

# PACKAGE DESIGNS FOR SELECTED POST-NATAL CARE (OMUGWO) SPICES IN IGBO SOCIETY

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## INTRODUCTION

Package design connects form, structure, materials, colour, imagery, typography, aesthetics and regulatory information with subordinate design elements to make a product suitable for marketing. Package design encompasses both structural and graphical details. It is one of the most important tools in the marketing mix. Package design also contributes to positioning the product through its presentation and personality. Packaging is a silent advertiser; it is an important aspect of marketing. It is a big component of a brand's marketing strategy and a medium to communicate its message and values. Marketing information can be designed into visual elements used on the package to convey a message that speaks to consumers' emotions.

Rita Kuvykaite (2009) asserts that packaging attracts attention to a particular brand, enhances its image, and influences consumers' perceptions or desires about a product. Since markets are becoming increasingly competitive (Mininni, 2008) and designers and marketers are more skilled, packaging has become the marketing mix's most important point-of-purchase merchandising tool. The discipline of packaging design is one of the key elements in a marketing strategy for a product and will be promoted, recognised and sought out by the consumer (Ambrose and Harris, 2011).

Omugwo is the Igbo term for the traditional custom of postpartum care. It is the care given to mothers after childbirth (mothercare). The practice is usually associated with the Igbo people of south-east Nigeria and their neighbours. Mothers usually eagerly look forward to it because it is heralded by the addition of a newborn to a family.

*Omugwo*, an aspect of unpaid care labour, is an important part of the economy and an essential contributor to the well-being of individuals, families and societies (Stiglitz and Fitoussi 2007). This could be a result of several factors such as if a woman's daughters never married or if none of her daughters gave birth to a live baby. Ojembe and KaIu (2018) aver that the concept of mutual benefit and family care characterise caregiving in Africa, providing unpaid care for a nursing mother and her baby is cultural and revered.

Spices are used to add flavor, relish or piquancy to food. In Nigeria, many indigenous plants are used as spices, food or medicine. Indigenous spices and herbs are used to prepare yam pepper soup (*ji mmiri oku*) for the nursing mothers, which exhibits hot and spicy tastes. Some forest fruits and seeds are sometimes added to food meant for pregnant and nursing mothers as medicinal spices. These plants' activity as sources of bioactive compounds makes it possible for them to be used in many traditional medicinal preparations and as spices in local foods (Okwu and Ibeawuchi 2005).

One among the spices is the *Uda seed* (also commonly known as Negro pepper) is an aromatic spice with lots of amazing health benefits to offer.

Negro pepper is a traditional dietary and medicinal plant in Nigeria. It is mainly consumed as a spice, flavouring agent and stimulant (Okwu and Ibeawuchi 2005). Fruit and seed of Negro pepper are added to food meant for pregnant and nursing mothers (Okwu and Ibeawuchi 2005).

*Uhio* is a very abundant plant in Ghana called *prekese* (soup perfume). Its fruit is used to spice dishes such as the popular *banga* soup, and its bark is used for medicinal purposes. Women cook the fruit and take the tea to shrink their fibroids. It is an excellent source of potassium, calcium, zinc, flavonoids, phosphorous, tannis, etc.

Another spice is *Uziza* (*Piper guineense*) commonly known as African black pepper, 'uziza' in Igbo South East, and 'iyeree' in Yoruba South Western Nigeria. The plant is also known as Ashanti pepper, Benin pepper, Guinea pepper, and false cubeb in other parts of Africa. The plant is used as a spice for its pungent and flavorful characteristic for soup preparation for post-parturient women (Chiwendu *Et Al.*, 2016). The principal roles of Food packaging are to protect food products from outside influences and damage, to contain the food, and to provide consumers with ingredient and nutritional information (Coles 2003).

Food packaging science is a discipline which applies principles from four major areas of science (materials science, food science, information science, and socioeconomics) to understand the properties of packaging materials, the packaging requirements of foods, and the packaging system Yam Et Al, (2016). Ewugibe (2016) explained that a brand could be a marketing strategy that involves creating an image to establish a presence in the mind of the consumers, which can also attract and retain the consumers.

