Culinary Institute of America

TECHNIQUE OF THE QUARTER: DEVELOPING HEALTHY RECIPES AND MENUS

Nutritious recipes are the foundation of a healthy menu. Before you take the time to develop new recipes, take a look at the dishes you already offer. Chances are that some of the recipes on your current menu already are healthy ones; other recipes might need some tweaking, and some might not work at all.

READING A RECIPE FOR NUTRITION

The first step in evaluating a recipe for a healthy menu is to know how you and your customers are defining the term. Does "healthy" mean low-fat or high-fiber? Low in sodium or high in calcium? Are you planning to make any claims on your menu that will need substantiating, or will you let the descriptions of your dishes allude to their healthful properties?

You will need to consider the roles that fat, salt, and sugar play in your recipes, as well as the type and source of each. Recipes for baked goods are far more difficult to adapt because ingredients such as butter, eggs, salt, sugar, and flours all perform very specific functions. Butter, for example, is unlike other fats in that it contains milk solids. You might be able to replace it with another fat, but you might need to use less of the substitution.

In other recipes, salt, fat, and sugar may be used as flavorings or for texture or mouthfeel. You may be able to swap an unhealthy trans fat or saturated fat for a monounsaturated fat, or build flavor with spices or seasonings other than salt, to make your recipes healthier. Or you may devise a way to remove the fat entirely from a dish without sacrificing flavor or texture. Rather than dip chicken cutlets in beaten eggs, you might dip them in egg whites, or to add more flavor you might use a mixture of Dijon mustard and white wine.

As you read the list of ingredients to identify those that you or your customers might deem "unhealthy," look for ways to add nutrient-rich ingredients in foods. Healthy cooking isn't just about limiting potentially harmful ingredients. To make a recipe truly healthy, you'll want to include beneficial nutrients as well.

Next, look at the technique to see if changing it will improve the recipe. Many cooking techniques are healthy, so if you cannot change an ingredient, consider whether changing the technique will help to bring a recipe into nutritionally acceptable parameters. Grilling or broiling a pork chop, for example, may allow you to omit the fat that sautéing requires, and roasting vegetables instead of steaming and then sautéing preserves nutrients and may streamline preparation.

INCREASING THE NUTRITION

Developing healthy recipes isn't just about replacing unhealthy fats with healthy ones or using fresh herbs instead of salt. The dishes you devise should supply beneficial nutrients, and they need to be tasty and flavorful as well. Here are other suggestions:

- **Build salads with dark greens.** Iceberg and Boston lettuces have their place, but are low on the list of nutritious salad greens. Darker lettuces and salad greens like romaine, spinach, and arugula contain significantly more vitamins A and C, as well as phytochemical pigments.

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- **Intensify flavors with variations on a theme.** Rather than adding a variety of seasonings to a tomato-based pasta sauce, for example, use several different tomato products, such as canned tomatoes, slow-roasted or sun-dried tomatoes, and fresh tomatoes, to create an intensely rich taste by "layering" the same ingredient. Puree smoked salmon and add to a paste that tops salmon fillets before broiling, or simmer apples in cider when making a sauce.

- **Introduce the exotic slowly**. Although most customers are willing to embrace unusual tastes, you'll have better luck incorporating them if you combine them with the familiar. An entrée of freshly caught grilled sardines might have limited appeal, but add them to a sampler plate that includes olives, marinated vegetables, a pungent cheese and a grain salad like tabbouleh and these healthy little fish might find an audience. Kale or mustard greens might be too strongly flavored for a side dish; stir them into a soup, or add them to a popular pasta dish on your menu.

- **Combine the sweet with the savory.** Don't limit fruit to your dessert menu. Toss red or black grapes into savory salads or sauté peach or nectarine slices in the pan drippings after cooking chicken breasts. Look at your sandwich menu to see if a fruit puree can replace mayonnaise as a spread, or consider adding a roast pork sandwich with apple butter and grainy mustard.

- **Go nuts**. Top mashed sweet potatoes with chopped pecans, stir walnuts into chicken salad, garnish a Mexican entrée with toasted pumpkin seeds. Serve dishes of spiced nuts at the bar.

USING STANDARD PORTIONS

Portion size is critical when trying to bring recipes into acceptable nutrition parameters, but it's often overlooked. Protein-based and fat-laden foods should often be reduced in size. You can overcome this dilemma by putting a generous assortment of properly prepared vegetables on the plate which will tip the scale in favor of good nutrition.

High-calorie, high-fat, and high-sodium ingredients, such as sour cream, butter, bacon, and guacamole, need not be totally eliminated in healthy cooking; when used in smaller portions they do not send any dish over the limits.

Restaurant patrons have come to expect enormous helpings of food at mealtime, particularly in entrées and proteins. The standard normally is a large helping of meat, poultry, or fish — and large can be anywhere from 6 to 12 ounces — with smaller portions of vegetable and starch side dishes.

Although the main point of healthy cooking is to move away from meals heavy on protein, fat, and calories and to make whole grains, legumes, fruits, and vegetables the focus of the plate, massive servings of any food should be avoided.

When designing a healthy recipe, start by paying particular attention to the sizes of meat, poultry, and fish; large amounts of these items are often responsible for pushing the dish beyond the limits of good nutrition. Generally, if the portion size of fat- and calorie-dense foods is kept to 3 to 4 ounces (raw weight), menu items will begin to fall in line. You are then free to round out the plate with more generous helpings of vegetables, whole grains, legumes, and fruits, all of which add variety, color, texture, and flavor.

One of the biggest challenges in decreasing portion size is avoiding the consumer perception of decreased value and quality. Even though many people want to eat healthier, they are still accustomed to huge servings of meat and may not

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yet be comfortable with smaller amounts. Before making adjustments to your recipes, survey your customer base to determine changes that are desired and those that will not be tolerated.

In order to prevent customers from feeling that they are somehow being cheated, there are a number of strategies you can employ. Offering two versions of the same dish, with different-sized portions (at different price points), is one method of determining interest. You're allowing customers to vote, in effect, on which portion size they prefer. After a few months, you can drop the less popular version from your menu.

Another important strategy in preserving value perception is artful presentation. Stuffing a meat, fish, of poultry item with vegetables or grains (or both) adds bulk, improves visual appeal, and increases the apparent portion size. Special knife cuts can be used to give the illusion that less is more. Cutting a salmon fillet on the bias before cooking, for instance, or thinly slicing and fanning cooked meat or poultry on the plate gives the appearance of a larger portion. Pounding or butterflying a piece of meat, fish, or poultry before cooking has the same effect. In the final presentation, height is an important element. Drawing the eye up and away from individual portions of food on the plate prevents customers from feeling that they were given a skimpy portion of meat.

While employing these techniques, it is important to incorporate whole grains and vegetables into the dish. These foods fill the plate, and create a feeling of satiety in diners. Patrons who leave feeling comfortably full are less likely to feel they were given skimpy portions.

THE IMPORTANCE OF MEASURING

Once a standard recipe is established, it is imperative that kitchen staff adhere to the amounts specified. If a nutrition claim is made about a particular dish, using standard portions ensures that the customer is actually getting the amount of nutrients referred to in the claim. For example, a pizza referred to as low-fat on the menu is not so if the pizza cook habitually uses twice as much cheese as the recipe states.

You should insist that kitchen staff weigh and measure everything. This is as important for managing costs and inventory, reducing waste, and maintaining product consistency, as it is for keeping nutrients in line.

Garnishes, flavorings, and other potentially high-fat, high-sodium ingredients should be carefully measured to keep them from upsetting the balance of flavor in a dish. Whenever practical, foods should be pre-portioned as part of the regular prep routine.

Accurate scales are a must in the nutrition-conscious kitchen. Other equipment that can be used to help control portion sizes and amounts of ingredients include ladles, scoops, molds, and pumps that dispense the same amount of product every time.

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THREE WAYS TO ADD HEALTHY RECIPES TO YOUR MENU

#1 – Use Existing Recipes

Before you spend the time, effort, and money adapting or creating recipes, review the ones you currently use. Look to see that they are in line with the standards for a healthy menu you have established for your operation. Evaluate the technique, the ingredients, and the portion size to be sure.

Grilling, broiling, roasting, poaching, steaming, stewing, and baking are all techniques that do not necessarily require additional fat during cooking. Recipes for clear soups, consommés, pilafs, and stir-fries are also normally appropriate.

Next, review the ingredients and their amounts. Whole grains, vegetables, fruits, pasta, fish, lean meats, and skinless poultry indicate a recipe that is potentially healthy. Ingredients for sauces should be low in saturated fat, salt, and refined sugar. If everything appears to be acceptable, review the portion size. Some recipes that are not initially within parameters can be brought in line by serving a smaller amount.

