SPA Rx

Ocean Notion

ADVOCATES OF THALASSOTHERAPY EXTOL THE POWER OF SEAWATER TO HEAL EVERYTHING FROM MIGRAINES TO MENOPAUSE. AIMEE LEE BALL SAMPLES THE EXPERIENCE AND SURVEYS THE SCIENCE BEHIND IT

IN THE LATE 16TH CENTURY, KING HENRY III OF FRANCE, ON THE ADVICE OF HIS DOCTOR, TRAVeled to the northern coast of his country for baths in the sea to cure "tormenting." (Henry had issues: Among other things, he liked to roam around in women's clothing, accompanied by young male attendants referred to as his *mignons*.) I have a slightly different set of 21st-century torments, but I'm thinking about Henry as I try to swim against a man-made tide of seawater in a circular pool outfitted with multiple jets, part of the regime at Miramar Crouesty, a thalassotherapy center in Brittany. The Bretagne coast was the birthplace of this tradition that extols the healing properties of the sea, ▶

its water, and its algae. Today there are about 40 thalasso centers along the Atlantic, Channel, and Mediterranean coasts of France. Thalassotherapy is also popular in other European countries, where the practice of "taking the waters" (thermal springs in Italy, mineral baths in Germany) has existed in one form or another for many years, and more recently has been taken up by resorts in Mexico (Paraiso de la Bonita) and California (Montage Resort & Spa).

The tradition of thalassotherapy has changed over the centuries, from going into the ocean to bringing the ocean, heated and purified, indoors. (See "History Lesson," opposite.) But the regime still incorporates a variety of treatments in which one is bathed, showered, wrapped, rubbed, or scrubbed with seawater or seaweed to cure and prevent various conditions and to provide "vitality and replenishment for the body," as one center boasts. Advocates claim thalassotherapy improves a variety of afflictions, from migraines to menopause, stress to skin problems, chronic fatigue to calcium deficiency. It may help you stop smoking, lose weight, or recover from childbirth. The baths are said to dilate the blood vessels of the skin, promoting the penetration of minerals in the seawater. Walking pools are said to relieve the "heavy legs" caused by poor circulation. Seaweed wraps are said to be antibiotic and antibacterial and to ease aches and pains.

There has been a good deal of scientific interest in seaweed—the Scottish Seaweed Research Institute was set up to explore its potential uses during World War II, when it was imperative to use natural resources. In the 1960s, scientists at the Gastrointestinal Research Lab at McGill University in Canada demonstrated that kelp may inhibit the absorption of hazardous metals and pollutants such as lead, cadmium, and radioactive strontium. (When I called the *Canadian Medical Association Journal* to request the articles that reported these findings, the librarian called them "oldie-moldies.") As recently as 2004, researchers at the Institut Pasteur in Paris found that the complex sugars in seaweed called polysaccharides showed significant activity against a number of human pathogens.

But while the benefits of eating seaweed may have been documented, there's a dearth of modern research about transdermal (through the skin) application. The French government dictates certain standards of operation for thalasso centers, regulating the procedures by which water can be taken from the sea, transported to and heated for use in the spa, but it has not demanded demonstration of efficacy. Much 21st-century treatment is justified with 19th-century "research"—a rather dubious provenance. (We've come a long way since leeching was considered sound medicine.)

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The French put great stock in the theories of a physiologist named René Quinton (1866–1925), who observed that all animals, from reptiles to birds to mammals, contain a fluid akin to diluted seawater. In 1897, Quinton conducted an experiment in which he drained the blood from a dog until it lapsed into a coma, then brought the dog back to full health with seawater injections. A few years later, he published his theories about the similarity in composition of seawater and human plasma for such elements as sodium, potassium, calcium, magnesium, sulfate, phosphorus, and copper. Quinton's comparisons are often touted on wall charts in thalasso centers, the implication being that the beneficial qualities of these elements can easily be transferred through the skin by immersion in seawater.

In 1971, Jean-Jacques Dubarry, a professor at the University of Bordeaux, claimed to demonstrate that human skin can be permeated by the ions in seawater and that the water's minerals are absorbed in direct proportion to their deficiency in the body—a claim that is often repeated by thalasso centers in explaining the therapy. In 1980, Alain Deledique, M.D., the former medical director of a thalassotherapy institute in Brittany, published a book called *Vous ne Pouvez Plus Ignorer la Thalassotherapie (You Can No Longer Ignore Thalassotherapy)*. But the health claims about thalassotherapy have never been supported with the gold standard of clinical trials by objective investigators and peer-reviewed articles in scientific journals. As part of my research for this article, I tried to get in touch with Dubarry and Deledique. The former, I was told, is deceased, and the latter was last heard of working in the French

Caribbean. Neither the university nor the institute responded to repeated inquiries about thalassotherapy.