### **Purpose of the Study**

1. Ideate packaging design for selected food spices suitable for *Omugwo* (postnatal care)
2. Ascertain the ideal typographical elements and images for the packaging design based on the consumer's acceptability, interest and cultural significance.
3. Design packaging for expanding selected postnatal care (*Omugwo*) spices in Igbo Society, befitting the international market.
4. Evaluate the package design based on the consumer's health, wellness and sustainability preferences.

### **LITERATURE REVIEW**

A package is an object or group of objects wrapped in paper or packed in a box. Product Packaging is the process of designing and creating packaging for a product. This includes the materials used, the design, the printing and the assembly. Packaging is an integral part of the product because it protects it, makes it easy to transport, and can be used to promote it. Packaging provides protection, safety, enhanced usability, attractive looks, optimal design and specific customer requirements.

Packaging can play an exciting role in the success or failure of a product. Its success depends a lot on how its creators design it. While some see it as a mere safeguard that has the sole purpose of protecting a product, others argue that the life and identity of the product lie within the package design. It has the power to influence your choices, and with its carefully thought-out aesthetics can affect your emotions.

In the Igbo society of southeastern Nigeria, spices hold a dual significance in both culinary and medicinal practices. These spices are essential in traditional practices such as *Omugwo* (postnatal care) and are valued for their nutritional, cultural, and economic contributions. Beyond

their role as flavor enhancers, spices are integral to rituals, health management, and the socioeconomic fabric of Igbo communities.

### Key Spices and Their Roles

#### 1. Uda Seed (Negro Pepper – *Xylopia aethiopica*)

- **Health Benefits:** Uda seeds are widely used during Omugwo for their medicinal properties. They are a rich source of phytochemicals such as alkaloids and flavonoids, which provide antioxidant and anti-inflammatory benefits (Okwu & Ibeawuchi, 2005). Uda is commonly included in yam pepper soup (*ji mmiri oku*), which is served to new mothers to stimulate uterine contraction, expel lochia, and detoxify the body.
- **Cultural Significance:** The use of Uda in Omugwo soups reflects the Igbo value placed on maternal care. It symbolizes a family's investment in the well-being of the mother and baby, strengthening familial bonds (Ojembe & Kalu, 2018).
- **Economic Impact:** Uda is a commercially significant spice, with its trade providing income for farmers and market traders. Its growing demand internationally presents export opportunities, especially with improved packaging.

#### 2. Uziza (African Black Pepper – *Piper guineense*)

- **Health Benefits:** Uziza seeds and leaves are known for their pungent flavour and medicinal properties, including their use as a digestive aid and antimicrobial agent (Ekanem et al., 2010). During Omugwo, Uziza soups aid postpartum recovery by stimulating uterine contractions and preventing infections.
- **Cultural Practices:** Uziza is an integral component of Igbo cuisine, especially in soups for nursing mothers. It is also used in traditional healing practices, reflecting the Igbo reliance on natural remedies for health care.
- **Economic Relevance:** The cultivation and sale of Uziza provide a source of income for many rural women, contributing to household sustainability (Chiwendu et al., 2016).

#### 3. Uhio (*Tetrapleura tetraptera* – Prekese)

- **Health Benefits:** Uhio is valued for its medicinal properties, particularly in reducing postnatal inflammation and aiding hormonal balance. Rich in potassium, calcium, and flavonoids, it is used to prepare soups that promote healing and overall wellness for new mothers (Iwu, 2014).
- **Cultural Importance:** Known as "prekese" in Ghana, Uhio is a symbol of good health and renewal in Igbo society. It is a staple in Omugwo practices and often features in discussions about cultural preservation.
- **Economic Value:** The demand for Uhio in both local and international markets underscores its economic importance. Enhanced packaging for export could significantly improve its marketability.

#### 4. Other Indigenous Spices

- **Ogiri (Fermented Castor Oil Seed):** Ogiri is used to enhance the umami flavor of soups. It also plays a role in appetite stimulation and digestive health (Okwu & Ibeawuchi, 2005).
- **Ehuru (Calabash Nutmeg):** Known for its aromatic and antimicrobial properties, Ehuru is used in stews and soups, particularly for its ability to enhance taste and fight bacteria (Okigbo & Igwe, 2007).
- **Ose Nsukka (Yellow Pepper):** Indigenous to Nsukka, this spice is prized for its vibrant yellow color and unique flavor. It has become a regional symbol of pride and culinary identity.