#2 -Modify Recipes

The most common method of developing a healthy recipe is to modify a traditional or classic recipe to reduce its calories, sodium, sugar, fats, or cholesterol. The key to successful modification is to imagine comparisons between the modified recipe and the original version. If a modified recipe cannot emulate the flavor and texture of the original but is still tasty, consider calling it by a new name and forgoing any association to the original dish.

In modifying recipes, two areas can be adjusted: techniques and ingredients, and fat is often critical in both areas. To identify recipes that are good candidates for alteration, look at the amount and purpose of fat. Recipes that rely on fat for the majority of their flavor and texture, such as deep-fried foods or sauces like hollandaise or beurre blanc, should be avoided. Those that have a moderate amount of fat, and that rely on other ingredients to contribute flavor, moisture, and structure, have potential. You may be able to use less fat if you modify the technique. Adaptations may be as simple as relying on the fat naturally present in a food when sautéing, using less fat or a healthier fat in the pan, or using a nonstick pan. Often healthy techniques can be substituted for less healthy ones. Deep-fried chicken may be "oven-fried" to obtain a similar texture with a fraction of the fat content. A game bird can be poached in water or broth rather than poêléed in a bath of butter, and so forth.

Substituting other ingredients requires a bit more thought. The basic elements that made the original dish successful can often be retained if you take an open-minded approach to solving the puzzle and use your imagination. Two considerations that should be addressed are the function of the ingredient and the flavor it provides. Ingredients that are high in fat, calories, or sodium can usually be substituted for or substantially reduced, as long as care is taken to emulate the function of the original ingredient. Heavy cream sauces and cream-style soups can be made using a velouté thickened with a modified starch rather than a roux and "creamed" with evaporated milk or low-fat yogurt. A mixture of nonfat yogurt and ricotta cheese can fill in for a traditional Bavarian cream base.

Vegetables can be enhanced with a flavorful thickened vegetable stock and fresh herbs instead of butter. You can also substitute smaller quantities of strongly flavored foods, such as extra-sharp Cheddar or Roquefort for milder Cheddars or Gorgonzola, or spicy chorizo for linguiça or Italian sausage. Try using egg whites for up to half the amount of whole eggs called for in a recipe. Cocoa powder can often substitute for chocolate, as long as a small amount of the chocolate is retained to provide the rich mouthfeel that cocoa butter imparts.

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When you find a formula that works for one recipe, apply it to similar recipes. The same changes in techniques and ingredients often work on other foods of the same type. What works for one cream soup, for example, often works for others.

#3 -Creating Original Recipes

The inspiration for a new dish can come from many sources. Perhaps a delivery brings a box of brilliantly colored, fragrant fruits that leads to a new dessert. Or maybe the memory of a dish enjoyed in another country returns when you smell a bouquet of pungent herbs. Or perhaps a new cookbook, a magazine article, or a newspaper clipping from years ago might be the impetus.

No matter what inspires you, the process of inventing a new recipe requires that you understand how ingredients, flavor dynamics, and nutrition interact. By using the freshest ingredients of the highest quality, incorporating a variety of textures, flavors, and temperatures, keeping sauces light and flavorful, and using cooking techniques that are low in fat, you can develop an idea into a wonderful addition to the healthy menu, as illustrated in the hypothetical process that follows.

Once the basics of the recipe are laid down — a dish of steamed fish with an Asianinspired sauce, for example — it is time to start putting it down on paper or plugging it into a computer. This step is where portion sizes and ingredient measurements come under their first scrutiny.

Perhaps when you first imagined the dish, you envisioned an 8-ounce portion of snapper, but when the recipe was analyzed for its nutrition content this version showed that the calorie count and sodium were unacceptably high. Reducing the portion size to 6 ounces made the calories somewhat better, but reducing it to 4 ounces allowed you a little more leeway in the side dishes you were thinking about. Replacing the tamari sauce with a reduced-sodium version and omitting the added salt in the marinade brought the sodium to a level appropriate for the menu category. When you finished making the adjustments on paper, your next step was to make a few trial dishes.

As each test recipe was prepared, you evaluated not only the nutrition but also the visual appeal, flavor, texture, and interplay of colors. When the consensus was that 4 ounces of fish did not fill the plate enough, you decided to increase the portion to 5 ounces. Finally, to keep the calories in line and to increase the eye appeal, you replaced the rice pilaf with a bed of wilted spinach and baby bok choy, and garnished with julienned carrot.

As this example demonstrates, there are no strict rules that govern the creative process. Developing a new recipe is a game of give and take to reach a balance. In the same way that the inspiration from a dish can come from any of a thousand sources, so the evolution of the recipe might follow a thousand paths.

MENU DEVELOPMENT

Before you can develop healthy recipes, you need to create a menu for your operation. The number and type of healthy offerings will depend on several interrelated factors that center around the type of establishment and your clientele.

Chefs today work in a variety of non-restaurant venues. You may work at a spa, on a cruise ship, at a resort hotel, as a caterer. You may be the director of food service at a school, office complex, hospital, residential facility, or chain of upscale supermarkets offering home-meal replacements. Even restaurants can vary widely: Do you work at a small, casual bistro or for a large chain of family restaurants?

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Where you work determines who your clientele is and the type of food they will expect. Factors such as the number of meals you prepare in a shift, the availability of ingredients, and the amount of storage and equipment you have will affect your menu.

The menu is the medium through which your customers learn what your kitchen is able to offer. Making good nutrition the focus of the menu or offering health-oriented dishes in addition to the more usual fare provides a new level of information to your customers. A menu that places an emphasis on nutrition, no matter how small, tells your customers that your establishment cares about offering them choices to meet their needs.

Sometimes customers' needs may not be the driving force behind creating a healthy menu. Knowing the basics of good nutrition and having the desire to provide foods that have healthful components (that are low in trans fats, high in antioxidants and fiber) may be all the impetus you need.

Knowing Your Customers

The menu you develop will depend in large part on your market. Are your customers looking to grab a quick sandwich, to impress a date or a client, or to recover from surgery so they can go home? An establishment that caters to executives on expense accounts has a different clientele, with substantially different needs and expectations, than a highschool cafeteria or a hospital.

Your menu will also depend on logistics. The availability and cost of ingredients, the price you are able to charge customers, and your facilities are factors that affect what you can offer. Chefs who are responsible for all of a person's meals have a greater obligation to provide healthy options than chefs whose patrons are infrequent guests.

Restaurants run the gamut from fast food to haute cuisine, from ten top independentlyowned stores to international chains with vast resources. Restaurants may well have the most flexibility in determining a menu. Because a chef really has no control over the other food choices a customer makes in a day, he or she doesn't need to be overly worried with providing balanced nutrition. You should, of course, offer nutritious dishes, but you have no way of knowing how they will fit into a customer's diet. It is the customer's responsibility to make smart choices. You know what your facilities can handle and how much storage you have, and you can plan your purchases and your menu, accordingly.

A caterer, particularly one who specializes in preparing hot food on location, faces much greater limits. Turning out dozens or hundreds of dishes in a matter of minutes requires a great deal of organization. You may find yourself working under a canopy in a parking lot or in an unfamiliar kitchen. Space and site issues, as well as flavor and nutrition, must be kept in mind when planning a menu with a client.

Chefs who work at institutions have a greater responsibility to keep nutrients in mind, and may face the biggest challenges. The director of food service at a hospital or school will most likely work with a dietician to ensure that menus and recipes fit specific parameters to meet patrons' needs. A sixty-five–year-old quadruple-bypass patient will have distinctly different nutrition needs and food preferences from a child whose tonsils were removed. Sick people often have limited appetites, so creating foods that will tempt them to eat and will help them to heal is the primary goal. What is considered "tempting," however, may vary considerably by age, as well as by ethnicity or cultural background. An elderly Chinese immigrant may ignore mashed potatoes, polenta, or cream of wheat, but might welcome a rice dish such as congee.

Cost can be a critical factor at institutions. The chef at a private facility may have a much larger budget than the director of food service for a public school district who charges $2 for a meal. In addition, school lunch programs serve a customer

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base with a broad range of caloric and nutrient requirements. A sixteen-year-old boy needs on average about 3,000 calories a day, about 25 percent more than a girl of the same age, and almost twice the amount that a first-grader does. Menus with a variety of portion sizes, as well as with options for side dishes, make sense. Appealing choices mean less waste.

