

The appearance of pharmaceutical packaging is more important than ever before. With the rise of direct-to-consumer marketing and growing popularity of online sales, consumers are increasingly being introduced to both prescription and over-the-counter medications through visual media. As with any product, attractive presentation can greatly enhance consumer perception. Color is an integral component of packaging, is one of the primary factors influencing purchasing decisions, and, as research presented at the Oxford Business & Economics Program states, “can be an effective mean of creating and sustaining brand image in customer’s mind.”¹ Distinctive package color can also enhance health and safety by allowing for quick differentiation between drugs, minimize the risk of illegal knockoffs at a time when the counterfeit drug market is expanding rapidly, and even increase patient adherence.² Thoughtful package color schemes require precise color measurement to ensure consistency and accuracy.

The Impact of Packaging Color

Color choice in packaging should not be arbitrary or based simply on pleasing visual appearance; rather, color should be chosen to complement the drug itself and fortify the image you want your brand to project. Just as [the color of medications is well-known to have an impact on consumer perception](#), research shows that pharmaceutical packaging color also has a significant psychological effect and helps to shape consumer expectations. Researchers at the Universite de Rennes 1 in France examined the effect of pharmaceutical packaging pigmentation on 150 research subjects and found that both hue and brightness act as important cues for a variety of drug qualities.³ The study found:

Red, brown, and grey packaging were perceived as designed for serious illnesses vs. yellow or green packaging. Red, brown and orange packages require some precaution of use, compared to blue, green and yellow. Brown- and red-packaged drugs are perceived as more costly than orange or yellow boxes.

Color did not have a significant impact on perceptions of therapeutic use, although dark packages were more likely to be associated with heart condition medications. However, brightness of the hue appears to correlate to other important expectations; the brighter the packaging, the less potent the drug is expected to be. Red and brown packages were associated with greater potency than green or yellow boxes. Additionally:

Dark-hued packages (red, blue and brown conditions) are considered as acting more rapidly, more expensive, more susceptible of side effects and more curative than light-hued packages (yellow, green, orange and grey conditions).

The researchers note that “attractive and meaningful” packaging can be a deciding factor in consumer choice and, ultimately, the success of the product. The move toward blister packaging for some prescription pharmaceuticals creates additional impetus toward taking color into consideration in future product and packaging development, as personalized, branded packaging replaces generic prescription containers. By intelligently applying knowledge of consumer perception to your product design, you can take full advantage of the power of color to promote your product.

Precise Color Measurement for Optimal Quality

Spectrophotometric color measurement can maximize the consistency, quality, and appeal of pharmaceutical packaging. Through careful regulation and technological precision, you can harness the psychological impact of color to shape consumers’ relationships with your product from first introduction to continued use. Once the ideal color scheme for the package has been selected, employing in-line spectral analysis throughout the manufacturing process ensures accurate pigmentation of paper, plastic, and metallic packaging components. By continuously monitoring pigmentation and providing quantifiable, objective color data, spectrophotometers can instantly alert operators to color variations that compromise the appearance of your product. The sophisticated color measurement capabilities afforded by these instruments allows for

accurate readings of even challenging surfaces like high gloss papers, [textured, translucent, and transparent plastics](#), and [metallic foils](#). For manufacturers using the same equipment to run multiple colors, spectrophotometric instrumentation also [facilitates the color changeover process](#) to increase efficiency and reduce costs.

Full article with photos available here:

<https://www.hunterlab.com/blog/color-pharmaceuticals/outer-appeal-the-importance-of-color-measurement-in-pharmaceutical-packaging/>