To figure out what could legitimately be claimed for thalassotherapy, to separate fact from spa faith, albeit centuries-old faith, I consulted a variety of experts in physics, biochemistry, oceanography, and dermatology. (See "What the Experts Say" on page 116.) But first I immersed myself in thalassotherapy at two of Brittany's premier centers, the Sofitel Diététique in Quiberon and the Miramar in Port Crouesty, both on the south coast.

At the Sofitel Diététique, there are about a dozen weeklong thalasso programs aimed at a specific audience or need: Young Mothers includes "bust therapy," Masculin Tonic incorporates flexibility testing and scalp massage, and Marine Beauty adds paraffin and collagen treatments for the hands and the "fragile zones" of the face. At the Miramar, the programs include Anti-Stress (the sea treatments are supplemented with daily yoga and "oxygenation" exercises), Slimming (with body-fat measurement and "shape assessment" by a dietician), and Mi Hai (which incorporates traditional Chinese medicine techniques such as tui na massage and acupuncture). At both resorts, an initial appointment with one of the staff doctors determines the appropriate *soins* (literal translation: "cares"). *Soins* are scheduled for either morning or afternoon, so you spend only half the day waterlogged.

The regimen of water treatments in these and most other programs is fairly standard, according to thalasso theory. For affusion, I am in a tiled room, face-down and naked on a table padded with plastic. (At the Sofitel, I'm granted the modesty of a paper bikini.) A few feet above my body, a long shower arm out-▶

History lesson

■ **420 B.C.** Greek playwright Euripides, a fan of thalasso-ish therapy before it had a name, writes, "Sea washes the troubles of all humans."

■ **2nd century B.C.** Roman politician Caton the Elder adds seawater to wine to make a restorative drink for tired slaves.

■ **17th century** In France, seawater is considered a remedy for rabies.

■ **Early 18th century** Queen Anne of England travels to Bath to "take the waters," popularizing the practice.

■ **1750** "A dissertation on the use of seawater in the affections of the glands" is published by British physician Richard Russell. "It is necessary to drink some seawater, to have baths in seawater, and to eat any sea product where its virtue is concentrated," writes Dr. Russell, who prescribes beverages containing marine ingredients like cuttlefish bones, crabs' eyes, tar, and burnt sponge—yummy. At Brighton, then a six-hour stagecoach ride from London, his patients are seated in small bathing boxes on the beach and wheeled into the sea by attendants called "dippers" for ladies and "bathers" for gentlemen. Each dipping promises to "strengthen your brain and revitalize your nerves."

■ **1778** The Maison de la Santé, constructed of wooden planks, is built directly on the beach at Dieppe on the northern coast of France, with seawater bathtubs. Since the seashore is a public domain, seabathing establishments are given only temporary licenses and often have to be collapsible. Tents are arranged facing the sea, and a crew of *maîtres baigneurs* helps people take their baths, which are recommended for "the depressed, the lymphatic, the asthmatic, and the neurotic."

■ **1824** The Duchess of Berry, the Paris Hilton of her day, makes Dieppe a fashionable bathing resort. Therapeutic sea bathing moves indoors, with each establishment carrying the name of one royal protector. As bathing centers get bigger, casinos are added for entertainment—the precursor of the Bellagio. A French law is passed that forbids gambling anywhere except "climatic resorts" and "water cities."

■ **1867** In Arcachon, near Bordeaux on the southwestern coast of France, Dr. Joseph de la Bonnardière coins the word *thalassotherapy* from the Greek *thálassa* (sea) and *therapeía* (healing).

■ **1894** The first international congress of sea bathing and water therapy is held in Boulogne-sur-Mer, France, promoting the regime for gynecological, dermatological, and ear/nose/throat diseases.

■ **1899** In Roscoff, on the northern Brittany coast, French doctor Louis Bagot opens L'Institut Rockroum, using *"kinébalnéothérapie"* to treat rheumatism, based on the tonic effect of warmed seawater.