The chef at a spa, hotel, or on a cruise ship faces some of the responsibility that an institutional chef does, some of the limitations that a caterer does, and some of the flexibility that a restaurant chef does. When consumers have no choice but to eat your food, particularly for several consecutive meals, you must offer an array of healthy choices. The menu at a spa will reflect the philosophy and mission of the facility; meals may offer dishes at specific calorie ranges or with a limited number of fat grams. A cruise ship might be able to replenish supplies in different ports, but if this is not an option, menus must be designed that take into account storage facilities as well as keeping properties of foods. Guests whose meals are included in their fees expect quality and variety, and they will often expect a high level of service and presentation as well.

Home-meal replacement is one of the fastest-growing segments of the food industry. People who don't have time to cook also might not have time to dine in restaurants where they must wait for their food to be prepared, but they might not want to eat take-out Chinese or pizza or drive-through fast food every night. Freshly prepared foods, whether from a favorite restaurant or a local supermarket, that can be ordered ahead and eaten at home are finding a wide audience. Allowing customers to build their meals by choosing from a variety of sides ensures that their nutrition needs will be met.

All chefs should keep in mind seasonality and availability of foods. Thanks to faster shipping, virtually every food is available year-round, all over the country. But just because you can get tomatoes in January or apricots in October or apples in April doesn't mean these foods are at their best throughout the year; nor does it mean that they'll be available at the best prices.

Instead, change your menus to reflect the bounty of each season. When local tomatoes are at their peak, create a BLT that reflects your establishment's sensibility: arugula, pancetta, and ciabatta for an Italian restaurant, perhaps. Soft-shell crabs, shad roe, and wild salmon are in season just briefly; it may be easier to add them to your list of specials than your regular menu.

Even minor modifications can reflect seasonality. Adding asparagus to sautéed mixed vegetables or fresh garden peas to a pasta dish can herald spring. A spinach and goat cheese salad might use blood oranges and olives in the winter, berries and pine nuts in the spring, peaches in the summer, and apples or pears and walnuts in autumn.

Although you might not want to remove signature dishes, consider changing your menu periodically to keep your staff and your customers from getting complacent or bored.

Knowing Your Customers' Needs

When asked, most people will say they want to eat more healthfully. They know that whole grains, lean meats and poultry, fish, and vegetables are good for them, but too often they perceive these foods to be unappealing. Healthy eating is associated with deprivation and food that just doesn't taste "right." No matter what people say, if healthy food doesn't taste good they won't eat it. At the same time, if your menu offers only high-calorie foods that are high in saturated fats and refined carbohydrates, your customers may be resentful at the lack of healthy choices.

The challenge for chefs is to build a menu that incorporates healthy options that look and taste tempting. You cannot control what your customers order, and you may not have any idea what other foods they have eaten that day, but you

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can offer options that will provide a nutritious meal. Emphasizing the positive — what you do offer — is as important as focusing on what you limit. Some people will interpret a phrase like "low-fat" to mean bland. Rather than highlighting the lack of fat in your recipes, you may wish to spotlight the ingredients and techniques that indicate flavor and nutrition. Instead of positioning foods as a "healthy" option, simply make them available. Add whole-grain breads to your bread baskets, or allow guests to choose white or brown rice as a side dish.

People who are interested in healthy eating usually are able to identify menu items that meet their needs. Thorough descriptions of each dish, including words that describe the side dishes and ingredients in a sauce or coating, will help them spot acceptable choices. Cooking terms like "grilled" or "broiled" let consumers know that a dish is likely to be much lower in fat than a "deep-fried" or "crispy" food. Meat eaters will appreciate knowing whether the steak entrée features a filet, a sirloin, or a porterhouse, and whether the steak is six or sixteen ounces. Even a dessert menu might highlight a flavorful, nutrient-rich triple-berry sauce rather than caramel, crème anglaise, or whipped cream.

A well thought out menu will include a balance of salads (including entrée salads) and pastas, fish, poultry, and vegetarian entrées as well as meats. Allowing guests to order a half portion or to split an entrée gives those with smaller appetites the opportunity to limit portions. Including a variety of appetizers, especially choices that are not fried or high in refined carbohydrates, enables patrons to order items from your starter menu as their main course.

Permitting substitutions of side dishes indicates that you are willing to accommodate guests' nutrition needs and preferences. Although excessive substitutions and special orders can wreak havoc in a busy kitchen and may throw off inventory, ultimately this is information a chef needs to succeed.

Developing a menu and the accompanying recipes is often a work in progress. As each change is introduced, you need to track its reception among your patrons and your staff. If any refinements are needed, they can be made based upon feedback.

Objectives in Creating a Healthy Menu

It can be confusing to keep nutrients in mind while developing menus, but it is not necessary to focus too narrowly on this. Chefs who need to be sure that their menus contain adequate amounts of nutrients in proper balance often work with a dietician to develop menus that are "what the doctor ordered."

If your menu includes recipes with any sort of a health or nutrient claim, you must ensure that the recipes meet specific requirements. Analyzing recipes for their nutrient content will help you to keep on track, and to identify where you may need to adapt a cooking technique, choose a different ingredient or two, reduce the portion size, or even change how the dish is presented.

Healthy recipes should follow certain guidelines. The number of calories and nutrients they contain will vary depending on whether they are breakfast, lunch, or dinner items, as well as on any parameters you have established that define "healthy." In the United States, most people also eat far too many calories in a day: Our diets are too high in protein, refined carbohydrates, and saturated and trans fats, and too low in complex carbohydrates and monounsaturated fats. We typically eat a breakfast that is heavy in carbohydrates. Cereal and milk, toast with jam, bagels, pancakes with syrup, and even fresh fruit provide little protein and fat, and might not provide sufficient amounts of complex carbohydrates. Lunches are often too skimpy or too large. A cup of soup or a candy bar from the vending machine won't provide enough nutrients to keep a person going, but a large, heavy lunch can induce lethargy and a mid-afternoon slump. Sugary or salty snacks and sweetened or caffeinated beverages might be chosen to boost energy or fill an empty stomach with

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equally empty calories. Dinners are usually built around protein, and most of us consider the proper balance to be a piece of meat that covers half the plate, with the remaining half divided between a starchy side and vegetables.

Because chefs are often at the vanguard of culinary trends, you have the opportunity to influence changes in how people in the United State eat. As a chef, you probably look to other cultures and cuisines for inspiration for flavors and dishes, but consider as well how people in other countries eat. In India, for example, thali is a meal without a main course. Meat, legumes, vegetables, rice or bread, salads, and relishes are served in comparable amounts. You may not want to add Indian foods to your menu, but you can certainly borrow this concept in rethinking the balance on a dinner plate.

Your customers might not be ready for congee or fish soup for breakfast, but perhaps your breakfast or dessert menu might feature blini — made with buckwheat flour, they are higher in fiber than regular pancakes or crêpes. Add kasha to your menu, either as a side dish or mixed into oats as a breakfast food. Rather than a high-fat eggs Benedict or an ersatz version with low-fat hollandaise, you might offer huevos rancheros topped with a zesty salsa or a Spanish frittata-like tortilla.

If you want to have a tuna salad sandwich on your lunch menu, skip the mayo-heavy version and consider a niçoise-inspired salad (minus the potatoes and green beans) or pan bagnat. Consider making a whole-grain bread your house bread (but have other options available) for sandwiches and in your breadbaskets.

Look for ways to add nuts to your menu. Can you replace a butter- or cream-based sauce with one like skordalia or romesco? Perhaps you could use finely ground almonds in a cake batter, or crushed pecans to crust a fish fillet.

If you change your menu often, or if you add dishes that might be unfamiliar to your customers, take a cue from the tapas bars of Spain and add a small-plate option to your menu. Guests will be able to try a variety of dishes and share them among a table, or they can build a meal by ordering a small plate or two with a salad or soup.

When developing a healthy menu, keep flavor in the front of your mind and concentrate on choosing healthy ingredients in appropriate amounts. Focusing on what you can use and what your menu offers is every bit as important as paying attention to what you should limit.

MENU DEVELOPMENT FOR SPECIAL NEEDS

Not only do dietary and cultural preferences come into play with menu development, but different segments of the population have different nutrient needs as well. "Healthy" can vary somewhat depending on the ages, gender, and lifestyle of your customers.

As people grow older, their nutrition requirements change. Chronic health conditions like type II diabetes or heart disease often appear as people age. Metabolic rates slow down and calorie needs decrease. Some older people might have adventuresome palates and be willing to try healthy dishes that include unusual flavors or textures. Others will appreciate small portions and healthier versions of traditional favorites.