### **Societal Impact of Spices on the Igbo Community**

#### **1. Health and Well-being**

The health benefits of these spices are integral to Igbo traditional medicine. Their use in postpartum care promotes faster recovery for mothers and ensures the wellbeing of infants through nutrient-rich diets. Spices such as Uda and Uziza help maintain maternal health by preventing infections and boosting immunity (Chiwendu et al., 2016; Ilıc et al., 2010).

#### **2. Cultural Preservation**

Spices are deeply embedded in Igbo cultural rituals, particularly Omugwo. They symbolize care, nurture, and the continuity of life. The preparation and sharing of spice-laden dishes reinforce traditional values and strengthen communal ties (Ojembe & Kalu, 2018).

#### **3. Economic Contributions**

Indigenous spices are a source of livelihood for many rural farmers and traders. With proper packaging and marketing strategies, these spices have significant export potential. Sustainable production practices could further elevate their status in international markets (Okwu & Ibeawuchi, 2005).

#### **4. Culinary Identity**

Spices define the unique taste of Igbo cuisine, making it recognizable and desirable globally. They serve as a point of cultural pride, showcasing the richness and diversity of Igbo culinary traditions (Iwu, 2014).

### **Steps to Package Local Spices**

#### **1. Material Selection:**

Choose materials that preserve the spices' quality and prevent contamination. Options include:

- **Laminated Films:** Airtight and moisture-resistant.
- **Glass Jars:** Ideal for premium packaging, offering a clear view of the product.
- **Kraft Paper Bags:** Eco-friendly and suitable for local markets.

#### **2. Design Layout:**

- Use CorelDraw or Adobe Photoshop to create appealing designs.
- Incorporate cultural patterns and typography that reflect Igbo heritage.
- Add clear labels with health benefits, preparation methods, and certifications.
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**3. Sealing Techniques:**

Employ vacuum sealing or heat sealing to maintain freshness. Ensure all seals are tamper-proof to build consumer trust.

**4. Testing and Feedback:**

Conduct consumer feedback sessions to evaluate the design's functionality, durability, and appeal. Adjust based on findings.

Effective packaging of local spices involves blending scientific principles with cultural relevance. By leveraging empiricism, determinism, parsimony, and testability, producers can create packaging that preserves product quality, meets consumer expectations, and enhances marketability. Such efforts not only ensure food safety but also celebrate the cultural significance of Igbo spices, driving economic growth.

**Theoretical Framework**

A foundational figure in consumer behaviour, Dewey's research on how people make decisions helped shape the idea of the Consumer Decision-Making Process, which is still widely used today. His model outlines the stages of problem recognition, information search, evaluation of alternatives, purchase, and post-purchase behaviour. John Dewey's contribution to consumer behaviour, particularly through his development of the Consumer Decision-Making Process, is foundational in understanding how individuals approach buying decisions.

**METHODOLOGY**

Because this study aims to ideate and design a model of packaged spices for post-natal care (*omugwo*) thereby getting them ready for international consumption, a Practice-Based Research Design is adopted. In essence, it is a qualitative research method. This kind of research has given rise to new concepts and methods in the generation of original knowledge. Methods of raw data collection, concept development and visualization are carried out accordingly. Primary sources of data are photographs which are in the form of pictures of these local species. Also, the study conceptualizes model posters that can be used as a medium to inform, and sensitize people on the packaged *omugwo* spices. There will also be an opinion poll conducted on potential end users of the product using the Google form. This is to ascertain the responses of these selected users to the product if the model designs are patented for mass production.

**Data Sourcing**

This aspect explains both primary and secondary data sourcing. The primary sources of data are the photographs of selected spices for the package designs. While some of them were shot in the field, some will be downloaded from Google Spaces. A critical review of existing related literature, from the Library, internet, social media platforms, journals, and newspapers. Information retrieved from here was analyzed and possible ideas were proffered for ideation and strategies.