■ **1904** French biologist René Quinton publishes his hypothesis claiming that the first live cell came from the sea and comparing the mineral composition of seawater and blood plasma. Quinton also opens "advice centers" that offer seawater injections.

■ **1920–1940** With the advent of modern antibiotics like penicillin, the "sea cure" falls out of favor.

■ **1964** Champion French cyclist Louison Bobet is treated with thalassotherapy in his native Brittany after a car accident. "The results on my weakened body were so distinct, so spectacular," he says, "that once I felt better, I remained dazzled by the virtues of the seawater." Determined to share the results, he establishes a thalasso center at Quiberon on the southern coast of Brittany, reenergizing the tradition. There are about 40 such centers in France today.

What the experts say

DRAWING ON EXPERT OPINIONS FROM the worlds of skin care and marine biology, we tried to hold the thalassotherapy tradition up to the hot white light of modern science.

Is seaweed good for you?
Possibly. There are approximately 30,000 species, all rich in minerals and trace elements that are called cofactors, meaning they activate enzymes necessary for proper cellular function, like the key you insert in a car ignition.

How about seawater?
Again, possibly. The sea is the ultimate mineral water.

But can seaweed and seawater get through the skin?
The answer to that question depends on who's being asked. The only difference between seawater and freshwater is the higher concentration of dissolved solids in the former—basically everything that has run downhill into the sea over millions and millions of years, explains Dan Walker, Ph.D., a scholar at the Ocean Studies Board at the National Academy of Sciences in Washington, D.C. These solids are ions—atoms that have acquired an electric charge by gaining or losing one or more electrons. "Almost any ion would be small enough to be absorbed by the skin, but that doesn't mean it will be," says Walker. "A cell membrane is what we refer to as a permeability barrier. It's not a screen on a screen door, where anything that's smaller than the size of the screen will go through." Cell functioning also allows the concentration of water to be higher outside than inside the body. "Otherwise," says Walker, "all the water in your cells would just go out into the atmosphere."

If the skin is so good at keeping things out, how come drug-dispensing skin patches work?
"The skin is a sophisticated organ whose job is to keep what's outside out and what's inside in," says Linda K. Franks, M.D., a New York City dermatologist and spokesperson for the American Academy of Dermatology. One of the key factors in absorption is whether or not the foreign product is lipophilic, meaning it has some of the same qualities of the fatty membranes that surround all cells, including skin cells. These lipid membranes are meant to keep the aqueous interior of the cell intact. If a product has a fatty-acid quality to it, then absorption is easier. Like seeks out like. With topical estrogens and nicotine patches, the active ingredient may not be a fatty molecule, but it's coupled with one that will drag it through the skin.

So what is the implication for thalassotherapy?
It's difficult for seawater to be absorbed by the skin. The minerals in seawater and algae are not lipid. "Their atoms have an electric charge," explains Dr. Franks, "which means that they want to be suspended in water, which does not get along with fats. It's like making gravy: Fat rises to the top of the liquid. Those two solutions don't want anything to do with each other."

That's a large generalization. Is everyone's skin the same?
"You might have different levels of lipids as you age and the skin breaks down," says Audra Stinchcomb, Ph.D., an associate professor of pharmacy at the University of Kentucky in Lexington and chief scientific officer at AllTranz, a company that does research for pharmaceutical development. "But the fats that are part of the barrier stopping things from being absorbed are there even if you have dry skin—dryness is a function of how much water is retained. If we change the chemistry, like if we add alcohol, we can alter the skin surface and make things penetrate faster." Of course, thalassotherapy centers boast of the natural, unadded-to state of their seawater and seaweed.

> Elements in seawater such as potassium, phosphorous, and sodium are held in careful equilibrium in our bodies and help regulate many bodily functions.

What about the thalassotherapy claim that the minerals in seawater are absorbed in direct proportion to their deficiency in the body?
It seems unlikely because the molecular size and polarity of minerals prevent them from penetrating the skin. "The cutaneous barrier," explains Dr. Franks, "is made up of the epidermis, intercellular channels, transcellular channels, cell membranes, cell-to-cell communication channels.... The bottom line is that large molecules can't get through those tiny channels." Stinchcomb points out that the

minerals in seawater and algae are known as big salts, "and we think of big salts as not having much absorption into the skin," she says, "although they might go into the hair follicles. Do I believe there is significant absorption that has an effect on health and well-being? Probably not."

Aha, so molecular size is the real key in skin penetration.

