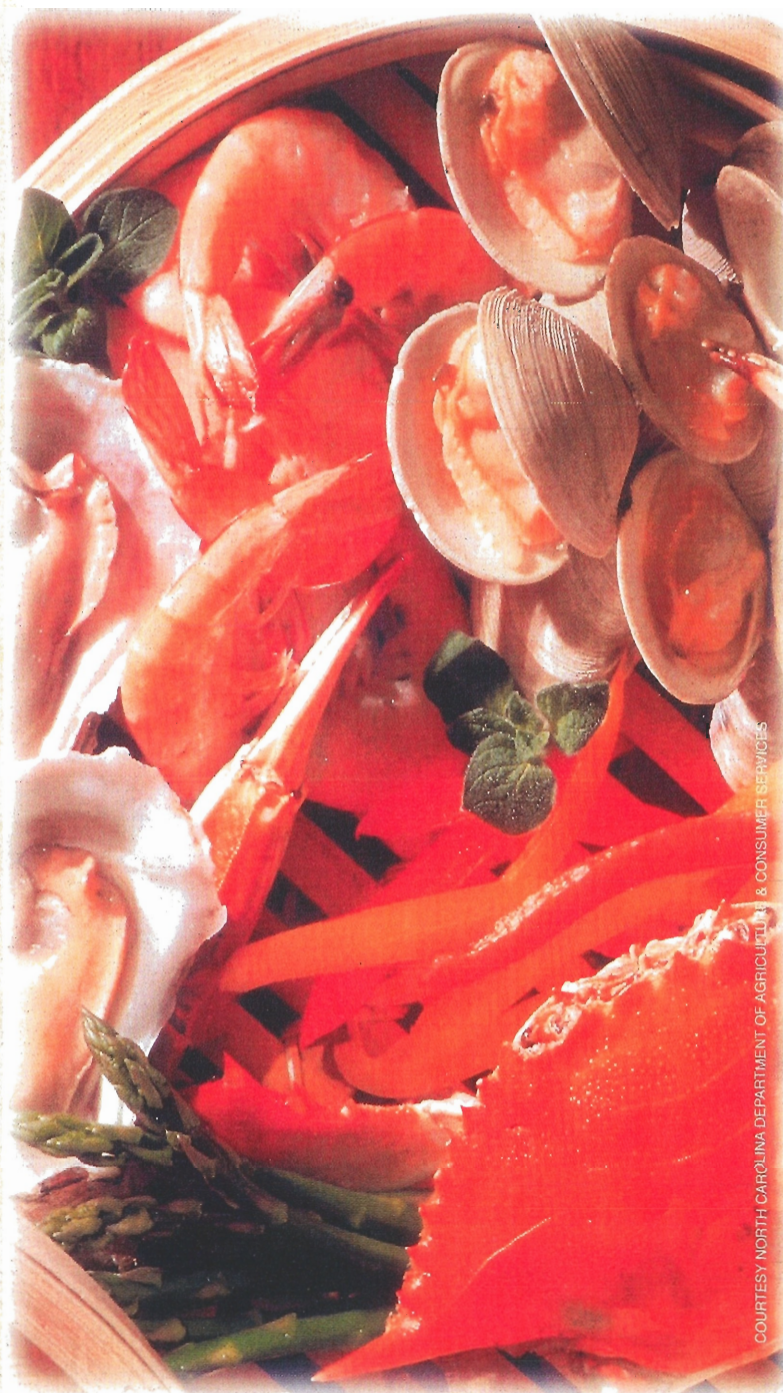


Superb Shellfish

Safely enjoy this low-carb wonder

By Sandy Shumway



COURTESY NORTH CAROLINA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES

Think steak, burgers and hot dogs are the only Atkins-friendly barbecue foods? Think again! Shellfish – clams, oysters and scallops, among others – are high in protein, low in calories, heart healthy, very tasty and versatile!

For example, compare the health benefits of beef and mussels. Weight for weight, mussels have almost the same protein content (14%), but only a quarter of the calories. They have only 6% of the fat of beef, and about a third of this is unsaturated fat. Mussels contain a small amount of cholesterol, but because it is combined with unsaturated fats, it can promote an overall reduction in blood cholesterol level. Mussels contain only 3% carbohydrates and 10 times as much phosphorus, more iron, thiamin and riboflavin. Mussels may be little, but they've got power!

