Temperature Indicator for Cooked Foods

Opportunity

Each year, contaminated food causes more than 50 million illnesses in North America, many of which are caused by pathogenic microorganisms such as E. coli$^1$.

One way to prevent illness is too ensure that food is properly cooked, but common methods such as visual inspection or the use of thermometers are often unreliable.

Guelph researchers have developed new doneness indicators that undergo an irreversible physical change when they reach a specific temperature - indicating that the food is ‘done’. The sensors are made from food-grade fats and carbohydrates, which melt away when they achieve their melting temperature.

Applications and Advantages

- Applications in prepared food products at risk of contamination, including meats, bakery products, egg products and others
- Applications for in-home use

Keywords

- Temperature • Doneness • Indicator • Patty • Food Safety •
- E. coli • Campylobacter • Listeria • salmonella • C. perfringens •

References

1. CDC Estimates of fooodborne illness: www.cdc.gov/foodborneburden