



ANNUAL REPORT PILOT 2021-2022

ARUBA CHILDHOOD OBESITY PREVENTION
PROGRAM



Contents

3

Introduction

4

Mission, Vision & Strategy

5

Urgency & Approach

10

Accomplishments

13

Financial report



Photo cover.

The children during one of JUMP18's sports sessions with the sports coaches. The children are divided into two different groups; one group with children up to 10 years old and one group with children 11 years old and older.



*Photo on the right
Mother and daughter with pediatrician
Dr. Busari during the Saturday carousel
consultation that each participant
receives once a month*



INTRODUCTION

Who we are

JUMP18 is more than just another healthy lifestyle intervention. The project distinguishes itself as a holistic multidisciplinary health improvement initiative driven by young Aruban healthcare professionals. More importantly, it provides the young Aruban professionals the opportunity to serve their Island and help Aruban children. JUMP18 is made possible through our partnership with the Dr. Horacio Oduber Hospital

Our aim

Over 35% of children in Aruba are overweight or obese. This makes obesity the leading public health problem affecting children and young adults in Aruba. Childhood obesity is associated with cardiovascular disease, cancer, diabetes, and chronic respiratory disease, and it also increases the likelihood of developing these diseases in adulthood. In addition, childhood obesity contributes to the rising burden of disease and health care costs around the world and in Aruba.

There are several reasons why children in Aruba are overweight. The problem is bigger and more complicated than just unhealthy eating habits. In addition to culture and education, economic and social factors also play a major role. Therefore, our program also addresses these factors. Our knowledge of the problem and sense of urgency to solve it are what drive our program.

MISSION, VISION AND STRATEGY



Children during one of the sports sessions. In a playful manner, we try to teach children that exercise is fun!



Vision

To eradicate the incidence of childhood obesity in Aruba and to improve the overall well-being of Aruban children.

Mission

To ensure the well-being of Aruban children by reducing the disease burden associated with childhood obesity. By combining knowledge and collaboration of various health care disciplines, we plan to significantly reduce childhood obesity in both the short and long term.

Strategy

JUMP18 aims to help parents and children to live healthier lives by (re)educating and challenging their limiting beliefs. Gaining access to their intrinsic capabilities enables them to live healthy lifestyles that promote and sustain a healthy weight in children. This is achieved by using a multi-faceted approach based on four pillars; 1) exercise, 2) education, 3) nutrition and 4) research.

Objective

The long-term goal of JUMP18 is to treat and prevent overweight and obesity in children and to promote a healthy lifestyle.

URGENCY & APPROACH

Urgency

The prevalence of obesity and overweight among children is high in Aruba. According to UNICEF, obesity is the biggest public health problem among children and adolescents (UNICEF, 2013). Among preschool children, over 25% of girls and 17% of boys are overweight or obese. Among grade five children, this percentage has already grown to 43% among girls and 32% among boys (Ministry of Public Health and Sport, 2013). Overweight children are often also overweight in adulthood.

Being overweight and obese in adulthood increases the risk of developing non-communicable diseases (NCDs) and contributes to rising health care costs (Pan American Conference on Obesity, 2011). The most common NCDs are diabetes, cancer, cardiovascular disease and chronic lung disease. All of these NCDs create a significant financial burden for AZV. For example, the healthcare costs directly related to its diabetes alone are between Afl.68 and Afl.75 million annually (PWC, 2019).

Approach

With JUMP18 we aim to provide help to parents and children based on four pillars, namely nutrition, education, physical activity and research. JUMP18 is an intensive 6-month program in which we offer a customized plan for each participant. Participation in the program is free of charge. Parents were able to enroll their child through the registration form on our website, through Facebook, or through the pediatrician or family doctor.

During our program, each child had a carousel consultation once a month. This meant that each child was seen separately by the pediatrician, the dietitian and the case manager. Each consultation lasted approximately 30 minutes. The consultations always took place on a Saturday so that the children did not have to skip school. During these consultations, each child was measured and weighed. After each carousel, the team met to discuss the findings. Six children were seen per Saturday.

In addition to monthly consultations, parents and children received workshops every other week on topics related to changing behavior and developing healthy habits. The children exercised three times a week under the guidance of a sports coach. Last but not least, each family was assigned a personal buddy with whom they had bi-weekly contact for mental support and motivation. This buddy had a social work background and was assigned to monitor progress and ensured that parents and children kept to the agreements that were made.

