

'OBESITY IS ONLY HALF THE STORY'

March 2014 – She wants children to have the best chance to grow into healthy, happy adults. Critical factor for success: a healthy lifestyle. Mai Chin A Paw is always seeing new opportunities to make things happen. 'We need to ask kids to share their own ideas.'



By Rianne Lindhout

Sufficient exercise is all well and good, but sitting still for long periods every day can still damage health. Adults who sit for prolonged periods every day have an increased risk of many afflictions, even if they get moderate to strenuous exercise for at least half an hour a day. It is unclear whether this also applies to children, but [Mai Chin A Paw](#) is deeply engaged in research to discover whether this is the case. Human movement scientist and epidemiologist Mai Chin A Paw (born 1968) received grants totalling 675,000 euros from NWO and ZonMw to conduct groundbreaking research into this topic. She is conducting epidemiological studies to examine the link between sedentary lifestyles and health indicators such as obesity, body fat percentage, motor fitness, cholesterol and glucose levels. Her research group is studying European youngsters to see which factors determine whether or not children sit still for prolonged periods, and why they do so. Finally, the project also involves laboratory research into the biological mechanisms behind the potential negative effects of prolonged periods of sitting.

BRIDGE BETWEEN HOSPITAL AND COMMUNITY

We take our seats in comfortable armchairs in her office to discuss her work and her motivations. No table in sight: for a sip of tea you have to stand up and reach for the bookshelf. Clever! Chin A Paw inherited her name from her Chinese-Surinamese father. She is thrilled that she can finally do this research. "I spent a couple of years securing funding for the project. If your research topic is completely new, you need to convince the grant agencies of its importance. I hope my chair will help facilitate the funding process, so that I can blaze a new trail with greater ease." She's

referring to her appointment as a professor: a University Research Chair as part of VU University's talent policy. "It is also a vital message from VUmc, one that underscores just how important preventative care really is. Our Department of Social Medicine functions as a bridge between hospital and community."

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An acknowledgement of the field, of course, but also of Chin A Paw herself. She is one of those scientists that you know you'll be hearing a lot about in the future. Her ultimate goal is to give children a sound basis for growing up into healthy, happy adults. She is working closely with the provincial Municipal Health Services to make this happen. Primary schools in Amsterdam are running the [JUMP-in](#) programme, which encourages kids to exercise more and eat healthier through sport clubs, healthy in-school nutrition and by getting parents involved. One of her PhD students recently completed a research project on the effectiveness of the JUMP-in programme. The research provided input for improving the JUMP-in concept, and she is certain that it is now ripe for a nationwide roll-out.

PREVENTION IS VITAL

In the [DOiT](#) programme, secondary school pupils study their own behaviour and examine the influence exerted by their environment. They try to change unhealthy behaviour by keeping a nutrition and exercise diary, using a pedometer, consulting

a calorie chart, giving an information booklet to parents and by using an interactive website. The DOiT programme has shown great promise in reducing soft drink consumption among school pupils, with DOiT participants losing weight by the end of the programme. Chin A Paw also demonstrated on the basis of a literature review that overweight children are much more likely to grow into overweight adults, will all the associated health risks. Prevention at a young age is therefore vital.

For Chin A Paw it is essential that her work helps to solve a societal problem. "I don't conduct research for the sake of research, even though I do enjoy it tremendously," she says. "I have always found exercise and health fascinating. But once I know how something works, I get very eager to fix things that aren't working well. And I always follow evidence-based practices. I'm crazy about new research methods, for example for reliably measuring vigorous and sedentary activity or for unravelling the mechanisms behind interventions."

CHILDREN DO NOT EXERCISE TO LOSE WEIGHT

Even though they are effective to some extent, the current prevention and care programmes for youngsters still come up short, finds Chin A Paw. "The mainstream programmes have been developed by adults who have little to no involvement with the children themselves. I especially want to work together with children to identify ways to live healthier. I want to train them as researchers in their own right. My intention is to get children actively involved in research as experts on their own lifestyles, health issues and preferences. What do they see as the cause of a sedentary lifestyle, what changes would they like to see made to the schoolyard?" Chin A Paw is currently engaged in this kind

of participatory action research, and the initial results are very promising!

Aside from the fact that children themselves have little voice in addressing their behaviour and environment, Chin A Paw hopes to develop behavioural theories specifically for them. "Adults work out because they want to lose weight or get fit. Children rarely exercise for these reasons. They exercise because they enjoy it, because their friends are athletic or because their elder siblings are active in a specific sport." Physical fitness programmes for children will therefore need different determiners than programmes for adults. Again: we are certain to hear more from Chin A Paw.

EVEN SLIM CHILDREN ARE LESS FIT

Mai Chin A Paw is not only worried that the lifestyle of overweight children will result in an unhealthy and unhappy adulthood. "Even children of normal weight spend a lot of time staring at computer screens. Their lack of activity puts them at risk of numerous illnesses later in life. The current generation of children – even those who are not overweight – are much less fit than their peers in 1980: they are less flexible, have less muscular strength and they have poorer coordination. Most kids would benefit from more – and more varied – exercise than they currently get."