

# The History Behind MEDISCA's Dye-Free Oral Vehicles

# THE TRUE COLORS OF **EXCIPIENTS**

Pharmaceutical products often contain a wide variety of agents which improve the appearance, consistency, stability and palatability of the product. Excipients often make up the majority of the volume of a medication and are intended to be inactive, meaning that they are not expected to interact with the active ingredient or cause unwanted effects.

Unfortunately, flavoring and inactive ingredients have been associated with causing health concerns especially in the pediatric population. Research indicates that sensitivities to certain food additives have been associated with triggering allergic reactions and behavioral changes, especially in children.





## **MEDISCA GOES DYE-FREE!**

A decade ago, research had begun to accumulate regarding the potential harmful effect of dyes, including case reports of potentially fatal reactions. This meant that greater efforts were needed to take the guesswork out of compounding safe suspensions for patients with special dietary needs.

The development of MEDISCA's line of dye-free oral vehicles was triggered by the need to provide safe options to pharmacists treating patients who may suffer from adverse reactions associated with pharmaceutical excipients.

## ARE YOU SURE IT'S DYE-FREE?

The absence of dyes on labels does not mean that the product is dye-free since food and drug labels do not always disclose the presence of dyes. Please remain vigilant!

# FOOD DYES' EFFECT ON HEALTH

Reactions to dyes or artificial food colorings (AFCs) have been observed in sensitive patient populations and range from a marked increase in adverse behaviours to incidents of anaphylactic shock.

Attention deficit hyperactivity disorder (ADHD) is the most common psychiatric disorder diagnosed in children according to the Centres for Disease Control and Prevention (CDC). Large scale meta-analyses have shown that there is a potential link between AFCs and the exacerbation of symptoms food-sensitive ADHD patients. Elimination diets which exclude artificial dyes and additives have been shown to be one of the most effective non-drug treatment options to manage symptoms of children with ADHD.





# WHAT DOES LITERATURE SAY ABOUT ARTIFICIAL FOOD **COLORINGS?**

"We would also like to underline the importance of detailed food labelling in order to prevent potentially life-threatening reactions in food-allergic people. Finally, we recommend considering the possibility of dye allergy in all patients who experience anaphylaxis or life-threatening reactions classed as idiopathic."1

"...accumulated evidence suggests that a subgroup shows significant symptom improvement when consuming an AFC-free diet and reacts with ADHD type symptoms on challenge with AFCs (Artificial Food Colorings). Of children with suspected sensitivities, 65-89% reacted when challenged with at least 100 mg of AFC."2

## WHEN IN DOUBT ...

Even though the mechanism underlying the observed behavioral phenomenon has yet to be clearly defined, current research suggests that it may be best to avoid exposing children to artificial food coloring.

As dyes offer no added benefits in medical treatments, MEDISCA believes it is in the best interest of patients to avoid the unnecessary risk they may pose.

#### DID YOU KNOW?

In response to the recent research suggesting a link to adverse child behaviors, the European Union has implemented a mandatory warning label on any food or drink that contains:

- Sunset yellow FCF (E110)
- Quinoline yellow (E104)
- · Carmoisine (E122)
- Allura red (E129)
- Tartrazine (E102)
- Ponceau 4R (E124)

In North America, the FDA and Health Canada have yet to take similar action.



#### **REFERENCES**

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