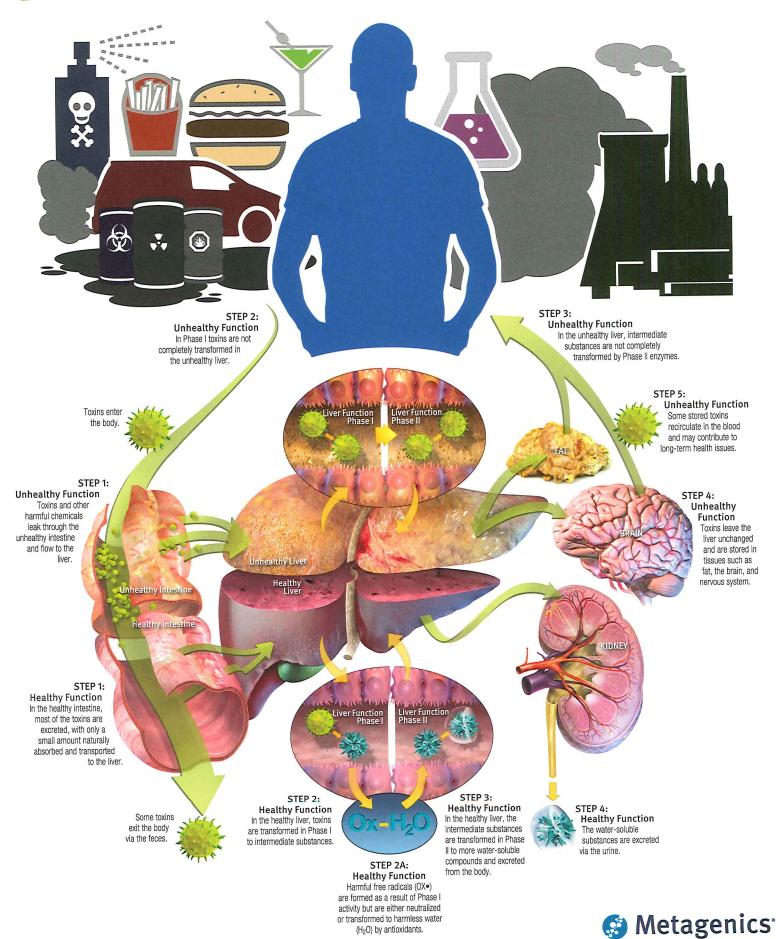
3 PHASES OF DETOXIFICATION



3 Phases of Detoxification

Exposure to Toxins Is a Fact of Life

During routine body function, the human body produces toxins. It is also exposed to environmental pollutants found in the air, drinking water, and food supply. Fortunately, humans have an efficient metabolic detoxification pathway that neutralizes and removes harmful chemicals via key elimination channels, including our digestive system, liver, and kidneys.

Toxins are compounds produced by living organisms that are harmful to humans. Toxicants are toxic chemicals found in nature or made by man. Both toxins and toxicants can have detrimental effects on health. Environmental toxicants include persistent organic pollutants (POCs), volatile organic compounds (VOCs), heavy metals, and pesticides. Exposure to toxins and toxicants is on the rise, and to compound the problem, we have also refined away much of the nutritional value of our food and replaced it with artificial colorings, preservatives, flavorings, conditioners, etc.

Toxic Burden

This represents the total accumulation of toxins in your body. Over time, the buildup of harmful chemicals from the environment and lifestyle choices may compromise the way your body works and can even affect your health.

Environmental toxins and drugs are neutralized and eliminated by efficient and elaborate enzymatic detoxification pathways. These pathways are dependent on proper nutrition and may require additional support during a prolonged or excessive toxin exposure.

Avoiding Toxin/Toxicant Exposure

While it is not possible to completely eliminate toxin/toxicant exposure from all sources, there are ways to minimize external exposures. If you know the source of any toxic materials at or in the home, remove or reduce them. When using any known toxic materials, ensure that you wear appropriate protective clothing and/or a breathing apparatus. It is also very important to eat a good diet with plenty of fresh, wholesome foods. Avoid eating excess fat, refined sugar, and foods high in additives and preservatives. Eat moderate levels of protein (approx. 30% of your calories) and fat (approx. 30% of your calories), while increasing levels of complex carbohydrates (approx. 40% of your calories). Consume meats from organically raised animals and select organically grown fruits and vegetables whenever possible. Drink plenty of purified water (ideally, eight 8-ounce glasses a day). A home water purification system is highly desirable.

