



TECHNICAL FOCUS

KAYTEE® exact Hand Feeding® Formula Preparations & Feeding Instructions

KAYTEE® exact Hand Feeding® Formula was the first “instant” formula available and is the most researched and respected product used by professional breeders, veterinarians and conservation programs throughout the world. Please find the following helpful information on the product, including preparation/mixing and feeding instructions.

Technical Features

- exact Hand Feeding® formula’s balanced, high-nutrient formula helps babies grow faster, wean earlier and develop better, brighter plumage.
- When used properly, **exact** will not cause crop slow-down.
- **exact Hand Feeding® Formula** contains probiotics to encourage a healthy population of intestinal microorganisms. The selected species have been chosen specifically for their vitality, stability, and overall benefits to a bird’s system.
- **exact Hand Feeding® Formula** has compatible tastes and ingredients with **exact® Conversion** and **exact® Adult Daily Diets** (*exact Natural® and exact Rainbow® products*) reducing digestive upsets during weaning, or when pulling young from the nest of **exact® formula** fed parents.

Please read all the instructions before using the Hand Feeding Formula. For tips on preparation and hand feeding, log on to www.kaytee.com to view the **exact Hand Feeding** video.

FORMULA PREPARATION

Use the following chart to mix formula according to the chick’s age. It is always advised to weigh formula and water to assure proper concentrations. Volume measurements are less accurate but usually sufficient.

Column A	Column B		Column C	
Age/Alter/ Âge / Leeftijd/Edad	Volume		Weight/Gewicht/Poids/Gewicht/ Peso/Peso	
Days/Tage/Jours/ Dag/Giorno/Dias	exact	Water/Wasser/ L'eau/ Water/ Acqua/Aqua	exact	Water/Wasser / L'eau/Water/ Acqua/Aqua
Hatch/Schlupf/Éclosion/Schiusa/ Pollada – 2 days	1 part	6 parts*	8 %	92 %
2 – 5 days	1 part	2-3 parts	16-20 %	80-84 %
5 days - Weaning /Entwöhnung/Sevrage/ Afwennen/Divezzare/Hasta el destete	1 part	1 1/3-2 parts	25-30 %	70-75 %

*An electrolyte solution may be substituted for the first two days only, but is not necessary.

Column A – Age – describes the age of babies from Hatch to 2 days old, 2 to 5 days old, day 5 to weaning (*weaning age varies depending on the type of bird being fed, see the **Technical Focus WEANING TIPS** for more information*)



TECHNICAL FOCUS

Column B – Volume – provides guidelines on how to mix the **exact Hand Feeding® Formula (HFF)** by volume or amount with examples of parts or portions of dry **exact HFF** mixed to water, such as: **1 part/portion/measurement** of exact® HFF to 6 parts/portions/measurements of water** using the same tool** to scoop or measure the product. Use the referred to age guidelines in Column A for mixing the product. Volume measurements are less accurate but usually sufficient. ***

****examples of tools used to measure HFF: teaspoon, tablespoon, cup, or other container or tool to scoop or measure the dry product)**

Column C = Weight – provides guidelines on how to mix the **exact Hand Feeding® Formula** by weight using the example of % (percentages) of dry **exact® HFF** mixed to % of water, such as 25% **exact HFF** mixed to 75% water or if using a gram scale weighing 25 grams **exact® HFF** to 75 grams water. Ranges such as 25-30% **exact® HFF** mixed to 70-75% water are provided to allow the person mixing and feeding the **exact® HFF** to adjust the consistency of the formula for the age range referred to in Column A and type of bird they are feeding. It is always advised to weigh formula and water to assure proper concentrations. *****NOTE:** Adding more than 75% (or 2 parts) water will cause the mixed formula to separate and if left standing water will separate to the top. Adding too much water dilutes the intended nutrients needed for growth and development, especially for babies older than 5 days and is not recommended.

1. Combine formula and hot water (approx. 120 °F) in a clean, sanitized container according to the age chart above. *(If your tap water contains bacteria, use bottled water or boil water prior to using. If using boiled water do not add hot boiling water to the dry formula, let it cool to about 120-140 °F before adding to the dry formula to prevent cooking the product which could destroy nutrients and alters the consistency of the mixed product.)*
2. Mix formula thoroughly and allow it to sit for one minute.
3. Cool mixture to 105 °F *(or between 102° - 110°F, to prevent burning the crop do not feed formula over 110°F, formula less than 100°F may effect the digestion and acceptance of the formula).* Mixture should have the consistency of thick creamy pudding. If a smoother consistency is desired, stir product vigorously at this time which aids in activating added enzymes.

SPECIAL NOTES FOR PREPARATION

- **IMPORTANT – DO NOT REUSE MIXED FORMULA!** Discard and mix fresh at each feeding.
- **For hatch to 2 days old** - formula should be made in small quantities and thoroughly stirred before feeding. Separation at this concentration is expected and is not a problem at this early stage because primary requirements are for water and water soluble nutrients. After chick is two days old, the food concentration must be increased as per the **Formulation Preparation** chart on page 1 or found on the product label.
- **Microwaving should be avoided.** Microwaving can create “hot spots” in the formula and increase the likelihood of accidental crop burns. If required, limit microwaving (on high) to no more than 5 seconds per ½ cup of mixed formula at a time. Be sure to follow this with vigorous stirring before retesting the temperature and feeding. Cover large batches of formula while microwaving to avoid a moisture loss. **STIR FORMULA THOROUGHLY TO AVOID POTENTIAL OF BURNING THE CROP.** Always test formula for proper temperature before feeding.

