

13.6 Alginate Safety

Gastroesophageal reflux symptoms such as heartburn and regurgitation were found to occur in patients with nonerosive reflux disease (NERD). Treating those patients with oral supplementation of sodium alginate was found to indicate relief of gastroesophageal reflux symptoms. They were found safe than the chemical compound omeprazole in relieving heartburn or regurgitation symptoms of NERD patients [101]. Similarly, they were found to be effective in the treatment of gastroesophageal reflux disease in preterm infants [102]. In another study by European food safety authority (EFSA), the novel food alginate–konjac–xanthan polysaccharide (PGX) was found safe for consumption at a rate of 1.8 g/kg body weight per day [103]. Apart from its safe use for human consumption, alginates have also been found to be safe for pets and non-food-producing animals and fish [104].

13.7 Conclusion

The physical properties of alginates, which are noninteractivity, viscosity, and formation of gelling agents, make them useful in various food-related applications such as thickening agents, stabilizers, emulsifiers, additives, encapsulation, etc. They were also found to not cause any harm to human consumption when taken in considerable amount and also found to be useful for animals. Also, another advantage is their use in medical applications. These advantages of alginates make them a highly efficient candidate for application in several fields including food industry.

References

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