Metabolic Detoxification: An Overview

Most toxic chemicals are lipid soluble (lipophilic molecules) and are

not easily eliminated from the body. Metabolic detoxification involves coordinated enzymatic reactions that neutralize and solubilize these harmful chemicals and facilitate their excretion from the body mainly via kidney, stool, or sweat. Hence, the main function of the detoxification pathway is to transform (a process referred to as biotransformation) lipid-soluble toxins to water-soluble (hydrophilic) molecules that are easily eliminated from the body. The phases of metabolic detoxification are performed by three sets of enzymes or proteins, called the Phase I (functionalization) enzymes, Phase II (conjugation) enzymes, and the Phase III (elimination) proteins.

Support Your Body's Detoxification Efforts

Through high-quality protein, complex carbohydrates, fiber, and essential fats, the body gets what it needs to support muscle and organ function and to help prevent depleted energy resources during the detoxification efforts. But that is just the beginning. Additional targeted nutritional support can specifically address the detoxification process and serve to protect the function of the main organs involved in this process—the liver, the kidneys, and the intestinal tract:

- Liver: Filters out and transforms toxic substances in the blood into harmless substances that can be excreted in the urine or stool
- Kidneys: Provide a route for toxin excretion via the urine, performing a vital component in the detoxification process as they provide a route for toxin excretion via the urine
- Intestines: Support regular bowel movements, eliminate the buildup of unhealthy microorganisms and internal toxins, and provide a strong and intact barrier to prevent the leakage of toxic materials from the intestines into circulation

Find the Help You Need

Ask your healthcare practitioner what you can do to support metabolic detoxification through nutrition and to recommend a program that is right for you.



205 Clark Place SE Tumwater, WA 98501 (360) 570-0401 info@heartofwellness.org



Metabolic Detoxification Questionnaire

Part 1: Symptoms Name: Date: Rate each of the following symptoms based on the last week using the point scale below: O Never or rarely have the symptom 3 Frequently have it, effect is not severe 1 Occasionally have it, effect is not severe 4 Frequently have it, effect is severe 2 Occasionally have it, effect is severe 0 1 2 3 4 Chest congestion **Digestive Tract** Nausea, vomiting 0 1 2 3 4 Respiratory 0 1 2 3 4 Diarrhea 0 1 2 3 4 Asthma, bronchitis Shortness of breath 0 1 2 3 4 Constipation 0 1 2 3 4 0 1 2 3 4 Difficulty breathing Bloated feeling 0 1 2 3 4 Respiratory Total: Heartburn 0 1 2 3 4 Eyes Watery or itchy eyes 0 1 2 3 4 Intestinal, stomach pain 0 1 2 3 4 Swollen, red, or sticky eyelids 0 1 2 3 4 **Digestive Total:** Bags or dark circles under eyes 0 1 2 3 4 0 1 2 3 4 Joints / Muscles Pain or aches in joints 0 1 2 3 4 Blurred or restricted vision Arthritis, joint swelling 0 1 2 3 4 Eyes Total: Stiff or limitation of movement 0 1 2 3 4 0 1 2 3 4 Nose Stuffy nose Pain or aches in muscles 0 1 2 3 4 0 1 2 3 4 Sinus problems or dripping nose Feeling of weakness or tired 0 1 2 3 4 0 1 2 3 4 Hay fever Joints / Muscles Total: Sneezing attacks 0 1 2 3 4 **Emotional** 0 1 2 3 4 Mood swings 0 1 2 3 4 Excessive mucus 0 1 2 3 4 Anxiety, fear, nervousness Nose Total: Anger, irritability, aggression 0 1 2 3 4 0 1 2 3 4 Mouth / Throat Frequent, consistent coughing 0 1 2 3 4 Depression Gagging, need to clear throat 0 1 2 3 4 **Emotional Total:** 0 1 2 3 4 Sore throat, hoarse, loss of voice Binge eating, drinking Weight / Food 0 1 2 3 4 Swollen or discolored tongue, gums, or lips @ ① ② ③ ④ Craving certain foods 0 1 2 3 4 0 1 2 3 4 Canker sores, other mouth sores 0 1 2 3 4 Excessive weight Mouth / Throat Total: 0 1 2 3 4 Compulsive eating, food addictions 0 1 2 3 4 Ears Itchy ears Water retention 0 1 2 3 4 0 1 2 3 4 Earaches, ear infections Underweight 0 1 2 3 4 0 1 2 3 4 Drainage from ear, waxy buildup Weight / Food Total: Ringing in ears, hearing loss 0 1 2 3 4 Energy / Sleep Fatigue, sluggishness 0 1 2 3 4 Ears Total: Apathy, lethargy 0 1 2 3 4 0 1 2 3 4 Head Headaches Hyperactivity 0 1 2 3 4 0 1 2 3 4 Faintness or lightheadedness Restlessness, achiness 0 1 2 3 4 Dizziness 0 1 2 3 4 0 1 2 3 4 Sleep disturbances **Head Total:** Energy / Sleep Total: 0 1 2 3 4 Cognitive Poor memory, recall Skin 0 1 2 3 4 0 1 2 3 4 Confusion, poor comprehension Hives, rashes, dry skin, redness 0 1 2 3 4 Poor concentration 0 1 2 3 4 0 1 2 3 4 Hair loss 0 1 2 3 4 Poor physical coordination 0 1 2 3 4 Flushing, hot flashes 0 1 2 3 4 Difficulty in making decisions Excessive sweating 0 1 2 3 4 0 1 2 3 4 Stuttering, stammering Skin Total: 0 1 2 3 4 Slurred speech Heart Irregular or skipped heartbeat 0 1 2 3 4 Learning disabilities 0 1 2 3 4 Rapid or pounding heartbeat 0 1 2 3 4 Cognitive Total: Chest pain 0 1 2 3 4 **Heart Total:** Other Frequent illness 0 1 2 3 4 Frequent or urgent urination 0 1 2 3 4 **Grand Total** Genital itch or discharge 0 1 2 3 4 Other Total:

