change in our leaders' attitudes and confidence. We continue to bridge the gap between culture, elders, leadership and education."

- Teacher lead in IYMP mentorship school

"The mentor program is good for this community because we teach the kids new things and to participate in activities, and it also teaches the mentors to be good role models for the kids."

- High school mentor from Zaagiing First Nation



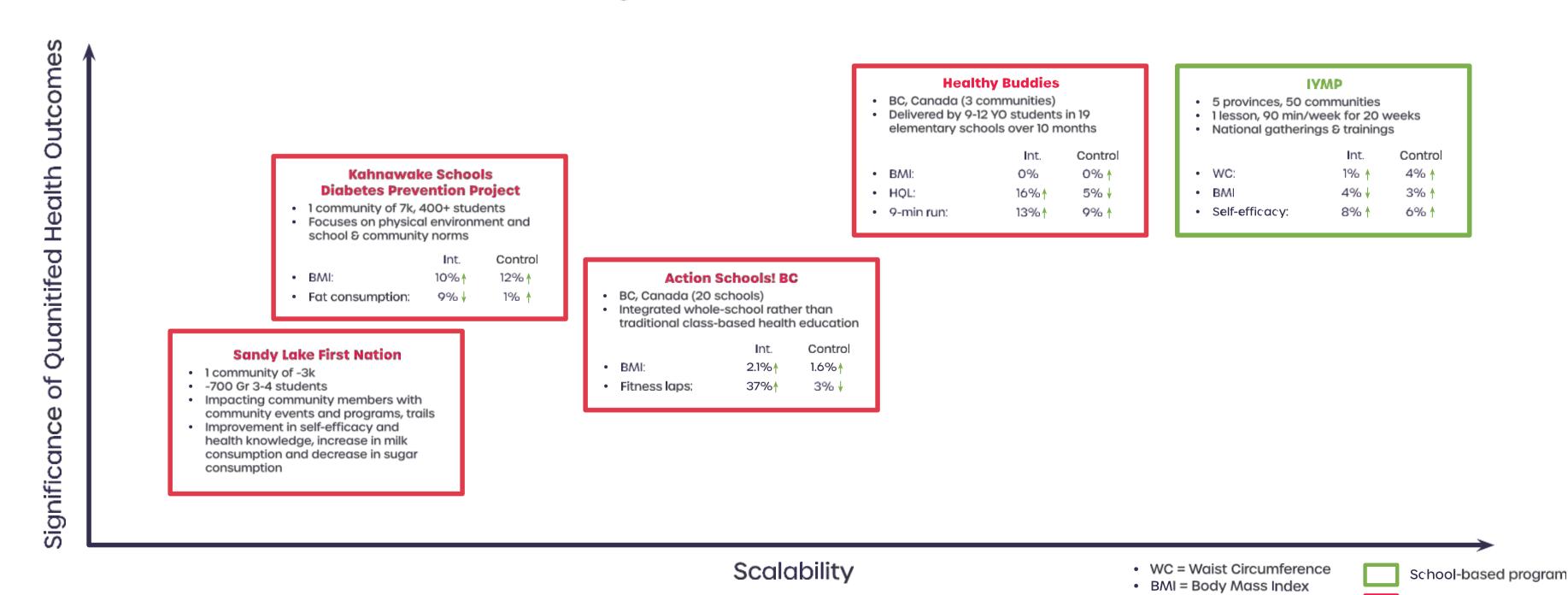
## **APPENDIX**

## ADDITIONAL DATA SLIDES

## In comparison to peer interventions within Indigenous communities, IYMP is well-positioned to scale and demonstrates the strongest health outcomes.

A 2015 systematic review of interventions to treat, manage and prevent Type 2 Diabetes in Indigenous communities in Canada identified 13 researched interventions, only 5 of which were focused on children and demonstrated improved health outcomes, particularly around BMI and waist circumference.

## Landscape of Indigenous Youth Health Interventions



HQL = Health Quality of Life

After-school program

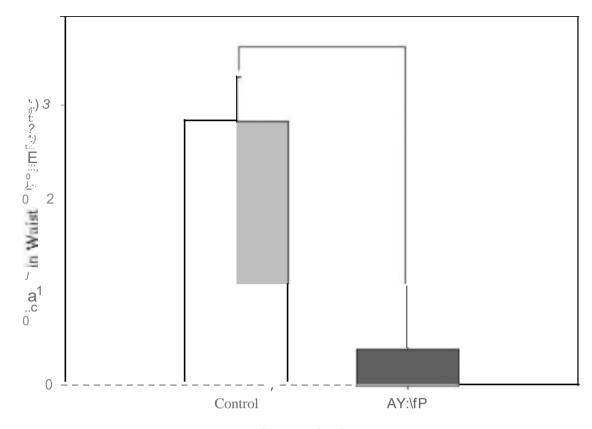


Figure 6a. Mean change in waist circumference (cm) in students who received the intervention (AYMP) and controls.

