



Challenge

The colour intensity of **annatto** extract powder declines over time due to oxidation. Drying methods (including spray-drying) expose **annatto** to excessive oxygen and heat, increasing this risk. Ultimately, this oxygen and heat exposure may cause some food products coloured with **annatto** to prematurely fade during storage on the retail shelf.

DDW Solution

D.D. Williamson developed an **annatto** drying process to minimize oxidation, thereby reducing the risk of colour fade.

Our analysis (see chart below) shows that the colour intensity of DDW's **annatto** powder declines by only 4% over 12 months, compared to a 20% decline for spray-dried **annatto**. A further advantage is DDW's larger particle size, which results in lower hygroscopicity and minimal residual product dust. Both of these factors boost ease of handling.

Additionally, our smaller batch size allows us to ship freshly manufactured powder, which is better for your product quality and shelf life.

Summary

The superior colour retention of DDW's **annatto** extract powder gives product developers more confidence in their product's shelf stability.

