

# VISIONS

DEPARTMENT OF FAMILY & CONSUMER SCIENCES ● VOLUME 13 ● NUMBER 1 ● 2000

## Handle With Care...Keeping Infant Formula Germ-Free to Prevent Foodborne Illness


**Luanne Hughes, MS, RD.**  
**FCS Educator, Gloucester County**

As outlined in President Clinton’s Food Safety Initiative, “There are gaps between the research, knowledge, and practices that promote a safe food supply.” It’s true. Scientists spend considerable time researching what causes foodborne illness (i.e., food “poisoning”) and how to prevent it. Their research also shows, however, that most US consumers don’t know as much as they should about basic sanitation and food handling steps that can greatly reduce the risk of foodborne illness.


The symptoms of foodborne illness may not appear to be serious — nausea, vomiting, and diarrhea. But the consequences can be serious — kidney failure, meningitis, even death. Infants and children under five years of age, in particular, are at high risk for contracting foodborne illness due to their underdeveloped immune systems. Their bodies don’t easily fight the bacteria and other germs that cause foodborne illness.

Bacteria and other germs cannot be seen, smelled, or tasted. The only way to be certain that infant formula is safe is to follow good food handling practices. Just follow these easy tips to keep your baby’s formula germ-free. You’ll have a happier and healthier baby!

### Safe Storage


 Store unopened liquid formula and opened powder formula in a cool,


dry place. Best choices are a cabinet or pantry that is not near the oven, hot water pipes, or heating ducts.

 Refrigerate open containers of ready-to-feed and concentrated formula.





### Preparing Formula


 Always prepare formula and bottles in a clean, sanitized place. The kitchen is best. Kill bacteria by cleaning the kitchen counter and table with a sanitizing cleaner. While you’re at it, clean changing tables/mats, toys, high chair trays, and table tops with the sanitizing cleaner, too. It helps prevent the spread of bacteria that can cause foodborne illness.

 Make your own sanitizing cleaner by mixing 1 tablespoon of bleach in

1 quart of water. Wash counters and other surfaces with this solution, and make sure they get thoroughly wet with the solution. Let them air dry before you work on them.

 Wash up before you mix formula or fill bottles. Know how? Use hot running water and soap. Wash for 20 seconds; rinse; then dry with a paper towel.

 Next, hand wash bottles, caps, and nipples with hot, soapy water. Or, wash them in the dishwasher.

 Rinse and then boil bottles, caps, and nipples for 5 minutes just before filling. Don’t use a towel to dry them. Air-drying is better and won’t spread germs.

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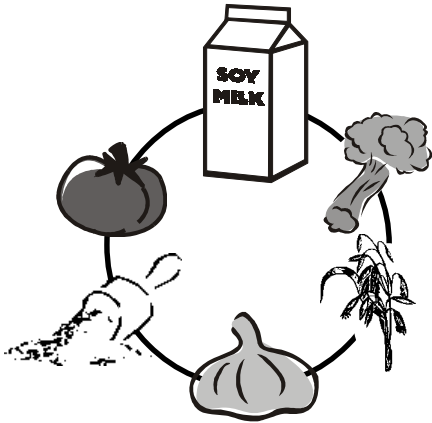
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# Phytochemicals and Functional Foods: Super Foods For Optimal Health

*Kathleen Klotzbach-Shimomura, M.Ed.,  
DTR  
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That food is intimately linked to optimal health is not a novel concept. "Let food be your medicine and medicine be your food" was a tenet espoused by Hippocrates in approximately 400 B.C.<sup>1</sup> Almost 2,500 years later, this philosophy is once more of utmost importance, as it is the "food as medicine" philosophy that is the core of functional foods



## What are phytochemicals and functional foods?

"Phytochemicals and functional foods" is a broad term that has attracted significant attention from scientific researchers, health professionals, and journalists. Although there is no consensus on an exact definition, "functional foods" usually refers to foods containing significant levels of naturally occurring, biologically active components that impart health benefits beyond the basic essential nutrients. These compounds may play a vital role in disease prevention and health promotion, but there is no Recommended Daily Allowance for them. Such substances may have a defined effect on a person's physical, mental, or physiological well-being. They could impact people's metabolism and immune systems, protecting them from disease. They could also affect their risk of heart disease, cancer, or other illnesses,<sup>2</sup> as well as aging and mood.