For Practitioner Use Only:

Urinary pH_



Metabolic Detoxification Questionnaire

Part 2: Xenobiotic Tolerability Test (XTT)

7. Do you develop symptoms with exposure to fragrances, exhaust fumes,

○ Yes (1 pt.) ○ No (0 pt.)	or strong odors:
If yes, how many are you currently taking? (1 pt. each)	Yes (1 pt.) No (0 pt.) Onn't know (0 pt.)
2. Are you presently taking one or more of the following	8. Do you feel ill after you consume even small amounts of alcohol?
over-the-counter drugs?	○ Yes (1 pt.) No (0 pt.) ○ Don't know (0 pt.)
○ Cimetidine (2 pts.)	10. Do you have a personal history of:
3. If you have used or currently use prescription drugs, which of the following	© Environmental and/or chemical sensitivities (5 pts.)
scenarios best represents your response to them:	Chronic fatigue syndrome (5 pts.)
Experience side effects; drug(s) is (are) efficacious at lowered dose(s) (3 pts.)	Multiple chemical sensitivity (5 pts.)
Experience side effects; drug(s) is (are) efficacious at usual dose(s) (2 pts.)	Fibromyalgia (3 pts.)
Experience no side effects; drug(s) is (are) usually not efficacious (2 pts.)	O Parkinson's type symptoms (3 pts.)
Experience no side effects; drug(s) is (are) usually efficacious (0 pt.)	Alcohol or chemical dependence (2 pts.)
4. Do you currently (within the last 6 months) or have you regularly used	Asthma (1 pt.)
tobacco products?	11. Do you have a history of significant exposure to harmful chemicals
○ Yes (2 pts.) ○ No (0 pt.)	such as herbicides, insecticides, pesticides, or organic solvents?
5. Do you have strong negative reactions to caffeine or caffeine-containing	○ Yes (1 pt.) ○ No (0 pt.)
products?	12. Do you have an adverse or allergic reaction when you consume
○ Yes (1 pt.) ○ No (0 pt.) ○ Don't know (0 pt.)	sulfite-containing foods such as wine, dried fruit, salad bar vegetables, etc.?
6. Do you commonly experience "brain fog," fatigue, or drowsiness?	
○ Yes (1 pt.) ○ No (0 pt.)	
	Total
Part 3: Alkaliz	ing Assessment
1. Do you have a history of or currently have kidney dysfunction?	3. Are you currently taking diuretics or blood pressure medication?
○ Yes (1 pt.) ○ No (0 pt.)	○ Yes (1 pt.) ○ No (0 pt.)
2. Have you ever been diagnosed with hyperkalemia?	
○ Yes (1 pt.) ○ No (0 pt.)	Total
Overall Sco	re Tabulation
For Practitioner Use Only:	
Part 1: Symptoms Grand Total (High >50; moderat	e 15-49; low <14)
Part 2: XTT Total (High >10; moderate 5-9; low <4)	
Part 3: Alkalizing Assessment Total (High ≥1)	
in the second se	
Urinary pH	
Urinary pH	
Urinary pH	
Urinary pH Notes:	

Disclaimer: This questionnaire is for informational purposes only. It is not meant to diagnose or treat any condition or illness. All medical symptoms should be addressed by a qualified medical professional.

