



ANNUAL REPORT 2022-2023

ARUBA CHILDHOOD OBESITY PREVENTION
PROGRAM



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Photo cover

The Friday sports class for children under the age of 12 is taught by one of our coaches at Nikki Beach

Photo on the right

The kick-off meeting where the new participants and the JUMP18 team get to know each other



INTRODUCTION

Who we are

JUMP18 is a hands-on initiative focused on reducing the incidence of overweight or obesity in children aged 4 to 18 years in Aruba. The goal of JUMP18 is to empower children and their parents to improve their health and well-being in a sustainable way.

JUMP18 is not just another healthy lifestyle intervention. The project stands out as a multidisciplinary initiative driven by several motivated healthcare professionals who are committed to their island. JUMP18 is made possible through our collaboration with Horacio Oduber Hospital.

Why we do what we do

Over 35% of Aruba's children 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 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 larger and more complicated than just unhealthy eating habits. Besides 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 drives our program.



Minister Dangui Oduber & Minister Endy Croes together with Dr. Busari attended Colegio Sagrado Curason elementary school during an informational day where students learned about healthy lifestyles

MISSION, VISION & STRATEGY



During our dieticians' cooking workshops, children learn to make healthy dishes with their parents



Vision

To eradicate the incidence of childhood obesity in Aruba and 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 educate children and their parents about a healthy lifestyle and how it can be achieved by increasing exercise and improving the diet of children in Aruba. This is achieved by using a multi-faceted approach based on four pillars; 1) exercise, 2) education and 3) nutrition and 4) research.

Objective

The long-term goal of JUMP18 is to treat and prevent overweight and obesity in children in Aruba 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 greatest 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 had 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 heavy financial burden for AZV. For example, the healthcare costs directly related to its diabetes alone are between Afl.68 and Afl.75 million per year (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 can enroll their child through the entry form on our website, through Facebook, or through the pediatrician or family doctor.

During our program, each child has a carousel consultation once a month at the pediatric clinic in the hospital. This involves each child being seen separately by the pediatrician, dietitian and case manager. Each consultation lasts about 30 minutes. The consultations always take place on a Saturday so the children do not have to miss school. During these consultations, each child is measured and weighed. After each carousel, the team meets to discuss the findings. Six children are seen per Saturday.

In addition to the monthly consultations, parents and children receive a workshop every other week on topics related to changing behavior and developing and maintaining healthy habits.

The workshops

The 12 workshops can be divided into three different topics, motivation, nutrition and physical activity.

- Motivation and empowerment (SMART goals).
- Connection and communication
- Recognition of parental roles and the effect on habits
- Mi tribu: dealing with each other
- Motivational and inspirational speech by Richard Trimon
- Vegetables and whole grain products
- Healthy breakfasts and healthy snacks
- Sugar and salt game
- Walk with the doctor
- Yoga and relaxation
- Reflection



Mi Tribu workshop results. During these workshops, the children learn positive thinking about themselves, the power of words and how to get along well.

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 comes together and we help families in a variety of areas.

Collaborations

We collaborated with the following parties during this cohort:

- Horacio Oduber Hospital, for available rooms on Saturdays during the carousel round and use of their database
- YMCA, Manchebo Beach Resort & Spa and University of Aruba as venues for the workshops
- Scol Practico Pa Ofishi and Scol Primero Kudawecha as locations for the fitness tests
- Maastricht University, where a JUMP18 team member is conducting her doctoral research
- Frank and Ineke from Elements of Aruba who are organizing and guiding hikes
- Maastricht University, where a JUMP18 team member is conducting her doctoral research
- University of Aruba, who made students available to support our researcher during her research
- One Healthy You, for creating membership cards that allow our participants to take different sports classes and get healthy food at a discount
- Kinetic Alliance, the gym in Oranjestad where our participants of 12 years and older get boxing lessons on Monday, Wednesday and Friday
- Inner Guru for organizing the yoga workshops this year
- Xavier University School of Medicine for making their auditorium available during our closing ceremonies and making their students available during various JUMP18 events