The workshops

The 10 workshops can be divided into three different topics, motivation, nutrition and physical activity

- Motivation and empowerment (SMART goals)
- Healthy breakfasts and healthy snacks
- Recognition of parental roles and the effect on healthy habits
- Vegetables and whole grain products
- Walk with the doctor
- Sugar game
- Reflection workshop
- Motivational workshop given by Sarah- Quita Offringa
- Walk with the doctor
- Closing Ceremony



One of our workshops in which the children learned how to make a healthy breakfast under the guidance of our dietitians

Our Strength

Our strength lies in our unique and multidimensional intervention, where we create a customized plan for each participant. In this intervention, we actively involve the child's parents and/or caregivers. Because our team is multidisciplinary, a wide range of knowledge and expertise is brought together.

Core team September 2021 - April 2022

During the pilot, the JUMP18 team consisted of a core team, the outpatient pediatrics team, a support team and a research team.



Dr. Jamiu O. Busari
Founder & Senior researcher



Amy van der Linden
Project Manager



Paola Tello
Research, Nutrition
& Epidemiology



Monique Bagheri
Pediatric Physical Therapist
(in training)



Alexandra Mendoza
Physical activity & Social media



Charlene Leslie
Nutrition, Epidemiology,
External relations & Process development



Samantha Schwengle
Research, Nutrition & Social media



Gerani Cheuk A Lam
Researcher & PhD candidate

Collaborations

We worked with the following parties during our pilot:

- Dr. Horacio E. Oduber Hospital, for available rooms on Saturdays during the carousel round and use of their database
- YMCA and Biblioteca Nacional as venues for the workshops
- Scol Practico Pa Ofishi as locations for the fitness tests
- Maastricht University, where a JUMP18 team member is conducting her doctoral research
- Instituto Pedagógico Arubano (IPA), which gave a team of movimiento y salud (movement and health) students the opportunity to work at JUMP18 as a sports coach or do an internship assignment at JUMP18
- University of Aruba, in which a social work student did her final internship at JUMP18 and worked as a case manager.

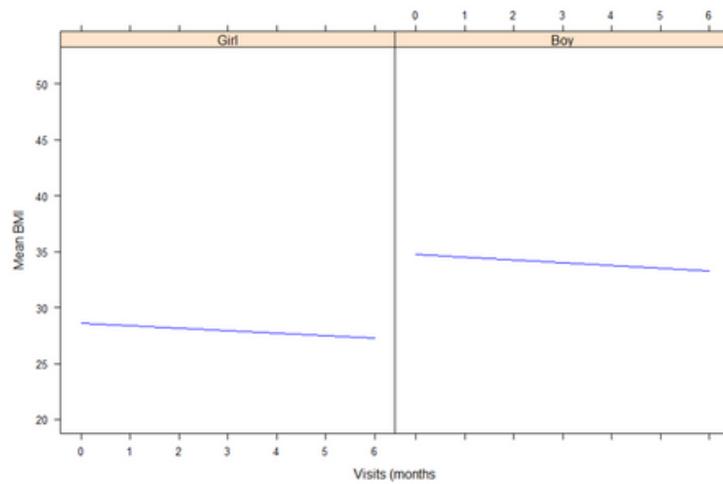


*Motivational and inspirational
workshop given by top athlete Sarah-
Quita Offringa*