Not according to Daniel Maes, Ph.D., vice president of global research and development at Estée Lauder. "In the past, I thought the skin was a barrier to high-molecular-weight substances, but the more I work, the more I think it is not true," says Maes. "Skin is not a perfect barrier. It lets a molecule of fairly big size penetrate."

So the minerals in seawater could get through?

Probably not, continues Maes. "The problem is the polarity. Minerals and trace elements have two positive charges and are not going to penetrate the skin. They will be attracted to the *surface* of the skin, which is charged negatively, but they certainly will not go through the cell membrane."

What about the minerals in algae?

Here the story is slightly different. What Maes and his colleagues do in their labs is play with the atoms of elements—a process called biological transformation—binding them to other substances to reduce their overall charge, which increases their ability to penetrate in skin-care products. "But we believe that in algae, the biotransformation happens naturally," says Maes. "When we measure penetration of magnesium, iron, and copper in the skin, we observe increased delivery."

Does a swim in the ocean constitute free thalassotherapy?

If you've ever gone to the beach with a cut or abrasion and found it was better at the end of the day, Dr. Franks can explain. "You've been continually in a moist environment that has waterlogged the skin, has made it very pliable, hasn't allowed a dry scab to form. We would advise putting ointment on it. You've just optimized wound care, only you've used nature to do it." Dr. Franks points out that elements in seawater such as potassium, phosphorus, and sodium are held in careful equilibrium in our bodies. They're electrolytes, chemical compounds that are able to conduct electricity, so they help regulate many bodily functions—heart rhythms, enzymatic reactions, absorption of nutrients through the intestines, nerve conduction, muscle contraction. "These minerals are already in the fluid that is within our cells, but those are very tightly balanced. Can a few get in? Can it have some effect? Maybe. We don't know everything about the benefits of soaking. It's not likely to be by absorption of these minerals into the skin. Some of the therapeutic benefits these spas are offering may be from heat and moisturization of the upper layers of skin."

Wouldn't it be easier to eat the seaweed than to get rubbed with it?

You do not get the same benefit from eating, say, the nori wrappers on your favorite sushi, according to Dan Fryda, the founder of Spa Technologies International, a New York company that has developed a line of skin-care products based on algae imported from Brittany. It's the complex sugars called polysaccharides in seaweed that play the key role in the uptake of minerals from the sea and in eliminating harmful metals, says Fryda, who is writing a book called *The Ocean Within*. "When you eat polysaccharides, they wind up in the mucous of your intestinal tract and you can't digest them," he explains. "That's why seaweed is so low in calories." Fryda disputes the idea that the beneficial minerals in seaweed and seawater can't penetrate the skin. "If the human body were the size of the earth," he postulates, "every cell would be like one of the Rocky Mountains, protein and fat molecules would be like skyscrapers, and minerals would be like grains of sand."

Suppose you could drink seawater—would you get the benefits of thalassotherapy?

Seawater is saltier than the human body, and a useful explanation of salinity comes from the Office of Naval Research, the science-and-technology branch of the United States Navy and Marine Corps. Water likes balance. It flows through a semipermeable membrane such as skin from an area of high concentration (lots of water, little salt) to an area of low concentration (little water, lots of salt). This process, called osmosis, is why you can't drink saltwater. Your kidneys would try to expel the extra salt as quickly as possible and in the process pump out more water than you took in. Soon you would be dehydrated, and your cells and organs would not be able to function properly.

Hasn't anyone tested the health claims for thalassotherapy?

"One criticism you can make is that there have not been serious double-blind controlled studies about this," says Maes. "The companies that are supplying marine ingredients to the industry are doing studies, but they're considered proprietary, part of the arsenal of information to convince us to use their ingredients. We have to sign secrecy agreements."

And the final verdict? Can you absorb the benefits of the sea through the skin?

"The answer is yes and no," says Alexander Sepper, M.D., Ph.D., vice president of research and development at Bionova Inc. in New York, which conducts research on bioactive substances. "From a historical point of view, yes, because we all evolved from the sea. It might be that somewhere in our genes is the code of recognition of these substances. The customer feels good, so that means something is in the seawater that our tissues can absorb and use. But that's a supposition. Unfortunately, there is no serious science behind all these claims and treatments."

fitted with multiple jets begins spraying me with warm seawater as a therapist gently rubs my back, arms, and legs with citronella cream. I smell like mosquito repellent, but the combination of water and rubdown is heavenly. At the Miramar, the similar *soin* is called *douche à quatre mains,* or four-handed shower: Two therapists do the rubbing, minus the citronella. Sybaritic, yes, but the promise is more than simple relaxation—one description claims "double sedative actions on the nervous receivers of the skin." It's also supposed to improve resistance to stress and to stimulate circulation, but at neither center is there a way of measuring whether this has in fact happened.