Together with Elements of Aruba, we organize a hike twice a year for all participants, family members and team members



Research results

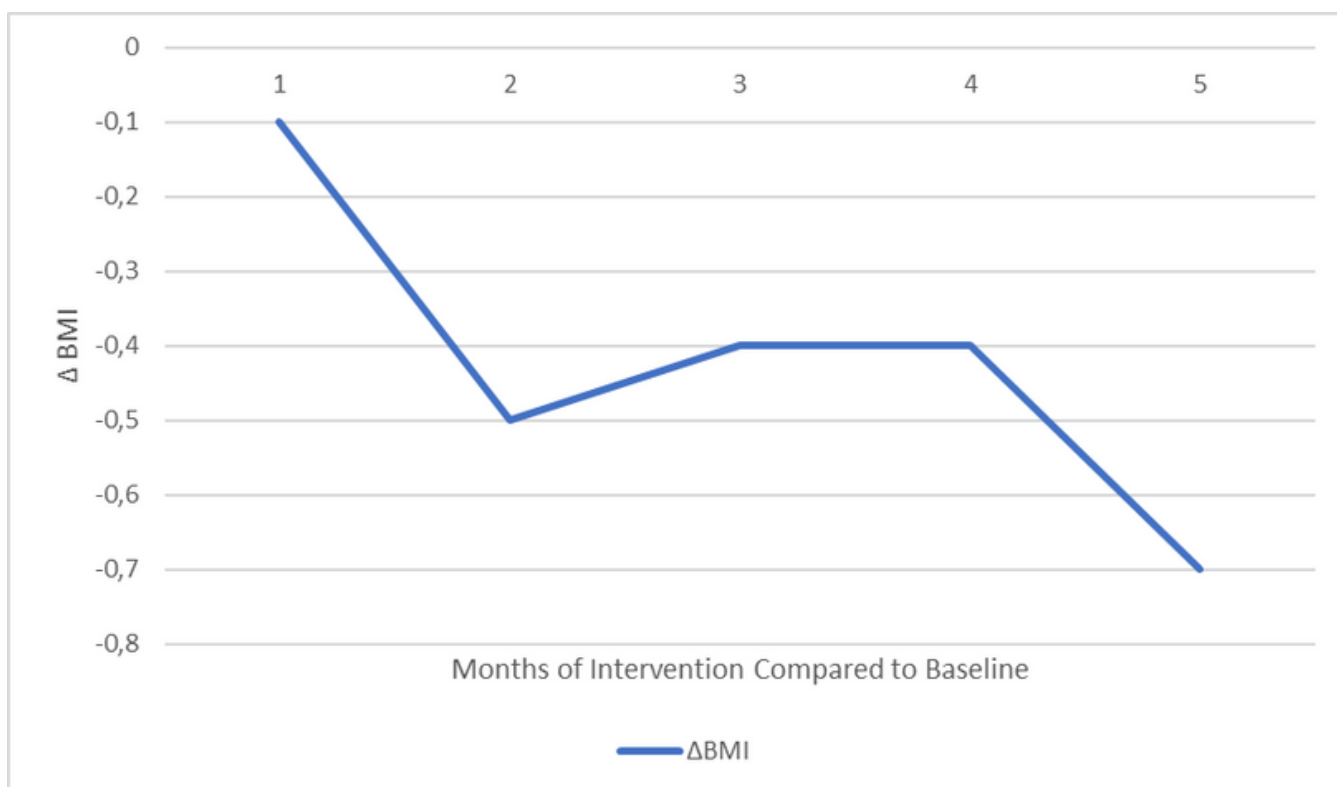
At JUMP18, we conduct research on the effectiveness of the program. At the end of our program, we found that the children had an average decrease in their BMI of 0.75 (SD 0.35) compared to their BMI during baseline.