## Are Phytochemicals and Functional Foods New?

Functional components have always been present in foods. While functional foods are a relatively new phenomenon in Western cultures, traditional Chinese medicine recognized functional foods as early as 1000 B.C.<sup>3</sup> What is new is that researchers are beginning to identify these components and they are now trying to determine exactly what benefits they may offer. Functional attributes of many traditional foods are being discovered, while new food products are also being developed to enhance or incorporate beneficial components. Health food stores already are filled with numerous foods that would meet the definition of functional foods and grocery stores are now trying to compete. Many vegetables, fruits, whole grains, and soy foods have been recognized for their potential cancer prevention benefits in innumerable studies.<sup>4,5,6</sup>

Growing consumer interest in the relationship between diet and health has produced an increased demand for information. In the past, many of the perceptions about healthy eating have focused on avoiding certain components in foods, such as fat and sugar. An important and gradual change toward more positive messages has occurred in the healthy eating market. In recent years, the focus of nutrition research has shifted from the prevention of nutritional deficiencies, such as vitamin C and scurvy, or niacin and pellagra to prevention of chronic diseases. Among factors fueling U. S. interest in phytochemicals and functional foods are rapid advances in science and technology, rising healthcare costs, consumer frustration with health care delivery, an aging population, changes in food laws allowing expanded label claims, and a focus on attaining wellness through diet.

Credible scientific research already indicates potential health benefits from food components that would expand the benefits now allowed to be identified by the Food and Drug Administration's ap-

proved health claims permitted in labeling.

Phytochemicals and functional foods components have been associated with the prevention and/or treatment of at least four of the leading causes of death in this country, cancer, diabetes, cardiovascular disease, and hypertension, along with the prevention and/or treatment of other medical ailments including neural tube defects, osteoporosis, abnormal bowel function, and arthritis.<sup>7</sup>

There is an increasing recognition that people can help themselves and their families prevent future illness and to maintain their state of health and well-being through informed dietary practices.<sup>8</sup> However, due to the complex nature of cancer and cardiovascular disease, prevention will rely on more than a single compound. Researchers have just scratched the surface of the identification

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# Increase Cooperation and Reduce Conflict – The Power of Positive Attention

*Elizabeth Levin*  
FCS Program Associate, Union County

**D**oes your child seem to always need your attention? Are you interrupted on the phone, or driven crazy by junk food and toy requests when you are at the grocery store? Does it seem your child is getting into trouble just to get your attention? According to Cynthia Whitham, MSW who wrote *Win the Whining War and Other Skirmishes – a family peace plan*, we all need and want attention. Children need and want attention the same as adults. “Imagine cooking a meal for your family. At the table there is silence. No “thank-you,” no “Boy, this smells terrific!”.....A day in which we and our efforts are ignored by our spouse, children, friends, neighbors, and co-workers is a bleak one.” Children’s need for adult attention provides a key to increasing behaviors you like and decreasing behaviors you do not like.

Try to give your complete attention when your child is telling you about his or her day. Set aside time so your child will know you are listening. If she or he shows you an art project or anything he

or she made, be specific about what you like or enjoy about it. For example, you might say, “All those bright colors make me feel happy.” or “Tell me about this picture.” Always try and show an interest in the work your child does.

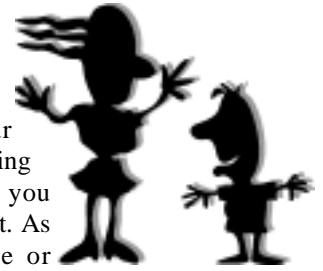
The other step to remember is to remove attention (ignore) from those behaviors (be sure that the child’s safety is not at risk) that are negative. Negative behaviors might be:

- ❑ asking you several times for a cookie after you have explained that it’s too close to dinner.
- ❑ asking to watch another TV show when it is his or her bedtime.