Children are often forgotten when it comes to providing healthy menu choices. Standard children's menus traditionally offer little more than hot dogs, grilled cheese sandwiches, fried chicken fingers, and French fries. Although children are not known for their willingness to experiment or their passion for bold flavors, familiar foods like pizza, pasta, and sandwiches can be reworked to be kid-friendly and nutrient-rich. Finger foods like grapes, berries, and apple wedges can be dipped into sweetened yogurt sauces for sides or desserts.

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Gender is another factor to take into consideration. Overall, both men and women are aware of the negative impact of trans fats and saturated fats and the positive attributes of antioxidants, omega-3 fatty acids, and whole grains. Women are typically more concerned about reducing their consumption of calories and fat. They may ask for grilled foods or salads with sauces and dressings on the side. If your salads feature dressings that use less oil, consider pointing this out. Because women tend to be smaller than men, they typically eat less. Smaller portions, tasting menus, or samplers are likely to appeal.

Men often show more interest in low-cholesterol and -sodium foods. If your customers tend to be a meat-and-potatoes crowd, offer minor variations on this theme. Highlight leaner cuts of beef on your menu — or replace the beef with a meaty tuna steak or duck breast. Use sweet potatoes and white potatoes in an au gratin side dish, and modify the sauce to include low-fat dairy. Keep portion sizes of proteins to a moderate size, but serve larger helpings of vegetables.

Lifestyle attributes also affect a customer's level of interest in nutrition when dining out. When restaurant meals are reserved for celebrations, customers are more likely to splurge on rich foods; the more often people eat out, the more interested they usually are in healthy menu choices. Businesspeople, families where both parents work, and senior citizens tend to dine in restaurants frequently. Family-style restaurants and establishments that serve a business clientele will want to offer a variety of healthy options.

As people in the United States cook less and less often, it becomes increasingly important for restaurants and other food service providers to offer nutritious options. People in this country are eating more restaurant meals — in 2005, only 58 percent of meals were prepared at home; the typical individual ate eighty meals in restaurants and nearly sixty meals as carryout — and smaller portions and healthy choices are big concerns.

VEGETARIAN MENUS

Lifestyle can also include vegetarianism. Many meat-eaters will look for vegetarian dishes; an interest in ethnic cuisines based on plant foods and the perception that vegetarian dishes are healthier than traditional meat-based proteins has led to their wide acceptance. Chefs can no longer afford to add a brown rice and tofu vegetarian plate to their menus as an afterthought — and the vast majority of chefs are not interested in doing so. Plant-based dishes now often show the same level of attention given to other menu options.

Developing a vegetable-based menu, or even a few menu items, means more than finding something to replace the meat in a traditional dish or offering a sampler composed of all the side dishes from meat-based entrées. Creativity is paramount here, and the options are limitless. Vegetable-based options can and should be offered in every menu category, but care should be taken not to repeat ingredients. A diner who would like to order several courses won't be happy if every dish contains wild mushrooms.

When designing vegetable-based dishes, the concept of incorporating a variety of foods becomes crucial for both sound nutrition and aesthetic appeal. As with side dishes, vegetarian entrées need to be visualized as a whole to make sure that all of the items are integrated and harmonious.

One of the biggest challenges in creating this type of cuisine is in compensating for the loss of the savory flavors that meats, poultry, and fish provide. Care should be taken to avoid relying heavily on high-fat dairy products and high-sodium ingredients. Instead, ingredients with complex flavors, such as dried chiles or mushrooms and roasted garlic or peppers, can be used. In order to make the dish satisfying and filling, whole grains and legumes should make up the bulk of the calories.

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When you devise a vegetarian menu, look to ethnic cuisines that have traditionally relied on plant-based foods for creative inspiration. In addition to the classic dishes they offer, their characteristic spice blends and flavor principles can be adapted for use in original recipes. Look also to dishes on your menu that can be modified; a popular pasta dish, for example, could be offered with or without chicken.

Plant-based cuisine need not be limited to plant foods. Many of the diners who order vegetarian dishes are not traditional vegetarians. They may choose a vegetable-based dish because of the health benefits associated with it or because it sounds delicious. If not all of your customers are strict vegetarians who avoid animal-based foods for ethical or religious reasons, you may have the option of including small amounts of animal foods, such as a bit of bacon in a salad or meat stock in soup, to enhance the flavor profile of a dish.

While there are numerous kinds of vegetarians, the three types that you need to be most concerned with are vegans, lacto vegetarians, and lacto-ovo vegetarians. Vegans adhere to the strictest diets. They do not eat any foods of animal origins, preferring to base their diets exclusively on vegetables, fruits, grains, nuts, and legumes. Lacto vegetarians consume the same foods as vegans, plus dairy products. Lacto-ovo vegetarians eat plant foods, dairy foods, and eggs.

Finally, be sure that any dish billed as vegetarian truly qualifies as such. Some foods that seem vegetarian may contain ingredients of hidden animal origin. An obvious choice would be a vegetable soup made with chicken stock. More difficult to identify are ingredients that people often overlook as being animal products. A terrine of grilled vegetables held together with gelatin cannot be considered vegetarian, and anything with honey is off-limits for vegans. Other ingredients to be alert for include eggs in pasta or noodles and Worcestershire sauce, which includes anchovies. Any dish identified as vegetarian should be vigilantly reviewed for any hidden animal foods used in its preparation.

VEGETARIAN MENUS

Proper staff training and customer communication techniques are essential in food service operations. In an establishment where the attempt is made to provide customers with healthy food preparations, they become doubly important.

Well-trained servers are more than just a great sales force; they are also a medium for communicating information about the ingredients and techniques used in the kitchen. Every server should be educated about healthy preparation techniques and menu items as well as how to discuss these subjects with the guest. The kitchen staff should be equally well trained on the nutrition goals of the establishment and the methods used to achieve them.

Many food service operations also provide nutrition information directly to their customers to help guide them in their selections. In addition to discussing staff training, this chapter highlights some of the ways in which you can communicate nutrition information to your customers.

The Service Staff

Research has shown that describing foods as "low fat," "low calorie," and "healthy" often creates a negative perception and may deter customers from ordering such items. This unfavorable association occurs because these terms focus attention on the absence of something, and customers may associate this absence with a lack of flavor as well.

Because most health-conscious customers are acquainted with the cooking techniques and ingredients that are likely to be healthy, it is often better to teach the service staff to let the foods speak for themselves. For instance, instead of telling a customer who inquires about healthy menu choices that the grilled chicken dish is low in fat and sodium, the server

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can describe the dish as a boneless, skinless chicken breast marinated in Indian-inspired spices and yogurt before being cooked over a wood-fired grill. In this way, the server actively emphasizes the positive flavor attributes of the dish while implying that because the chicken is a skinless breast and is grilled, it is a healthy choice. Dining room staff should be aware of the location of more specific information on the nutrition content of menu items, in case a customer requests it.

Servers also need to be trained to handle special requests. You should inform your staff about which menu items can be modified and what sorts of adjustments can be made. It is advisable to make the staff aware of which changes are simple to make and which take time. Because it is impossible to anticipate every request, servers should be told to check with you or the person in charge of the kitchen before making promises concerning new requests.

If a customer has certain food preferences, allergies, or dietary restrictions, the server should be taught to gather as much information as possible about what can and can't be eaten. The server should then describe the ingredients in menu selections that may fit the customer's needs and allow the customer to choose. If the server is unsure about whether or not certain ingredients are present in a dish, under no circumstances should he or she ever guess. Taking the extra time to check with the kitchen is not nearly as inconvenient as a lawsuit. In the case that a special dish needs to be created for a customer, the server should be aware that it is just as important to the chef to know what a person can eat as it is to know what he or she cannot.

Once the initial training is complete, steps should be taken to keep the communication channel open between the kitchen and the dining room and to make it a two-way street. Hold pre-service meetings as often as necessary to brief the servers on specials and anything else they should know about. Servers should be encouraged to talk to you about their observations in the dining room, particularly concerning customer feedback on menu items.

The Kitchen Staff

Proper technique in the kitchen is paramount in an operation that seeks to produce healthy meals. The kitchen staff should be trained in basic nutrition and healthy cooking principles. They should be provided with standardized recipes, and a system for the careful trimming and portioning of all foods should be established to ensure that the customers are getting what they ordered. After all, the intention to create healthy meals means nothing if your line cooks are still using big ladles of oil or giant hunks of butter to grease their sauté pans. It should be emphasized that fat and salt are not the only sources of flavor and that delicious foods can be made easily with controlled amounts of these ingredients.

The kitchen staff should also be trained how to properly handle questions from customers concerning the presence or absence of an ingredient in a particular dish. Although the kitchen staff is aware of the foods that are used in a dish, they should be taught to consider whether or not any prepared products are part of the ingredients. Many prepared products, such as Worcestershire sauce and soup bases, contain ingredients that some customers wish to avoid, but they are often overlooked. If kitchen staff members are unsure of the ingredients in a prepared product, they should always check the label.

