One frequently asked question that we receive at the Northeast Center for Food Entrepreneurship is, “How important is it to have a scheduled process developed for each food product?”

I would like to take this opportunity to discuss the importance of developing a scheduled process in some detail.

**Background**

Several life-threatening outbreaks of botulism occurred during the early 1970s. These outbreaks were linked to commercially prepared low-acid foods that received inadequate processing and were packaged in hermetically sealed containers. In addition, outbreaks were associated with commercially prepared acidified foods that were not acidified properly. To protect consumers from microorganisms of public health significance, *Clostridium botulinum* and its resulting toxin in particular, the United States Food and Drug Administration (FDA) published the following regulations: Code of Federal Regulations Title 21, part 108 (Emergency Permit Control), part 113 (Thermally Processed Low-Acid Foods), and part 114 (Acidified Foods). The regulations, including “Current Good Manufacturing Practices,” detail the equipment, controls, manufacturing, processing, and packing procedures that should be used to ensure the production of safe products. Manufacturing practices for the production of thermally processed low-acid foods and acidified foods must include a thermal process and/or other means of preservation that are designed by a processing authority (a scheduled process) to destroy or inhibit *Clostridium botulinum* spores. There must also be proper delivery of these thermal processes and/or adequate control of other methods being used. Documentation is also required indicating that the scheduled process has been followed for production.

**Scheduled Process**

A scheduled process is a detailed procedure that includes the formulation, critical control points, processing steps, and storage/distribution, selling conditions/restrictions for a product. A scheduled process is specific for each product (i.e. two products that differ in sodium concentrations would each require a separate scheduled process). A scheduled process is issued by a processing authority, which is a person or institution with the expert knowledge, experience, and adequate facilities to make determinations about the safety of a food process and formulation.

**Importance**

Although a scheduled process is required by the FDA for shelf-stable acidified products and low-acid canned foods, it is our recommendation that all products have a scheduled process. The New York State Department of Agriculture and Markets
Entrepreneur Profile

GRANNY BLOSSOMS SPECIALTY FOODS

It’s 1997, at 4:00 am and Bob and Doris Kopp are loading up their van with raw vegetables, ingredients, and canning jars preparing for a trip to the Vermont Food Venture Center (VFVC) in Fairfax. They arrive around 8:00 am and Brian Norder, the director of VFVC, helps them unload the van. Sixty cases of product later, they head back to Blossom’s Corner at the intersection of Routes 30 and 149, sandwiched between West Pawlet and Wells, Vermont.

Bob and Doris are the owners of “Granny Blossoms Specialty Foods,” a small food company that produces herb/spice blends as well as jarred products. They began their specialty food production in the same building that once housed their first business, a restaurant. Their business expanded into producing products versus meals, starting with healthy food snacks for their restaurant customers to take home. At the time, they baked fresh granola and trail mix.

Bob, a chef who graduated from the Culinary Institute of America in Hyde Park, NY, and his wife, Doris, then developed a line of culinary dips that could be added to sour cream, cream cheese, and cooking oils. They tested over 50 blends of herbs and spices on their customers and marketed the dip mixes locally. After much experimentation and customer input, they narrowed down the choices to five unique blends and changed their packaging from plastic bags to plastic tubes filled with the herb and spice blends, calling them “Stick O’ Dips.” Their product took off after the 1991 Fancy Foods Show in NYC when “Stick O’ Dips” were featured on the “Today Show.” From then on, their sales grew and grew.

After 6-8 weeks of producing their product at the VFVC, they needed to have their own space and purchased used equipment for production. They set up shop at Blossom’s Corner in the old restaurant space, keeping the “old fashioned family” business feeling. Today, Granny Blossom’s owners and employees (totalling eight) handle all activities from production to packaging the product.

Jennifer Jacob, the general manager of Granny Blossoms said, “Our turn-around time on product is very quick and we keep an adequate inventory on hand.”

Bob agreed, saying, “We speak silver and we deliver gold.”

When asked what challenges they face, Bob had to stop and think. “We’re having so much fun.” He went on to explain that they are constantly challenged with pleasing customers, from whom they receive valuable feedback. The latest products are fruit salsas, featuring varieties such as peach, apple, and cranberry. They also produce bread and butter pickles, dilly beans, corn relish, and pickled garlic. Their seasonal products are produced using fresh vegetables and herbs usually supplied from local growers in Vermont and New York. Their products are available in every state east of the Mississippi and some to the west, like Texas and Oklahoma.