Try the following and your child may begin to cooperate and give up some of the negative behaviors that drain you of time and energy.

- ❑ The next time your child is cooperating, playing quietly, or completed a chore be sure to praise him or her for their effort. You could say, “Eric, it really was such help when you helped set the table.” or “Sandy, I liked to way you took turns when playing the game with Sara today.”

❑ If your child is doing something you dislike, wait. As soon as he or she is engaging in a behavior that you do like, be sure to pay attention and respond by either smiling, patting his or her head, and showing interest in what he or she is doing (watching a TV show, reading a book, or playing a game).



## Remember

1. Children need and want attention from parents.
2. Parents can use the power of attention to change (shape) behaviors.
3. Giving positive attention (praise) increases behaviors you like and want children to engage in more often.
4. Removing attention (ignoring) decreases behaviors you dislike and don’t want to see as often.

If your child is under stress from big changes such as divorce, death in the family, or moving consider seeking professional counseling to help your family cope more effectively.

# Videoconference Presents Financial and Investing Tips

**R**utgers Cooperative Extension recently hosted a downlink site for a videoconference called “Financial Strategies For A New Century.” Panelists in the program included Money magazine senior editor, Teresa Tritch, and 1990 Nobel Prize Winner, William Sharpe of Stanford University. Below is a summary of the information provided to conference participants:

- ⌘ The stock market always reflects predictions for the future. Recently, investment performance has sagged during the fall months but that hasn’t always been the case. Investments

have done well in October and November, also, in previous years.

- ⌘ Current stock market volatility is not surprising compared to past market performance. Although large numerical drops in the Dow Jones Industrial Average (e.g., 400 points) make people very nervous, they are well within historical norms on a percentage basis (e.g., 2.5%).
- ⌘ Investors should never make decisions solely on investment volatility. Instead, factors like personal goals and changes in job status or family size, should dictate investment choices.
- ⌘ All panelists agreed that long-term

investors should simply “ride out” Y2K. Some companies will undoubtedly be affected, of course, but for financial markets as a whole, it is just one of many factors affecting stock prices. Keep good records, however, in case errors are made in computerized account records. It is not advisable to pull a lot of money out of stocks or you could lose out when the market rebounds. Experts also caution not to set your expectations of market performance too high: 20%+ returns, like we’ve had the last four years are not the norm.

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# Recognizing Stress in Your Child

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**Remember what it was like to be five, ten, or fourteen?** Problems are just as real to children as they are for adults. Knowing when you should be concerned about stress reactions in children is not always easy. Some stress is a normal part of growing. Some stress is due to developmental growth. Your child will be able to handle certain situations as reasoning and mental skills increase. In most cases you can help your child cope with pressures of childhood. The following is a list of common childhood stressors:

- Birth of a sibling
- Starting school
- Moving to a new home
- Illness in the family
- Natural disasters
- Divorce
- Death

## How can you help your child control stress?

Children do not have the same coping skills as you. Prevent stress overload by preparing your child for certain situations. If possible, discuss things in advance that will affect your child. Reading books and talking with your child may help them feel more comfortable with new life experiences. Other techniques to try are:

1. Be a role model. Children learn from watching how people around them react to stress.
2. Use “active listening”. Try to understand your child’s feelings about the situation.
3. Tell your children the truth about family matters. Keep explanations simple and accurate.
4. Involve your child in the process of decision-making and problem solving. This will help with the immediate situation and will build these skills for later in life.
5. Use art and fantasy play to allow your child to express feelings. Remember there are no “good” or “bad” feelings. Accept any feelings your child may have about the situation as valid. Once again, use “active listening.”
6. Provide opportunities for physical play to vent built-up tension.
7. Be very generous with hugs, kisses, and other signs of affection.

If you feel your child is not coping and is on stress overload, seek help from a teacher, the family doctor, or other professionals.

## Resources:

Elkind, D. 1981. *“The Hurried Child-Growing Up Too Fast, Too Soon”* Reading, MA.:Addison-Wesley.