Proper training carries with it an advantage beyond superior service and product. Using time and resources to educate your staff usually has the effect of making them feel valuable, resulting in improved productivity and reduced employee turnover.

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The Customer

When composing the language of a new menu, every chef is confronted with the dilemma of how much or how little information about the healthfulness of the food to relay to the customer, and what form this communication should take. Individual operators need to choose the method that is most appropriate to the establishment they are running and to their customer base.

Because this decision is dependent upon the type of establishment and the clientele, no attempt is made here to spell out every option. Instead, what follows is a summary of types of food service operations and suggestions for appropriately communicating health and nutrition information to the customer.

Fine Dining Establishments, Bistros, and Executive Dining

Restaurants that cater to a clientele composed mainly of businesspeople and professionals can be relatively certain that their guests are likely to be nutritionally aware. These are people who read about food and nutrition, join health clubs, and, at the same time, enjoy fine dining. While this type of clientele is usually receptive to menu options that are associated with nutrition and health claims, using obvious language like "low in saturated fat" may not be desirable. The following options may be more appropriate in such a situation.

- **Server training:** Teach your dining room sales force to communicate the health and nutrition attributes of certain items to customers.
- **Standard menu language:** Many customers are generally aware of nutrition issues. Using descriptive language like "grilled" or "vegetable coulis" is often enough to tip them off as to the healthfulness of an item.
- **Icons:** Small symbols that indicate a particular ingredient, health, or nutrition attribute are appropriate in some situations. If they are used, their meaning should be clearly explained in the menu. If an icon refers to a health or nutrition claim, written substantiation must be available upon request. A caveat: icons used to indicate "healthy" selections may suggest negative connotations to customers who associate healthy foods with a lack of flavor.
- **Referrals:** A phrase at the bottom of the menu indicating that nutrition information is available on request is a subtle way to indicate that the menu includes healthy selections.
- **Healthy cooking demonstrations:** Cooking demonstrations are a great way to encourage people to try your healthy selections and generally promote the operation.

Family-style Restaurants

Family-style restaurants cater to people who are looking for affordable, wholesome, familiar foods. They often offer a wide variety of menu choices, and chances are they serve some customers who are interested in healthy fare. The informal style of this type of restaurant suggests a more direct approach to nutrition communication.

- **Special menu sections:** Grouping healthy choices into their own menu category makes it easy for customers to identify these selections.
- **Placemats:** Paper placemats can be used as a vehicle for promoting and listing nutrition and health information about certain menu items.

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- **The direct approach:** Listing nutrition facts and health claims right on the menu may be an appropriate choice in this type of setting.
- **Pamphlets:** Prominently displayed pamphlets are a great way to communicate the nutrition information for all or some of the menu items.

Home Meal Replacements

Home meal replacement is one of the fastest-growing trends in the food service industry. It's a sign of the times; people seem to have less leisure time than ever before. Rather than spend those precious few hours on grocery shopping and preparing meals, they often prefer to purchase carryout home-style meals. Because these meals are meant to replace home-cooked foods, they are particularly good candidates for nutrition labeling.

- **Pamphlets:** As in a family-style operation, pamphlets make a visible statement that your establishment cares about providing healthful meals for its customers.
- **Signage:** Menu boards and special posters can be used to indicate which selections are healthy and why.
- **Labels:** On pre-packaged foods, nutrition facts labels work very well. Nutrition software packages are available that analyze recipes and create nutrition labels in the FDA format according to your specifications. If these are used, care should be taken to ensure that the portion sizes in the package match the size given on the label.

Spa and Health Resorts

People who patronize spas and health resorts are the most likely of all to be interested in the nutritional content of the foods they are eating. In this type of setting, the most obvious of approaches are suitable.

- **Special menus:** Menus designed to provide a set number of calories and nutrients for each meal period provide the guests with an understanding of healthy ingredients, cooking techniques, and portion sizes. Complete nutrient information can be included on the menu for each course or item, and for the entire meal.
- **Daily meal plans:** These provide the guests with guidelines for making healthy eating choices throughout the day.
- **Cooking demonstrations:** Most guests are interested in learning how to cook healthy meals in their own homes.

Cafeterias, Schools, Hospitals, and Other Institutions

These types of operations serve a diverse clientele in a very informal setting. The selfservice approach to the menu offerings suggests a similar treatment of nutrition and health communication.

- **Kiosks:** Although expensive, kiosks containing a self-serve computer database of nutrition information are highly visible and attract the curious.
- **Nutrition binder:** A loose-leaf binder containing the nutrition information is a much cheaper alternative to a computerized system and is also simple to change or update.

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- **Icons:** Symbols denoting ingredient, health, or nutrition attributes are particularly appropriate for hospitals and other health care facilities. Their meaning must be clearly explained and the nutrition documentation must be readily available to substantiate claims.
- **Signage:** Small signs next to certain dishes on the serving line work well in a cafeteria setting.
- **Cooking classes and demonstrations:** These are a great way to educate patients and staff in hospitals, and they are wonderful for schoolchildren, who love to see and be involved.

Fast Food

Although fast food restaurants are not particularly known for their nutritious selections, many are making an effort to offer more of these options. In the public interest, several fast food chains make nutrition information on all their menu items available to their customers, regardless of their healthy attributes.

- **Posters:** This is an inexpensive way to prominently display nutrition information.
- **Pamphlets:** These can contain a smaller version of a nutrition poster for customers to take home with their carry-out meals.
- **Web site:** Several of the larger fast food chains maintain Web sites that include complete information on nutrition and ingredients.

COOKING WITH LESS FATS

Fats are not equal: Some types are much more desirable than others when creating nutrient-conscious menus. You may be able to improve your recipes by choosing the right type of fat, but sometimes the solution is not as straightforward.

Fat is an essential nutrient, and it performs many important culinary functions. It contributes to the flavor and texture of foods on its own, and it blends the flavors of other ingredients and foods. Nutrients and flavor compounds that are fat-soluble are hidden in foods that are prepared or served without fat. Fat helps to create a crisp texture when used in fried and sautéed foods, helps to tenderize and create a flaky or crumbly texture in baked goods, and helps to retain moisture. It contributes to feelings of satiety and can actually help people to eat less.

Reducing Fat

Reducing fat is one of the most intriguing challenges facing a chef. Although many people want to eat less fat, they are usually unwilling to sacrifice flavor or texture to do so.

The first step in creating low-fat recipes or reducing the fat content of existing recipes is to evaluate whether the recipe can be made with less fat. Sometimes this is easy. Rather than toss vegetables or top a stack of waffles with a pat of butter, another ingredient can be used. Flavored olive oil or a starch-thickened sauce may complement the vegetables, and a fruit puree adds flavor to breakfast cakes. Sometimes, though, the fat contributes to the finished product in a more complicated manner. The butter in a cake batter, for example, affects the leavening, color, and texture of the finished item.

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After the function of the fat is identified, you can figure out your strategy for improving the fat content of a dish. You can use a leaner cut of meat or poultry, or replace a high-fat meat with a meaty fish steak. You can replace meat in a stew with legumes or vegetables. If you are roasting poultry, leave the skin on to help retain moisture; tuck herbs or other aromatics under the skin to introduce another flavor element. Just be sure to remove the skin before serving.

Choose your saturated fats wisely. Bacon provides a unique flavor and can be used as a condiment in some dishes. Render it first and pour off most of the fat before proceeding with the recipe to minimize the amount of saturated fat while taking advantage of its flavor.

You also may have the option to remove unnecessary fat throughout the cooking process. Fat drips off grilled and broiled meats, and is not used in pan sauces. Soups, stews, and braises can be refrigerated overnight. The fat will rise to the top and solidify, making it easy to remove.

Many low-fat and fat-free ingredients can be used to replace fat. You'll have no trouble finding high-quality reduced-fat dairy products. Some nonfat dairy products may not be suitable for cooking and baking because they tend to break down when subjected to high heat. Others, however, can be used with great success. The cream cheese in a cheesecake can be replaced with a combination of reduced-fat cream cheese; nonfat yogurt drained of its whey, and pureed low-fat cottage and ricotta cheeses. Evaporated skim milk can be used in place of cream in many dishes. In recipes that call for eggs, several of the egg yolks can often be omitted without anyone noticing.