The water-massage bath, variously called *bain hydromassant* and *bain multi-jets,* is a tubful of computer-programmed frothing. The bubbles are supposed to disperse a layer of air between the skin and the water, allowing the algae powder that's been poured in to penetrate. At the Sofitel, the treatment is said "to encourage tissue oxygenation and general relaxation with a capital R." When I get into the private whirlpool, I find myself on high alert as the series of timed jets rotate on and off, accompanied by flashing colored lights that have an almost hallucinogenic effect. The same bath at the Miramar does not include the light show, and I might doze off if not for the congenial attendant who keeps coming in to ask, "*Ça va?*" So, yes, I'm tranquil, but am I oxygenated? How would I know?

Douche sous marine is an assisted underwater shower. I climb into another tub of seawater, but this time the therapist stays with me, using a powerful hose against my legs from thighs to toes that turns the water into a cloudy eddy. It reminds me of childhood swims during which I'd sidestroke past a garden hose that had been put in the pool to raise the water level. In this case, water pressure is touted for soothing muscle spasms, easing painful areas, and, once again, stimulating circulation. It's especially agreeable on the soles of my feet—like a mini foot massage.

My least favorite treatment is the equivalent of the old Scotch hose: I stand about five feet from an attendant and make quarter turns while she aims a shower nozzle at me. The water pressure is so strong that it stings up and down my legs, and there's a cold-water finish—am I being punished? At the Miramar, this treatment is called *douche à pomme*—for some reason, the showerhead is thought to resemble an apple. It's supposed to relax all the major muscle groups, being particularly effective for edema and cellulite. I can imagine that the alternately warm and cool seawater may be invigorating to some, but if my muscles are relaxed, the rest of me is made irritable by the pain.

Seaweed wraps are purported to eliminate toxins and excess water through sweating while also replenishing minerals. In the Miramar's *enveloppement,* a green poultice of algae is applied to the front of my body—a restful 20 minutes in a cocoon. The effect of the algae seems more concentrated during *algotherapie,* since the poultice, applied this time to the back of my torso and legs, is intensified with a heat lamp. Any weight loss, of course, is quite temporary. Why, I wonder, isn't the seaweed analyzed before and after it's used to determine what "toxins," if any, leave the body?

There's a serious intent to the exercise class that takes place in a small pool filled shoulder-high with warm seawater. Exercising while immersed increases the pressure on the body without a commensurate increase in strain, and it's purported to improve lymphatic drainage. But I get a real case of the giggles as I join half a dozen "students" (all wearing shower caps) holding on to underwater metal bars while an instructor counts our leg lifts ("*un, deux, trois...*") against gushing jets. The 20-minute session has the potential (and the safeguard against injury) of any water-based physiotherapy, but to me it seems like a cross between Navy Seals training and a *Saturday Night Live* sketch, and as a calorie burner (thalasso-robics?) it's wimpy.

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There are many more treatments—every possible kind of spray or jet or mudpack on every part of the body where it could plausibly do good, all variations on a theme. But the pièce de résistance of the thalasso regime is the *parcours aquatique,* or water trail. At the Sofitel, a large round seawater pool, heated to just below body temperature, is divided into activity stations: underwater geysers aimed at the legs, stomach, and hips; horseshoe-shaped

"microbubble chairs" with jets in the seats and footrests; a fountain cascading against the neck and shoulders; a "dynamic corridor" for walking; and an outdoor Jacuzzi overlooking the cliffs. It's classic hydrotherapy: The various gushings of water are meant to provide "effective" massage, give the muscles a "workout," get rid of stress, and "clean your lungs." A cold plunge is recommended for 30-second dips, but I avoid it after dipping in a toe. At the Miramar, the *parcours* includes "the maze" (floor-level geysers, waterfalls, and jets at different heights), "the river" (where you must walk or swim against a rushing current), and "the grapefruit bath." (Yes, there are grapefruits bobbing around in it; they're said to have "stimulating qualities.")