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# Shop Smart With Kids

**Karen M. Ensle EdD, RD, FADA, CFCS**  
**FCS Educator, Union County**

Is supermarket shopping with kids a chore you dislike? Consider the following tips and activities. Just make sure the kids are not tired or hungry.

- For very young children, vocalize everything about the shopping experience. For instance, “here is our favorite cereal. It’s in a big yellow box. Listen to what happens when I shake it. Can you shake the box? Now we are going to pay for all the food in the cart. First we will put it on the counter, then the cashier will let us know how much it costs.”

- Let kids feel as many items as possible such as a cold container of yogurt, the bumpy skin of an avocado, or the furry skin of a kiwi.

- Select a color and let kids find an assortment of produce items in that color.

Set a specific challenge by asking them to find a specific item by giving it a description such as “Find me a fruit that is hard, crunchy, red on the outside and white on the inside” (apple).

- As you navigate the aisles, have kids pick out different 3-dimensional items such as: cubes, cones, cylinders, and rectangles. Which shapes stack up easily and which take up a lot of space?

- Let kids find produce in four forms: fresh, frozen, dried, and canned. Discuss the merits of each. Older kids can be challenged with a spot quiz: How many fruits can you name in one minute? What is your favorite vegetable? Or, who can name five vegetables you would put into a tossed salad?

- Tell kids to select two produce items, guess which one is heavier, then weigh them on the produce scale to find out if they chose the one that is heaviest or lightest correctly. Encourage them to guess the total price of each of the two bags of produce (for example, “If string beans cost \$ 1.49 per pound, then how much will three pounds in your bag cost?”).

Using the scales in the produce section of the store and the price per pound can reinforce simple math lessons.

- Older, school-age children can reinforce their math skills by figuring out the price per ounce of a quart of milk and compare it to the price per ounce of a liter of soda. Converting measurements to ounces and practicing long division and then comparing products for their nutritional

content and cost per ounce per product are essential life skills that everyone needs to learn.

- When you use a shopping list, have kids check off the items as they are found and placed in the shopping cart. If you are using coupons, let the child match the coupon to the food item to make sure the item matches the size and type of product being purchased.

- When standing in the check-out line, discuss the origins of various foods such as milk, produce, fish, and baked goods.

- Let children compare unit prices of similar items that have different brand names with store brand and no-frills items. Have them decide after comparing, which is the best buy, and let them put the food item in the shopping cart.



- Once you make it to the check-out line, have the kids play a game of “I spy.” For example, “I spy something that is crispy and brown and round made out of oats. It is in a box and you eat it at breakfast. Who am I?” Make sure everyone gets a turn to create the question and all get to answer at least one question.

- At home, kids can help sort items such as canned goods, bathroom or cleaning items, and help put away groceries and fold the shopping bags. As you sort the items, ask the kids

why you are organizing the purchases in the way that you do. Sorting and organizing food products helps kids learn simple management skills.

- Let kids write down or draw a picture of items needed for the next shopping trip. For more fun, have children help plan the weekly menus. Pick one item they will help prepare and make a shopping list for preparing that item. Other projects that kids enjoy include setting up a lemonade stand in the summer, preparing homemade clay for projects or cutting homemade stamps from potatoes. Each of these projects requires the children think about the items needed, create a shopping list of items to be purchased, go to the store and help shop for the needed items, go home and store items until needed, prepare food items for project, and evaluate the success and cost of the project.

Good luck shopping and remember, making the experience a fun time for kids will help them learn and enjoy the experience.

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Britten, P., Ed. (1997) *The Nutrition Idea Book*. Minneapolis, MN: Society for Nutrition Education. Printed by West Virginia University Printing Services, Morgantown, WV 26506-6031.

## Videoconference Presents Financial and Investing Tips

(continued from page 3.)

