"تأثير استخدام الأغلفة الغذائية الأولية القابلة للأكل على سياحة الطعام"

Packaging on The Impact of Using The Edible Primary Food" Food Tourism"

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Abstract:
In light of what countries mean from the inappropriate environmental conditions, the so-called climate change, along with the large increase in population, there was an urgent need to increase food production, which is commensurate with that increase with the increase in that production, which led to an increase in packaging that is not degradable from petrochemicals, and that led to an increaseled to fuel consumption and landfills, and consequently an increase in carbon and thus a rise in the temperature of the earth, and from here began thinking about the covers of petrochemical polymers that can be degraded to reduce fuels, but the matter led to finding solutions Other, which are edible food packaging, such as fats, proteins and sugars, as these covers had a major role in affecting food tourism, In order to provide ecotourism like food tourism, this research paper is presented to study the effectiveness of using edible

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primary food packaging in food tourism, To fulfill the objectives of sustainable development, additionally how it affects food tourism.

Keywords: Edible Primary, food packaging, food tourism, environmental conditions, sustainability

1. Introduction

Non-degrading petrochemical polymer materials have great damage, such as plastic, which has small atoms of it capable of destroying human cells and developing cancer(, besides remaining in the soil without decomposition, and not only, but also we cannot treat it the radically, but preservatives are added in those containers (Jeya Jeevahan et al., 2017), unlike glass, which has a high ability to preserve food, as it can be treated thermally as there are no pores through which bacteria and fungi enter, but it is faulted for not decomposing, but it remains in the soil For thousands of years, which makes it a suitable environment for the increase of insects, rodents and wounds, either tin containers are sealed and without pores and correct with thermal treatment only and be defected by rust, which requires coating with tin as it is prone to injury oil rancidity so-called oxidation of oil next to does not have the ability to decompose so it was necessary to search for environmentally friendly covers in light of the goals of countries towards sustainable development and resistance to climate change and reduce its effects, which are cellulosic covers of natural origin Such as cellulosic materials such as paper and cardboard or cardboard covered with aluminum foil (Fotie et al., 2023) such as juice and cheese workers, and the matter did not stop at that, but research began quickly to find primary packaging for food, as its role is in protecting food from bacteria and fungi and retaining the smell and nutritional elements, and not only that, but this application also contains many nutritional elements (Wang et al., 2023). This fee is also able to Keeping the largest amount of water inside the product reduces the rate of loss and evaporation, which makes the product fresher for the longest possible period, and not only that, but also recently the price of cooking oils has increased, which has made primary coatings, especially meat, more economical.

2.Classification

There are colloids have a major role to help in the adhesion ability, where they are a grid model that completely surrounds the product as it should when making these covers that does not change color or smell and taste and I fit each cover (Jeevahan et al ., 2017) with each product and be characterized by gloss and free of toxic substances and heavy elements and must be from natural materials suitable for eating and materials that do not have the ability to melt, especially in the materials that are painted in food products that cook such as meat and some types of Vegetables such as potatoes and eggplants lead to the lack of use of oils and the lack of saturated oils that cause many heart diseases such as atherosclerosis and pressure as a result of increased cholesterol.

3.History of packaging of food products:

Ancient History of Canning: In 1765, "Spallanzany" declared that food may be stored for a long period when it is packed inside sealed vessels. This announcement marked the beginning of human knowledge of the method of preserving food in airtight containers.

Recent developments in food packaging Beginning in the early nineteenth century, in 1809, the French dessert maker "Nicholas Albert" created a method to ieth century, microbiological research was applied in canned food.

preserve food within glass containers by sealing them firmly with a cork stopper and then heating the containers in boiling water. This practice persisted until 1850. In the European world, Solomon added ingredients including oil, calcium chloride, and table salt to create a high temperature before cutting the time down from five hours to 30 minutes. Until the beginning of the twenty.

4. Cellulose packaging

In recent decades, environmental contamination has reached dangerously high levels due to the use of synthetic materials. (Khan at al., 2023) Without increasing the use of natural, ecologically friendly chemicals, the eco-equilibrium system will be difficult to restore Utilizing renewable cellulose could have a significant positive impact on the environment, both directly and indirectly. Because cellulose is a raw material that is renewable, non-toxic, and biodegradable, its value is tied to sustainable development. There are several uses for cellulose products in both domestic and commercial settings.