At the beginning and at the end of the program, a fitness test is taken by the children under the direction of our pediatric physical therapist. This fitness test consists of a 6-minute fast walk test and a shuttle run test. These tests are done to examine the physical fitness of the children.

The average distance covered in the fast walk test at the beginning of the program was 443.47 meters. After 6 months, this distance was 518.20 meters. This is an improvement of over 70 meters!

The average score of the shuttle run test improved with a positive difference of 1.1 step.

Graph 1. Change in BMI between baseline and 6 months of intervention.



Successes

What did we achieve during this cohort?

Our ambition last year was to double the number of participants. By expanding our team with driven and motivated colleagues and by establishing more collaborations with local organizations, we managed to successfully help 36 children and their families this year in creating a healthy lifestyle. Next year we will continue this and again have two groups with 18 children each participating in our program.

The government of Aruba sees the need and importance of our program and has supported our project financially this year. We are very grateful for all their help. In addition, the Minister of Public Health & Tourism Dangui Oduber and the Minister of Education & Sports Endy Croes attended our closing ceremonies where they gave a speech and presented the participants with their certificates.

In addition to the government, insurance company ENNIA also sees the importance of JUMP18. Together with them we have a long-term partnership since this cohort. They support our project because they believe in our mission and approach. In this way, ENNIA wants to give back to the Aruban people.

Also this year we were able to achieve great results: an average decrease in BMI of 0.75 and an improved physical condition for all children who followed the program.

The closing ceremony of our first group of this cohort to celebrate their completion of the program. The ceremony was held at Xavier University and Minister Endy Croes, among others, was present. It was a celebration where the children received a certificate and a goody bag



Experiences of previous participants

All participants completed a questionnaire at the end of their participation to evaluate our program. This questionnaire showed that our program was rated with an 8.7 average. Our carousel consultations received a 9.1 and the sports sessions and workshops were rated 8.8 and 8.4, respectively.

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

"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

Again this year, we have set goals and ambitions for our next cohort! We will again guide two groups of 18 children to a healthier lifestyle.

Follow-up program

We want to set up a follow-up program so that the children and their families can continue to be guided and helped in the area of a healthy lifestyle after the intensive six months. During the follow-up, all former participants will have the opportunity to visit the pediatrician, dietician and social worker once every three months. In addition, they can continue to participate in our weekly sports classes. In this way, we can guide them longer and help them even better to implement healthy habits in their daily lives.

Expanding research

Next cohort we plan to expand our research further. In addition to measuring the satisfaction of the children and their parents as well as the impact of 6 months of participation in JUMP18, we are researching ways to influence behavior around food choices in schools. We call this the "nudging experiment." We have a PhD student working on this.

We are also going to research other treatment options that can increase the impact of our interventions, especially among adolescents. For example, we want to investigate the role of glucagon-like peptide 1 (GLP-1) receptor agonists as adjuvants to lifestyle interventions. We will do this in collaboration with students and researchers from the University of Aruba.

Public relations and social 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.

Below are our socials:



<https://jump18.org/>



jump18aruba@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 from whom we were able to receive a donation for our pilot

Financial report

Sponsors

Since 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 this cohort so successfully. The companies this year that donated money and other supplies are ENNIA, FPSA, WEB Aruba N.V., CEDE, Aruba Wine and Dine and Dolphin Wine Education Foundation. Thanks to the donations we have received from our sponsors, among other things, we have been able to double the number of children we help in our program!

Income Statement

During our pilot last year, we were frugal with the donations we received and were very careful with our spending. As a result, last year we had a surplus of 19,401.66 florins. This allowed us to start a new cohort in September 2022. Even during this cohort, we have been frugal with the money donated, so we have a surplus again this year. This surplus will be put into a new cohort of 36 children and setting up the above-mentioned follow-up program for all (former) participants of JUMP18.