Bob said, “Whenever we have a question about good food manufacturing practices, we call Dr. Todd Silk at the Northeast Center for Food Entrepreneurship (NECFE).” The NECFE has been a valuable source of information for Granny Blossoms, starting with Dr. Don Downing, Dr. Olga Padilla-Zakour, and Judy Anderson at Cornell/Geneva.

Granny Blossom’s advice for new food entrepreneurs is to use the resources and facilities of the NECFE and the VFVC. Bob said Brian Norder was invaluable when learning to produce their recipes on a commercial level. “Brian helped us from the get-go,” he said. Brian continues to assist Granny Blossoms whenever they need help with the mechanics of a job.

Bob added, “I do trade shows throughout the Northeast. Other states are envious of what we have here in New England.” He also encouraged new entrepreneurs to contact Jennifer Grahovac at the Vermont Department of Agriculture, Food and Markets as a good resource.

To find Granny Blossom’s products check out your local supermarkets, or visit their website at: www.grannyblossomsspecialtyfoods.com

By Pam Durda
University of Vermont
requires a scheduled process for the majority of food products produced and sold in New York. Several other states in the Northeast are also requiring such documentation for a number of products.

The development of a scheduled process creates an environment where producers and a processing authority critically review production practices. This review can lead to the discovery of potential safety concerns. It may be determined that certain requirements are not being met or that there have been changes in product formulation, processing, or production practices which can affect product quality and safety. Developing and following a scheduled processes familiarizes producers with the critical steps in production and helps to ensure that they are being properly followed, verified, and documented. We urge you to develop a scheduled process even if you are producing a product that is not required to have one.

**Writing a Scheduled Process:**

1. Identify the type of product (condiment, beverage, pet food, etc.).
2. Identify the product name, producer, address, phone number, fax number, and e-mail address.
3. State the date on which the document is developed.
4. List the exact formulation of the product by itemizing each ingredient with its weight (grams, ounces, pounds).
5. Give the specific directions used to make the product. It should be a comprehensive step-by-step process.
6. Identify the type of packaging that will be used (type and size of container, container material, etc.).
7. State how the product is to be sold (refrigerated, frozen, or shelf stable).
8. Provide results of required lab analyses (pH, water activity, or other).

This information is submitted to a Food Processing Authority and, upon review and approval, the scheduled process must be followed as written and appropriate records of critical control points (such as pH, temperature, etc.) for every batch of product made must be maintained.

If you have any questions concerning the development of a scheduled process please contact us at the Northeast Center for Food Entrepreneurship.

**References:**


Northeast Center for Food Entrepreneurship. Small scale food entrepreneurship: a technical guide for food ventures.
ACRYLAMIDE IN FOODS
What you need to know as a food producer and consumer
By Cecilia Golnazarian and Todd Silk, University of Vermont

In April 2002, scientists at Stockholm University’s department of environmental chemistry, in cooperation with Sweden’s National Food Safety Agency, released information that high levels of acrylamide, believed to cause cancer, are found in foods such as bread, rice, and potatoes (part of a case-control study). Acrylamide is a chemical that may be formed when foods high in carbohydrates (sugars and starches) are cooked at high temperatures, such as when frying and baking. Acrylamide is known to cause cancer in rats, but there is no credible evidence that acrylamide in foods poses a cancer risk when consumed by humans.

In a December 2002 press release from the new American Council on Science and Health (ACSH), Dr. Joseph D. Rosen wrote that results from high-dose rodent tests cannot be extrapolated directly to humans. In rats and fruitflies, acrylamide causes cancerous changes at concentrations 1,000 times higher than those found in the average human diet. There is no direct evidence that acrylamide has a similar impact on humans.

In a population based study, Muccil et al. reanalyzed the Swedish case-control study. The researchers assessed the diets of 987 cancer patients and 538 healthy individuals, over a 5-year span, to see if there was a link between consumption of foods high in acrylamide and an increased risk of cancer. This study assessed the individuals’ dietary recall of certain food items for which the acrylamide levels are known. They found a lack of excess risk, or any convincing association of cancers of the bowel, bladder or kidney in consumers who reported high intakes of 14 different food items with acrylamide content ranging from 300-1200 g/kg (high level) or 30-299 g/kg (low level). The study concluded that individuals with the highest total acrylamide intake were at no greater risk of cancer than those with lower intake.