Shellfish Safety

1. Hunter Safety. During summer trips to the shore, it's tempting to collect shellfish and cook them over an open fire. Before you do this, make sure you know the area well. Are the waters polluted? Are there red tides present? If the answer to either one of these questions is "yes," don't risk it.

Shellfish 'are what they eat,' and they eat microorganisms from the surrounding seawater. Their highly efficient filters can remove millions of cells from the water every hour by pumping water through their systems. That means that they can also accumulate any pollutants or toxic materials as well.

Shellfish are extremely efficient at filtering the surrounding waters. As a result, they can become carriers of debilitating and sometimes deadly diseases such as vibrios, viruses and bacteria, and algal toxins. Cooking does not always eliminate the risks of eating contaminated shellfish, so be sure your meal comes from clean, safe waters.

2. Grimy Grocery? Improper shipping, handling, and storage methods can make this healthy product a diet disaster. Purchase seafood only from reputable seafood markets, grocery stores, or directly from aquaculture farms.

Aquaculture products are a safe bet.

Sea farmers produce shellfish that are often far superior in both taste and appearance to their wild-caught cousins. The product remains available year-round, so you can pull out the hibachi in the middle of a snowstorm and still enjoy fresh barbecued shellfish.

Aquaculture shellfish are carefully and regularly monitored by state and federal laboratories for contaminants. Seafood dealers and aquaculturists only market their best products.

Recipes

With these thoughts in mind, let's get cooking!

Barbecued Shellfish with Dips

This recipe is best suited for mussels, clams and oysters, though any shellfish can be used successfully. Adjust quantities according to necessary servings.

Fresh shellfish

Desired condiments (salsa, butter, etc.)

Rinse shellfish in ice cold water and discard any that are 'gaping,' or do not shut when the shell is tapped. Place shellfish on the grill in one even layer, about 4 inches above the heat source. Roast 10-15 minutes or until shells pop open. The meats will firm up and pull away from the shells. Discard any shellfish that do not pop open during cooking.

The shellfish cook in their own juices and will take on a smoked flavor. Dip them in your favorite salsa or melted butter. You can also eat them right off the grill.

Superb Shellfish *cont.*

Scallop Skewers

Serves 4

These are attractive and easy to prepare ahead of time so you can enjoy the party.

1½-2 pounds sea scallops (about 24 pieces)

1 sweet red pepper, cut into bite-sized squares

1 sweet green pepper, cut into bite-sized squares

½ cup orange juice

¼ cup chopped scallions, including the green parts

2 tbsp. unsalted butter

Salt, to taste

Pepper, to taste

1 small ripe tomato, peeled, seeded and diced (about ¼ cup)

4 tsp. olive oil

2 tbsp. chopped fresh coriander or parsley

Place six scallops on each skewer, alternating with pieces of red and green pepper. Chill until ready to grill.

Preheat grill to high heat.

In a small grill-safe pan, combine orange juice and scallions. Reduce by half over grill or on top of stove. Add butter, tomato, salt and pepper. Keep warm while cooking skewers.

Brush skewers on all sides with oil and place on hot grill. Cook until done, turning occasionally, as they will burn easily. Place skewers on serving plates, garnish with sauce and coriander or parsley. (For variety, add pineapple, mushrooms or bacon to the skewers.)

Steamed Oysters with Lemon-Garlic Butter

Fresh oysters (adjust quantity according to number of people)

Juice of 2 lemons

1 tbsp. minced garlic, or less if desired

¼ pound butter, melted

With a small scrub brush, wash oysters in cold water to remove debris on the shells. Pay special attention to the lip areas.

Combine lemon juice, garlic, and butter. Set aside.

Place oysters on the grill and, as they pop open,

add a dollop of the lemon-garlic mixture. Discard any oysters that do not open.

Allow the oysters to continue steaming in their own juices until meat firms up. Do not overcook! Serve right from the grill. ■



Burgers or Clams?

When comparing burgers and clams, who wins the battle of good nutrition? Here are the stats for 3.5-ounce portions of both products.

