An introduction to cultured food

By Anita Kugelstadt

Culturing or fermenting foods is an ancient practice. It is how our ancestors preserved food and made it more digestible and nutritious. Many cultured foods might seem strange to us; however, most of consume cultured foods all the time without perhaps even realizing. Cheese, yogurt, wine, beer, sour cream, cream cheese, sauerkraut, pickles: all are examples of foods that are created (at least traditionally) through fermentation.

The health benefits of cultured foods are enormous. These sorts of foods can be especially helpful to children with ASD, who often suffer from candida overgrowth, dysbiotic bacteria overgrowth, and poor nutritional profiles. The following is a quick introduction to some of the more common cultured foods—kombucha, kefir, and yogurt—that are easy to make at home, inexpensive, and quite possibly of great benefit to your child's (and your own!) health.

Do note that cultured foods are becoming more popular all the time. It is now easy to find yogurt with live bacteria, when even twenty years ago, almost all yogurt was pasteurized to destroy the bacteria. Unfortunately, much of what you will find in the grocery store will not be "alive" anymore when it comes to things like pickles, sauerkraut, and even kefir. As with many things, it is often best to make your own, to ensure that the health benefits are truly there.

Kombucha, kefir, and yogurt are all excellent dietary sources of healthy bacteria that contribute to digestive health. All are easy to make, inexpensive, and easy to give to most children, even picky eaters.

Kombucha is a drink made out of the kombucha culture (often called a scoby, which stands for symbiotic culture of bacteria and yeast). Don't be alarmed by the yeast in kombucha—it is the same kind of yeast many of us pay a lot of money for (like Sacchyaromyces boulardii) and not the harmful yeast like candida albicans. The yeast and bacteria in kombucha will compete with and inhibit harmful intestinal microbes children with ASD often struggle with because of their poor gut health and compromised immune systems.

Kombucha is made from tea, sugar, and the scoby. The sugar feeds the bacteria and yeast so that the drink is relatively low sugar once it is ready for consumption. For excellent instructions on how to make kombucha, visit http://www.seedsofhealth.co.uk/fermenting/kombucha_howto.shtml

You can buy a scoby (or often called a kombucha baby) on-line or find someone who will share one. Each time a batch of kombucha is made, another kombucha baby is produced. People are generally very happy to share these for free, or ship them for the cost of postage. One place to find people all over the world who are willing to share a scoby is http://www.kombu.de/suche2.htm#uk

Kombucha may be a problem if someone is sensitive to brewer's or baker's yeasts, amines, or phenols (if this last one is a problem, it is likely that Houston's No-Fenol would help). Some people can have a die-off reaction to kombucha. Be sure to start slowly when you introduce it. If your child does seem to have a negative reaction, consider which of these possible problems may be occurring. There is an upper limit as to how much kombucha one should drink daily. Information on this can be found at the websites I have suggested.

The following list of some of the other beneficial components of kombucha is taken from Nourishing Hope by Julie Matthews, Certified Nutrition Consultant and DAN! practioner:

- *Lactic Acid: Found in Kombucha in its most potent form L-lactic(+). Lactic acid is essential for the digestive system.*
- *Acetic Acid: Its main function is to inhibit harmful bacteria. Acetic acid also conjugates toxins to neutralize them.*
- *Malic Acid: Is used in the body's detoxification process.*
- *Oxalic Acid: Encourages the cellular production of energy and is a natural preservative.*
- *Glucuronic acid: Is effective against many yeast infections such as candidiasis and thrush. Glucuronic acid is a wonderful detoxifier made by the liver to detoxify substances including petroleum-based products—one of the few agents capable of this. Once bound by glucuronic acid this substance is neutralized, cannot be reabsorbed, and is eliminated from the system.*
- *Butyric Acid: protects human cell membranes and combined with glucuronic acid strengthens the walls of the gut and protects against parasites and candida. Can also help with constipation.*
- *Nucleic Acids: Work with the body aiding healthy cell regeneration.*
- *Amino Acids: Amino acids have many benefits including building cells and repairing tissue. They also form antibodies to combat invading bacteria & viruses. L-theanine is one of the amino acids a client of mine calls the "yoga amino acid" as it has a calming effect on her (as it does most people) as though she just came from a yoga retreat.*
- *Enzymes: boost the actions of other health giving components*