5. packing in tin

The market for packaging materials used in the food sector is very large. Metal packaging, which has a well-known propensity to display barrier qualities and is widely used in the food sector, is one of the most well-known packaging materials. The metal packaging comes in a variety of forms and can be used as lids or caps for bottles or other containers. (Akram et al., 2023) The metal packaging's affinity for other metals and redox reactions pose the most worry, while this can also cause a number of additional dangers. Metal container is coated to prevent posing and rotting because of its high affinity for food products. But the popularity of metal packaging is owing to a number of benefits, including its lesser contribution to pollution and longer shelf life.

6. packaging in plastic

The harmful effects of plastic packaging are extremely serious, as if a certain part of the plastic enters a human cell, it may destroy it and expose it to cancer. It cannot be treated thermally, and it may also be a suitable environment for microbes and bacteria. Preservatives must also be added to the food in which it is kept, which will cause more disease.

Food containers made of plastic that can be microwaved may contain harmful materials. Although plastics like polypropylene polymers are frequently used as safe materials in food packaging, recent research has shown that plastics or their by-products can migrate to food simulants, actual foods, and, more recently, to people's bodies through ingesting food. (Pathak, 2023) Food in food contact materials hasn't yet undergone a full study under cooking circumstances. In this article, we demonstrate for the first time how plastic migrants found in food contact materials can interact with natural food ingredients to form a compound that combines a UV- photoinitiator (2-hydroxy-2-methyl-1-phenylpropan-1-one) with maltose from potato starch. This compound was discovered after cooking potatoes in microwaveable plastic food containers. Polypropylene glycol compounds have also been discovered.

7. Packing with polysaccharide

Governmental organizations throughout the world are creating new policies to reduce the excessive use of plastic in food packaging and to create novel, biodegradable materials for it out of a sense of urgency. Due to their ability to control moisture loss, food transpiration, and even antimicrobial growth, hydrogels are used in the food industry. They are made of three-dimensionally cross-linked polymer chains that interact with and hold large amounts of water while also being highly malleable and biocompatible with food. However, thanks to the importance of hydrogels, new research directions are opening up for use in food packaging. (Del Valle ., 2023) The utilization of natural hydrogels based on proteins, polysaccharides, lipids, and other biodegradable polymers as sustainable materials for food packaging is now in an indeterminate state.

7.1 Cellulose Derivatives

An major source of biomaterials for food packaging is cellulose derivatives, which are cellulose that has been functionalized in a solvent state with various side groups. These sources are taken into account in this review: cellophane, cellulose acetate, methylcellulose, carboxymethylcellulose, and cellulose. For both coatings and freestanding packing films, mechanical and barrier qualities are crucial. Thus, the potential of the chosen cellulose derivatives and cellophane is evaluated in terms of both their tensile and moisture and oxygen barrier capabilities. For microfibrillar celluloses, nanocrystalline celluloses, and whiskers, the ability of cellulose to strengthen the films and aid in obstructing gas diffusion is explored. (Coffey et al., 1995) Cellophane is said to have excellent oxygen barrier characteristics. Regular studies have demonstrated that nanocellulose fillers

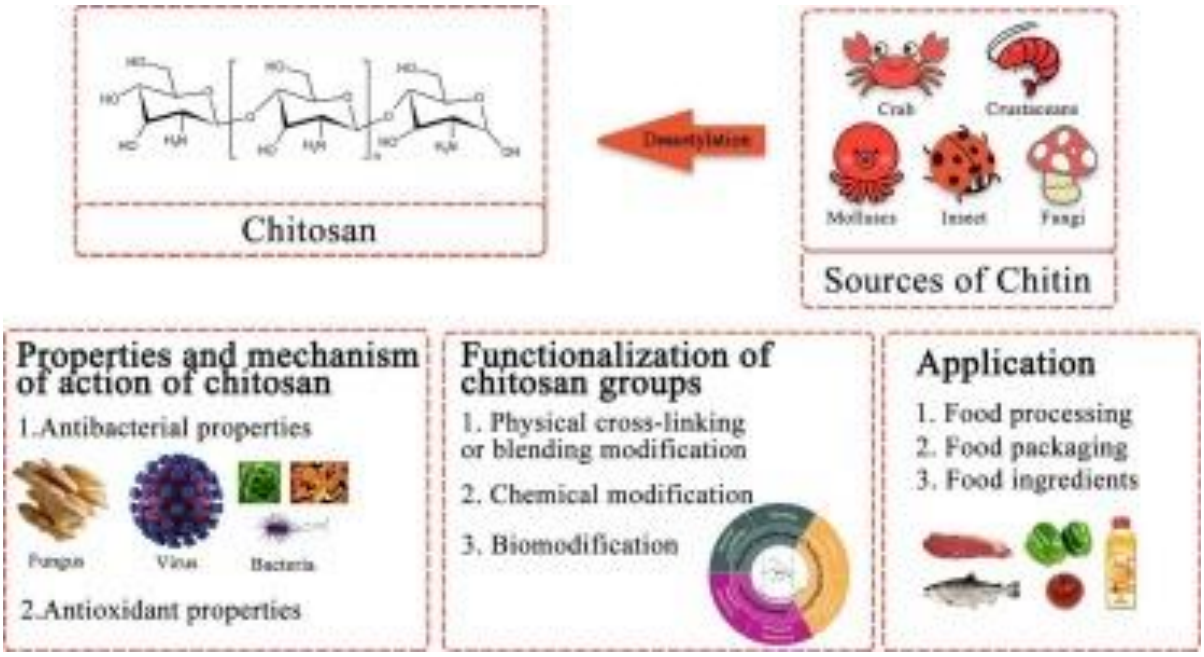
7.2 Uses of starch in packaging:

Around the world, people are becoming more concerned about how plastics made from petroleum affect the environment. Containers and packaging make up the majority of municipal solid trash and are a significant source of pollution on land and at sea. For a more sustainable future, plastics made without petroleum are needed as an alternative. Alternatives to petroleum-based plastics have been created using starch, a plentiful, renewable, biodegradable, and inexpensive material. Starch can be transformed into a thermoplastic material, however due to its weak mechanical characteristics and moisture sensitivity, its usage is restricted. (Lucia et al., 2022) Starch-based plastics have been produced with better qualities by combining it with other polymers, employing moisture-resistant coatings, and developing composite composites out of fibers and

inorganic components. Additionally, starch is a crucial fermentation feedstock for the creation of.

7.3 Chitosan:

In recent years, environmental and sustainability challenges have drawn more and more attention. Due to its abundance of functional groups and superior biological capabilities, chitosan has been created as a natural biopolymer as a sustainable alternative to conventional chemicals used in food processing, food packaging, and food additives. In this paper, the distinctive qualities of chitosan are analyzed and summarized, with an emphasis on how its antibacterial and antioxidant abilities work. This offers a wealth of knowledge for the creation and use of composites based on chitosan that are antibacterial and antioxidant. (Chen et al., 2023) A range of functionalized chitosan-based products are produced through further physical, chemical, and biological changes of chitosan. Chitosan's physicochemical characteristics are enhanced by the change, which also makes it possible for it to have additional uses.



7.4. Carrageenan:

Kappa-carrageenan (K) and protein isolate (SPI) with different amounts of bacterial cellulose nanofibrils (BCN). The morphological, structural, mechanical, water vapor barrier, and moisture content properties were all enhanced by increasing the BCN concentration. The film with a high BCN concentration showed a considerable reduction in WS (22.98 0.78%), MC (21.72 0.68%), WVP (1.22 0.14 g mm-1 S-1 Pa-1 10-10), and EAB (57.77 5.25%) properties in compared to the pure SPI film (S). It is important to note that the physicomechanical characteristics of the ideal film (SKB0.75) with Zenian-loaded metal-organic frameworks (ZM) were unaffected. However, due to the robust interfacial contacts between polymer chains and

ZM, it significantly improved the thermal stability of this film. Additionally, the ZM coatings prevented the development of

7.5. Gellman:

waste that does not disintegrate or decompose rapidly, requires a significant financial investment for disposal, or pollutes the environment. In order to use it as a substance that can kill bacteria that contribute to the spoiling of preserved fruits, polymeric films of carboxymethyl chitosan (CMCs) and carboxymethyl starch (CMS) were created. The findings showed that DK extract has good compatibility with film polymers and had no effect on the morphological structure of the produced films. The results also showed that, in the presence of the crosslinking agent, DK extract sought to make bonds with both polymers, which ultimately worked to greatly increase the number of insoluble films in water. (Zidan et al ., 2023)The CMCs/CMS/DK-3 demonstrated superior antibacterial properties, according to the results.

7.5 . Pullulan:

The creation of packaging materials that are useful, eco-friendly, and safe has gained international attention. As antioxidant and antibacterial agents, essential oils can be added to packing materials. The application in food packaging may be constrained by their high volatility and discontinuous film matrix difficulties, which might result in a rough film surface. In this study, a pullulan-sodium alginate (PS) film was created using a thyme essential oil microemulsion (TEO-M). The PS film was given antioxidant and UV protection capabilities by the addition of TEO-M. The antioxidant activities of the PS film incorporating TEO-M were much higher than those of the PS film incorporating TEO-C (thyme

essential oil coarse emulsion). TEO-M is more evenly distributed throughout the movie than TEO-C was. Lipid oxidation and microbial development in cooled pork were inhibited by incorporating TEO-M at a concentration of 50 mg/mL in the PS film (PS-50M). After 10 days of storage at 4 °C, the total viable count (TVC) of chilled pork preserved in the PS-50M material was significantly reduced compared to the control group ($P < 0.05$). This study shows that incorporating TEO-M in the PS film provides a method for applying essential oils in food packaging, which may have great potential in the food industry.