 Patients with high symptoms but low XTT may be exhibiting reactions that are not related to toxic load. Other mechanisms should be considered, such as inflammation/ immune/allergy, gastrointestinal dysfunction, oxidative stress, hormonal/neurotransmitter dysfunction, nutritional depletion, and/or mind body. Individualize support with

Heart of Wellness

205 Clark Place SE
Tumwater, WA 98501
(360) 570-0401
info@heartofwellness.org

specific medical foods, diet, and/or nutraceuticals.

• Recommend non-alkalizing nutrients if patient answers "yes" to any questions in the Alkalizing Assessment.

1. Are you presently using prescription drugs?

Activities to Enhance the Cleanse

The dietary guidelines and supplements that make up the core of this cleanse will certainly go a long way toward cleaning out your body. However, there are many other activities you can do to enhance the effectiveness of those core elements. Below are some suggestions for activities that can be done daily or as often as possible. They aren't mandatory, but will optimize the results you experience with this program.

1) Epsom Salt Baths

Epsom salt is a salt of magnesium. When added to a hot bath, these are a great way to get more magnesium into your system. In order to get the full advantage of these baths, use 4-5 cups of Epsom salt in a bath that is as warm as tolerable. Soak for 20-30 minutes.

Magnesium is known to play a role in over 350 functions in the body, including energy production and detoxification. Magnesium is helpful in the treatment of conditions as wideranging as diabetes, hypertension, fatigue and insomnia.

2) Castor oil massaged into skin over liver area, nightly

Castor oil has a long history of use as a traditional medicine. More recent research shows that castor oil enhances local immunity and stimulates the movement of lymph fluid. When applied to the skin over the liver, castor oil gently enhances the detoxification of the liver and provides a way for the benefits of the cleanse to extend throughout your sleeping hours.

Since castor oil is quite thick; just a small amount is needed. Your liver is located on the right side of your abdomen, tucked up under the bottom edge of your rib cage. A small amount of castor oil should be massaged into your skin over this area. Castor oil's penetrating qualities allow it to absorb into your skin and gently stimulate your liver while you sleep.

It is important to note that, as an oil, it will stain any cloth that it comes into contact with. It is recommended that you wipe your hands thoroughly after applying it, and that you wear an old t-shirt to bed or use bed sheets that you don't mind staining.

3) Saunas

If you have access to a sauna, this is a great way to facilitate excretion and cleansing. The skin is the largest excretory organ of the body. Many toxic substances, including nitrogenous wastes and heavy metals, get excreted most efficiently through the skin and the sweat.

Use of a sauna should always follow the guidelines posted by any sauna facility: stay well-hydrated, limit time in a sauna to 15 minutes, and leave the sauna if any symptoms such as lightheadedness, dizziness, or heart palpitations are experienced. Some people should avoid use of saunas altogether, including pregnant women, people with hypertension and individuals with

congestive heart failure. If there is any question, consult your health care provider before utilizing a sauna during this cleanse.

4) Stretches

Daily stretching is an excellent way to enhance circulation of both blood and lymphatic fluids. While the blood is obviously important for carrying nutrients to cells and removing wastes, it is the lymphatic fluid that is doing a great deal of the work during a cleanse.

The lymphatic system is the primary home of the body's immune system. This is because all of the fluid in the body circulates through the lymphatic system over time, allowing any bacteria, viruses or other wastes to be exposed to large numbers of immune cells. During a cleanse, lots of waste circulates through the lymphatic system as it moves out of the body.

Stretching is a great way to enhance lymphatic circulation and facilitate this process.

Any set of stretches that gently stretch the major joints of the body will work. There are many swetching routines and suggestions available on the web. It is important that stretching not be done in any way that produces pain in any joints. The goal is simply to provide a gentle stretch to the connective tissue around the joints and throughout your body.