Kombucha also contains ascorbic acid (vitamin C), B vitamins (B1, B2, B3, B6, B12 and folic acid), beneficial yeasts and bacteria. Vitamin C and B-vitamins have many functions in the body and assist many systems including immune function. (Nourishing Hope: The Essentials of Nutrition Intervention for Autism Spectrum Disorders, 2007)

Kombucha is naturally casein and gluten free. I would encourage anyone who is interested in kombucha to spend some time exploring http://www.seedsofhealth.co.uk/fermenting/index_kombucha.shtml as it is an excellent website full of great information.

Kefir is a fermented drink (although many people eat it as a food, like yogurt, when it is thicker), most often made with milk, but can also be made using coconut water, water, or other kinds of liquid like grape juice. (although grape juice kefir will have a higher alcohol content and may not be a wise choice for children). As with kombucha, the starter for kefir is often shared. Each time kefir is made in milk, where the grains feed on the lactose, more grains grow. It is these grains that people who believe in the health benefits of kefir are happy to give away. Note that there are milk kefir grains and water kefir grains. Know what you're getting before you acquire any.

Kefir contains more than 30 different types of bacteria which can help to improve intestinal health. Kefir also contains enzymes, vitamins, minerals, and amino acids. It has been shown many times that people who do not tolerate milk will tolerate kefir made from milk.

In my opinion, kefir is more of an acquired taste than kombucha, but I have found that is very easy to add small amounts to other foods or drinks. As with kombucha, you would want to start slowly as children have been known to have huge die-off reactions to the introduction of kefir.

A good place to introduce yourself to more information about kefir is http://www.seedsofhealth.co.uk/fermenting/kefir.shtml

A huge website, considered by kefir experts to be the very best (if a bit difficult to navigate and digest) is owned by Dominic Anfiteatro, a kefir guru. Here you can find everything there is to know about kefir, including how to make non-dairy kefir http://users.chariot.net.au/~dna/Makekefir.html

Some parents of ASD children are most interested in coconut water kefir. You can read about that here at the Body Ecology Website http://www.bodyecology.com/mcoconutkefir.php

Kefir made with water, coconut water, or juice is naturally gluten and casein free.

Yogurt, especially yogurt with a long fermentation period, like SCD (Specific Carbohydrate Diet) yogurt, is also full of health-promoting bacteria. It is said that there are three billion CFUs per milliliter of SCD yogurt. That is an enormous amount of bacteria! Information and clear instructions for making your own milk yogurt can be found here http://www.breakingthevicioussycle.info/beginners_guide/yoghurt/yoghurt.htm

Many people hang or strain yogurt to create cream cheese. Sweetened with a bit of honey, it makes a delicious cheesecake or frosting for other desserts. Adding some herbs and spices turns it into a delicious dip for raw vegetables. The whey that you will have after hanging your yogurt in a cheesecloth can be used in smoothies or other drinks.

There are some people who want a non-dairy yogurt; however, soy is not recommended as a healthy alternative for our children and there is very little information on making alternatives such as coconut milk yogurt. There a few recipes (which I have not tested personally) that use homemade nut milks to create yogurt here http://www.rawfoodinfo.com/recipes/cultured_foods.html
Many children who cannot tolerate most dairy do well on 24 hour yogurt, and it may, in the absence of a true allergy, be worthwhile trying for your child.

For people who want to pursue other cultured foods, such as sauerkraut and other cultured vegetables, sourdough bread, and miso, Wild Fermentation by Sandor Ellix Katz is a highly readable and helpful book. There are also yahoo groups devoted to the subject of cultured food.