Reduced-fat dairy foods may curdle because they often lack sufficient fat to inhibit protein coagulation. To avoid this, add the reduced-fat product at the last possible minute and use gentle heat. Or, try mixing a small amount of starch, such as cornstarch or flour, into the dairy product. The starch will swell and block the proteins from coagulating in much the same way that fat would.

The fat in a cream soup can be reduced in a variety of ways. Rather than use a roux to thicken the broth, puree vegetables or starchy ingredients such as potatoes, rice, or legumes. These can also be used in many classic sauces. Gravy, traditionally thickened with a roux, can be made with jus lié. Roasted, braised, fresh, or dried fruits and vegetables can be used in coulis, relishes, and chutneys to give a dish a completely different flavor profile.

Replacing fat in baked goods presents greater challenges because of the complex physical and chemical changes that take place during the baking process. Using cooking spray, a silicone baking mat, or parchment paper to line a pan rather than butter, oil, or shortening reduces the fat somewhat. When replacing the fat in batters and doughs, it is doubly important to consider the function of fat. Fruit purees like applesauce, mashed bananas, lekvar (prune puree), or other fruits with high pectin and sugar levels can be used to replace up to 75 percent of the fat in some recipes. Meringues can be used to provide volume in cake and soufflé batters, and when a cooked meringue is folded with a small amount of whipped heavy cream, the result is a good substitute for full-fat whipped cream. Buttermilk is naturally low in fat; it can be used in lieu of milk or cream in many baking recipes. It adds a pleasant tang to the finished dish, and its high acidity helps to leaven and to create a more tender product.

Equipping the Low-Fat Kitchen

Although you don't need special equipment for low-fat cooking, having some items on hand can make it much simpler. Nonstick pans have become much more durable in recent years and are appropriate for professional kitchens. Well-seasoned cast-iron is also useful. Both types of cookware prevent foods from sticking and encourage browning. As long as these pans are cleaned and stored properly, they will give you years of use.

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Defatting pitchers can be used to remove fat from small amounts of liquid. These have spouts at the bottom that allow the liquid to be poured out when the fat has risen to the top. Defatting ladles can be used to remove fat from large amounts of liquid and are easier to use than regular ladles, which require a very steady hand. Defatting ladles have a raised rim above small slots. The fat flows through the slots and is collected in the bowl of the ladle.

The new silicone bake mats are handy for baking. They are nonstick and heat resistant, and can be used to line sheet pans. Parchment serves a similar function, though it is not as effective.

COOKING WITH LESS SALT

Salt does more than add saltiness to foods. It intensifies the other flavors in a dish, which is why a small amount is often added to desserts and baked goods.

Improperly seasoned foods taste bland and unappealing, but under seasoning foods in the kitchen so customers can add it at the table is unwise. Cooked foods often require more salt to achieve the same amount of flavor than if they had been salted throughout the cooking process. In addition, the majority of the sodium we consume is in processed foods, such as canned goods and snack items, not from salt added before, during, or after cooking.

It's possible to create flavorful dishes without adding a lot of salt or using high-sodium ingredients. Aromatic ingredients such as onions, garlic, shallots, fresh ginger, and scallions are fundamental. They often go into the pot first so their flavors and aromas can infuse everything else in the dish. Look to cuisines from other countries for characteristic flavor profiles that may complement the recipe you are making. Greek cuisine, for example, often uses olive oil, lemon, cinnamon, tomato, and oregano; Asian dishes might begin with ginger, garlic, or scallion. Latin American cooking often uses chiles, lime, and cilantro to build flavor.

Herbs and spices are essential to healthy cooking. Fresh herbs in particular can lift the flavor of any food. Choose those that have intense or unique flavors, such as rosemary and saffron, for the most impact, but add them sparingly so they do not overwhelm the other flavors.

Chiles add a pleasant heat and a piquant zest to foods. Smoked, dried, and fresh chiles are widely available in an array of heat levels.

Pungent ingredients can add bold flavors: Mustard seeds and dry mustard, horseradish, tamarind pods, and wasabi provide a noticeable kick. Soy sauce and fish sauce, Worcestershire sauce, and pastes like tapenade can add a depth of flavor beyond mere saltiness. Be sure to check labels on prepared varieties of these ingredients and avoid those with extremely high sodium levels.

The bright, sharp flavors of acidic foods can often reduce the need for salt. Citrus and flavored vinegars can give recipes a refreshing taste without affecting their sodium content.

By combining and contrasting spices, herbs, and other distinctive flavoring agents, you can moderate sodium levels while enhancing the flavors of the main ingredients.

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COOKING WITH LESS SUGAR

Humans are born with a preference for sweet foods, which can make it difficult to limit the use of refined sugars and to resist desserts. Providing your guests with the option to choose foods that taste delicious but do not contain excessive amounts of sugar is a hallmark of healthy cooking.

Before you turn to refined sugars, try to capitalize on the natural sugars present in many foods. Fruits are a source of sugar, but they also are packed with nutrients. Combining several fruits, or combining the same fruit in different forms (fresh, dried, cooked, or pureed) expands the flavor profile of a dessert.

Caramelizing foods enhances their natural sugars. Cooking foods using a dry-heat method browns them, creating a deep, rich, complex flavor.

Sweeteners other than sugar add flavors beyond just sweetness. Consider how different gingerbread would taste if it were sweetened with maple syrup rather than molasses. Honey often has a flavor that hints of the flower from which it originates; sage and eucalyptus honey are rather bold and somewhat resinous, while orange blossom honey is sweetly citrusy. Like molasses, honey can be used in sweet and savory recipes.

Adding Complexity to Carbohydrates

There's more to cooking with less sugar than simply using less sweet stuff. Refined grains like white rice and pasta, and starchy vegetables like white potatoes, have an effect on blood sugar that's almost as dramatic as cake or cookies.

Adding whole grains is the obvious solution, but customers may resist unfamiliar flavors and textures. Farro, wheat berries, amaranth, and wild rice are high in nutrients and flavor, but less adventurous diners may be disinclined to try them and those who do sample them may find their chewier textures and stronger flavors off-putting. You can make these unusual grains more palatable by combining them with familiar grains. Pilafs made of barley and wheat berries, of bulgur and amaranth, or of a blend of rices might find a more receptive audience.

Think of ways to combine unfamiliar and familiar vegetables, too. White potatoes have some nutrients, but they pale in comparison to other root vegetables. Pureeing turnips or sweet potatoes and adding to mashed potatoes boosts nutrition. Stirring cooked greens, toasted nuts, or fruit into a grain dish expands its flavor profile and it adds texture and nutrition.

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BROCCOLI RABE WITH GARLIC AND HOT CRUSHED PEPPER

Yield: 2 Quarts or 10 Servings

Ingredients	Amounts
Pancetta, julienned	2 wt. oz.
Onions, diced	12 wt. oz.
Garlic, minced	3 Tbsp.
Broccoli rabe, chopped	2 lb.
Thyme, chopped	1 Tbsp.
Red pepper flakes	1 Tbsp.
Chicken veloute	12 fl. oz.
Chicken stock	1 ½ pt.

Method

1. Render the pancetta in a preheated, large sauté pan. Add the onions and garlic and sweat until the onions are translucent.
2. Add the broccoli rabe, thyme, and red pepper flakes. Sauté until the broccoli rabe is tender.
3. Combine the velouté and stock. Stir into the broccoli rabe and reduce to a sauce consistency. Season with the lemon juice.

Per Serving

118 calories, 5 g fat, 15 g total carbohydrate, 6 g protein, 248 mg sodium, 6 g cholesterol

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CHICKEN STOCK

Yield: 1 Gallon

Ingredients	Amounts
Chicken bones, 3-inch lengths	8 lb.
Cold water	6 qt.
Mirepoix	
Onion, rough cut	8 wt. oz.
Carrots, rough cut	4 wt. oz.
Celery, rough cut	4 wt. oz.
Sachet d'épices	1 ea.

Method

1. Rinse the bones with cold water.
2. In a large stock pot, combine the bones with the water. Simmer slowly for 5 hours, skimming the surface when necessary.
3. Add the mirepoix and sachet and simmer an additional hour.
4. Strain, cool, and store.

Per Serving

56 calories, 2 g fat, 4 g total carbohydrate, 4 g protein, 201 mg sodium, 7 g cholesterol

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VELOUTÉ-STYLE SAUCE/WHITE SAUCE

Yield: 2 ½ Pints, 20 2-oz Servings

Ingredients	Amounts
Arrowroot	1 ½ wt. oz.
White stock	1 qt.
Evaporated skim milk	8 fl. oz.
Salt	¼ tsp.
Ground white pepper	¼ tsp.