- Retirement planning by baby boomers is cause for concern. Early in the next century, 19% of the U.S. population will be age 65 or older, like Florida is today. An estimated 25 million boomers have less than \$1,000 of assets. Inflation protection of retirement assets was advised through keeping a healthy percentage of your portfolio in stocks or growth mutual funds.
- It is dangerous to invest in just one asset class (e.g., stock). Investors need diversification in other assets like bonds and cash equivalent assets. It is also important to avoid overlapping funds that invest in the same securities (e.g., large company stocks).
- A caller asked which gets priority: retirement, children's college savings, or the financial needs of aging parents?

The consensus of the panel was retirement savings, if "sandwich generation" baby boomers can only do one thing. Scholarships and loans exist for college students, and government and other needs-based social programs exist for aging parents. Retirement security, on the other hand, is largely influenced by how individuals save and invest for themselves.

- Another question concerned fears that stock market prices may drop sharply when large numbers of baby boomers start withdrawing their assets. While this could happen in another 20 years or so, videoconference viewers were advised to invest based on current market conditions and not fears about the future.
- Another suggestion by panelists was

to purchase index funds. By doing so, you "buy the stock market" and get the same performance of a stock market index, minus fund expenses. The Wilshire 5000 is an index that tracks a broad array of U.S. companies of varying sizes. Mutual funds tracking this index often have the words "total stock market" in their name.

- "Finding" money to invest is always a challenge. Possible sources of funds mentioned by panelists include tax refunds, reduced tax withholding, reduced household expenses, and automatic investment deposits taken from your checking account. Another great source of investment dollars is employer matching (e.g., to 401(k) plans), which is "free money" that should never be passed up.

## Phytochemicals and Functional Foods: Super Foods For Optimal Health

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of various compounds, their disease preventive properties, and their efficacy against certain diseases. Many questions still remain. Although scientists have discovered how a variety of phytochemicals work in the body, many more need to be investigated.<sup>9</sup>

The National Cancer Institute estimates that one in three cancer deaths are diet related and that 8 of 10 cancers have a nutrition/diet component. These figures alone suggest that the potential impact of phytochemicals and functional foods on the health of Americans is worth examining.

### What specific foods might have functional components?

#### Examples of Phytochemicals and Functional Foods:

**Oats** contain beta glucan, a soluble fiber which may help reduce the risk of cardiovascular disease via the lowering of blood cholesterol, a recognized risk factor for cardiovascular disease.



**Garlic** are rich in allicin and related compounds, it appears to lower cholesterol levels and blood pressure. These com-

pounds may also stimulate immune function and slow the growth of cancer cells.



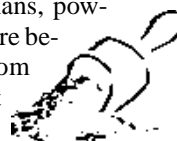
**Tomatoes** get their red color from lycopene, a carotenoid that fights the uncontrolled growth of cells into tumors. Consumption of tomatoes and tomato products such as sauce, catsup and tomato paste may reduce risk for cancer of the colon, prostate, bladder, and pancreas.



**Soy Products** (tofu, tempeh, soy milk, miso, etc.) contain genistein and other cancer-fighting isoflavones. These compounds suppress formation of blood vessels that feed cancer cells and interfere with the body's synthesis of estrogen, possibly reducing the risk for breast, ovarian and prostate cancer.

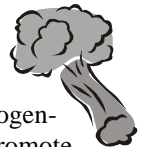


**Flaxseed** contains lignans, powerful antioxidants that are believed to stop cells from becoming cancerous. It also contains alpha-li-



nolenic acid, the plant version of omega-3 fatty acids that may reduce the risk of heart disease.

**Broccoli** contains indoles that may protect cells from damage by carcinogens and help the liver inactivate estrogen-like compounds that may promote breast cancer.



At this point, scientific data is incomplete to argue that any one food prevents or cures disease. Experts agree that scientific evidence related to functional foods is still unfolding. The best dietary advice is to follow the recommendations of the food guide pyramid and consume at least the minimum of three vegetables and two fruits per day, whole grains, soy foods, and dairy foods that contain both known beneficial compounds and those still awaiting discovery.

### References

<sup>1</sup>Jones, W.H.S., ed. 1932. *Hippocrates*. p. 351.

<sup>2</sup>Clydesdale, F. 1995. Functional Foods: Foods of the Future. *Food Insight*, Jan/Feb.

(continued on page 7.)