After the Swedish announcement of acrylamide detection in foods, the U.S. Food and Drug Administration (FDA) began a testing program and reported the presence of acrylamide in various common foods. However, the FDA findings, according to the new ACSH report, are not directly relevant to human health. Acrylamide in food is not the result of contamination from environmental sources, and is believed to have been present in cooked foods for thousands of years. The FDA is continuing to investigate acrylamide levels as well as how it is formed in foods, and hopes to use the results to identify ways to reduce acrylamide levels that result from cooking. As well, FDA will continue to study the potential health risk of consuming acrylamide in foods.

Now that we know acrylamide is out there, what do we do as food producers and consumers to keep ourselves safe? The first line of advice is—don’t worry, there still is no direct correlation between eating foods with acrylamide, and getting cancer. However, these findings do not condone eating junk foods. Don Mottram, who studies food chemistry at the University of Reading, UK, suggests obesity, diabetes and a lack of fruit and vegetables in the diet are more serious health threats than acrylamide. The FDA recommends that consumers continue to eat a balanced diet with a variety of foods. The United Nations Food and Agriculture Organization (FAO) and the World Health Organization (WHO) advise consumers to avoid cooking foods for too long at too high a temperature, while continuing to cook all foods thoroughly, particularly meat and meat products so as not to increase your risk of foodborne illness.

Finally, the Center of Science in the Public Interest (CSPI) continues to advise consumers to eat less of the foods that have the most acrylamide: French fries and snack chips. Of course, those are exactly the kinds of foods that people should eat less of because they are low in nutrients and high in calories and, in some cases, trans fat.

References:


The cheese industry in the United States has seen a boom in recent years, largely due to consumer’s appreciation for European specialty cheese. Imports of artisanal cheese have been a crucial factor to the domestic growth of the U.S. cheese industry.¹

In today’s restaurants and markets, cheese is a hot item! People are looking for flavor and variety, at mealtime and to use in entertaining. More and more restaurants are adding a “cheese course” to their menu. A cheese course is a plate of specialty cheese along with fruits or vegetables to complement the cheese. This course is offered either as an appetizer, or end-of-meal treat. If you are interested in learning how to make cheese—now is the time to learn.

Without a doubt, this is an exciting time to venture into the realm of artisan and farmstead cheesemaking. The Northeast Center for Food Entrepreneurship (NECFE) offers a number of workshops and seminars dealing with artisanal cheese and cheesemaking. Farmstead and artisanal cheeses differ from commodity cheeses in that they are made by hand in smaller quantities. The only difference between farmstead and artisanal cheese is that farmstead cheese is made from milk from the cheesemaker’s own herd on the farm. Both farmstead and artisanal cheeses have the flavor, depth and complexity of pure artistry. But, as Dr. Paul Kindstedt of the University of Vermont recently stated, the art of cheesemaking goes beyond artistry. Cheesemakers need to produce a product with consistency, uniformity and safety—day in and day out.²

For the past two years, our Beginner and Advanced Cheesemaking Workshops have been successful in helping individuals do just that—create an artful cheese with consistency and uniformity. Many of those who attended our Beginner Workshop continue to make cheese and joined us for the Advanced Workshop. This year, we plan on continuing to help those interested in learning how to make cheese with Beginner and Advanced Workshops. We are excited to announce that we are adding a new seminar this year for chefs, caterers, other food professionals, and even interested consumers to learn how to incorporate cheese to recipes and to offer successful cheese courses. All our cheese workshops and seminars will include a section on sensory analysis. Attendees will learn basic sensory test methods for appearance, flavor, aroma and texture. They will learn to use the sensory data to guide product development and quality control, as well as to communicate cheese qualities to staff and customers.

If you are interested in receiving additional information about our cheese workshops, contact Cecilia Golnazarian at 802-656-0147 or Cecilia.cgolnaza@zoo.uvm.edu.


