





#### Sustainable Sun Safety Written by: Deborah Olorunda, 2023-24 Teen Healthy Living Ambassador

For years the chemicals inside of sunscreen have effectively protected humans from harmful radiation. However, in more recent years our oceans have been acidifying at higher rates due to increased pollution. This crisis has encouraged scientists and marine researchers to investigate the effect sunscreen has on marine ecosystems. In particular, research has found that traditional sunscreens are destructive to marine organisms such as algae and in particular have undermined the symbiotic relationship between coral and algae creating coral bleaching. Coral bleaching occurs when the ocean water becomes too warm due to acidification stressing out the algae and causing them to expel (break away) from the coral; leaving the coral exposed and dead. This massive decay of coral and other marine organisms reduces the biodiversity of oceans which shortcuts the ability for a proper food chain to occur causing other species in turn to start dying off. The enigma of coral bleaching that is so prominent in our coral systems has encouraged people to discover the true efficacy of sunscreen and question if "reef safe" is truly better for our reeves. The question is can a sunscreen really exist that can dually protect the vibrancy of reefs while providing ample sun protection for humans to prevent skin cancer? The answer is YES! The typical chemicals in traditional sunscreens that have been destructive to the oceans are oxybenzone, octinoxate, and avobenzone. One of which oxybenzone has already been outlawed in the production of sunscreen! Chemical agent, zinc oxide has been discovered and utilized as the base of new "reef-safe" sunscreens. Testing was done with a common marine algae Nannochlopsis Oculata comparing the amount of cell growth and decay using a zinc oxide mineral-based sunscreen versus ones with the traditional makeup. The zinc oxide mineral based sunscreen was found to deplete almost half as many nanometers of cells in the algae in comparison to the other sunscreens. This several-month series of testing echoes the many more reports that show zinc oxide to be a far more sustainable sunscreen agent for marine ecosystems while still providing ample sun coverage for beach-goers. So how does this problem impact you? If you look at the back of a sunscreen bottle 9 times out of 10 the active ingredients include names of lengthy chemicals such as octinoxate, avobenzone and homosalate. These active ingredients though effective in sunscreen are endocrine disruptors meaning these are the chief chemicals creating marine damage. After extensive research and testing out of those active ingredients, zinc oxide-based sunscreens are proven to be more sustainable for use. Now its time for you to keep yourself protected this summer while actively being a friend to our marine ecosystems! Swap out your chemical sunscreens for mineral-based sunscreens with zinc oxide.



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# BITES

BUILD YOUR OWN Popsicle Choose from your favorite ingredients and make it your own!							
Prep Time: 15 min Total Time: 25 min	utes	vonte ingredients an	u make it your o				
LIQUID	2 cups	2 cups unsweetened	2 cups low-fat	2 cups			
	low-fat milk	fortified soy milk	vanilla yogurt	100% juice			
FRUIT	1 cup	2 bananas,	1 cup fruit	<sup>1</sup> / <sub>2</sub> cup frozen 100%			
	frozen fruit	sliced	canned in juice	Juice concentrate			
EXTRA	% cup	% teaspoon		1 teaspoon			
	peanut butter	cinnamon		vanilla extract			

#### **Directions:**

- Select a liquid, fruit, and/or extra
- Layer fruits and/or extras in a blender. Pour liquid over top. Blend until smooth.
- · Pour into popsicle molds or small plastic cups. Insert popsicle mold handles or use plastic spoons or popsicle sticks in cups.
- · For chunky popsicles, add fruit to molds. Mix any extras with the liquid and pour over fruit
- Freeze 4-6 hours or overnight. Run warm water over molds to loosen and remove the popsicles.
- Makes 6 3-ounce servings
- As you become more familiar with the recipe, try adding or replacing with different liquids, fruits, and extras for a different flavor



# **Exercise Your Mind**

### Summer

В	В	Q	С	В	Е	А	С	Н	S	
Е	L	А	L	А	Κ	Е	S	Υ	Е	
Н	В	Ι	S	В	Μ	Ν	U	L	А	
Ρ	А	А	S	Е	R	Ρ	Ν	А	S	
Н	0	М	R	Т	В	Е	Ι	W	0	
Н	Ι	0	Μ	В	Е	А	Е	Ν	Ν	
0	Υ	Κ	L	0	Е	R	L	Ζ	G	
Т	В	Е	Е	S	С	С	Ι	L	Y	
G	А	R	D	Е	Ν	Κ	U	Ν	Y	
V	В	Е	R	R	Ι	Е	S	Е	G	
istering			Basel	ball		Bai	rbecu	e	ł	Hike

Blistering	Baseball	Barbecue	
Berries	Camping	Garden	
Hammock	Beach	Season	
Breezy	Lawn	Bees	
Sun			

Lake

Pool

Hot

### **Pool Safety Tips**

- Swim with a buddy: Never swim alone, and always have a friend or family member nearby in case of an emergency.
- Learn to swim: Knowing basic swimming skills is crucial for pool safety. If you haven't already taken swim lessons, you are encouraged to sign up.
- Adult supervision: Ensure that there is always an adult present when swimming, especially if there are inexperienced swimmers in the
- group. Know the depth: Be aware of the depth of the pool, particularly if there are diving boards or slides. Diving into shallow water can result in serious injuries.
- Avoid running or roughhousing: Running or engaging in rough play around the pool area can lead to accidents and injuries.
- can lead to accidents and injuries. Sun protection: Apply sunscreen with an SPF of 30 or higher, wear sunglasses, and take breaks from the sun to prevent sunburn and long-term skin damage. Stay hydrated: Drink plenty of water to stay hydrated while swimming. Avoid consuming sugary drinks, as they can contribute to dehydration. Understand pool rules and signs: Familiarize yourself with the pool's rules and warning signs, such as no diving or no running. Learn basic CPR: Knowing how to perform

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- Learn basic CPR: Knowing how to perform CPR can save a life in case of an emergency. You are encouraged to take a CPR course. Keep pool area clean: A cluttered pool area can create tripping hazards and make it difficult to quickly respond to emergencies. Ensure that towels, toys, and other items are care create tripping the pool's edge stored safely away from the pool's edge.

## Resources

Virginia 4-H

facebook.com/Virginia4HStateOffice

Virginia Family Nutrition Program

eatsmartmovemoreva.org

www.facebook.com/VaFNP

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