

APPLYING PET FOOD PALATANTS

INSIGHTS FROM THE EXPERTS

BY: GORDON STIRLING, AFB INTERNATIONAL

Producing foods that taste good to pets is a complex process. One key to producing high-performing pet foods is effectively applying topical liquid and dry flavorings known as palatants.

Liquid Palatants

Liquid palatants are the standard in pet food palatability. Commonly delivered in bulk tankers and stored on site in agitated storage tanks, liquid palatants perform best when maintained between 70°F and 110°F.

To apply liquid palatants, use either an auger or drum-type coating system. Set up these systems to add the fat first, then the palatant. Once complete, blend kibble for approximately three minutes to allow the fat and palatant to fully absorb.

For optimal kibble performance when using a liquid palatant:

- **Keep air out of the palatant application process.** Include baffles in mixing tanks and eliminate free-fall product return on recycle systems to help prevent fat from oxidizing, which can decrease palatability performance.
- **Avoid over-application.** Carefully synchronize the kibble feed rate and the palatant application rate to prevent excessive application, which could increase moisture and lead to mold growth.
- **Prevent overspray.** Aim spray nozzles to avoid excessive buildup on the auger or coating drum, which could compromise pet food quality over time.
- **Carefully position palatant and fat spray nozzles.** Ensure no more than 10% overlap in palatant spray patterns to support consistent performance. Also strive for no overlap between the fat and palatant application.

Dry Palatants

Dry pet food palatants are gaining in popularity. Purchased in 25-kilo or 50-lb. bags or 1-ton super sacks (also known as bulk bags), dry palatants are pneumatically transferred to feeders for application.

Add dry palatants after the fat or liquid palatant application. The fat or liquid palatant acts as a tacking agent for the dry palatant and is an integral part of the total palatability solution. Feed dry palatant into the coating system using a loss-in-weight feeder—which adds the material based on kibble feed rate—or a well-calibrated volumetric feeder.

For optimal kibble performance when using a dry palatant:

- **Coat kibbles evenly.** Discharge kibble onto a vibrating disbursement plate or splitter to facilitate even palatant distribution.
- **Avoid impeded flow.** The small size of the feeders often requires the use of vibrators or flow assist devices.
- **Avoid palatant buildup on the coating system.** Maintain the desired kibble level before applying dry palatant to avoid such buildup, which can lead to cross contamination.

For more details on palatant application, including an update on vacuum coating, visit palatantsplus.com/gordon



For more information contact **Gordon Stirling** at gstirling@afbinternational.com or visit AFB online at afbinternational.com or palatantsplus.com.

