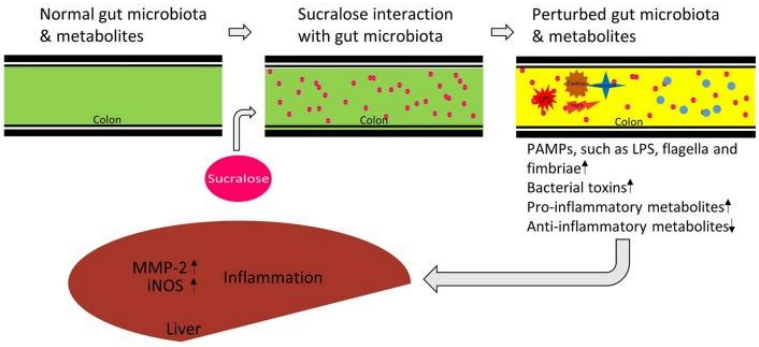
The Effects of Artificial Sweeteners

Artificial sweeteners are synthetic sugars that are added to foods to make them taste sweet. They are able to make foods taste sweet without the added calories that normal sugar has. This makes them appealing for people who are trying to lose weight. The most common everyday foods that contain artificial sweeteners include, candy, soda, toothpaste and chewing gum. Splenda is the most commonly used artificial sweetener. In recent years its health effects have become highly debated. Studies now show that consumption of sucralose can alter the gut microbiota. The gut microbiome plays a key role in relation to host health. Some examples are food digestion and fermentation, immune cell development and enteric nervous system regulation. The most common effect associated with gut microbiome disruption is diabetes and obesity. Artificial sweeteners are often used by people who are trying to lose weight. However new studies suggest that artificial sweeteners may be linked to weight gain. Results from animal experiments demonstrated that mice fed with artificial sweeteners had higher levels of glucose than those fed with glucose that was associated with increased abundance of gut bacteria favourable to absorb carbohydrate in intestine tract. Artificial sweeteners also increase insulin resistance and glucose intolerance. New studies have also found that the frequent long-term consumption of artificial sweeteners is associated with an increased risk of type 2 diabetes. In conclusion, foods or drinks containing artificial sweeteners increase the risk for obesity and diabetes. If you like to reduce your weight or prevent diabetes, you should avoid drinking “diet” drinks containing sweetener as well as sugar.



https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5522834/

After sucralose enters the gut microbiome it enriches the bacterial pro-inflammatory mediators while also disrupting metabolites involved in inflammation regulation. When combined these 2 things contribute to the inflammation of the liver in the host.