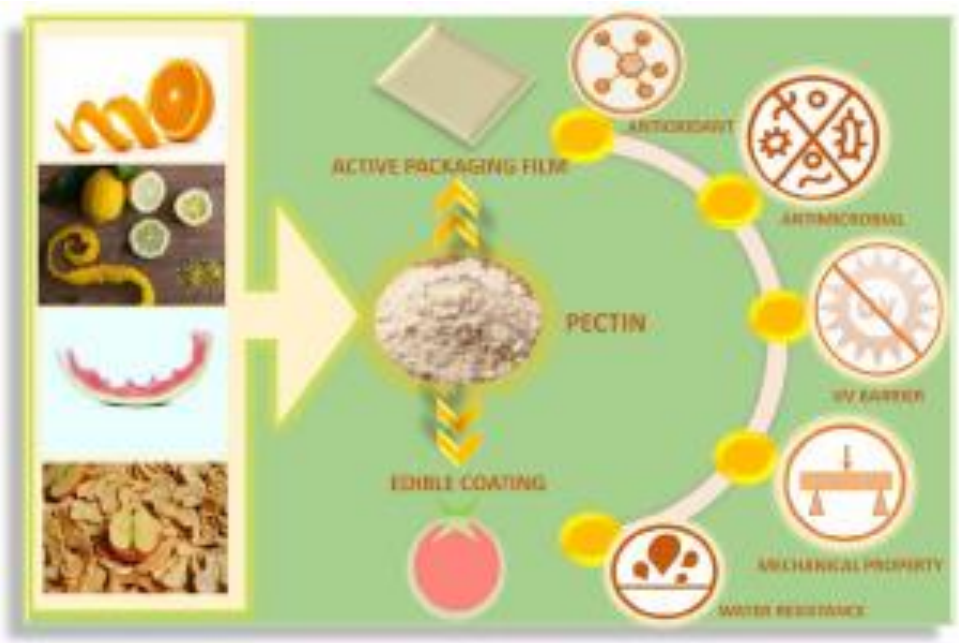
7.6 Alginate:

One of the biggest risks to the environment and public health is plastic pollution, more specifically the contamination of food packaging and containers, which make up the largest portion of the present plastic output (36%). Therefore, the creation of substitute renewable plastics is required to support a circular economy and stop the depletion of resources. Sargassum natans, an invasive brown seaweed that has been inundating the Caribbean coasts, has been demonstrated to be an outstanding contender. Seaweeds have been known to offer good film forming capabilities appropriate for the creation of bioplastics. As an alternative to conventional plastic packaging, this study demonstrates for the first time the development of a novel optimized biodegradable alginate composite bioplastic. Response Surface Methodology (RSM) was used to carry out the optimization procedure.

7.7. Pectin

Pectin is a plentiful complex polysaccharide that can be found in many different plants. Pectin has been widely used as a gelling agent, thickener, and colloid stabilizer in the food industry since it is safe, biodegradable, and edible. Different methods of extraction can change the structure and characteristics of pectin. Due to its superior physicochemical characteristics, pectin is suited for use in a wide range of applications, including food packaging. Pectin has recently received attention as a biomaterial that has promise for the production of bio-based sustainable packaging films and coatings. Active food packaging applications benefit from the use of composite films and coatings made of functional pectin. Pectin and its use in applications for active food packaging are covered in this review. (Roy et al., 2023) Pectin's origin, extraction process, and structural details were explained in the

