

# ‘Not suitable for under-4s’: New industry guidance issued on glycerol in slush-ice drinks

Manufacturers are also being advised to tell retailers that they should not offer free refill promotions to under-10s, to prevent young children being exposed to excessive amounts of glycerol.

[The updated guidance](#) follows an FSA risk assessment which found that children below this age may suffer from headaches and sickness caused by exposure to glycerol.

The FSA is also aware of two cases in Scotland in, one in 2021 and one in 2022, where children were hospitalised because of glycerol intoxication.

At very high levels of exposure – typically when several of these products are drunk by a child in a short space of time – glycerol intoxication could cause shock, hypoglycaemia and loss of consciousness.

FSA Head of Additives, Adam Hardgrave, said:

While the symptoms of glycerol intoxication are usually mild, it is important that parents are aware of the risks – particularly at high levels of consumption.

It is likely that there is under-reporting of glycerol intoxication, as parents may attribute nausea and headaches to other factors.

We are grateful to those manufacturers who have already taken steps to reduce levels of glycerol, and to those who have already told us they will be adopting our new guidelines.

Slush ice drinks can contain glycerol as a substitute for sugar to create the slush effect. [The FSA’s new guidance asks businesses to only add glycerol at the minimum quantity technically necessary](#) to achieve this effect.

While glycerol is found in some other foods, it is added at much lower quantities than in slush ice drinks.

The FSA’s risk assessment considered a worst-case exposure scenario in which a child consumed a 350 ml slush drink containing the highest level of glycerol used (50,000 mg/L) and compared this to a threshold above which adverse effects could occur. Children aged 4 or below would exceed this threshold.

Those above the age of four are considered unlikely to suffer ill effects from drinking one slush drink. This is because the effects of glycerol are related to body weight. The FSA’s risk assessment and advice considered the average weight of children at different ages.

If, in the future, the maximum levels of glycerol used by industry decrease, the new industry guidelines may be reassessed.

The FSA will be monitoring how widely the guidelines are adopted and could take further action in future.