It's fun to submit to the stations of the *parcours,* but why so many jets? For men, I learn, the goal is to provide muscle tone; for women, to combat cellulite; for everyone, to increase circulation and mobility of the joints. It seems to me the epitome of passive exercise. When I try to up the intensity by resisting the current, I'm carried along like a gum wrapper in the street after a fire hydrant opens up.

The Miramar claims that thalassotherapy is "curative and preventive and aims at total physical regeneration." The Sofitel claims that just breathing the "vivifying air" of this region "stimulates the vital functions and helps to regain one's energy" and that seaweed, "the queen of the marine environment," has minerals and vitamins "essential for your major biological functions." Are these minerals and vitamins seeping into my skin? Am I inhaling something that's aiding my immune system, my circulation, my metabolism? The Sofitel attempts to answer some of these questions by taking blood samples from

The Sofitel

ABOUT 40 YEARS AGO, A TOUR DE FRANCE champion named Louison Bobet, the Lance Armstrong of his day, was injured in a car accident and improved so dramatically after seawater treatments that he established a thalassotherapy institute near his home, on a beautiful peninsula in southern Brittany. Two hotels were built next to the center, the Sofitel Thalassa in 1965 and the Sofitel Diététique in 1973, and their reputation spread all the way to Hollywood—Gregory Peck and Jane Fonda were visitors. A bon vivant who got into more hot water than thalasso provided, Bobet lost the properties in 1975. His baby is now part of the Accor group, which owns 4,000 hotels in 90 countries. The recently renovated Thalassa and Diététique form a C-shaped curve facing the sea and sharing the institute.

The public spaces are sleek and modern but relaxed rather than fancy, with fresh flowers in many corners. Guest rooms are barely big enough for a TV and a bed, but the TV is flat-screen and the bed is seriously cushy, with layers of downy comfort. Treatment rooms lie along a series of multilevel corridors, with additional ones in a group of freestanding round structures that look like industrial vats. They run alongside the largest lap pool I've ever seen (25 meters, or more than 80 feet). There's not much in the way of a locker room—you must tote your own shampoo to the bare-bones shower. I especially liked the *salon de repos,* a quiet room furnished with deck chairs and duvets for napping and reading, and the hammam, an attractively tiled steam room.

The Diététique claims to be the only fully diet hotel in France, but the philosophy is "Life is far too short to slim in suffering." Breakfast is served to guests in their rooms. One side of the menu is written in English, so I don't have to struggle to translate health advisories such as "Cereals are the main source of energy for muscles and nerves" and "Fruit, which is rich in vitamin C, has a tonic effect." If you're expecting croissants and café crème, the menu will seem relatively spartan—skim milk is served with coffee, the confiture is low-sugar, and the butter is *allégée* (lightened)—but there's a terrific nonfat cheese "pie" made with skim-milk cheese, and a slice of wheat toast dipped in a four-minute boiled egg tastes positively decadent compared to an American egg-white omelet.

Breakfast choices are monitored by the dietician, who sends you a note if she disapproves and visits your dinner table to inquire about the next day's meals. The resort's brochure promises, "The dietician is always on hand to reply to whatever questions you have. She is your guardian angel." With few exceptions (a truly vile salmon sauce that is gray in color and tastes like iodine), the calorie-controlled lunches and dinners (about 400 calories each) are quite satisfying—heavy on the local seafood, bread served only on request. There's even a reduced-fat cheese trolley (*vive la France!*), but—*mon dieu!*—no wine. (Ironic that such a wet experience is dry.) At the Thalassa, guests are unencumbered by dietary restrictions. Everything one associates with classic French cuisine is available—wine, cheese, bread, soufflés—as well as a good New York strip steak, if that's your poison.

There's not much to do on this remote peninsula. What little activity is provided (an adequately stocked gym, the occasional yoga class) confirms the idea that the French regard the American obsession with exercise as deranged. For entertainment, there are regular "festivals" of music, theater, and comedy (regrettably, I am missing the "festival of reading and literature in bathrobe"), and in the warm weather, there are *pique-niques diététiques* held on the lovely nearby island of Ile de Houate. But my exercise consists of walking along the cliffs, swathed in layers whipped around me by the brisk sea breezes, feeling like the French Lieutenant's Woman.