Method

1. Combine the arrowroot with enough stock to form a paste. Bring the remaining stock to a boil in a medium sauce pot.
2. Add the arrowroot mixture and the evaporated milk to the boiling stock. Stir constantly until the sauce has thickened.
3. Season the sauce with salt and pepper.

Per Serving

29 calories, 1 g fat, 4 g total carbohydrate, 2 g protein, 84 mg sodium, 2 g cholesterol

Variation

Béchamel-style Sauce - Replace the stock with an equal amount of skim milk. Simmer gently; do not allow the milk to come to a full boil.

Per Serving

34 calories, 0 g fat, 6 g total carbohydrate, 3 g protein, 69 mg sodium, 1 g cholesterol

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BROILED LAMB CHOPS WITH CARAMELIZED ROOT VEGETABLES AND WHITE BEAN ROSEMARY SAUCE

Yield: 10 Portions

Ingredients	Amounts
White Bean Rosemary Sauce	2 lb. (recipe follows)
Marinade for the Lamb chops	
Reduced sodium soy sauce	3 fl. oz.
Worcestershire sauce	2 Tbsp.
Dijon mustard	1 wt. oz.
Rosemary, chopped	1 Tbsp.
Thyme, chopped	1 Tbsp.
Sage, chopped	1 Tbsp.
Vegetable oil	1 fl. oz.
Ground black pepper	1 tsp.
Lamb loin chops, trimmed	20 ea.
Kosher salt	1 tsp.
Ground black pepper	½ tsp.
Caramelized Root Vegetables	2 lb.
Rosemary, chopped	1 Tbsp.

Method

1. Sprinkle the rosemary on the sauce after it has been plated.
2. Combine the ingredients for the marinade and spread evenly on the lamb chops. Marinate for 30 minutes.
3. Brush any excess marinade off the lamb. Season the chops with salt and pepper and place on a rack in a roasting pan. Broil until medium rare.

Per Serving

326 calories, 12 g fat, 28 g total carbohydrate, 27 g protein, 827 mg sodium, 78 g cholesterol

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CARAMELIZED ROOT VEGETABLES

Yield: 2 Pounds, 15 2-oz. Portions

Ingredients	Amounts
Olive oil	1 fl. oz.
Parsnips, bias cut	10 ½ wt. oz.
White turnips, wedge cut	10 ½ wt. oz.
Yellow turnips, wedge cut	10 ½ wt. oz.
Fennel, wedge cut	12 wt. oz.
Salt	½ tsp.
Ground black pepper	¼ tsp.

Method

1. Add the olive oil to a roasting pan and preheat in a 350°F oven. Add the vegetables and toss in the oil.
2. Roast the vegetables until well caramelized and tender, 25 to 30 minutes. Season with the salt and pepper.

Per Serving

75 calories, 3 g fat, 12 g total carbohydrate, 1 g protein, 177 mg sodium, 8 g cholesterol

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WHITE BEAN ROSEMARY SAUCE

Yield: Portions

Ingredients	Amounts
Roasted lamb bones	2 lb.
Veal stock	2 qt.
Cornstarch or arrowroot slurry	as needed
Cannellini beans, cooked	8 wt. oz.
Kosher salt	1 tsp.
Ground black pepper	¼ tsp.

Method

1. Simmer the lamb bones in the veal stock for 2 hours. Strain through a fine-meshed sieve and lié with a cornstarch slurry if necessary.
2. Stir in the beans and season with salt and pepper. Simmer until a sauce texture develops, about 15 minutes.

Per Serving

101 calories, 1 g fat, 16 g total carbohydrate, 8 g protein, 316 mg sodium, 1 g cholesterol

Note: Veal or Venison Stock

Replace the chicken bones with an equal amount of veal or venison bones. Simmer the stock for 7 hours. Add the mirepoix and sachet and simmer an additional hour.

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CARPACCIO OF BEEF WITH FRESH ARTICHOKES AND TOMATO SALAD

Yield: 10 Portions

Ingredients	Amounts
Beef tenderloin, trimmed	12 wt. oz.
Cracked peppercorns	as needed
Artichoke hearts, cooked, quartered	1 ¾ lb.
Plum tomatoes, small dice, peel, seed	10 wt. oz.
Shallots, minced	1 ¾ wt. oz.
Basil, chopped	½ wt. oz.
Anchovy-Caper Dressing (recipe follows)	5 fl. oz.
Basil Vinaigrette (recipe follows)	3 ½ fl. oz.
Mixed salad greens	as needed

Method

1. Chill the beef thoroughly so that it becomes firm enough to slice easily. Slice it very thinly on a slicing machine or with a sharp slicing knife. Lay the slices out on parchment paper as they come off the blade. Do not stack them one on top of the other.
2. Place the quartered artichokes, tomatoes, shallots, and basil in a bowl. Add the vinaigrette and toss to coat evenly. Remove these ingredients with a slotted spoon, allowing the excess vinaigrette to drain back into the bowl.
3. Add the mixed greens (one handful per portion) to the vinaigrette remaining in the bowl and toss to coat the leaves lightly.
4. Place the sliced beef on chilled plates and season with a generous amount of cracked black pepper.
5. Drizzle the anchovy-caper vinaigrette on each portion and serve immediately.

Per Serving

182 calories, 3 g fat, 8 g carbohydrate, 11 g protein, 246 mg sodium, 20 g cholesterol

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ANCHOVY-CAPER DRESSING

Yield: 1 Quart, 32 1-oz. Portions

Ingredients	Amounts
Part-skim ricotta cheese	10 wt. oz.
Nonfat yogurt, drained	20 fl. oz.
Red wine vinegar	4 fl. oz.
Capers	4 wt. oz.
Anchovy fillets, mashed	2 ea.
Shallots, minced	2 wt. oz.
Garlic, minced	½ wt. oz.
Chives, chopped	½ wt. oz.
Parsley, chopped	½ wt. oz.
Basil, chiffonade	½ wt. oz.

Method

1. Purée the ricotta in a food processor or blender until smooth.
2. Transfer the ricotta to a large bowl and whisk in the remaining ingredients.

Nutrition information per 2-oz serving

24 calories, 1 g fat, 3 g total carbohydrate, 2 g protein, 137 mg sodium, 3 g cholesterol

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CHOCOLATE RICOTTA BAVARIAN

Yield:10 Portions

Ingredients	Amounts
Vegetable oil spray	as needed
Powdered sugar	1 wt. oz.
Semi-sweet chocolate, chopped	3 ¼ wt. oz.
Gelatin powder	¼ wt. oz.
Water	1 ½ wt. oz.
Dairy Base	14 wt. oz.
Cocoa powder	2 wt. oz.
Sugar	1 ¾ wt. oz.

Method

1. Spray the inside of 3-inch diameter 2-inch length ring molds with vegetable oil and dust with powdered sugar. Place the molds on a baking sheet lined with plastic wrap. Refrigerate until needed.
2. Melt the semi-sweet chocolate over a double boiler.
3. Bloom the gelatin in the water for five minutes. Dissolve over a double boiler.
4. Combine the dairy base with the warm chocolate and heat very gently over a double boiler.
5. Add the dissolved gelatin and cocoa powder to the chocolate mixture and whisk until smooth. Cool the mixture to room temperature.
6. Warm the sugar and egg whites to 100°F. Whip the mixture to medium peaks and fold into the chocolate mixture.
7. Pipe the mixture into the molds, cover with plastic wrap, and chill for at least two hours.
8. To serve, slide each Bavarian out of the mold into a chocolate hippenmasse cup.
9. Garnish with white chocolate shavings and fresh berry coulis or caramel sauce.

Per Serving

158 calories, 5 g fat, 27 g total carbohydrate, 6 g protein, 61 mg sodium, 5 g cholesterol

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DAIRY BASE FOR FROZEN GLACE AND BAVARIANS

Yield: 3 ¼ Pounds, 14 3 ½ oz-Servings

Ingredients	Amounts
Part-skim ricotta cheese	1 ½ lb.
Nonfat yogurt	1 lb.
Maple syrup	12 fl. oz.
Vanilla extract	¾ fl. oz.

Method

1. Purée the ricotta in a food processor or blender until smooth.
2. Add the remaining ingredients and process until incorporated.
3. Flavor as desired and freeze in an ice cream machine according to the machine's directions.

Per Serving

175 calories, 4 g fat, 28 g total carbohydrate, 7 g protein, 83 mg sodium, 16g cholesterol

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CURRIED YUKON GOLD POTATOES

Yield: 2 lb, 10 3-oz. Servings

Ingredients	Amounts
Yukon Gold potatoes, peeled	2 lb.
Vegetable oil	1 Tbsp.
Onions, minced	1 Tbsp.
Granny Smith apples, peeled, diced	5 wt. oz.
Curry powder	¼ wt. oz.
All-purpose flour	¼ wt. oz.
Water	1 qt.
Kosher salt	½ tsp.

