



# THE THRILL OF SKILL



## Q Why Learn to Bake and Cook?

**A** Children and adults can learn a lot together in the kitchen. All the skills used to cook and bake contribute to building personal, family, career and community “functional literacy.” These core competencies are learned in an “applied” setting and may be easier to practice—especially with all the sensory encouragement included. A few include reading, following directions, measuring, math functions, conserving resources, time management, team work, problem-solving, and building healthy relationships at home and in community life.



Preparing your own food also develops an “active or hands-on lifestyle,” burning calories preparing the foods enjoyed, learning portion control, ingredient adjustments, and creativity by tummy-driven young chefs.

More: [HomeBaking.org](http://HomeBaking.org) *Why Bake?* PowerPoint

### Decades of Research Supports Learning Hands-On Food Preparation

*“Research consistently shows that integrating nutrition and food education into the larger curriculum and providing children with hands-on cooking experiences changes what they are willing to eat.”* **The Cookshop Program.** Liquori. *Journal of Nutrition Education*. Sept/Oct. 1998.

*“If children are raised to feel uncomfortable in the kitchen, they will be at a disadvantage for life.”* *Journal of the American Medical Association*. 2010. Lichtenstein, A; Ludwig, D. 303(21):2109.

*“This conversation is not just about weight or size or BMI. It’s about overall health and the kind of lives that we want our kids to lead. We’ve got to set them up for success.”* — Michelle Obama

**Core Knowledge and Competencies for Afterschool and Youth Development Professionals.** p 62. 09/2011. Complete document on-line, [naaweb.org](http://naaweb.org)

## Getting Started

- Read the recipe top to bottom before starting!
- Plan tasks that fit age and coordination. Demonstrate “how-to” or view on-line video.
- Allow enough time; split the recipe into two days of preparation if needed.

Review *Ten Tips for Baking Success Fact Sheet*.



## Core Standards and Outcomes

Baking and cooking connect with and achieve national education standards.

**Art.** Creative menu additions, dough-shaping, cake/cookie decoration. View *DIY Baking Channel*, [HomeBaking.org](http://HomeBaking.org)

**Current Affairs.** Ask members to gather food and nutrition topics in the news to share. Stroll the food aisles. International Food Info Council, [ifc.org](http://ifc.org)

**History/Social Studies.** Explore what people ate in the 1700s; the South; Lewis & Clark; pioneers; Native Americans. More at [HomeBaking.org](http://HomeBaking.org)

**Cultural Ties.** Explore other cultures. Find and share favorite family or cultural recipes. Write the recipe and blog [HomeBaking.org](http://HomeBaking.org) or Pin It! *Everybody Bakes Bread*. Dooley. *An African American Cookbook*. Phoebe Bailey. [goodbks.com](http://goodbks.com)

**Literacy.** Read a related story together. Read and follow recipe directions. Write recipes, plan events, give directions, prepare invitations, write a club food news/blog. Create product labels for your recipe!

**Online Team Nutrition Booklist**

[michigan.gov/documents/mde/UpdatedMichiganTeamNutritionBooklist\\_290287\\_7.pdf](http://michigan.gov/documents/mde/UpdatedMichiganTeamNutritionBooklist_290287_7.pdf)

**Book and Bake** [HomeBaking.org](http://HomeBaking.org)

**Math.** Calculate dough or batter volume and weight. How many servings in a recipe? Find the product’s net weight in ounces and grams. Double or halve recipes. Calculate recipe costs and price products for bake sale profits. Conduct a consumer survey and see what percentage of the consumer group liked or disliked a recipe? Compare food prices and nutritional values.

**Science.** Ingredients have unique functions in batter and dough. How will an ingredient substitution work? Temperatures matter! Accurate weights and measures are critical. What adjustments does high altitude require? What physical and chemical changes occur? Cause and effect. More *Kitchen Science and Baking Guide Cards* at [HomeBaking.org](http://HomeBaking.org)

**Service Learning.** Share your wealth! Teach others to confirm what you’ve learned. Plan fundraiser bake sales. Educator award! [HomeBaking.org](http://HomeBaking.org) [Greatamericanbakesale.org](http://Greatamericanbakesale.org)

**Technology.** Explore test kitchen websites. Learn to use small and large appliances, reading the manuals for use and care. Blog, Facebook or Pin It! Visit [HomeBaking.org/Members](http://HomeBaking.org/Members) Also, [www.kidsacookin.ksu.edu](http://www.kidsacookin.ksu.edu) or [learningandlivingwell.org](http://learningandlivingwell.org)

## Age-Appropriate Kitchen Tasks

### Preschoolers

Older children gain from helping younger ones learn.

#### 2 years

- Proper hand washing.
- Wipe table tops.
- Play with utensils.
- Scrub, wash, tear, snap, break into pieces.
- Move pre-measured ingredients from one place to another.
- Add prepared/measured ingredients to a bowl.

#### 3 years

- All of the above plus...
- Handle dough, begin kneading, simple shaping.
  - Pour cool liquids into mixture.
  - Mix dry ingredients with wire whisk or spoon (use an extra large bowl to contain mess).
  - Shake liquids.
  - Spread soft spreads.
  - Place things in trash.

