

## Overweight After Childhood Cancer? A study on children after acute Lymphoblastic Leukemia in the USA and Switzerland

Summary by Carina Nigg

### What did we want to find out with our study?

We wanted to understand how often adults who had acute lymphoblastic leukemia (ALL) as children are later affected by overweight or obesity (severe overweight). We compared the frequency of overweight in these individuals with their siblings in Switzerland and with former ALL patients and their siblings in the USA.

### Why is this important?

Children with ALL are treated with high doses of steroids ("cortisone") for extended periods. In the past, many ALL patients also received radiation treatment to the head area. Both treatments can lead to weight gain. Overweight can contribute to further health problems, such as heart disease and diabetes. It is important to understand how many former childhood cancer patients are affected by weight problems so that preventive measures can be taken.

### What did we do in our study?

We sent questionnaires to former childhood cancer patients in Switzerland and North America and asked about their height and weight to calculate their "Body Mass Index" (BMI). We asked the same questions to the siblings of the affected individuals. A total of about 1,700 ALL survivors and 2,500 siblings participated in the study.

### What did we find out and what does this mean?

In North America, almost two-thirds (59%) of ALL survivors were affected by overweight; in Switzerland, "only" one-third (31%) were. Siblings had overweight at similar rates to the former cancer patients. Obesity was particularly common among older participants (over 45 years old) and people of colour or low income.

The fact that siblings in both countries had overweight at similar rates as the former cancer patients means that diet, lifestyle, and social environment have a much stronger influence on overweight than cancer treatment. Preventive measures and therapies for overweight and obesity could, therefore, be similar for former cancer patients as they are for other people of the same age group.

**Further information:** [www.swiss-ccss.ch](http://www.swiss-ccss.ch)

**Reference:** Belle FN, Schindera C, Ansari M, Armstrong GT, Beck-Popovic M, Howell R, Leisenring WM, Meacham LR, Rössler J, Spycher BD, Tonorezos E, von der Weid NX, Yasui Y, Oeffinger KC, Kuehni CE. Risk factors for overweight and obesity after childhood acute lymphoblastic leukemia in North America and Switzerland: A comparison of two cohort studies. *Cancer Med.* 2023; 12(20): 20423-20436. doi: 10.1002/cam4.6588

[Here you can find the full publication.](#)

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