


Natural Ingredient Alert System

Empowering Healthier Manufacturing

What Is The Problem?

Tell me about how the ingredients manufacturers use in their products could help us eat healthier and live longer.




One key aspect is the energy density of food, which is the calories per 100 grams. Foods with lower energy density, like vegetables, allow people to eat more volume while consuming fewer calories. Reformulation of recipes to reduce energy density can make a big difference. For example, the UK's sugar tax on soft drinks led to significant reductions in sugar content. However, reformulating foods like cakes and biscuits is more challenging due to their structural reliance on sugar.

Feel free to ask more if you want to dive deeper into this topic!


Ultra-Processed Food and Chemical Ingredients.

What are issues for manufacturers switching from ultra-processed ingredients?



Switching from ultra-processed ingredients can be challenging due to several factors. Firstly, cost: natural ingredients often cost more and have shorter shelf lives. Secondly, taste and texture: maintaining the same sensory qualities with less processed ingredients can be difficult. Thirdly, supply chain: sourcing natural ingredients consistently and at scale can be problematic. Lastly, regulatory compliance: ensuring new formulations meet food safety standards adds complexity.


Tell me about the problem with ultra-processed foods and obesity



Ultra-processed foods (UPFs) are often high in energy density, making it easy to consume a lot of calories quickly. They are engineered to be hyper-palatable, encouraging overeating. While convenient, UPFs can displace healthier, less processed options in people's diets. This convenience and palatability contribute to higher calorie intake, which is a significant factor in obesity.

Would you like to explore this further or discuss another aspect?

What are the difficulties in getting manufacturers to change the ingredients in their products to make them more natural and less ultra-processed.



One major difficulty is maintaining taste and texture. For example, reducing sugar in cakes is tough because sugar has structural roles. Manufacturers also worry about losing customers if their products taste different. Voluntary reformulation has had mixed success; brands might not change if competitors don't. There's also the cost and complexity of reformulating recipes.

Feel free to ask more if you want to dive deeper into this topic!

More About This Issue.

Ultra-processed foods often contain high levels of saturated fat, salt and sugar and when we eat them, we leave less room in our diets for more nutritious foods.

- British Heart Foundation

Dr Chris van Tulleken -

UPF is addictive, meaning that for some people binges are unavoidable. The emulsifiers, preservatives, modified starches and other additives damage the microbiome, which could allow inflammatory bacteria to flourish and cause the gut to leak.

A Solution :

A website where manufacturers can find information about natural ingredient alternatives and sign up for alerts.

The Natural Ingredient Alert System (NIAS)

The opportunity to earn badges and compete with other manufacturers will increase customer retention rates by up to 40%.