All amounts are in AWG	Sept '22- May '23
Income	
Donations	177.595,88
Surplus pilot	19.401,66
Total income	196.997,54
Expenses	
Operating expenses	
Rent used spaces	2.054,00
Rent sport accomodations	2.835,00
Costs material	3.203,09
Staff compensation	126.521,82 *
Other expenses	
Bank costs	133,00
Merchandise	1.073,00
F&B	1.601,87
Other costs	2.212,68
Total expenses	139.634,46
Result	57.363,08

*Our staff's compensation is fully covered by the contribution from Fundacion Prevencion di Salud.

Five-year budget

The five-year budget is based on actual costs incurred during this cohort. The tables on the next page show an estimate of the projected costs for the project for the next five years, assuming JUMP18 continues to hold carousel consultations at the pediatric clinic. Inflation and rent increases have been taken into account by multiplying each year's cost by 1.05.

Next cohort we will hire more sports coaches which will increase the total staff compensation. Staff costs for the follow-up program were calculated separately from staff compensation during the 6-month program.

This cohort, thanks to collaborations, we were able to use Aruba University's auditorium for the motivational speech workshop and Xavier University's auditorium for both of our closing ceremonies at no cost. For next year, any costs for using these spaces have been included. In addition, a portion of the smartwatches each child receives during the program was sponsored this cohort by Kiwanis Club of Aruba. For future years, the full cost of smartwatches has been included, hence it has been calculated higher in the next cohort.

This year we want to do more research. For this we have made funds available so that our PhD student and research assistants can further expand their research. These costs are budgeted at 55,000 florins per year. This money will be used to measure the effectiveness of JUMP18 and how overweight and obesity among children in Aruba can be addressed and prevented.

Estimated five-year budget in AWG incl. research

Operating costs	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Merchandise	1.073,00	1.126,65	1.160,45	1.195,26	1.231,12
Staff compensation 6 months	126.521,82	136.207,91	140.294,15	144.502,97	148.838,06
Staff compensation follow-up program		35000,00	36750,00	38587,500	40516,88
Food and beverage	3.371,73	3.540,32	3.646,53	3.755,92	3.868,60
Rent spaces	2.054,00	8.456,70	8.710,40	8.971,71	9.240,86
Materials	4.436,00	4.569,08	4.706,15	4.847,34	4.992,76
Marketing	1.000,00	1.050,00	1.081,50	1.113,95	1.147,36
Research	-	55.000,00	57750,00	59482,50	61266,98
Website maintenance & support	286,20	294,79	303,63	312,74	322,12
Posters & handouts, questionnaires, etc.	655,02	674,67	694,91	715,76	737,23
Smartwatches	479,80	6.444,00	6.637,32	6.836,44	7.041,53
Total	139.877,57	252.364,11	261.735,04	270.322,09	279.203,50

Estimated five-year budget in AWG excl. research

Operating costs	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
Merchandise	1.073,00	1.126,65	1.160,45	1.195,26	1.231,12
Staff compensation 6 months	126.521,82	136.207,91	140.294,15	144.502,97	148.838,06
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Rent spaces	2.054,00	8.456,70	8.710,40	8.971,71	9.240,86
Materials	4.436,00	4.569,08	4.706,15	4.847,34	4.992,76
Marketing	1.000,00	1.050,00	1.081,50	1.113,95	1.147,36
Website maintenance & support	286,20	294,79	303,63	312,74	322,12
Posters & handouts, questionnaires, etc.	655,02	674,67	694,91	715,76	737,23
Smartwatches	479,80	6.444,00	6.637,32	6.836,44	7.041,53
Total	139.877,57	197.364,11	203.985,04	210.839,59	217.936,53

Cost savings in healthcare

It is our expectation that children who participate in JUMP18 will make less use of medical services. Research shows that children who are overweight or obese at a younger age continue to experience this later in life. This creates a heavy 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 is already f1,027,119 and at 10% even more than f2,000,000 can be saved annually.

Sponsors cohort 2022-2023



Partners



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