Building a website is like building anything. Just because you build it doesn’t mean anyone will come to visit! Therein lies the challenge to any business that has decided to have some type of web presence. Whether your goal is to market your business or to sell items online, if people don’t come to your website, you’ve wasted your money and your time in developing the website in the first place. This issue is usually the number one reason why small businesses avoid developing a website in the first place—they aren’t sure that it will really provide them with the return on investment (ROI) that is necessary to prove it successful.

The key, of course, as in any business practice, is to plan. When it comes to website marketing, planning out a full strategy of HOW you are going to make your website successful at the same time it is being developed is very important, and will make the difference between success and failure.

First, let’s update the current figures of how many people are online, and show them against what I last reported in the Spring 2002 issue.

How Many Online?

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<tbody>
<tr>
<td>Canada &amp; USA</td>
<td>182.67 million</td>
<td>180.68 million</td>
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<tr>
<td>World total</td>
<td>605.60 million</td>
<td>513.41 million</td>
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And growth of the online audience continues! Now, how can you, as a small business, really take advantage and reach out and get some attention for your website?

Know your audience

It is really important to know who your audience is. Ideally, you have already figured this out as you build the website, so now, as you are beginning to figure out how to get people to come see it, it’s time to be clear once again on who you are trying to get there! Probably the easiest and most fun way is to create what I call a “user profile.” Come up with your ideal customers. Who are they? Are they male or female? Do they have kids? What do they drive? What are their favorite TV shoes? Favorite music? What’s their income? Education level? Employment? What are their hobbies and interests? Do they have a computer? Do they shop online?

Answer all of these questions as you lay out who your audience is and you will get a picture of who they really are, and, more importantly, how to reach them and through what media. What search engines might they use? What magazines might they look at? What radio station do they listen to? What newspapers do they read? Keep this all in mind since it will influence many of your decisions down the line.

Get your website ready for search engines and directories

Search engines are a big part of how people will find your website. The trick is to prepare your site for those search engines so they will send out their robots and discover your site. The devil, as always, is in the details. There are many search engines and directories out there, and they all prioritize HOW they search for sites to add to their databases in different ways. Remember that a search engine really is just a glorified database of information. A user types in a few key words or a phrase and the search engine returns a list of results of websites that either contain that keyword, have paid to come up when that keyword or phrase is typed in, or have a bunch of other sites linking to them AND have that keyword in the body of the text of their homepage. There is NO consistency and EACH one is different. Your goal is to provide as many options as possible to fulfill the rules of as many search engines as possible.

• Meta-Tags/Keywords: Decide on a series of words and two or three word phrases that describe your business and then come up with a sentence that includes specific keywords as well as a description of your primary mission. Insert them into the HTML code that makes up your website—your hosting provider/website designer will help with this. These are called meta-tags—some search engines utilize them to categorize your website. The MOST important one is the sentence description, which is called the Meta Description. That is the one supported by almost all search engines and directories.

• Homepage Text: Write your homepage text with your user AND the search engines in mind. Avoid “Welcome” as your first word and focus first and foremost on your business name or your main keyword. Write a clear, simple description of what your business is all about. Remember that your first sentence is often the description that search engines provide in their listing results.

• Linking Strategy: Many search engines are now ranking sites based on “popularity”. This can mean either the amount of times you are visited OR more likely how many other sites link to you. Your goal here is to list out ALL the key business organizations, partners, and complimentary sites that you think would be willing to link to your site. Make sure that you are also willing to link back to them!

Getting ready for the search engines doesn’t mean that you’ll be listed. You’ve still got some more research to do before you are ready for that process.

Here’s a recent listing of the top search engine/directories on the web from Search Engine Watch.
Log files also provide information on links that people used to get to your site, as well as daily and hourly visits. This information can help you in several ways. First, you can see if anyone is visiting your website. However, more importantly you can see what pages they are going to, which helps you to focus your updating efforts on the specific pages that get the most visits. The log files will let you know if your linking and search engine strategies are working by showing you the number of referrers to your site and which ones were used to get people there. They will also show you how a site was searched for in a search engine so you know if your keywords and other marketing techniques are working.

Use all types of marketing techniques

Getting listed with search engines is NOT enough. Linking is more and more important, and as described above will often make a huge difference. But, what else can you and should you do to get your website found?

