

the healthy swimmer



Michael Frank

In Season – Basil

Ocinum basilicum, known to most as basil, is a fragrant, low-growing perennial herb. A favorite in Italian and Asian cooking, the herb originated in India and other tropical regions of Asia, where it has been cultivated for more than 5,000 years. Basil comes in several varieties, including sweet basil used in Italian cooking, and Thai basil, which is most often used in Asian cuisine. Basil has a strong, sweet aroma – similar to anise. The plant is sensitive to cold, and is best grown in hot, dry conditions.

Basil contains essential oils found to have potent antioxidant qualities. Traditionally, basil has

been used for supplementary treatment of stress, asthma and diabetes. Recent scientific research has established that basil oil also has potent anti-aging, anti-cancer, anti-viral and anti-microbial properties.

Basil is most commonly used fresh, but can also be dried or blanched and frozen. Fresh basil can be refrigerated in plastic bags for short periods of time. When used in cooked foods, the fresh herb is typically added at the last moment to avoid flavor loss. When gardeners have an abundance of basil, one popular way to use the herb is by making pesto, a sauce traditionally made with crushed basil and other ingredients. <<<

reader recipe

Pesto sauce is thought to have originated from Genoa in the Liguria region of Italy. The name refers to the traditional method of crushing herbs and garlic with a mortar and pestle. Pesto is most commonly used as a last-minute coating for pasta. This month's recipe is a simple, reduced calorie pesto sauce featuring fresh basil.

Simple Pesto

_____ 4 cups	basil leaves (about 4 ounces)
_____ 2 T	coarse-chopped pine nuts (or walnuts)
_____ 1	garlic clove, peeled
_____ 2 T	extra-virgin olive oil
_____ 1/4 t	salt
_____ 1/4 t	fresh ground pepper

In a blender or food processor, chop basil leaves, pine nuts and garlic until fine. With the motor running and top open, slowly drizzle olive oil into the mixture. Turn off blender, scrape down sides, cover and pulse motor until mixture is finely minced and is the consistency of a paste. Season with salt and pepper to taste. If mixture is too thick, add small amounts of water and pulse motor until sauce reaches desired consistency. Toss with cooked pasta just before serving, and garnish with fresh grated Parmigiano-Reggiano. Refrigerate leftover pesto sauce and use within 1 week. Yield: 3/4 cup <<<

Serving size: 1 tablespoon. 35 calories per serving. 2 grams of fat per serving.

>>> Do you have a recipe our readers would enjoy?

Send it to editor@usms.org, or mail to: Reader Recipe, c/o Bill Volckening, 1220 NW 119th Place, Portland, OR 97229.

How Many Calories Burned?

How many calories can you burn when swimming? Aileene Palm of New England Masters, an exercise physiologist who specializes in weight loss, has some answers.

"I wish I could tell you that you'll burn 500 calories per workout, but it is not that simple," says Palm, who is also a certified personal trainer, yoga teacher, nutrition specialist and Thai yoga massage practitioner. "The most suitable and accurate way for measuring caloric expenditure is through indirect calorimetry, which measures maximum oxygen consumption (VO₂ max) and carbon dioxide production in the body."

Palm says the indirect calorimetry test is done when the subject is walking or running on a treadmill, or pedaling a bike while wearing headgear with a mouthpiece.

"Every time you exhale, the air goes through a tube into a metabolic measurement cart and [the machine] computes your oxygen consumption. The test takes about 10 to 15 minutes. Some health clubs, sports training facilities and universities offer VO₂ max testing at a cost. Free testing may be available through a research study.

Palm says there are also equations that can estimate your oxygen consumption and caloric expenditure, but adds that such testing is not an exact science.

"If you lose or gain weight, become efficient with your workouts, or provide a different work rate of the activity you do, your caloric expenditure will change," Palm says. "There are many caloric expenditure calculators online, but there are discrepancies between them and they could give you different results with the information you provide." <<<

>>> Check out www.exrx.net. Click on "fitness calculators" then click on "calories expended." This website will give you lots of useful fitness information.

READERS ASK Help! I Smell Like Chlorine!

Q: Whenever I swim, I notice my skin still smells like chlorine the next day. What are the long-term effects of chlorine retention in the skin? Should I do something more to remove chlorine from my skin following my daily swim?

A: Jennifer Kappler, a physician assistant and Masters swimmer from Louisville, Ky., has answers:

“Chlorine is used in swimming pools to kill disease-causing bacteria in the pool water,” says Kappler, who swims with the Lakeside Masters. “Chlorine does have some less desirable side effects on our bodies. Eye irritation, dry hair and skin, and residual chlorine smell on the body all can occur after swimming in a chlorinated swimming pool. Applied properly, the amount of chlorine added to swimming pools is enough to kill germs, but not enough to cause long-term health problems.”