Nutrient	82% Lean Ground Beef	Clams
Protein	28 g	15.6 g
Fat	17 g	1.5 g
Saturated fat	7 g	0.3 g
Cholesterol	100 mg	25 mg
Total Carbohydrates	38 g	0 g
Calories	300	100

However, we are not advocating a steady diet of clams-ugh! We illustrate the differences for those of you who like quirky facts to win bbq and bar bets.



Fruity Scallop Kabobs are shown here with dried apricots and pineapple chunks, though other fruits can be substituted. Try dried mangoes or prunes, or use your imagination.

- Not Just a Pretty Shell

By Sandra Shumway

They swim, they see, they have beautiful shells and, unbeknownst to St. James, they are Atkins-friendly. Scallops are probably the best known shellfish - from the Birth of Venus to the symbol for an international oil company. The modern word *shell* is actually a derivative of the word *skal*, from the ancient Germanic tribes of Central Europe. They have been recognized for centuries and appeared regularly on heraldic armor, in architecture and art.

There are approximately 350 different species of scallops around the world. They are considered a delicacy everywhere. Some are fished commercially, especially on Georges Bank, the Irish Sea, and in Japanese waters. They are also grown in aquaculture facilities in many countries, most notably China, Japan and South America.

Here in the United States, the most commonly available scallop is

the sea scallop (*Placopecten magellanicus*). Native bay scallops (*Argopecten irradians*) are available seasonally and sporadically, making them a real delicacy.

scallops live in more shallow coastal environments from Massachusetts to North Carolina and more often are collected with small hand dredges or

North American

WHAT ABOUT THOSE BARGAIN PRICED, PREVIOUSLY FROZEN BAY SCALLOPS?

The common North American bay scallop was transported to China in the 1900s. Of the 27 delivered, 13 survived and formed the basis for the entire Chinese aquaculture production of bay scallops. These scallops are now imported to the United States and sold as "bay scallops, previously frozen." They are not as tasty as wild-caught, native bay scallops, but certainly more readily available and only about one-third the price. Previously frozen scallops are best used in recipes with sauces or in chowders.

Bay Scallop

Sea scallops can live to be 20+ years old and are trawled with large dredges from Canada to Virginia, and then shucked immediately at sea. Bay

by hand. Their life span is less than two years.

The season is from fall through winter or until the quota is caught. In

the Pacific Northwest, one can often find the weathervane, pink and spiny scallops. For an exceptional treat, locate some rock scallops in the Pacific Northwest or native bay scallops in Rhode Island or on Long Island.

In the United States, it is traditionally only the large white muscle that is consumed and referred to as the meat. In some countries, the entire scallop is eaten, much the same as an oyster or clam, while in still other countries, the adductor muscles and *roes* (gonads) are eaten. Whole scallops are an acquired taste with an odd texture.

The muscles are predominantly white or cream-colored, but a range of hues from pink to orange are common and quite natural. Scallop meats are graded according to size and count, i.e. how many scallops to the pound. Examples: Sea scallops range from 20-30/pound and can be over two inches in diameter – great for skewers – while bay scallops run about 50-60/pound and closer to one-half to three-quarters of an inch, making them ideal for salads and other dishes.

The *roe* is a crescent-shaped organ ranging in color from orange or brown to cream or yellow. These are quite tasty and can add a dash of color to your preparation. When purchased, scallops should have only a faint and sweet aroma. Keep them cold and use within three days.

And, for my environmentally conscious friends, scallops, like other shellfish, are ranked highly by the Seafood Watch and Sierra Club for having minimal impacts associated with their growth and harvest.

NUTRITION

Like other *bivalve molluscs*, scallops are a health food. A 100 gram (about 3.5 ounces) serving includes: 88 calories, 17 grams protein, 0.8 grams fat and 2.4 grams carbohydrates. Scallops

are high in calcium and very low (33 milligrams) in cholesterol.

SAFETY

Most scallops in this country are sold as meat only, so the health risks are almost nonexistent. Be careful if you decide to try whole scallops. They pose a health risk in areas of bacterial pollution, toxic algae or 'red-tides' because the scallops concentrate the toxins in the guts and other tissues. The meat, or muscles, in almost all situations, remain clean. (Avoid pink scallops in California!)

satile of shellfish and come in their own serving dish. Be sure to rinse them in very cold water prior to cooking. Individual creativity is the order of the day, and all types can be interchanged in recipes.