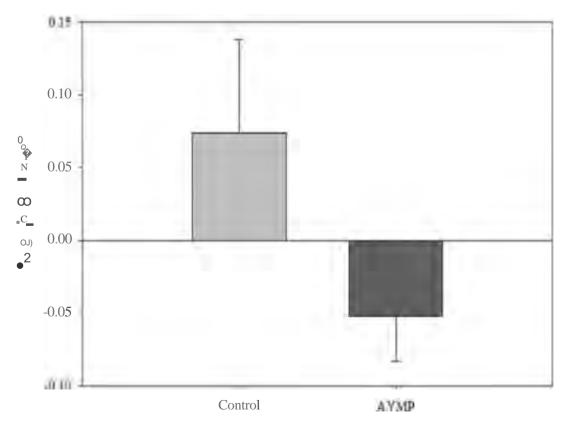


Figure 6b. Mean change in BMI z-score in students!who received the intervention (AVMP). EskidiogJu, Halas, McGavock et al. *Pediatrics* 201-4.

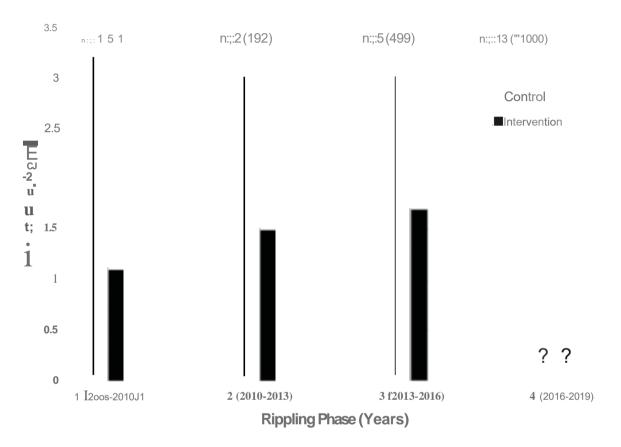


Figure 3. Sustained Effect Size of IYMP Following 2 phases of rippling

IYMP-related reductions in waist circumference during pillot studies, following scaling to 2 (n=192), then to 5 communities (n=499)

**TABLE 1** Baseline Characteristics

Variable	Control (n = 100)	Intervention $(n = 51)$
Age,y	10.4 <u>+</u> 0.7	9.7 <u>+</u> 0.4*
Sex (female/male)	51/49	38/13*
Grade (4/5)	36/64	51/0*
Waist circumference, cm	83.9 <u>+</u> 15.7	79.8 <u>+</u> 12.6
BMIzscore	1.48 <u>+</u> 0.94	1.46 <u>+</u> 0.84
Weight status, %		
Normal	28 (n = 28)	25 (n = 13)
Overweight	15 (n = 15)	25 (n = 13)
Obese	56 (n = 56)	50 (n = 25)
Healthy food knowledge, %	76.2 <u>+</u> 12.3	69.8 <u>+</u> 13.6*
Physical activity knowledge,%	74.6 <u>+</u> 24.3	58.7 <u>+</u> 21.2*
Self-efficacy, %	82.6 <u>+</u> 16.0	87.3 <u>+</u> 12.2*
Body image (ideal self - current self)	-0.64 <u>+</u> 1.02	1.06 <u>+</u> 1.11

Continuous variables are presented as mean  $\pm$  SD; categorical variables are presented as a percentage of the total study arm or n. \*P < .05 significantly different from the control group.

