

## IN SEARCH OF VITAMIN C

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*Institution:* Szegedi Tudományegyetem Gyakorló Gimnázium és  
Általános Iskola 10/A osztály  
(10/A class of the Teacher Training Primary and  
Grammar School of the University of Szeged)

*Teachers:* Veronika Németh  
Gábor Z. Orosz  
Zoltán Somogyi

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The statue of Szent-Györgyi has become a popular place to take photos  
in Szeged. Petra and Kornél want to follow the path of the professor.



Dani and Ákos managed to find the tram that advertises Vitamin C



We were able to capture the tram during a chemistry lesson as well



At Szent-Györgyi's first home in the city, a memorial room has been opened where you can see a replica of the Nobel Prize medal. The professor gave the medal for a fund-raising campaign when the Soviet Union, without a declaration of war, invaded Finland. However, a Hungarian person who was living in Helsinki bought the medal, so, eventually, it could stay in Hungary.



Peti brought his pet, Mázli, to the school because science can be grateful to guinea pigs. Since, during the evolution, the guinea pigs have lost their ability to synthesize Vitamin C, like humans, the lack of Vitamin C and its effects on them when consuming it can be examined very well.



**The experiments took place in the laboratory of the school**



**We squeezed the juice out of the plants, which we had bought at the market, just before the experiments.**



We detected Vitamin C based on its reducing effect with the help of iodine and starch. We had to count the drops added, until the blue color disappeared. This required a lot of patience and attention from the boys as well.



The girls invited the Japanese exchange student, Reon, to join our team who was also glad to participate in the project.



The groups put the obtained results on the board and then we calculated their average. The order of the plants examined according to the concentration of Vitamin C they contained is (from the most to the less): paprika, lemon, cabbage, sauerkraut, apple.

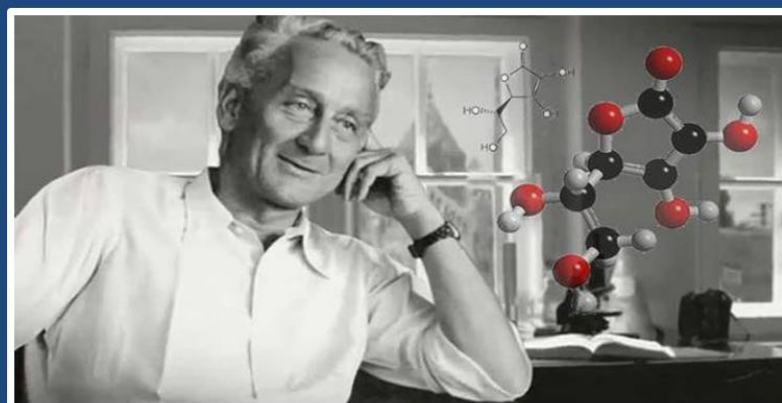


## SCIENCE FAIR



At the StarT Science Fair our team is waiting for the start

## A C-vitamin nyomában



StarT-projekt Tudományos Vásár  
2017. február 15.

[Our presentation](#)



**Márk and Peti undertook to report our work**



**Many people visited our stand**



### The students' comments:

"For me the most interesting parts were the experiments. We don't have the opportunity to do these kinds of things many times and this particularly was very interesting. The teamwork made it even better."

"We got to know the concentration of Vitamin C in different fruit and vegetables."

"The fact that the apple contains such little amount of Vitamin C surprised me."

"It was exciting to work in teams, I had a great time."

"This project gave exactly what I was hoping for."

"I realized that we can thank a lot to the guinea pigs."

"My knowledge has been widened with important facts."

"This whole project was not only instructive but it made us more united as a learning community as well."

"Moreover we have found a Finnish connection too!"

"It made me more interested in science."

"The lesson was more useful this way than just listening to the teacher and taking notes."

"The icebox from the 1930s was interesting."

"I won't forget this knowledge because I acquired it with good experiences."

"I got to know the Nobel-prize winner scientist of my hometown."

"I got to know Szent-Györgyi not just as a scientist but as a person too."

"The experiment took a long time but it wasn't boring at all. I think it was very creative and exciting."

### **Teachers' comments:**

“The children liked the program, so it is already a success. We could develop skills that can be useful in other areas as well. It would be great if we could organize other projects like this throughout the year. I have learned that I can rely on the ideas and on the independence of the students so I don't have to figure out everything on my own.”

“The project was done in a free and easy atmosphere. The students were very motivated to start the work. It was good to see the way they got actively engaged in the process of learning. Truly, everyone participated in this project. We could immediately talk about the difficulties and errors that emerged during the investigation, so we were able to solve them right away. In my opinion, the key advantage of this project was that the children could widen their knowledge and develop their viewpoint regarding the scientific research and the nature of science. For example, they had the opportunity to learn how to make their measurements comparable and reproducible. Also, they could experience that the previous conclusions are not always supported by the results obtained during the research (for example: no one had thought that the apple would contain the less vitamin C). As a teacher it was good to experience the role of facilitator and work together with the children throughout this project. Now, I feel that it is very likely that I will keep using the project-based learning in the future as well.”