**Materials and procedure**

Materials to be used are locally sourced and improved. Photographs of spices such as Uda (Negro pepper), Uhio or Prekese in Ghana (Tetrapolar tetraptera), Uziza (Piper guineense) were used for preliminary studies and layout designs. These are the materials used for the production

1. Strawboard
2. Laminating film

3. Sticker
4. Adhesive

**Tools:**

1. Personal Computer
2. Printer
3. Digital Camera
4. Measuring Tape
5. Steel Ruler
6. Cutter
7. Pencil
8. Scissors

**State the procedure**

1. Draw with a pencil and measure the dimensions using centimetres scale on a strawboard with tape or a steel ruler.
2. Cut out the drawn diagonal as it was measured on the strawboard with a cutter or scissors.
3. Cut out the same diagonal sides on your printed sticker design and place them side by side at the front of the strawboard.
4. Apply your adhesive at the back of the strawboard and place your laminated film on it to create a transplant on some part of the carton.
5. Then fold in the necessary sides and use adhesive to hold them together.

**Description of Computer Software to be used in the production process**

The researcher will use some design applications in executing this project, which include:

- CorelDraw: This is a popular graphic designing application commonly used in business centres for computer design. It contains basic foundational computer design tools.
- Adobe Photoshop Cs5 is a computer application mostly used for editing photos and designing. It offers exceptional design rendition. It is best used for cropping and adjusting images.
- Printer: It is an outputting device. Depending on the need, different kinds of printers are available, including large-format and semi-printers. In this project, the large-format printer was used to print out the visual design of this Indigenous product to a well-measured and desired size.

**Design Layout**

Creating the advertising messages is an important stage of any advertising campaign. The content of the message is carefully drafted in the layout using a picture window layout. In picture layout, the image takes a larger space in the design. Brand Characteristics influence the message content and form. The researcher carefully chose words, symbols, Google Online effects and illustrations, photographs of real models were also taken, which are meaningful, familiar and attractive concepts.

### **Production stage one: Ideas**

Ideation is pertinent in package designs. Several linear expressions were made on paper as semblances of the finished work. These drawings, although appear in basic shapes, serve as a guide for further designs.