5) 20 minutes of moderate exercise/activity each day

There are a number of ways to add this component to one's daily routine. The important point is that it is not necessary for it to be a rigorous workout. Any increase in activity level above your daily average baseline is going to help with detoxification and with weight loss. A few simple suggestions you might considering challenging yourself with include:

- Buy a pedometer (device to count steps taken) and strive for 5000 or more steps each day. This is the equivalent of walking approximately 2.5 miles. If this seems like an easy goal to reach, shoot for 10,000 steps (5 miles) daily.
- Do 3 or 4 sets of semi-deep knee bends each day. This should be done while holding something to stabilize your balance. Don't bend so far that it causes any pain in your knees, and be sure to bend your knees and not your waist.
- Go for a walk after lunch and/or dinner. A moderately paced walk will facilitate your digestion. It
 will also burn off some of the energy you've just consumed at your meal, thereby enhancing
 weight loss.

6) Make a commitment to reduce stress in your life

Chronic stress is a major contributor to poor health, chronic inflammation, weight gain and to the failure of many people to maintain weight loss over time. Chronic stress has an impact on virtually every system of the body. If weight loss is a goal, you should understand that stress causes an increase in blood sugar even if you don't eat food. As a result of this excess blood sugar, your body produces insulin, and insulin gives your body one very strong signal: store energy as fat.

Some simple suggestions for stress reduction include:

- A 15 minute leisurely walk each day. Have the intention to actually notice your environment: the sounds, the colors, the sights, the interactions among people that you might see, rather than focusing on the time. Avoid listening to music or other kinds of stimuli during this walk.
- Make a commitment to avoid television and/or computers at least several days/nights during
 this program. Instead of those, consider reading, writing, going for walks, meditation, or
 beginning a hobby or project that you've put off.
- Start observing yourself being stressed. When you notice that you're feeling stressed, simply pay attention to the story that is playing in your head at that moment. Then bring yourself out of your head and back to your life by asking yourself, "What am I doing right now?" Take a moment to simply describe what you're doing in that moment (I'm sitting in this chair. I'm holding this pen. I'm hearing someone sneeze. Etc.).

Remember, your whole life is nothing but moments just like this one. Conversely, stress is nothing other than the thoughts that are running through your head, and the body sensations provoked by those thoughts.

Heart of Wellness

205 Clark Place SE Tumwater, WA 98501 (360) 570-0401 info@heartofwellness.org

How to Take Epsom Salt Baths

I have a fairly standard-sized western bathtub. When I fill it up and sit in it (with my legs on the bottom of the tub) the water barely reaches my belly button. So, to get another 2-3 inches out of the tub I picked up this <u>cheap little widget</u> and it works great. So, let's break it down to simple steps so that everyone can partake.

Step 1. Draw the hottest temperature bath water you can stand. Make sure to put <u>this nifty device</u> in place to get more out of the tub. And if it's too hot then just add some cold water. Don't make this harder than it is.

Step 2. At some point while it's filling up, start to add your epic ingredients. I've learned to wait at least 5 minutes for the various products to dissolve into the water.

- Add 1-3 cups of Epsom salt. Start at 1 cup if you are very sick. 2 cups seems to be about the standard amount. And working up to 3 is the advanced range. This wiki pagesuggests using ½ cup for children under 60lbs and 1 cup for children between 60lbs 100lbs. I haven't seen anything to contradict this for children, but I have no experience so hopefully someone in the comments will give theirs.
- Add ¼ 1 cup of Baking soda (I usually use ½)
- Add 1000-2000mg of Ascorbic Acid (vitamin C powder)
- Add 6-12 drops of essential oils (mix the water up before jumping in)
- Ready the environment. I like to use relaxing music, set a timer on my iPhone and sometimes put in ear plugs.

Step 3. The soaking part. If you're lucky, your bathtub might be deep enough to allow the water to cover your whole torso almost up to your head. If you're normal, you'll have a choice to either soak the legs or soak the upper body. If you're minus a bathtub, then it's just your feet and you can skip this section. But for the rest of us we have a decision. I like to spend the first 5-10 minutes or so soaking the lower body and then spend the rest with my upper body under water and lower body wedged up on the wall. And if you're someone like me who has had skin issues on your face, you might want to go all-in and spend part or the entire bath with your head half way underwater, leaving just your nose/mouth out to breathe. This will allow the skin on your face time to soak up these great nutrients and usually leaves mine looking great and feeling smoother.