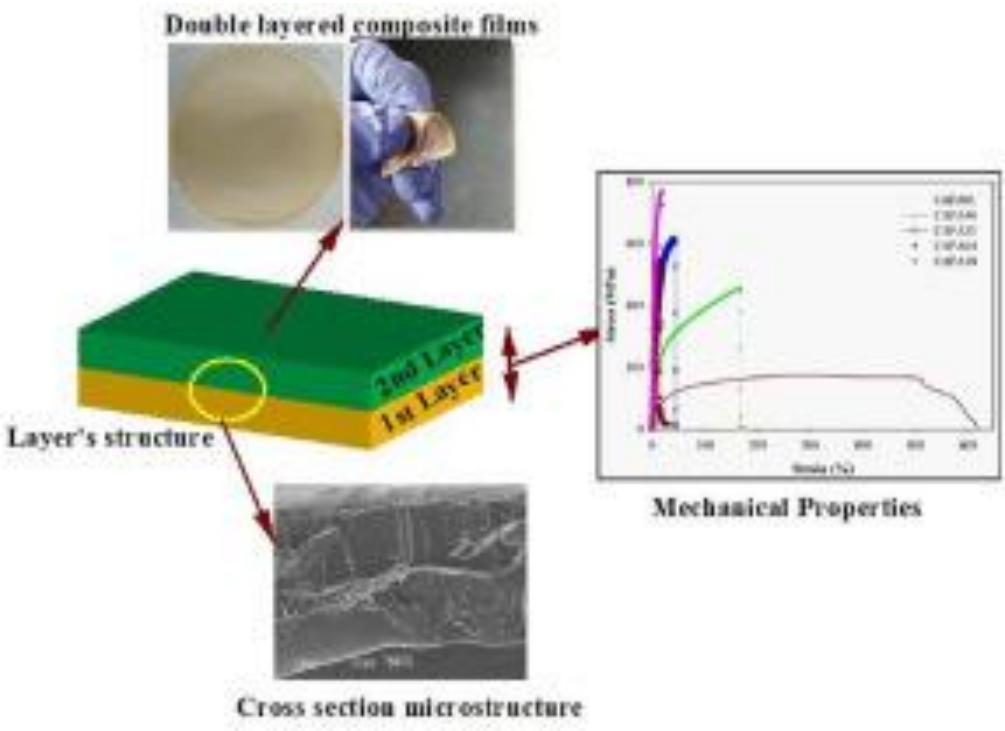
beginning along with some of its fundamental information and qualities. Then, several pectin modification techniques



7.8. Agar

Packaging plays a key role in lowering food waste and boosting product competitiveness. Nearly 40% of all plastic trash produced worldwide is made of plastics derived from fossil fuels, primarily for food packaging. To solve this problem, our work created unique bilayered plastic composites with separate agar/chitosan and PVA/agar layers using a layer-by-layer casting approach. The thickness, plasticity, and tensile strength of the film were all influenced by changing the volume of the layers. The amount of citric acid used as a crosslinker (up to 30 wt%) was favorably correlated with the

elongation at break. Better UV-light blocking capability and opacity were supplied by the chitosan-rich initial layer, which helped to prevent lipid oxidation. (Diop et al., 2023) While the colors were preserved, the light absorption was significantly reduced by adding a second layer 40–60% thicker.



8.Fruit Purees:

Foodborne outbreaks and the buildup of food plastic waste in the environment in recent years have sparked a search for creative, inventive, and sustainable food packaging solutions to address microbial contamination, food quality, and safety. Environmentalists around the world are increasingly concerned about pollution brought on by trash produced by agricultural activities. The efficient and cost-effective valorisation of agricultural leftovers can be a solution to this issue. By-products and leftovers from one operation would be used as ingredients and raw materials in another. Fruit and vegetable waste used in green films for food packaging is one example. In a well-studied field of science called edible packaging, a variety of biomaterials have already been investigated. These biofilms frequently have dynamic barrier characteristics in addition to.

9.Proteins:

Food safety and lengthy shelf life are the main goals when developing food packaging. Numerous inventive packaging methods for extending shelf life and enhancing the quality and safety of food products are now available thanks to developments in material science and extensive encapsulation technologies. Pickering emulsions (PEs), a stable alternative to traditional encapsulation techniques, have demonstrated good performance in food packaging formulations.

9.1.Gelatin:

The potential use of gelatin-based film as active and intelligent edible films in developing new cutting-edge food packaging technologies as a replacement for the usage of synthetic packaging is discussed in this review. Gelatin-based film has been one of the food packaging industry's most studied materials in recent years due to its excellent mechanical and barrier qualities, low production costs, and environmental friendliness. Industry may benefit from the creation of gelatin biodegradable film by using less water, solid waste, electricity, and emissions. Additionally, gelatin-based film had a good matrix and compatibility, allowing it to serve as a medium for the integration of antioxidant and antibacterial agents to carry out their respective roles for improving safety, stability, and quality.