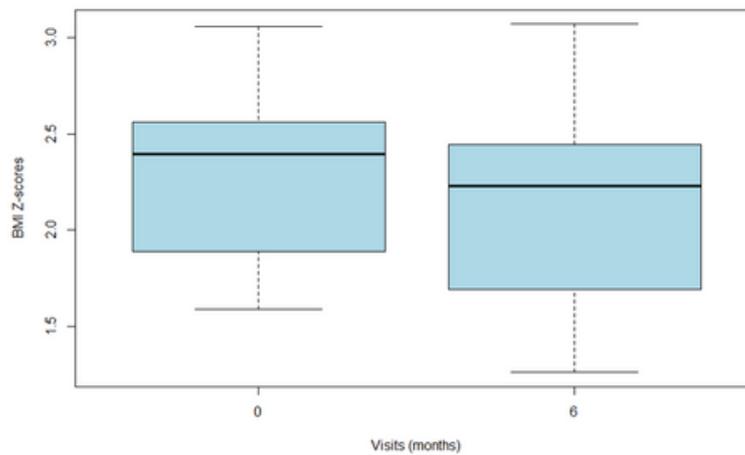


Research Findings

At JUMP18, we conduct research on the effectiveness of the program. At the end of our program, we found that the children had a significant weight loss of an average of 1.4kg/m² on their BMI. Furthermore, the children's physical fitness also improved. Average heart function improved from 103.7 beats per minute at baseline to 90.6 beats per minute after 6 months. Moreover, on average, the children scored better on the 6-minute walk test from a maximum distance of 451.3 meters during baseline to a maximum distance of 483.5 meters after 6 months. So this is an improvement of over 30 meters! Finally, the average score on the shuttle run test also improved from step 2.3 during baseline to step 2.7 after 6 months.



Mean BMI of the whole group during baseline = 31.3 kg/m² and after 6 months = 29.9 kg/m²



Boxplot of the mean BMI-Z score during baseline and after 6 months

Research on Aruban school canteens

In addition to the extensive (intramural) JUMP18 program, our team member Gerani Cheuk-A-Lam is doing research (extramural) on school food environments in Aruba. She is doing her PhD trajectory at the Faculty of Health, Medicine and Life Sciences in Maastricht (NUTRIM/MUMC+). The research project aims to help create healthy school food environments that contribute to the prevention of childhood obesity in Aruba. Together with the JUMP18 team, we hope to achieve a lasting and sustainable change in the lifestyle of Aruban children.

Accomplishments

What have we accomplished during the pilot?

During our first year, we have already been able to achieve several accomplishments. For instance, before the pilot began we were able to add several colleagues to our team, such as case managers and dieticians. We purchased 18 Garmin Vivo Fit Jr.3 smartwatches so that participating children could monitor their physical activity, and for the children aged 13 and older, we purchased 5 Fitbit fitness trackers.

For one of our workshops, we were able to invite Sarah-Quita Offringa. She is a professional windsurfer from Aruba. During this workshop Ms. Offringa talked about how important it is to have a good social network that supports you, motivation and perseverance.

Experiences of previous participants

All participants completed a questionnaire at the end of the intervention to evaluate our program. This questionnaire showed that our program was rated with an 8.7 on average. Our carousel consultations received a 9.1 and the sports sessions and workshops received an 8.8 and 8.7, respectively.

We asked a number of children and their parents after the pilot to share their experiences about the program. Here's what they said:

“The program has given me more energy and I feel like doing something more often. It is really fun to participate because you meet new people and making friends is easier. You don't do it alone, because other people also join you, so you don't have to be afraid because you do it all together in a group.”

“The program has motivated my child to be more conscious about what she eats and her health. In addition, it has also helped our family lead healthier lives. Fantastic!”

“I can definitely recommend this program for other families! The way this program was put together not only helped my child lose weight, but also helped me talk to my child about their mental health which is really great.”

Our ambitions for next year

For our next round of projects, we have set some ambitions and goals. Namely, we want to help even more children and parents develop and maintain a healthier lifestyle. Our ambition is therefore to double the number of participants in the next round. We want to do this by adding more driven and motivated colleagues to our team. Furthermore, we want to further professionalize and expand our reach by entering into more partnerships. Additionally, JUMP18 is now part of the national prevention plan in Aruba.

The closing ceremony for our pilot group to celebrate their completion of the program. The ceremony was held in Gloria and the Minister of Health, among others, was present. It was a joyous conclusion where the children received a t-shirt and a certificate of completion



Public relations en sociale media

On our website JUMP18.org, Facebook, Instagram -and LinkedIn page we post and share content to keep participants, (potential) sponsors and donors informed and recruited to our program. Parents have given written permission for their children's photos to be used on our pages.



<https://jump18.org/>



childobesityplan.aruba@gmail.com



[jump18_aruba](#)



Jump18 - Aruba Childhood Obesity Prevention Program



Jump18-Aruba Childhood Obesity Prevention Program



Our team along with the team from insurance company Ennia whose donation we were able to receive for our pilot

Financial Report

Sponsors

Given that our program is offered free of charge, we depend on donations from our sponsors. Without these sponsors, we would not have been able to conduct our pilot so successfully. The companies that donated money and other supplies for our pilot last year are Setar, Ennia, Kiwanis, Aruba Rotary Club, Web and Nutrilon. Thanks to the donations we received from our sponsors, we were able to recruit professionals, purchase materials for the workshops, consultations and rent the locations for the activities.