TABLE 3 Effect of AYMP on Knowledge of Healthy Living Behaviors, Self-Efficacy, and Body Image in Children From a Rural First Nation

Variable	Control (n = 100		Intervention	on (n = 51)	Group	Group-wise Comparisons		
	Before	After	Before	After	Effect	95% CI	р	
Healthy food knowledge, %	76.9 (74.2 to 79.5)	73.3 {70.3 to 76.2)	68.9 (65.1to 72.7)	71.2 (67.3 to 75.1)	6.1	1.0 to 11.1	.02	
Physical! activity knowledge,%	75,.3 (70.7 to 80.0)	76.9 (71.9 to 82.0)	57.5 (50.9 to 64.2)	6.2.3 (55.16 to 169.1)	3.6	-3.8 to 11.1	.34	
Self-efficacy, %	83.2 (79.8 to 86.4)	88.4 ,(84.2 to 92.7)	87.1 (82.5 to 91.6)	94.3 (89.2 to 99.4)	2.4	-3.3 to 8.3	.40	
Body imag,e (ideal self-current s,elf)	-0.64 ( 0.82 to -0.46)	-0.66 {-0.85,to -0.47)	-1.06 (-1.32 to -0.80)	-0.71 (-0.98 to -0.44)	0.37	0.01 to 0.72	0.045	

Data are presented as adjusted mean and (95% CI). All the analyses were adjusted for age, gender, and baseline weight. Effect indicates treatment effect.

TABLE 2 Effect of the AYMP on Measures of Adiposity in Children From a Rural First Nation

	Control (n=100)		Intervention (n = 51)		Group-wise Comparisons			
	Before	After	Before	After	Effect	95% CI	Р	
All children								
BMI z score	1.26 () .19 to 1.34)	1.30 (1.23 to 1.38)	t27 (1.17 to 1.37)	1.22 (1.11 to 1.32)	-0.09	-0.08 to -0.09	.007	
Waist ciircumference, cm	80.0 ,(78.4 to 81.6)	82.9 (81.2 to 84.5)	77.8 (75.6 to 80.1)	78.2 (75.9 to 80.5)	-2.5	- 2.'6 to -2.5	<.001	
Overwei1ght/obese children only	Control $\{n=71\}$		!Intervention (n = 38)		Group-wise Comparisons			
	Before	After	Before	Aft.er	Effect	'95% CI	p	
BMI z score	1.73 (1.65 to 1.83)	1.74 (L65 to 1.83)	1.66 (1.60 to 1.77)	1.63 (1.52 to 1.74)	-0.04	-0.04 to -0.03	.13	
Waist c1ircumference, cm	85.2 (82.1to 88.2)	87.8 (84.8 to 90.7)	82.0 (78.4 to 85.6)	82.4 (78.iS to 86.0)	-2.2	-2.3 to -2.2	.02	

Data are presented as adjusted!means (95% Cls). linear mixed effects models for the change in **BMI** Z score were adjusted for baseline weight category (normal weight. overweight, and obese): the analysis for the change irnwaist circumferencewas adjusted for age, gender, and baseline weight category. Effect indicates treatment effect

**TABLE 4** Independent Determinants of the Change 1in Waist Circumference and BMI ZScore After Exposure to AYMP

Variablle	ß	SE	р
Change in wai1st circumference			
Age .	-o.s·1	1.01	.42
Cender	1.27	116	.27'
Weight	-,0.85	065	.191
Knowledge of physical activity	-0.85	2.52	.73
Knowledge of healthy eating	2'.35	4.0.5	.56
Self-efficacy	-7.90	459	.03
Body image	-0.41	0.62	.50
Change in <b>BM</b> zscore			
Age	-0.00	0.03	.82
Gerider	,0.01	005	.72
Weight	-0.03	0.02	.22
Knowledge of physical activity	-,0.07	011	.50
Knowledge of healthy eating	,0,15	0.18	.38
Self-efficacy	-,0.01	0.20	.94
Body image	,0,01	0.02	.66

# The 2019 National Gathering Report identified four main themes for future growth and support:

## **Skill Development**

Leadership development and obtaining knowledge of applicable games and activities

## **Elder & External Learning**

Working with Elders and other partners to build a robust and culturally sensitive program

## **Peer Idea Sharing**

Connecting with mentors in different provinces and sharing knowledge with peers

## **Additional Support**

A go-to coordinator for resources and an IYMP mentor/activity manual



# IYMP adapted during the COVID-19 pandemic to continue offering critical programming to communities, responding to unique needs, and promoting resiliency in the face of trauma.

Hosted monthly Zoom check-in calls and social media events to foster social connections for over 1,000 Indigenous youth

Offered home activity kits with a focus on cultural crafts, land-based learning and physical activity

Created Resilient Schools
Facebook groups and videos
focused on resiliency and
positivity during difficult times

Connected with youth in care and implemented additional safety measures

Supported and shared community-initiated COVID-19 projects and ideas, many of which were modelled after IYMP's health-focused and relationship building values

Distributed hygeine care packages and food security hampers