Method

1. Simmer the potatoes in water until tender. Drain and reserve.
2. Heat the oil in a small sauce pot. Add the onions and apples and sweat until the onions are translucent. Add the curry powder and flour and sauté to lightly toast. Add the water and salt and simmer for 30 minutes.
3. Combine the curry mixture and the potatoes.

Per Serving

100 calories, 2 g fat, 19 g total carbohydrate, 2 g protein, 122 mg sodium, 0g cholesterol

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FOUR-GRAIN WAFFLES

Yield: 16 Waffles, 8 Servings

Ingredients	Amounts
Nonfat buttermilk	12 fl. oz.
Egg	1 ea.
Egg whites	2 ea.
Vegetable oil	2 fl. oz.
All-purpose flour	4 wt. oz.
Whole wheat flour	3 wt. oz.
Cornmeal	1 ½ wt. oz.
Rolled oats	2 ½ wt. oz.
Baking powder	1 Tbsp.
Sugar	1 wt. oz.
Vegetable oil spray	as needed

Method

1. Combine the buttermilk, whole egg, egg white, and oil in a large bowl.
2. Combine the flours, cornmeal, rolled oats, baking powder, and sugar in a separate bowl.
3. Add the dry ingredients to the liquid ingredients and mix just until incorporated.
4. Lightly spray a hot waffle iron with vegetable oil. Ladle the batter into the waffle iron and cook until the waffles are golden-brown, about 3 minutes.

Per Serving

365 calories, 9 g fat, 57 g total carbohydrate, 15 g protein, 456 mg sodium, 46 g cholesterol

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MOROCCAN CHICKEN PITA SANDWICHES

Yield: 10 portions

Ingredients	Amounts
Chicken Marinade	
Cayenne, ground	¼ tsp.
Spanish paprika	½ tsp.
Garlic powder	1 tsp.
Ground black pepper	½ tsp.
Cinnamon, ground	½ tsp.
Cumin, ground	½ tsp.
Kosher salt	2 tsp.
Lemon juice, fresh	¾ fl. oz.
Chicken legs, skinless	10 ea.
Extra virgin olive oil	1 ½ fl. oz.
Chicken stock	8 fl. oz.
Kalamata olives, chopped	4 wt. oz.
Cilantro, chopped	1 tsp.
Parsley, chopped	1 tsp.
Tomato concassé	1 lb.
Roasted peppers, diced	1 lb.
Kosher salt	2 tsp.
Pita bread	10 ea.

Method

1. Combine the chicken marinade ingredients in a shallow pan. Add the chicken and toss to evenly coat.
2. Heat the oil in a roasting pan. Remove the chicken from the marinade and place in the roasting pan. Brown the chicken evenly and remove from the pan. Deglaze the pan with the stock and return the legs to the pan. Add the olives, bring to a simmer, cover and braise until the meat is fork tender.
3. Cool the chicken in the braising liquid. Remove the chicken from the liquid. Degrease the liquid and reserve.
4. Pull the chicken meat from the bones and place in a large bowl. Add the tomatoes, peppers, braising liquid, and salt and toss well.
5. Fill each pita bread with the chicken mixture.

Per Serving

402 calories, 16 g fat, 28 g total carbohydrate, 33 g protein, 1050 mg sodium, 93 g cholesterol

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TORTILLAS DE PAPAS

Yield: 10 servings

Ingredients	Amounts
Red bliss potatoes	4 lb.
Clarified butter	1 Tbsp.
Kosher salt	1 tsp.
Ground black pepper	as needed
Spanish onions, sliced with grain	3 ea.
Artichokes	6 ea.
Red peppers, roast, peel, thick slice	4 ea.
Yellow peppers, roast, peel, thick slice	4 ea.
Sherry Vinaigrette (see Vinaigrette dressing)	3 Tbsp.
Parsley, chopped	½ wt. oz.
Thyme, chopped	¼ wt. oz.
Egg whites	20 ea.
Eggs	10 ea.
Goat cheese, crumbled	5 wt. oz.
Chervil plûches for garnish	as needed

Method

1. Boil the potatoes in water until they are tender. Drain and cool at room temperature. When the potatoes are cooled, cut them into large dice (do not remove the skins).
2. Heat half of the clarified butter in a large sauté pan and add the diced potatoes. Season with ¼ tsp of the salt and pepper to taste. Cook until browned and reserve until needed.
3. Heat the remaining clarified butter in another large sauté pan and add the onions. Season with ¼ tsp of the salt and pepper to taste. Cook until caramelized (if onions begin to scorch, add a small amount of water). Reserve until needed.
4. Trim the stems and thick outer leaves from the artichokes. Cut off all but about 1-inch of the inner leaves. Cook the artichoke bottoms in acidulated water until tender. Cool in the cooking liquid.
5. When the artichoke bottoms are cool enough to handle, drain, scoop out the chokes, and slice into small wedges. Combine the artichokes with the roasted peppers, vinaigrette, parsley, thyme, and pepper to taste. Reserve in a warm area until needed.

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VINAIGRETTE-STYLE DRESSING

Yield: 1 Pint or 16 1-oz. Portions

Ingredients	Amounts
Chicken or Vegetable stock	8 fl. oz.
Arrowroot	1 ½ tsp.
Red wine vinegar	4 fl. oz.
Extra virgin olive oil	4 fl. oz.
Kosher salt	½ tsp.
Seasoning*	½ tsp.

Method

1. Combine the arrowroot with enough cold stock to form a smooth paste.
2. Bring the remaining stock to a boil and stir in the arrowroot mixture. Return to a boil and stir constantly until the stock has thickened. Remove from the heat, stir in the vinegar, and cool completely.
3. Gradually whisk in the oil. Add the salt and seasonings.

Notes & Variations

- *Basil Vinaigrette:* Add 3 tablespoons chopped fresh basil with the salt and seasonings.
- *Sherry Vinaigrette:* Substitute sherry vinegar for red wine vinegar in equal amounts.
- *The choice of seasonings includes prepared mustards, chopped fresh herbs, capers, onions, garlic, or citrus zest.
- Refrigerated the dressing will thicken and may be stored up to one week.
- Orange or tomato juice, apple or pear cider, and fruit nectars may replace the stock. Thick juices will require little thickening, if any.
- Special vinegars such as balsamic, sherry, or red wine will give the dressing distinct character.
- Oils other than olive may be used, including various nut oils (peanut,

Per Serving

67 calories, 7 g fat, 0 g total carbohydrate, 0 g protein, 49 mg sodium, 0 g cholesterol

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VIETNAMESE SUMMER ROLLS

Yield: 14 Portions

Ingredients	Amounts
Dipping Sauce	
Sugar	3 wt. oz.
Fish sauce	2 fl. oz.
Lemon juice, fresh	3 Tbsp.
Water	2 Tbsp.
Garlic, minced	1 Tbsp.
Chili sauce	2 tsp.
Filling	
Rice noodles	6 wt. oz.
Shrimp (26-30 count)	8 wt. oz.
Carrots, finely julienned	6 wt. oz.
Kosher salt	¾ tsp.
Iceberg lettuce, chiffonade	4 wt. oz.
Sugar	1 ½ tsp.
Lemon juice, fresh	2 fl. oz.
Sugar	1 wt. oz.
Warm water	8 fl. oz.
Rice paper wrappers	14 ea.
Cilantro leaves	½ wt. oz.

Method

1. Whisk together the dipping sauce ingredients and chill.
2. Cook the rice noodles in boiling water. Shock the noodles in cold water and drain.
3. Blanch the shrimp in boiling water until cooked, about 3 minutes. Shock, peel, and clean the shrimp. Slice the shrimp in half lengthwise.
4. Toss the carrots with ½ tsp of the salt and marinate for 10 minutes. Drain any excess moisture from the carrots. Combine the noodles, carrots, lettuce, sugar, lemon juice, and remaining salt.
5. Combine the sugar and warm water in a large bowl.
6. To assemble the summer rolls: moisten one wrapper in the sugar water and place on a clean, flat-weave cloth. Place 2 ½ oz of the noodle mixture, 2 shrimp halves, and a few cilantro leaves in the center of each wrapper. Fold in each end of the wrapper and roll to completely encase the filling. Refrigerate until needed.
7. For each portion: serve one cold summer roll with approximately 1 tbsp dipping sauce.

Per Serving

152 calories, 0 g fat, 30 g total carbohydrate, 6 g protein, 603 mg sodium, 25 g cholesterol

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