Monitoring of quality of beverages in school canteens in the Moravian-Silesian Region

Since the year 2014 methodology of Ministry of Health CZ has been introduced – Nutritional recommendations for consumer basket (hereinafter referred to as "methodology NR") which deals with beverages availability in school catering. Beverages are an integral part school meals, or dairy food program in nursery schools, and they have been used for the evaluation of the nutritional intake.

In the year 2018 we inspected 65 objects and in 30 objects we focused on beverages in more detail within a special task. The goal of the task was the investigation of alternatives of drinking regime in schools and school canteens and the comparison of availability with the methodology NR but it also included:

- investigation of the conditions, maintenance, cleaning or disinfection of barrels and trays used for serving beverages to schoolchildren,
- indirect demonstration of sufficient procedures to ensure effective cleaning,
- checking the amount of sugar in the served beverages.

The results

It can be said that conditions and maintenance, including cleaning and disinfection of barrels, trays, storage tanks and compliance with proper hygienic and manufacturing practices in school canteens are on a good level. 60 samples were taken, from which only 10 samples from 2 objects (a whirler and a barrel with outlet tap) failed to meet the requirements of the coliform bacteria indicator.

As part of the diet evaluation according to methodology NR we were dealing with the offer of beverages in school canteens. Of the 65 inspected school canteens, 61 followed the rule to serve sweetened and also unsweetened beverages and dairy and nondairy beverages. Only 4 school canteens offered only sweetened drinks – most of them were cordial drinks or sweetened tea.

Sugar content in beverages was checked in 30 schools or school canteens. 65 different kinds of beverages were inspected.

According to the project of The National Institute of Public Health – Healthy School Canteen, the acceptable amount of sugar content are 2 g sugar per 100 ml beverage. This value was implemented in 31 beverages, however 22 of them used tap water. The amount of 2 g/100 ml were exceeded in 34. The average content was 4.9 g/100 ml, the highest value of sugar content was in dairy beverage Granko (instant cocoa) with the amount of 12.5 g/100 ml.

Conclusion

The basis of the drinking regime for school kids should be water. Water could be easily enriched by herbs, fruit and vegetables. Other suitable drinks can include unsweetened fruit teas and herbal teas or water-diluted juices. Bear in mind that when the beverages are sweetened, that it does not make them an energy source and that is why the amount of sugar content in beverages should not exceed 2 g per 100 ml of beverage. 7 servings are suggested per child and day, where serving sizes correspondent to the size of child fist.



Pict. 1: Pupil in school canteen



Pict. 2: Pupils learning about drinks