## Phytochemicals and Functional Foods: Super Foods For Optimal Health

(continued from page 6.)

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<sup>4</sup>Block, G., Paterson, B., and Subar, A. 1992. Fruit, vegetables, and cancer prevention: a review of the epidemiological evidence. *Nutrition and Cancer* 18(1):1-29.

<sup>5</sup>Buring, J.E. and Hennekens, G.H. 1995. Beta-carotene and cancer prevention. *J. Cell. Biochem. Suppl.* 22:226-230.

<sup>6</sup>Herman, C., Adlecreutz, T., Goldin, B.R., et al., 1995. Soybean

and phytoestrogen intake and cancer risk. *Nutrition* 125:757S-770S.


<sup>7</sup>Goldberg, I. Ed. 1994. *Functional Foods, Designer Foods, Pharmafoods, Nutraceuticals*. New York, NY: Chapman & Hall


<sup>8</sup>Richardson, D. 1996. Functional foods: shades of gray: an industry perspective. *Nutrition Reviews*, 54: P-S176.

<sup>9</sup>LaChance, P.A. 1997. *Nutraceuticals: Designer Foods: Garlic, Soy, Licorice*. Trumbull, CT: Food and Nutrition Press.

## Handle With Care...Keeping Infant Formula Germ-Free to Prevent Foodborne Illness


(continued from page 1.)


 Use sterile water for mixing powder or concentrated formula. Always follow the mixing directions. Use the exact amount of water.


 Keep filled bottles of prepared formula in the refrigerator until just before feeding.




### Throw-Aways


 Throw away prepared bottles that your baby doesn't drink after 48 hours.

 Throw away open containers of ready-to-feed or concentrated formula after 48 hours.

 Baby didn't finish a bottle? Don't keep leftover formula that your baby doesn't drink. Bacteria from the baby's mouth can contaminate the formula, making it unsafe to drink later.

### Warm Ups

 Warm bottles by placing them in hot (not boiling) water for 5 minutes.

 You can warm plastic bottles in the microwave if you're careful. Here's how:

Put at least 4 ounces of formula in the bottle.

Leave the cap, ring, and nipple off of the bottle so heat can escape.

Heat 4-ounce bottles for no more than 30 seconds at full power.


Heat 8-ounce bottles for no more than 45 seconds at full power.


Put the nipple, ring, and cap back on the bottle. Turn the bottle upside down 5-6 times.


Check warmed formula before you feed it to your baby. Place a few drops on the top of your hand to make sure it's cool to the touch – not hot.

Feed warmed formula to your baby right away. Germs grow in formula that sits around.


### On the Road...


 Keep formula safe when you're out with your baby. Use an insulated bag with an ice pack to keep formula cold.


 If you don't have an ice pack, freeze a plastic bottle of water to make your own.


 Always keep dirty diapers away from bottles, toys, and formula. Put only clean diapers in your diaper bag.


### Don't Spread Bacteria. Wash Hands after you...


 ...use the toilet.

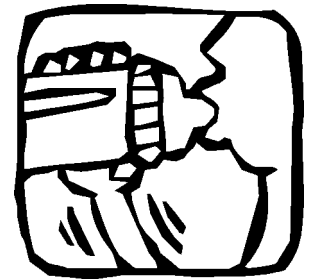
 ...help a child use the toilet.

 ...change diapers.

 ...blow your nose or wipe a runny nose.

 ...touch raw meat, poultry, fish, or eggs.

 ...clean up saliva, vomit, or bathroom "accidents."



**FCS IN THE COMMUNITY...** The Gloucester County FCS Department is working with local maternal/child health agencies to teach parents how to safely handle food, formula, and expressed breast milk – which will help prevent foodborne illness. Gloucester County FCS is training agencies that offer health and nutrition programs to use “**Handle With Care,**” a safe food handling program for parents of infants and toddlers. If you'd like more information on the “**Handle With Care**” program (curriculum, fact sheets, and posters), contact your county FCS educator or Rutgers Cooperative Extension of Gloucester County, FCS Educator at 856/307-6450.

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