Kappler says body oils and perspiration react with the chlorine in the pool water to produce chloramines, which cause the chlorine odor in your hair and on your skin.

“To help prevent the chlorine smell from absorbing into your hair and skin, rinse your hair and body in a shower prior to entering the water,” says Kappler, who swam for Texas A&M. “Also, wearing a swim cap can help reduce the amount of chlorine exposure to your hair.”

Kappler recommends showering with soap and water, and shampooing your hair immediately after swimming.

“Apply a moisturizer after showering to further reduce the chlorine odor,” she says. “The chlorine smell will not necessarily go away completely, but these measures should reduce it as much as possible.”

Kappler also notes several anti-chlorine products on the market, such as TRISWIM and UltraSwim. “These products are intended to aid in removing the chlorine and the chlorine smell from your hair and body,” she adds. <<<

Cryptosporidium in the News

Recently, national news reports about *Cryptosporidium* contamination are causing some swimmers to ask if their pool water is safe for swimming. Kip Kircher, M.D., an emergency medicine physician at the University of Wisconsin, Madison, has some useful information for swimmers.

“*Cryptosporidium*, also known as ‘Crypto,’ is a parasite found in both humans and animals that can cause an acute gastrointestinal illness,” Kirchner says.

The *Cryptosporidium* parasites, which encompass more than one species, are among the most frequent causes of waterborne disease (drinking water and recreational water) among humans in the United States, according to the Centers for Disease Control. Swimmers may encounter the chlorine-resistant parasite in their pools.

The illness caused by these parasites is characterized by watery diarrhea that lasts from two to four days. Victims also may experience abdominal cramping, loss of appetite, low-grade fever, nausea, vomiting and weight loss; however, infections without symptoms occur frequently.

“The good news is that in otherwise healthy people, Crypto is usually a self-limited illness, meaning that healthy people will likely recover fully without the need for treatment,” says Kirchner. According to the FDA, there is no known effective drug for the treatment of *Cryptosporidiosis*.

“The bad news is the parasite is protected by an outer shell that allows it to survive outside the body for long periods of time, making it very resistant to chlorine disinfection,” Kircher adds. “In people with a compromised immune system, such as HIV patients, Crypto can be a severe, cholera-like illness.”

According to the CDC’s Morbidity and Mortality Weekly Report, “Efforts to reduce the transmission of this chlorine-resistant pathogen in pools will require a concerted effort to move beyond existing pool practices to include new technology (ultraviolet light or ozone inactivation), operational improvements (use of filtration enhancements that improve *Cryptosporidium* removal), and public education to reduce the continued swimming of people who are ill with diarrhea.” <<<

>>> For more information, go to cdc.gov/healthyswimming.

The information in this department is not intended as a substitute for professional or medical advice. It is not intended to provide medical advice on personal health matters. For personal medical advice, consult your healthcare provider. If you are concerned about a particular medical condition or injury, see your healthcare provider for evaluation and care.

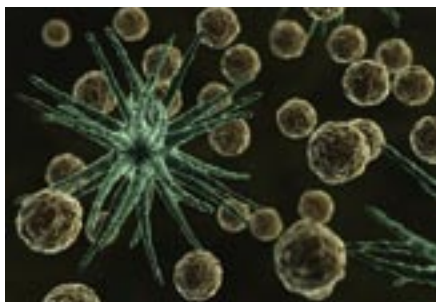
Advice for Allergic Swimmers

Does swimming impact fall seasonal allergies? Masters swimmer Ron Greger, M.D., has information of interest to swimmers who suffer from fall allergies.

“In the fall, grasses go to seed again (the first time was in spring) and ragweed pollen also spreads through the air,” says Greger, who practices family and sports medicine in Rockville, Md. “Falling and decomposing leaves in late fall will generate leaf mold that can also be an allergen for some.”

If you are swimming outdoors, Greger says added exposure to airborne pollen can trigger a reaction in sensitized individuals.

“Exercise necessitates an increased



James Steidl

intake of air and as a result an increased intake of pollens or other allergens,” says Greger, who swims with the Germantown Masters. “The allergic person may subsequently develop allergic rhinitis (sneezing, runny nose), bronchitis (cough) or even

asthma. On the other hand, the pool water will have a flushing effect on the nasal and mouth passages, and thus may help wash out any inhaled pollen. Studies repeatedly cite that about 20 percent of swimmers have some degree of asthma.”

Greger says another potential consequence of swimming outdoors is the possibility of inhaling cold air. While not a seasonal allergen, cold air can aggravate asthmatic bronchospasm.

“But the obvious high humidity of the pool water tends to mitigate against the drying effect of the cold air,” Greger says.

Greger says many swimmers become irritated by or even allergic to the chlorine used to sanitize the pool water. <<<