9.2.Soy protein:

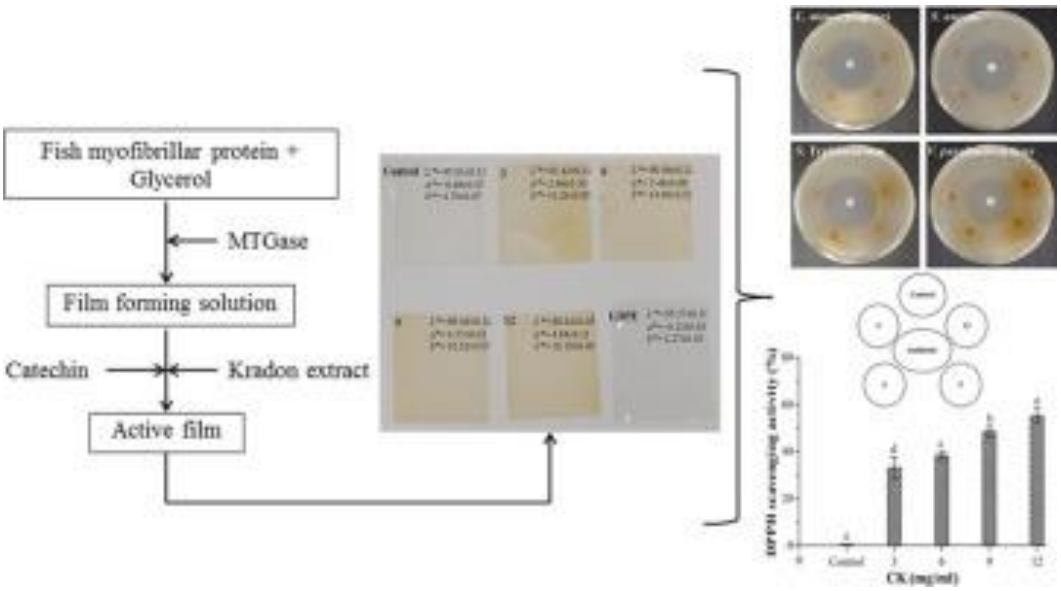
Food packaging edible films must have superior mechanical and inhibitive qualities. Films made of proteins have a high film-forming capability and good gas barrier qualities. They do, however, have poor mechanical and water barrier properties. Creating active composite films using reinforced soy protein isolate (SPI)/Kappa-carrageenan (K) and various amounts of bacterial cellulose nanofibrils (BCN) was the aim of this study. The morphological, structural, mechanical, water vapor barrier, and moisture content properties were all enhanced by increasing the BCN concentration. The film with a high BCN concentration showed a considerable reduction in WS (22.98 0.78%), MC (21.72 0.68%), WVP (1.22 0.14 g mm-1 S- 1 Pa-1 10-10), and EAB (57.77 5.25%) properties in compared to the pure SPI film (S). It ought to be

9.3.Wheat gluten:

The secret of wheat's exceptional capacity to suit the manufacturing of leavened goods is gluten, the dough-forming protein found in wheat flour. Through the large-scale industrial separation of wheat starch from gluten and the regulated drying of the gluten to preserve its functional qualities, the past fifty years have seen the development of gluten as a commodity in its own right. The majority of bakery goods employ the resulting Vital Dry Gluten. (L.day et al ., 2006) Nevertheless, gluten (vital, de-vital, or modified) is being used increasingly frequently as a food ingredient since it offers a variety of useful qualities at a more affordable cost than rivals like milk and soy proteins.

9. 4.Myofascial Protein:

Investigated were the properties of catechin-Kradon extract (Careya sphaerica Roxb.)-incorporated fish myofibrillar protein (FMP) films. Tensile strength was improved when less than 9 mg/ml of CK was incorporated, but it marginally declined when the concentration was raised (P 0.05). When the CK content was raised, there were statistically significant drops in elongation at break (51.38-132.76%), transparency
(3.35-3.88)
, and water vapor permeability (1.56 2.08 109 g m1 s1 Pa1) (P 0.05). However, when the quantity of CK increased, the film thickness (11.45-19.48 m), solubility (18.82-38.30%), and antioxidant activity significantly increased (P 0.05). Low L* values, high a* and b* values, and excellent UV light barrier qualities were found in FMP films with CK added. (Kaewprachu et al ., 2017) However, Vibrio parahaemolyticus was the sole microbe against which antibacterial action was seen. According