#### 4 years

- All of the above plus...
- Peel loose-skinned oranges; hard-cooked eggs.
  - Move hands to form round shapes (dough pieces).
  - Mash fruits (bananas) or cooked vegetables.
  - Cut with dull scissors (snip green onions, dried fruits).
  - Set table.

#### 5-6 years

- All of the above plus...
- Help adult measure ingredients (stir, spoon, level).
  - Cut with a blunt knife (plastic or tableware).
  - Use a hand-held egg beater or whisk.
  - Crush crackers in a bag with a rolling pin.
  - Sprinkle ingredients on salads, cakes, cookies, casseroles.

### K-2nd grade

#### 6-8 years

- All of the above plus...
- Clean surfaces before and after.
  - Wash fruits and/or veggies.
  - Gather ingredients, pans, measuring and mixing tools.
  - Grease or spray baking pans.
  - Stir dry ingredients, spoon into dry measure cup, level off.
  - Measure liquid ingredients.

- Add measured dry and liquid ingredients into mixing bowl.
- Learn to crack eggs.
- Cut fruit, margarine or butter sticks with plastic or table knife on cutting board.
- Push buttons on blenders, processors.
- Knead dough.
- Preheat the oven (adults load products into hot oven).
- Wash dishes, put away ingredients or utensils.
- Get adult help with sharp knives or peelers, opening cans/bottles, stirring thick mixtures, loading and unloading the oven, and handling baking pans.

### 3rd-6th grade

#### 9-12 years

- All of the above, plus...
- Learn safe knife skills for chopping, dicing, and cutting.
  - Teach how to handle food equipment safely.
  - Teach placing oven racks and loading oven (while oven is cold).
  - Safe operation of electric mixer, microwave, bread machine food processor and hand-held blender.
  - Follow a recipe, measure accurately and prepare a product.
  - Read and interpret ingredient and food labels.
  - Handle/store food ingredients and finished products safely.
  - Plan and prepare simple meals, snacks.
  - Clean up—how and what to wash in dishwasher or by hand.

### Teens

- All of the above, plus...
- Tasks requiring multiple preparation steps or close timing.
  - Create new flavor combinations, shapes or decoration.
  - Plan and prepare whole menus for meals or entertaining.
  - Make shopping lists and shop for ingredients.
  - Help younger children learn about food and how to prepare.
  - Enjoy baking and cooking with adults and peers.

## Do-it-Yourself Foods Skills Build Healthy Lifestyles

**Preschoolers** Adults model preparing, tasting wide variety of meals/snacks. Hands-on prep promotes eating a wide variety of foods. TIP: Sometimes a child needs to try new foods over 12 times! Connects good food choices with growth. Focus on sensory experiences.

Learn more: **BakeWorks.**

[HomeBaking.org](http://HomeBaking.org)

**K-2nd** Connects food and health—what foods do for you. Introduces food groups/[ChooseMyPlate.gov](http://ChooseMyPlate.gov) helps child take food responsibility for choices, learn good portion sizes. Offers incentive/rewards.

**3rd-6th** Offers independence. Forms lifelong habits. Emphasizes skill development. Helps expand positive nutrition choices. Teaches shopping, menu-planning, cooking confidence. Saves hard-earned dollars. Provides practice interpreting ads, media portrayal of body image.

**Teens** Helps reduce peer influence, develops personal tastes, entertaining skill. Food knowledge and skill help reduce erratic eating habits. Provides outlet for interest in how nutrition affects them. Include use of on-line nutrition analysis software to compare commercial foods and home prepared; track and assess their diets. Food prep is part of active lifestyles; emphasize effect on calories burned and consumed; sports, appearance, academic performance.

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Visit [HomeBaking.org](http://HomeBaking.org) for baking why and how resources. Visit [wheatfoods.org](http://wheatfoods.org) for research-based grain food nutrition resources.

## Pictures worth a thousand words?

- Free at [HomeBaking.org](http://HomeBaking.org): *Bake for Family Fun*; *DIY Baking Channel*; *Baker's Glossary*; Educator Resources and Educator Award information
- *A Baker's Dozen Lessons and Baking for Success* DVD, [HomeBaking.org/products.php](http://HomeBaking.org/products.php)
- *A Bakers Dozen Labs*. [HomeBaking.org/products.php](http://HomeBaking.org/products.php)
- *Baking with Friends* book-and-bake recipes and skill-building resource book to assist older youth, family and friends to bake. [HomeBaking.org/products.php](http://HomeBaking.org/products.php)
- *Kids a Cookin'* Spanish and English on-line resources. [www.kidsacookin.ksu.edu](http://www.kidsacookin.ksu.edu)
- Locate human and ready-to-teach resources with University Cooperative Extension at [Learningandlivingwell.org](http://Learningandlivingwell.org)
- *Portable Kitchens* blueprint, videos and resources.
- *Test Kitchen* baking and cooking resources. Video, step-by-step, tested resources. [homebaking.org/hbamembers/index.html](http://homebaking.org/hbamembers/index.html)