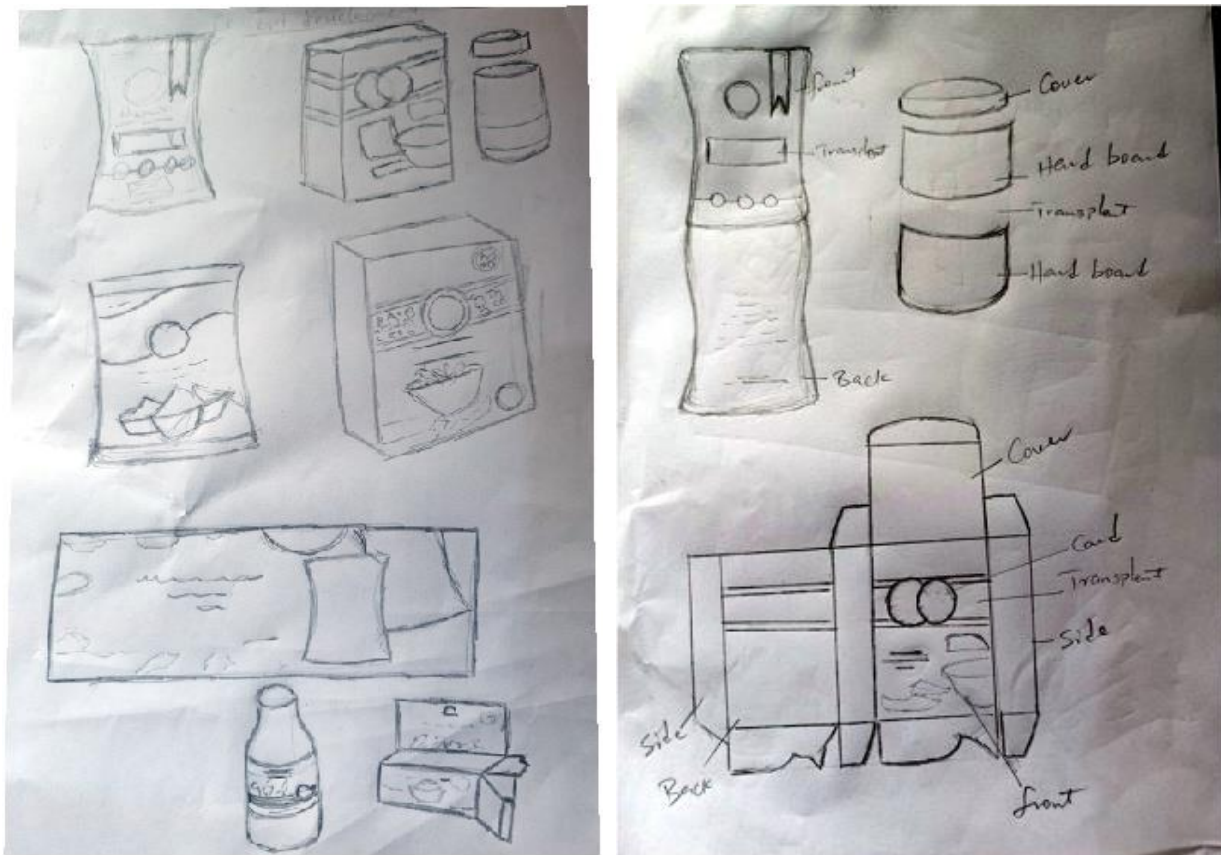


Fig 1: Sketch for packaging on post-natal spice.  
Researchers' preliminary sketch

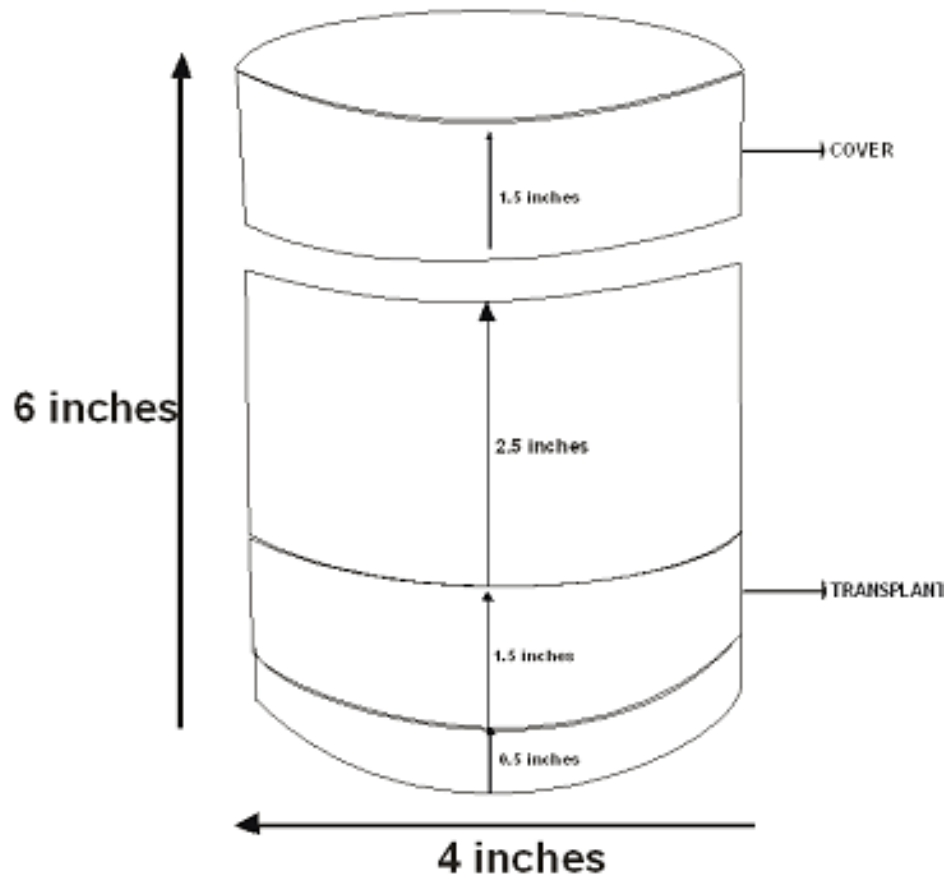


Fig 2: Detailed line art on CorelDraw.  
Researchers' preliminary sketch

This is the second stage of the design, here the researcher uses CorelDraw package to delineate comprehensive structures with the shapes and dimensional sizes of the various carton patterns using the sketches on paper as a reference. Vector graphics technique was necessary for this drawing because of its scalability