9. 5.Milk proteins

By casting, casein and whey protein concentrate (WPC) films that were separately plasticized with sorbitol and glycerol were created. The films' film thickness, water vapour and oxygen permeability, tensile strength, and moisture absorption were all measured. The films' respective elastic modulus (EM), tensile strain (TE), and tensile strength (TS) ranged from 2.05 to 6.93 MPa, 19.22 to 66.63%, and 0.71 to 4.58 MPa, respectively. The type of biopolymer (casein and whey protein concentrate), plasticizer, and its concentration all had an impact on the film's qualities. The film thickness, water vapour permeability (WVP), and TE all rose with increasing plasticizer content, but the TS and EM dropped. For glycerol-plasticized films, the film thickness grew from 0.168 to 0.305 mm as plasticizer concentration rose to its greatest level. films. The amount of plasticizer in the film network rose, but the amount of biopolymer stayed constant,

increasing the film thickness. Casein films outperformed WPC films in terms of tensile strength. In casein and WPC films, the WVP ranged from 3.87 to 13.97 g.mm/(m2.h.kPa). (Mohamed et al ., 2020) The GAB model effectively represented the moisture sorption isotherms of both films, which were characteristic of high-protein materials. Regardless of the plasticizer used, casein films had a relatively lower oxygen permeability than WPC films. The sensory information showed that milk-protein film packaging had no effect on the organoleptic quality of Cheddar cheese.

10. Lipids:

Three pork muscles were used to make the raw patties, and the effects of packaging and irradiation combinations on lipid oxidation, off-flavor development, and color changes were investigated. Pig L. dorsi (L. thoracis and lumborum), psoas, and R. femoris muscles were ground, and the patties were packaged in either oxygen permeable polyethylene bags or impermeable nylon/polyethylene bags. They were then exposed to an electron beam at a dose of 0 or 4.5 kGy, and stored for up to two weeks at 4 °C. After 0, 3, 7, and 14 days of storage, as well as 24 hours after irradiation, lipid 8 oxidation and color of the patties were assessed. The lipid oxidation in raw beef during storage was enhanced by irradiation and high fat content. (Ahn et al ., 1998) Nevertheless, oxygen availability during storage was more crucial than irradiation.

11. Food Tourism

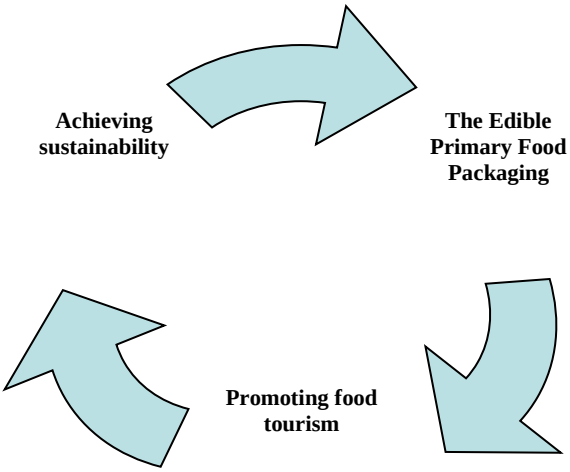
The level of the tourism industry's plans to draw visitors has become more varied in recent years. Luxury vacations in opulent lodges and leisure time on pristine beaches are no longer the only forms of tourism. Nowadays, tourists seek out locals in the

places they travel to engage in their daily lives and sample their various cuisines. The basis of the new tourism is historical and heirloom cuisine. Because the closest way to entice a traveler to visit a place is through his stomach, gastronomic tourism has started to take off around the world (Andersson et.al, 2017).

As a starting point, from a definition perspective Hall and Sharples (2003, p.10) provides an excellent preliminary understanding of food in tourism which is the major motivation, describing food tourism as "visitation to primary and secondary food producers, food festivals, restaurants and specific locations for which food tasting and/or experiencing the attributes of specialist food production region are the primary motivating factor for travel"

12. Food tourism and edible primary food packaging

Food tourism has become an important type of tourism, especially as it is a major factor in tourists determining their destination, with the aim of learning about new cultures in different countries by enjoying the experience of foods, foods and drinks that are closely linked to the heritage and history of each country (Andersson et al, 2017), The use of edible primary food packaging is one of the modern uses that achieve the goals of sustainable development and green growth, as the choices and desires of many travelers have changed based on the nature of food and drinks in tourist cities (Kim. et al, 2018).



13. Food Packaging.

Food packaging systems have diverse functions, including those associated with information, containment, and marketing. Their main function is to separate food from the surrounding environment, reducing interaction with spoilage factors (such as microorganisms, water vapor, oxygen, and off-flavors) and avoiding losses of desirable compounds (for example flavor volatiles), thus extending the shelf-life of food (Otoni et al., 2017).

14. Natural Polymers Based Edible Films and Coatings

Current consumer demands and needs more natural, high-quality, and safer foods around the world. They also ask for food packages that do not increase pollution and are made by sustainable processes, all of these in a cheap way.