• Put your URL on ALL your printed material.
• Send out a news release to the local media about your website launch.
• Put your URL on any current advertising you do—newspaper, magazine, radio, or TV.
• Offer website incentives such as coupons, or website specials that only visitors to the website can get.
• Get your visitors to sign up for e-mail announcements, then provide monthly or bi-monthly campaigns that offer specials and include a “forward to your friend” e-mail option.
• Make sure your URL gets out to people who visit your booth at tradeshows.

Study your Log Files

Information about your website visitor is usually just a click away! Did you know that? Unlike an advertisement which you put in a newspaper or magazine, with your website you can really tell right away if anyone has visited, what pages they’ve looked at and where they’ve come from. Called log files, this wealth of information about your website user resides on the server where your website lives. Your hosting company will provide you with a link to that log file so you can see what is out there.

If you wish to be found quickly and you have a new website, it is best for you to spend some money to get paid inclusion in the search engines. Bottom line: while you can do it for free, it will take a very long time to get listed unless you are willing to pay some money.

Here is where knowing who your audience is will help you. If you know that your audience is most likely to use the top three search engines—Google, Yahoo! and MSN, you can focus your efforts on those three. Google powers Yahoo! which means that Google listings are also found at Yahoo! (As of the writing of this article, however, that may change due to Yahoo! purchasing a new search engine service.) If you wanted to get listed quickly on these three sites, paying their fees would get that accomplished.

• Yahoo! — yearly fee to get listed in their Directory: $300 annual fee.
• Google – Create an Ad word or Sponsorship: $25 or more (or less)/month depending on how many people “click” on it.
• MSN – requires that you register with Inktomi or LookSmart: $39 for six months.

If you decide on a “get listed fast” budget for search engines, allotting about $500 for the first year is a good bet.

Seem confusing? Well, it is. The challenge is that the search engines change EVERY DAY. Knowing where to get listed can be tricky, but working with the top three is your best bet.

Have a budget

So now comes the tough part. You know all the pieces that you need to do, but can you afford them all? How much can you spend? You’ve got to decide how much money you are willing to put forth into a marketing strategy because that figure will drive the rest of your decisions. Be realistic and set your goal. Based on what you can afford there will be trade-offs that you will have to make. Prioritizing your actions will help you out here.

To be continued in next issue.
Kitchen Incubators: Sprouting Up Around the Country
By Brian Norder

One of the hot trends in enterprise development nationally is the growth of food business incubation. Also known as shared-use commercial kitchens, the most recent incarnations of kitchen incubators trace their roots back to the 1970’s.

In the 1970s, the US Department of Agriculture helped fund a large number of community canning kitchens around the country. These facilities were for individuals or groups who canned for personal rather than commercial consumption.

In the early 1990s, the entire concept of business incubation was starting to take hold in several sectors of the economy—food being one of them—and some early kitchens were opened up in such areas as Spokane, WA, and Sandpoint, ID. A second wave came along in the mid-90s as more incubators opened in places such as Denver, Poughkeepsie and Plattsburgh, NY, Fairfax, VT, Athens, OH, and Lancaster and Epping, NH.

Although results have been mixed (several of the facilities listed above are no longer in business, for instance), there has been continued interest in developing incubators. Kitchens in Greenfield and Boston, MA, and Buffalo and Ithaca, NY, opened over the past few years and more are on the drawing board. The proposed facilities represent the next breed of incubators: ones focusing in value-added agriculture processing. Among these are proposed facilities in Asheville, NC, and southern New Jersey to assist growers in those areas.

The most recent Farm Bill emphasized value-added processing. This represents a major growth area for incubators. Both western North Carolina and south Jersey have traditional commodity focuses in tobacco and canning tomatoes respectively. North Carolina has had good results with exotic herbs, mushrooms and organics while many New Jersey growers are trying Asian vegetables geared to the urban markets. As food incubators transition into “agri-bators” convenience processing for the pre-cut market is likely to be a significant component.

A new type of assistance for food manufacturers is in planning at the State University of New York (SUNY) at Morrisville. When completed, this would be among the first university-sponsored co-packer for specialty foods in the country. Unlike the facility at the University of Nebraska, the SUNY facility will provide on-going commercial production for food businesses.

NECFE actively works with incubators in the Northeast to provide the needed technical assistance to entrepreneurs in those facilities.