Salt and Salt By Ora Emmerich UCCE El Dorado County Master Food Preservers

There is salt, and then, there is salt. Basic chemistry explains that salt, or NaCl, combines sodium and chloride. Scientists, engineers, consumers and many others find uses for salt ranging from making roads to dyeing clothes, from drilling for oil to bleaching paper stock, and from softening water to extinguishing fires. The home food preserver, however, uses salt to ferment foods, enhance flavors, and prevent harmful organisms from proliferating.

Although the basic chemistry of many salts remains the same, the refining processes vary for different applications. Anti-caking agents and iodine added to table salt result in a fine salt for the shaker, but a salt that will leave the home food preserver with cloudy liquid in the canned foods. Using pickling salt solves the cloudiness issue, as the pickling salt processing not only leaves out the additives, but also creates a very fine particle which dissolves neatly for a great brine. Kosher salt also results in a clear fluid for the home canning enthusiast, but these flakes of salt do not dissolve very well. The large flakes of kosher salt come in handy when curing meat, absorbing water easily.

Fermenting foods requires that the product be soaked in a salty brine solution over a period of time. The fermenting changes the color, texture and flavor of the product. Salt inhibits certain harmful microbes while allowing other desirable microbes to flourish and produce the fermented product. Pickling salt or kosher salt must be used to ferment foods as regular table salt with the added iodine does not maintain the correct chemical balance for proper fermenting. Try to make sauerkraut at home with the proper salt and find out that the simple fermentation process produces the best sauerkraut ever tasted!

Sea salt, obtained by evaporation, contains minerals and nutrients not found in processed salts such as picking, kosher and table salt. Depending on the location the sea salt came from, the particular mining process, and the additional additive which may have been used, the tastes of various types of sea salt will be quite diverse. Some sea salts can be used everyday in place of regular table salt and some must be reserved for a "finishing" effect on a spectacular dish. Do a taste-test of various salts to understand the many different flavors. Compare sea salt to table salt and learn how fresh tasting sea salt can be. Then, try various finishing salts to find the one that makes the house special really special!

For questions about safe home food preservation, or to schedule a speaker for organizations or clubs on the topics of food safety or food preservation, call the Master Food Preservers at (530) 621-5506. For more information, be sure to go to the Master Food Preserver website at http://cecentralsierra.ucanr.org/Master_Food_Preservers/. Sign up to receive our new Master Food Preservers E-Newsletter at http://ucanr.org/mfpenews/.