A definition for coatings and edible films is that they are primary packaging made from edible ingredients. Also, it is possible to

apply directly a thin layer of edible packaging in the food by coating, immersion, and spraying (Salah A.A. Mohamed et al.,2020)

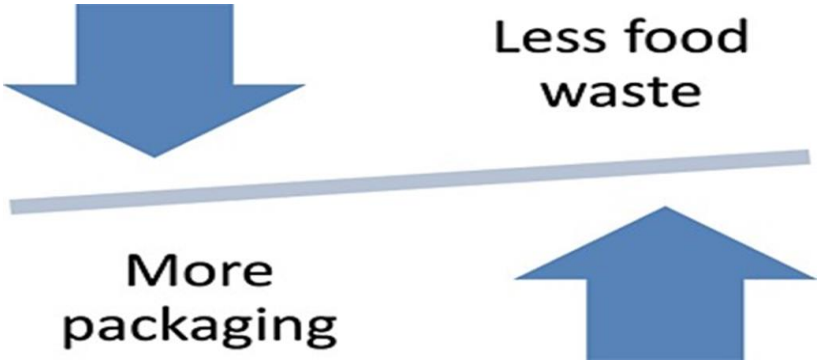
15. Fruit Purees

Fruit purees (such as purees of apricot, apple, peach, banana, tomato, mango, carrot and pear) can form edible films. Cellulose and pectin are the common constituents of fruit purees. The films, produced from fruit purees, usually, offer poor flexibility. Plasticizer addition could be used to improve their toughness and processibility. Fruit purees composite films with fiber or particle addition could be used to improve their properties (Martelli, Barros, de Moura, Mattoso, & Assis, 2013).

16. SMART PACKAGING (SP)

The ultimate purpose of applying SP is to extend the shelf-life of the product and keep its freshness, exchange quality information with consumers, enhance product's safety, and improve traceability of the product while moving across the supply chain. Active packaging which serves as the primary alternative to traditional packaging aims to support and maintain high quality and to extend freshness of food products. To realize that, different components can be embedded into the system which are capable of releasing/absorbing substances from/ into the packaged food to avoid spoilage (Arvanitoyannis & Stratakos, 2012; Prasad and Kochhar, 2014).

14- The benefit of Using Edible Primary Food Packaging for Food Production in Hospitality Industry.



Trade-offs between food waste and packaging.

Summary:

The study clarified a set of facts, which are that using cellulose wraps is the closest solution to reducing the problems of non-decomposing food wraps that need to be burned and increasing climate change, unlike plastic, which when burned emits a large amount of smoke that causes a hole in the ear. Also, burning waste leads to an increase in the percentage of carbon that In turn, it leads to an increase in the temperature of the soil, and packaging in tin containers was the cause of a major problem, which is the difficulty of decomposing and burning them, and thus their survival, to become a suitable environment for an increase in insects. The study also showed a comparison between the use of plastic containers, tin containers, and glass containers. Plastic was the most dangerous of them, because it contains the largest amount of One of the small atoms that have a great destructive ability to human cells, causing cancer. Among the disadvantages of plastic containers is the difficulty of heat treatment and therefore the addition of destructive preservatives. As for tin containers, the study has proven that they are suitable for heat treatment and therefore the lack of materials, the addition

of preservatives or their absence, but they are criticized for needing to be painted. With a layer of tin so that it does not rust. The study also showed that glass containers have many advantages, the most important of which is the ease of heat treatment, but because we can make a sudden but slow cooling, it is easy to see the product inside the container. The research study also showed that cellulose derivatives are only biodegradable and not edible, such as Adding starch with some plastic materials other than chitosan, which is edible and biodegradable, unlike bolan, thyme oils contain antioxidants, and using alginate, a type of algae that is biodegradable and not edible. Also, pectin extracted from plants is a good coating and edible, as the study showed, a group of proteins used in coatings. Foodstuffs such as gelatin, soybean protein, milk protein, meat protein, and wheat glutamine, but the least expensive and available is gelatin, then wheat glutamine, compared to soybean and milk protein. Fats were also used as a coating, but they are more harmful due to the increase in fats in food, in addition to their dissolution in intense heat. on the tourism side, these modern methods of food packaging are considered a modern trend, which in turn leads to the flourishing of food tourism as a modern trend in tourism, Food tourism is characterized by direct communication with local communities, which has a positive impact on their economy by employing more workers in all hotel and tourist establishments, which is the goal that sustainable tourism seeks to implement, taking into account the environmental and societal aspects, and In the presence of the use of edible primary food packaging, The goals of sustainable development and green growth are achieved, which meets the desires and needs of tourists and provides a clean life.

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