Homemade Baby Formula Recipes

By Marie Bishop, Sally Fallon and Mary G. Enig, PhD

While government officials and orthodox pediatricians are often appalled at the thought of a parent mixing up baby formula—and one based on raw milk, no less—the feedback we have received from parents has been extremely positive.

Some breastfeeding advocates have also criticized our stance, claiming that by providing a healthier alternative to commercial formulas, we are discouraging breastfeeding. Make no mistake: the best food for baby is breast milk from a healthy mother.

However, many situations call out for a good substitute: adopted and orphaned babies, babies born to mothers with serious health problems, and babies whose mothers do not have enough milk (a situation that does happen occasionally) deserve to receive something better than commercial formula.

The following information has been compiled by the authors over a period of several years and should cover most situations encountered by parents giving homemade formula to their babies.

Milk-Based Formula

Makes 36 ounces

Our milk-based formula takes account of the fact that human milk is richer in whey, lactose, vitamin C, niacin, and long-chain polyunsaturated fatty acids compared to cow's milk but leaner in casein (milk protein). The addition of gelatin to cow's milk formula will make it more digestible for the infant. Use only truly expeller-expressed oils in the formula recipes, otherwise they may lack vitamin E.

The ideal milk for baby, if he cannot be breastfed, is clean, whole raw milk from old-fashioned cows, certified free of diseases, that feed on green pasture. For sources of good-quality milk, see www.realmilk.com or contact a local chapter of the Weston A. Price Foundation.

If the only choice available to you is commercial milk, choose whole milk, preferably organic and un-homogenized, and culture it with a piima or kefir culture to restore enzymes (available from G.E.M. Cultures 707-964-2922).

2 cups whole milk, preferably unprocessed milk from pasture-fed cows

1/4 cup homemade liquid whey (See recipe for whey, below)

4 tablespoons lactose*

1 teaspoon bifidobacterium infantis**

2 or more tablespoons good quality cream (not ultra-pasteurized), more if you're using milk from Holstein cows

1 teaspoon regular dose cod liver oil or 1/2 teaspoon high-vitamin cod liver oil*

1 teaspoon expeller-expressed sunflower oil*

1 teaspoon extra virgin olive oil*

2 teaspoons coconut oil*

2 teaspoons Frontier brand nutritional yeast flakes*

2 teaspoons gelatin*

1 7/8 cups filtered water

1/4 teaspoon acerola powder*

*Available from Radiant Life 888-593-8333

**Available from Natren 800-992-3323 or Radiant Life 888-593-8333

Add gelatin to water and heat gently until gelatin is dissolved. Place all ingredients in a very clean glass or stainless steel container and mix well. To serve, pour 6 to 8 ounces into a very clean glass bottle*, attach nipple and set in a pan of simmering water.

Heat until warm but not hot to the touch, shake bottle well and feed baby. (Never, never heat formula in a microwave oven!) Note: If you are using the Lact-Aid, mix all ingredients well in a blender.

Variation: Goat Milk Formula

Although goat milk is rich in fat, it must be used with caution in infant feeding as it lacks folic acid and is low in vitamin B12, both of which are essential to the growth and development of the infant. Inclusion of nutritional yeast to provide folic acid is essential.

To compensate for low levels of vitamin B12, if preparing the Milk-Based Formula (above) with goat's milk, add 2 teaspoons frozen organic raw chicken liver, finely grated to the batch of formula. Be sure to begin egg-yolk feeding at four months.

Liver-Based Formula

Makes about 36 ounces

Our liver-based formula also mimics the nutrient profile of mother's milk. It is extremely important to include coconut oil in this formula as it is the only ingredient that provides the special medium-chain saturated fats found in mother's milk. As with the milk-based formula, all oils should be truly expeller-expressed.

- 3 3/4 cups homemade beef or chicken broth
- 2 ounces organic liver, cut into small pieces
- 5 tablespoons lactose*
- 1 teaspoon bifidobacterium infantis**
- 1/4 cup homemade liquid whey (See recipe for whey, below)
- 1 tablespoon coconut oil*
- 1 teaspoon cod liver oil or 1/2 teaspoon high-vitamin cod liver oil*
- 1 teaspoon unrefined sunflower oil*
- 2 teaspoons extra virgin olive oil
- 1 teaspoon acerola powder*

Simmer liver gently in broth until the meat is cooked through. Liquefy using a handheld blender or in a food processor. When the liver broth has cooled, stir in remaining ingredients. Store in a very clean glass or stainless steel container.

To serve, stir formula well and pour 6 to 8 ounces in a very clean glass bottle. Attach a clean nipple and set in a pan of simmering water until formula is warm but not hot to the touch, shake well and feed to baby. (Never heat formula in a microwave oven!)

Fortified Commercial Formula

Makes about 35 ounces

This stopgap formula can be used in emergencies, or when the ingredients for homemade formula are unavailable.

- 1 cup Mead Johnson low-iron, milk-based powdered formula
- 29 ounces filtered water (3 5/8 cups)
- 1 large egg yolk from an organic egg, cooked 3 1/2 minutes (See recipe for egg yolk, below)

1 teaspoon cod liver oil or 1/2 teaspoon high-vitamin cod liver oil

Place all ingredients in a blender or food processor and blend thoroughly. Place 6-8 ounces in a very clean glass bottle. (Store the rest in a very clean glass jar in the refrigerator for the next feedings.)

Attach a clean nipple to the bottle and set in a pan of simmering water until formula is warm but not hot to the touch, shake well and feed to baby. (Never heat formula in a microwave oven!)

Egg Yolk for Baby

Egg yolk should be baby's first solid food, starting at 4 months, whether baby is breastfed or formula-fed. Egg yolks from pastured hens will contain the special long-chain fatty acids so critical for the optimal development of the brain and nervous system.

The whites may cause an allergic reaction and should not be given to baby until he is at least one year old.

1 organic egg from a pasture-fed hen

1/2 teaspoon grated raw organic liver, frozen for 14 days (optional)

pinch seasalt

Boil egg for 3 1/2 minutes. Place in a bowl and peel off shell. Remove egg white and discard. Yolk should be soft and warm, not hot, with its enzyme content intact. Sprinkle with salt. If you wish to add liver, grate on the small holes of a grater while frozen. Allow to warm up and stir into egg yolk.

Homemade Whey

Makes about 5 cups

Homemade whey is easy to make from good quality plain yoghurt, or from raw or cultured milk. You will need a large strainer that rests over a bowl. Line the strainer with a clean linen kitchen towel or several layers of cheesecloth.

If you are using yoghurt, place 2 quarts in the strainer lined with a tea towel. Cover with a plate and leave at room temperature overnight. The whey will drip out into the bowl. Place whey in clean glass jars and store in the refrigerator.

If you are using raw or cultured milk, place 2 quarts of the milk in a glass container and leave at room temperature for 2-4 days until the milk separates into curds and whey.

Pour into the strainer lined with a tea towel and cover with a plate. Leave at room temperature overnight. The whey will drip out into the bowl. Store in clean glass jars in the refrigerator.

Source: Nourishing Traditions by Sally Fallon with Mary G. Enig, PhD.