Scallops have a very light and delicate flavor, so be careful not to overpower them with strong sauces or spices. Avoid overcooking, as scallops will become tough and lose flavor. My favorite is *au naturel* on the grill until just golden brown!

While you're waiting for the grill,



Simple is Best: Scallops wrapped in bacon. Cook on a skewer, remove and add toothpicks to serve as an appetizer or place on a Caesar salad for a lunchtime treat.

DO NOT COLLECT AND CONSUME WHOLE SCALLOPS ON YOUR OWN, this is a very dangerous proposition globally. If you purchase whole scallops or scallops with roe attached, be sure to ask if they have been tested for toxins. As with other species of shellfish, purchasing from reputable dealers or directly from aquaculturists is the safest bet.

RECIPES – BE CREATIVE!

Scallops are perhaps the most ver-

try scallops raw with a little lemon or lime juice. They're also great with salsa.

The Old Stand By: Scallops Wrapped in Bacon

Simply roll a slice of bacon around the scallop, skewer and grill. The bacon takes longer to cook than the scallop but provides insulation so the scallops don't overcook. (Note: This is not recommended for

Scallops

bay scallops, as they cook too quickly and are often too small for the skewer.)

Coquille St. Jacques on the Grill

While this sounds like a familiar item, the available recipes are as varied as the authors. For me, butter, wine, garlic, onions, wine and cheese are essential. Add chives, tomatoes, flavored breadcrumbs, mushrooms, or herbs to your liking!

- 1 **lb. scallops (sea or bay; if you use sea scallops, you'll need to cut them in quarters)**
- 6 **tbsp. butter (not margarine!)**
Chopped onion, to taste
Minced garlic, to taste
- 2 **tbsp. white wine (a hearty, woody Chardonnay works well)**
Freshly-grated Parmesan cheese

In a grill-safe pan, sauté garlic, onions and butter. Add scallops and cook about 1 minute. At this point, don't cook thoroughly. Remove scallops and reserve the liquid. Place scallops in individual grill-safe baking dishes or scallop shells, add wine and reserved liquid. Sprinkle with Parmesan cheese. Continue to grill until scallops reach desired consistency. Quickly cover with foil and place under broiler, if you like your cheese crispy, or serve right from the grill.

Scallop Fruit Kabobs

When skewering, be careful to get it right the first time, or the meats will tear and fall off the skewer during cooking. Place scallop with the cut edges 'top and bottom' (like a little barrel), and run the skewer through the side to reduce breakage. You can use any fruit or vegetable, but remember that scallops will cook quickly, so gauge the accompanying items accordingly. Pineapple cubes, dried apricots, and mangos are all subtle enough to allow the flavor of the scallop to prevail. For a simple variation, baste with cider.

the scallops. Place scallops on a grill-safe pan or wrap in foil and toss directly into a briquette or wood fire until done, about 3 minutes. Place scallops on a bed of rice and serve hot or cold.

Planked Scallops on Caesar Salad

These are fun. Get some cedar shingles (not chemically treated) or commercial cedar barbecue planks and soak them in water. Coat scallops in light olive oil and roll them in any of your favorite herbs and spices. Arrange on the shingle/plank and

Coquille St. Jacques

Coquille St. Jacques, or St. James's shell.

In medieval times, the scallop shell was a badge for pilgrims making the trek to the apostle's tomb at Santiago de Compostella in Northern Spain, where St. James is buried at the cathedral in a scallop-adorned silver vault.

St. James shell

Scallops with Saffron Rice & Peas

This is a simple recipe and a good use of the 'previously frozen bay scallops' if others are not available. I combine rice cooked with saffron, carrot shavings and peas, but any of your favorite rice recipes will suffice. Avoid heavy flavorings, as they will overwhelm

place directly on the grill. Serve atop the cedar with your favorite Caesar salad recipe. ■

Sandy Shumway, Ph.D., is a world-renowned shellfish biologist. She has served as Editor-in-Chief of the *Journal of Shellfish Research* for 18 years and co-edited a shellfish cookbook, *Shellfish Artistry*, that is now in its third printing.



Top right: The sea scallop in its natural habitat.

Bottom left: Vegetable Kabobs is another recipe where your creativity can flourish. Try mushroom caps, grape tomatoes, pearl onions or small peppers. Serve with a cool Chardonnay.

Scallops