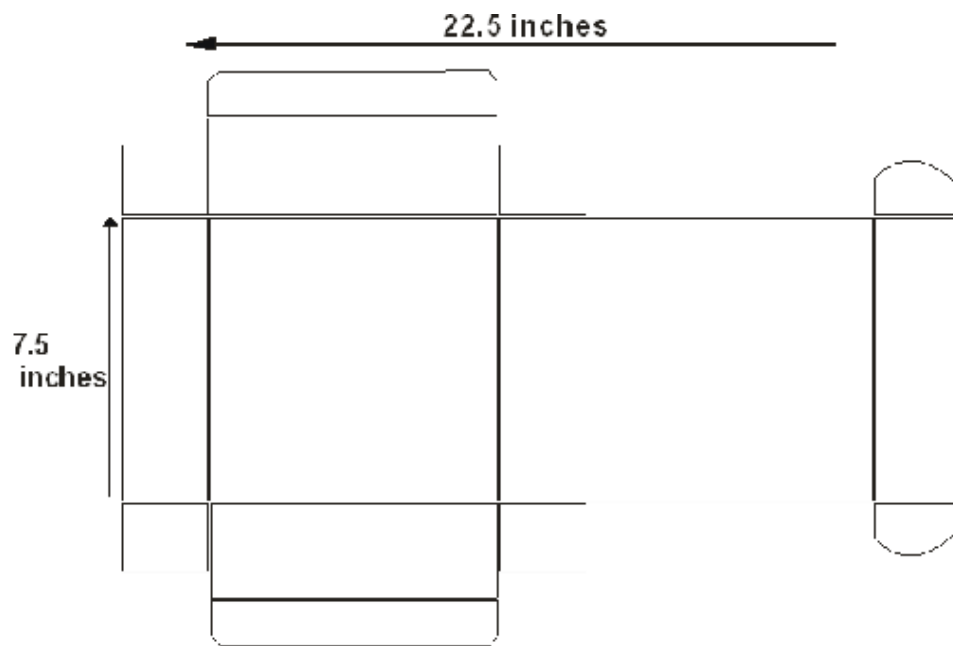


Fig 3: Type B pack for spices

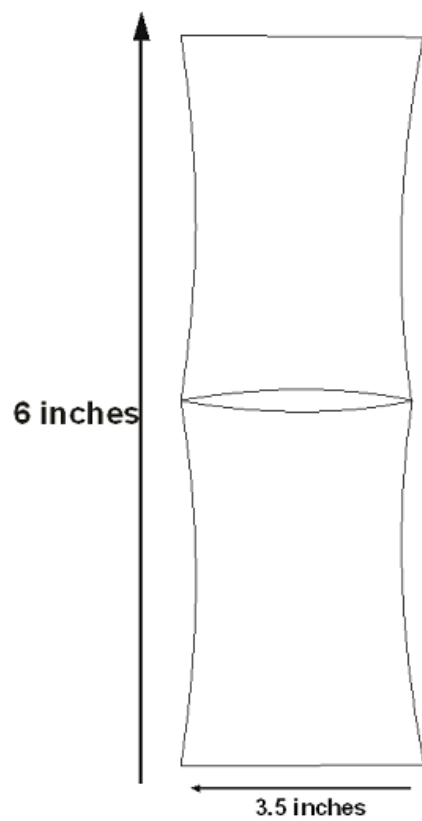


Plate 3: Type C Pack for spices

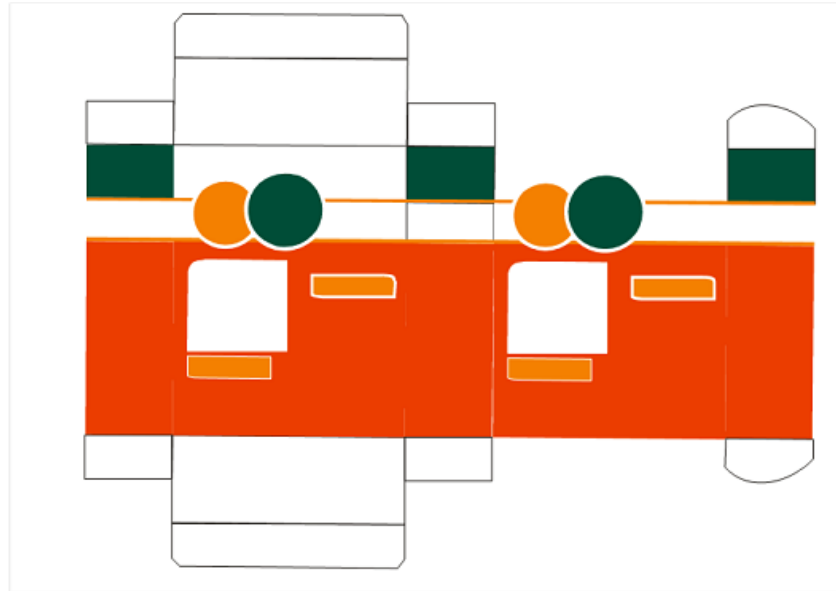


Plate 1: Colour fill on vector supplication. © Obi Abumchukwu, 2024

CorelDraw is a vector-based application that allows easy scaling and filling of shapes to almost an unlimited dimension. According to Lea (2007:19), Vectors are mathematical objects that define shapes or curves. Unlike pixels, vectors are resolution-independent. This means that they can be scaled to any size, edited or transformed an infinite number of times without any deterioration of clarity or loss of detail. In Photoshop, vector art can be integrated into your image files in the form of paths, vector masks or shape layers.

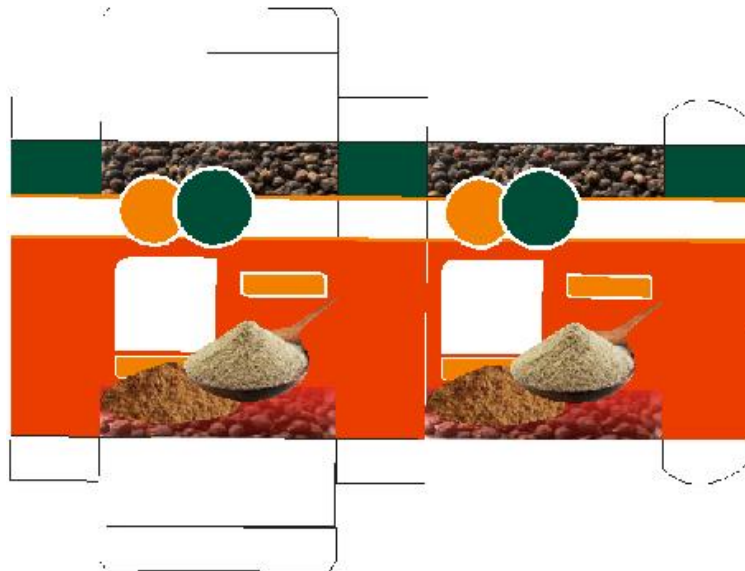


Plate 2: cropping and importing of photos. © Obi Abumchukwu, 2024

Orange and green were considered for this package because they are colours from nature. The aim is to make the package to appeal to the final consumers. Pictures were cropped on Photoshop, and sometimes Corel Photo Paint. With this, unwanted backgrounds are removed, giving room for a superimposition effect



Plate 3: Finished design with texts. © Obi Abumchukwu, 2024

This plate presents the finished design stage of the work with texts, images colours and other elements presented herein. The final stage of this particular work is folding the printed designs into packages that will suit the appropriate product. Depending on the ideas, the same technique was used to design other packages, but with varying colour and compositions

## Results

This study indicates how consumers subconsciously assign subjective values to packages based on their colour, shape and basic materials. Packages perform a major role in enhancing brand equity by fortifying brand awareness, purchasing decisions and building brand images via conveying functional, symbolic, and experiential benefits. The basic elements of package design are name, shape, colour, typography, material, product information and image. We examined the association of these packaging attributes with the response of consumer's minds to packaging. The basic elements of package design are name, shape, colour, typography, material, product information and image. We examined the association of these packaging attributes with the response of consumer's minds to packaging.