One-week programs with three meals a day from $2,926. www.accorthalassa.com

guests at the beginning and end of their stays, to be analyzed by a doctor in Paris, but as general manager Olivier Brugere says, "Most people don't want to contribute." No results have been made available yet, and I don't qualify because I'm not staying for the full-week program. "We don't promise any weight loss," says Brugere. "If you want to go to town and eat chocolate, we don't follow you. But if you follow our program, we are roughly sure you will lose three kilos in a week." (That's about 6.5 pounds.)

I don't know how mineralized I am at the conclusion of my stay. I am certainly deeply relaxed after just a few days of thalassotherapy, and my skin seems plumped up, with a lingering thoroughly cleansed smell that is part iodine, part menthol, part grass. I have not lost weight because I cheated and ate cheese and croissants (see the boxes on the Sofitel on page 119 and the Miramar Crouesty at right), but I haven't gained, either, despite the limited calorie burning in a thalasso regime. (This is hardly the spa experience for a fitness fiend.) Spa-ing in Brittany is all about taking the waters—accepting the traditions and literally going with the flow. I've spent more time in the water than Esther Williams, and I feel almost dirty when I resume an at-home routine of a mere daily shower. Is thalasso legit? From a scientific point of view, the jury is still out, but perhaps 60 million Frenchmen (and their *grands-mères*) can't be wrong.

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The Miramar Crouesty

THE GLEAMING WHITE OCEAN LINER THAT looks as if it has run aground isn't a ship at all but the ship-shaped Miramar Crouesty, built on the tip of a peninsula between the Atlantic Ocean and the Gulf of Morbihan. Every effort has been made to evoke the sense of cruising, from the nautical blue-and-white color palette to the portholes and coiled rope handrails along the walls. Most of the "staterooms" along several "decks" are identical, small and rather basic, with built-in settees that are a lot shorter than I am. This is unfortunate because there's no commodious, quiet place to relax during downtime from thalasso: The pool areas are shared with the "youngsters club," the nondescript and windowless lounge "onboard" seems more suited to a PowerPoint presentation, and the "hammams" are tragic—closet-size cubicles in the men's and ladies' bathrooms. There's a more appealing coed experience, the eucalyptus inhalation room, but its half-dozen chaises cannot accommodate the demand. Although I pass by often, I never get the chance to use it.

Most of the real estate (more than 25,000 square feet) is devoted to the thalassotherapy institute that was, until this winter, named for Louison Bobet, whose brother established it, but after recent negotiations with the family, the Bobet name has been removed—literally. (There's still a pentimento of the letters at the entrance.) About 50 freshly scrubbed, mostly portholed treatment rooms line two long corridors on the lower deck, and both are filled with the distinctive pungent odor of algae. You can get a clean white robe and slippers at the reception desk before heading off to follow your program, printed on a card in a plastic sleeve.

There are some terrific non-thalasso treatments, too, like the "herbal Siam," a massage with a cloth-wrapped pompom of sesame seeds, and a chocolate facial with a melted semisweet mask. Why? "Cocoa contains elements that are even more efficient antioxidants than wine or tea and protect efficiently against free radicals and aging," claims the institute. I don't know about that, but it's good enough to eat.

Guests are free to alternate between the traditional dining room and the diet restaurant—the former has a wine list; the latter, a mineral-water list. (Those on specific programs for weight loss or smoking cessation have consultations with a dietician and are expected to eat *diététique*.) The regular menu seems a bit fussy and overly sauced, so I'm quite content to eat from the leaner spa menu, where the fish is likely to be wrapped with braised leeks rather than napped with cream. The Sunday-night seafood buffet around the pool really evokes a cruise theme; there's such a bounty of fresh and smoked fish that I can stuff myself relatively guilt-free. (The oysters, from local waters, are the best I've ever tasted.) Breakfast is self-serve, and there are *pains au chocolat* alongside the stewed prunes, so discipline is required.

Special spa touches include a citrus spray for your terry cloth robe offered in the reception area and a delicious berry-flavored smoothie served midafternoon at the juice bar near the pool. The gym is small but well equipped, and it was mine alone during my entire stay. The Miramar marina offers some shopping diversions (including the non-*diététique* butter cookies for which Brittany is famous), as well. It helps to speak a bit of French, as most of the thalasso information is not translated into English, either by the attendants or in the brochures. But the concierge named Stephane is one of the most helpful resort employees I have ever encountered, and would be an instant best friend to anyone whose French skills stop somewhere around "*la plume de ma tante*."

One-week programs with three meals a day from $1,950. www.miramarcrouesty.com