STORAGE INSTRUCTIONS

After opening, use the food within 30 to 45 days. Reseal package and store in a cool, dry location. Refrigerate or freeze for extended storage.

©2009 - 2015 KAYTEE Products, Inc., Kaytee, exact, exact Hand Feeding, ²exact Natural and exact Rainbow are registered trademarks of Kaytee Products, Inc. For permission to reproduce this document or any *Kaytee Technical Focus* document, please contact Kaytee Customer Service at 1-800-KAYTEE-1 or email us at CustomerService@Kaytee.com.



FEEDING INSTRUCTIONS

Baby birds should be fed on a routine schedule allowing the chick's crop to empty (or nearly empty) between feedings and to determine if bird is being fed the right amount. This prevents any food remaining in the crop too long and possibly spoiling. If the time between crop emptying suddenly increases, and the crop appears to be slowing down, observe the chick closely. See "**IMPORTANT NOTES**" regarding crop-slow down.

1. Feed mixture with a clean, disinfected syringe, spoon, tube, or other comfortable method. A separate implement should be used for each baby to prevent spread of disease.
2. Dispense food along with the chick's feeding response (rhythmic bobbing motion). This is more natural and decreases the likelihood of formula being inhaled.
3. Feed until the chick's crop is nicely rounded or it refuses any more food, whichever comes first. Do not overfeed or regurgitation may occur. Generally, each meal should consist of a volume equivalent to 10-12% of the bird's body weight.
4. Clean and sanitize feeding equipment after use. Clean any spilled food from the chick and change bedding after each feeding. Good hygiene is critical for a baby bird's health.

(To view mixing and feeding of the HFF log on to www.kaytee.com to view the exact Hand Feeding video)

exact Hand Feeding® Formulas are designed to be the only food for baby birds. Additions to the diet may include fruits and vegetables (such as strained baby foods) but should not exceed 20% of the total diet. **No additional vitamin or mineral supplements should be added.**

MONITORING A HAND FED BABY BIRD

- Monitoring weight gain and loss is the best way to identify a problem before it becomes visibly obvious. Weigh and record the weight of each baby bird every morning before the **first** feeding.
- A healthy chick should gain weight every day until it begins the weaning process. If weight gain stops, but weight is maintained, watch the bird closely. Loss of weight indicates a problem and should be investigated immediately. Call your avian veterinarian for more information.
- An otherwise healthy bird may not gain weight if it is not receiving enough nutrients. This could happen if the hand feeding formula is mixed too thin (contains too much water); if the formula is diluted with other ingredients, if the bird is not fed enough or does not get enough food at each feeding.
- To assist with monitoring baby weights request the **exact Hand Feeding Weight Chart** found in the **exact Educational Reference Guide/Appendix B** or the **Weight Chart** can be found on Kaytee website's **exact Hand Feeding®** product pages.

IMPORTANT NOTES:

- **DIET CHANGE:** For babies previously fed another hand feeding preparation, a minimum of 24 to 48 hours is recommended for the dietary changes. During this period, both products should be prepared separately (as directed) and mixed together, with the **exact Hand Feeding® Formula** slowly being increased in proportion until the previous diet has been eliminated. An immediate conversion to **exact Hand Feeding® Formula** may cause crop slow-down due to the dietary change. Use a more dilute formula the first couple of feedings in an attempt prevent this.



TECHNICAL FOCUS

- **CROP SLOW-DOWN:** If crop slow-down should occur, first check for proper environmental temperature as this is a frequent cause of crop problems. Then mix equal parts of **exact Hand Feeding® Formula** and infant applesauce or provide additional water by preparing **exact® formula** at the ratio of one part **exact® formula** to two or three parts water. Provide this mixture for approximately 24 hours and then slowly return to the normal concentration of **exact® formula** over an additional 24 hour period. During this time, massage the chick's crop gently to break up any food aggregates that may develop. Never massage the crop when it is more than half full. Allow the crop to empty before feeding again. This method will quickly allow the gastrointestinal tract to stabilize and become fully functional again. The appearance of dark green droppings in a hand fed baby may indicate a temporary shut-down of crop emptying (or the lack of food in the digestive system). If this occurs and the crop contains food, the rate of crop emptying should be immediately evaluated. If no improvement is noted within 36 hours, professional assistance is advised.
- Volume of up to 15% body weight per meal may be provided, but may induce regurgitation in some birds. If regurgitation occurs due to overfeeding, stop feeding, clean food off baby and do not handle. Reduce meal volume at next feeding.

WEANING INSTRUCTIONS

To encourage the weaning process, **exact® Conversion** diets should be offered when "exploration" begins. When the baby bird is fully feathered offer **exact® Conversion** diet or an **exact® Adult Daily Diet (exact Natural® or exact Rainbow® foods)** in a clean food cup in addition to routine hand feeding. The baby bird will slowly begin to prefer these new forms of the food. Fresh water must be provided at all times. Prolonged use of hand feeding formula beyond the normal weaning age, or excessive feeding, may result in health concerns.

A chick will lose up to 10% of its body weight during weaning as it begins to eat on its own. Birds wean easily onto **exact® Conversion** diets or **exact® Adult Daily Diets** because of compatible taste and ingredients.

For tips on preparation and hand feeding, log on to www.kaytee.com to view the **exact Hand Feeding** video and visit Kaytee's Homepage **Learn & Share** for more information on weaning and other helpful subjects. If you have any questions or need assistance contact Kaytee Consumer Care at 1-800-KAYTEE-1 (1-800-529-8331) and we will be happy to help you.

061.09, r23.12, 110.15