**PLATE 4:** Package for Uziza seed.  
© Patricia Obi 2024

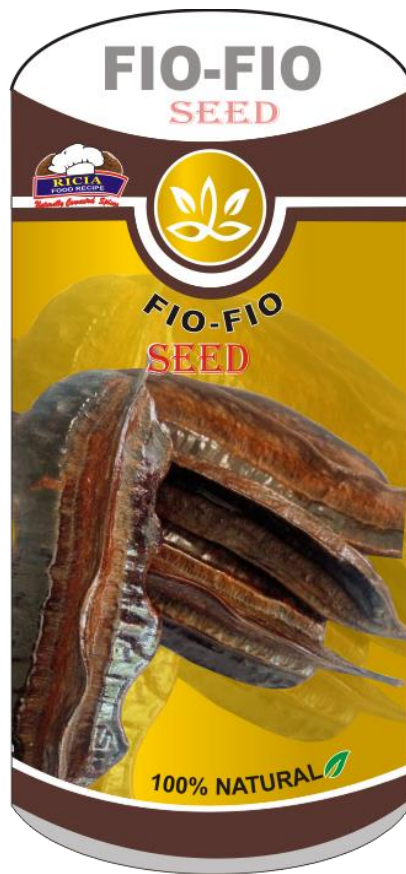
This product was packaged in a Ziplock bag and placed inside a branded container. This pack is a box that houses the product. Predominantly, orange and green were used on the body of the pack. Orange is a colour from nature. A number of fruits and vegetables bear orange colour. Example is ripe pawpaw, ripe tangerine, giant pepper, and ripe mango. Although *uziza* is dark in colour, the idea was to design the package such that it appeals to taste. Psychologically, orange is warm and catchy. Green on the other hand, represents colour of the ecology.



**PLATE 5:** Cylindrical Package with a label for powdered *Uda*.

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This container was designed to house Negro pepper, scientifically known as *Xylopiya aethiopica*,. is a fascinating spice with a rich history and a unique flavour. The label was designed to roll around a cylindrical container. Purple was used as the product brand colour. Historically, purple has been associated with royalty, wealth, and power. This association stems from the rarity and cost of purple dye in ancient times. When used in packaging, purple can convey a sense of high quality, premiumness, and exclusivity, making the product seem more desirable and upscale



**PLATE 6:** Cylindrical Package with a label for powdered.  
© Patricia Obi 2024

Yellow is a popular and impactful colour in food product packaging, and for good reason! It carries a lot of positive associations that can influence how consumers perceive a product. Yellow is widely recognised as the colour of sunshine, joy, and positivity. It can instantly lift the mood and create a sense of cheerfulness. This makes it a great choice for food products that aim to evoke feelings of fun, energy, and lightheartedness. Think of snacks, candies, and even breakfast cereals that often use yellow to appeal to a sense of happiness and enjoyment. Brown was chosen as the second colour of this brand. Dark brown immediately evokes a connection to nature and the earth.

It suggests unprocessed, unrefined ingredients and can make a product feel more wholesome and healthier. This is particularly effective for products emphasising natural or organic origins, like whole grains, coffee, chocolate, or even some snacks





**PLATE 7:** Cylindrical Package with a label for powdered *fio-fio* powder or seed.

© Patricia Obi 2024

Green is practically synonymous with health and natural goodness. It evokes images of lush fields, fresh produce, and thriving plants. This makes it an ideal choice for products emphasising natural ingredients, organic origins, or health benefits. The combo of green and yellow was used on this label. Because the product is used for recovery and restoration, the combination was ideal. More, Green has a calming effect, associated with tranquillity and peace. It can instil a sense of trust and reassurance, making consumers feel good about their purchase.

Packaging has a surprisingly powerful influence on consumers, impacting their perceptions, decisions, and overall experience with a product. It's much more than just a container; it's a crucial marketing tool and a key touchpoint in the consumer journey. The Tables below explain the frequency and responses per sex and occupation

## CONCLUSION

The study underscores the importance of packaging as a critical component in preserving the cultural, nutritional, and economic value of Omugwo spices. Proper packaging not only safeguards the spices' integrity but also enhances their appeal and competitiveness in both local and international markets. By integrating traditional knowledge with modern design principles, the Igbo community can elevate these indigenous products to a global standard. A package and its design need to affect users in terms of both functional and emotional responses. Package development can thus be viewed as driven by consumer desires, but distribution needs, new materials, and the functional, industrial, or legislative developments that continuously put new demands on packaging materials also need to be considered. The defining attributes of an initial

food purchase decision are price, quality, and food security, package typically reflects an image of quality and food safety that is critical. Special concern needs to be taken when developing and designing food packages since food places tougher requirements on product quality and safety than other products. Food packaging must be regarded as an integrated system consisting of the food and its package, and also integrated with the supply chain environment: in other words, food packaging design must be viewed holistically. With such a view, packaging can further be looked upon as a system that is built up of a product with aligned services to the users, such as product safety, product information, and user practicability, to mention a few.

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