Income Statement

During our pilot, we were very mindful of our spending and were careful with the donations we were privileged to receive. This meant that we had money left over at the end of our program. This money will be used during the next cohort to further expand and professionalize JUMP18.

	<u>NOV '21- APR'22</u>
All amounts are in AWG	
Income	
Donations	<u>61.580,50</u>
Total income	<u>61.580,50</u>
Expenses	
Operating expenses	
Costs materials	3.594,88
Costs website	858,60
Rent used spaces	2.984,50
Staff compensation	<u>32.585,67</u>
Other expenses	
Bank costs	42,00
Merchandise	1.852,50
Slogan design	150,00
Other costs	<u>110,75</u>
Total costs	<u>42.178,90</u>
Result	19.401,60

Five-year budget

The five-year budget is based on the actual costs incurred during the pilot. Starting this year, two 6-month trajectories will be carried out each year. This year's new rounds started in September and November.

Table 2 shows an estimate of the expected costs for the project for the next five years, taking into account staff costs and that JUMP18 will continue to hold carousel consultations at the pediatric clinic. The costs for merchandise, salaries, food for consultations, workshop spaces and materials, posters, handouts, questionnaires and smartwatches have been doubled for 2023, as the number of children participating in the program doubled from that year as well. Inflation and rent increases were taken into account by multiplying each year's costs by 1.03.

Estimated five-year budget in AWG

Operating costs	2022	2023	2024	2025	2026
Merchandise	1.852,50	3.816,16	3.930,64	4.048,56	4.170,02
Staff compensation	32.585,67	67.126,48	69.140,27	71.214,48	73.350,92
Food for consultations	489,02	1.007,38	1.037,60	1.068,73	1.100,79
Workshop spaces	2.984,50	5.969,00	6.148,07	6.332,51	6.522,49
Workshop materials	3.594,88	7.189,76	7.405,45	7.627,62	7.856,44
Marketing	1.750,00	1.802,50	1.856,58	1.912,27	1.969,64
SPSS	175,00	180,25	185,66	191,23	196,96
Website maintenance and support	858,60	884,36	910,89	938,22	966,36
"Posters & handouts, questionnaires, etc.	650,00	1.339,00	1.379,17	1.420,55	1.463,16
Smartwatches	3.105,86	6.398,07	6.590,01	6.787,71	6.991,35
Total	48.046,03	95.712,96	98.584,36	101.541,88	104.588,13

Cost savings

It is our expectation that children who participate in JUMP18 will use fewer medical services. Research shows that children who are overweight or obese at a young age continue to experience this later in life. This creates a significant burden on medical facilities and costs. We have made an indication of the costs that can be saved annually thanks to JUMP18 based on known data from the Central Bureau of Statistics. At a 1% reduction in the percentage of people who are overweight or obese in Aruba, f205,424 can be saved per year. At a 5% reduction this amount increases to f1,027,119 and at 10% even more than f2,000,000 could be saved.

Sponsors pilot



Partners



Bibliography

Ministry of Public Health and Sport. (2013). Health Monitor Aruba 2013. p. 85-88. Retrieved from <https://cbs.aw/wp/wp-content/uploads/2015/09/Health-Monitor-2013.pdf>

Pan American Conference on Obesity (2011) The Aruba Declaration (A Call for Concerted Action) on Obesity with Special Attention to Childhood Obesity. Retrieved from <https://www.paho.org/en/documents/aruba-declaration-call-concerted-action-obesity-special-attention-childhood-obesity>

PWC. (2019) Doorlichting kostenontwikkeling AZV: Onderzoek naar de ontwikkeling van de toekomstige financiële situatie van de AZV en mogelijke risico's. Retrieved from <https://deugdelijkbestuuraruba.org/wp-content/uploads/2022/04/Eindrapportage-doorlichting-kostenontwikkeling-AZV-Aruba.pdf>

United Nations Children's Fund. (2013) The Situation of Children and Adolescents in Aruba: Key findings and recommendations. p.6. Retrieved from https://www.unicef.nl/media/1389246/aruba_executive_summary__28english_29.pdf