Step 4. The meditative part. As I've said there's really no right or wrong way to do an Epsom salt soak but I want to provide a couple ideas that work well for me. The first is to do meditative deep breathing. There's about a million ways to do this and I think one of the easiest is to try 5-5-5 triangle breathing. Inhale for a count of 5, hold for a count of 5 and breathe out for a count of 5. You might want to spend part of the bath remembering times that you are grateful for, saying a gratitude list out loud or replaying the day... making sure not to judge it and just to digest it. Lastly, if you didn't think I was weird enough I seem to do some of my best thinking in water





EWG'S 2017

Shopper's Guide to Pesticides in Produce

CUT ALONG LINE



INSTRUCTIONS:

- 1. CUT ALONG OUTSIDE LINE.
- 2. FOLD ALONG MIDDLE LINE.



205 Clark Place SE Tumwater, WA 98501 (360) 570-0401 info@heartofwellness.org

The Monterey Bay Aquarium Seafood Watch program creates science-based recommendations that help consumers and businesses make ocean-friendly seafood choices. Carry this guide with you and share it with others to help spread the word.

BEST CHOICES

Arctic Char (farmed) Barramundi (US & Vietnam farmed) Bass: Striped (US hooks and lines, farmed) Catfish (US) Clams, Mussels & Oysters Cod: Pacific (AK) Crab: King, Snow & Tanner (AK) Lingcod (Canada trolls & US longlines, trolls) Lionfish (US) Lobster: Spiny (Mexico) Prawn (Canada & US) Rockfish (AK, CA, OR & WA) Sablefish/Black Cod (AK) Salmon (New Zealand) Sanddab (CA, OR & WA) Sardines: Pacific (Canada & US) Scallops (farmed) Tuna: Skipjack (Pacific trolls, pole and lines)

GOOD ALTERNATIVES

Branzino (Mediterranean farmed) Cod: Pacific (Canada & US) Crab: Dungeness (Canada & US) Lingcod (Canada) Lobster (Bahamas & US) Mahi Mahi (Ecuador & US longlines) Octopus (Portugal & Spain pots) Salmon (Canada Pacific & US) Scallops: Sea (wild) Shrimp (Canada & US wild, Ecuador & Honduras farmed) Snapper (US) Squid (Chile, Mexico, Peru & US) Swordfish (US) Tilapia (China, Colombia, Honduras, Indonesia, Mexico & Taiwan) Trout: Rainbow/Steelhead (Chile farmed) Tuna: Albacore (US longlines) Tuna: Skipjack (free school, imported trolls, pole and lines, US longlines) Tuna: Yellowfin (free school, trolls, pole and lines, US longlines)

AVOID

Basa/Pangasius/Swai Cod: Pacific (Japan & Russia) Crab (Argentina, Asia & Russia) Halibut: Atlantic (wild) Lobster: Spiny (Belize, Brazil, Honduras & Nicaragua) Mahi Mahi (imported) Orange Roughy Pollock (Canada trawls & Russia) Salmon (Canada Atlantic, Chile, Norway & Scotland) Salmon: Chinook (Puget Sound)

Salmon: Coho (Columbia River) Sardines: Atlantic (Mediterranean) Sharks

Shrimp (other imported sources) Squid (Argentina, China, India & Thailand) Swordfish (imported longlines) Tuna: Albacore (imported except trolls, pole and lines)

Tuna: Bluefin Tuna: Skipiack (imported purse seines) Tuna: Yellowfin (longlines except US)

How to Use This Guide

Many seafood items appear in more than one column. Please be sure to check them all.

Best Choices

Buy first; they're well managed and caught or farmed responsibly.

Good Alternatives

Buy, but be aware there are concerns with how they're caught or farmed.

Avoid

Take a pass on these for now; they're overfished or caught or farmed in ways that harm other marine life or the environment.

Monterey Bay Aquarium



Monterey Bay Aquarium



denerations. ocean, now and for future ways that support a healthy that's fished or farmed in businesses choose seafood pelbs consumers and Seatood Watch program The Monterey Bay Aquarium

Seafood Watch

SeafoodWatch.org





DOMNLOAD Our free app.

dining and snopping. trom our app or website when CHOOSE Seafood Watch partners

ou onk app and website. the eco-certified options found look for Good Alternatives or BUY Best Choices. If unavailable,

is important to you. know responsible seatood partner?" Let businesses ASK "Are you a Seafood Watch

Take Action

or download our free app. the full list, visit us online spopping and dining. For

tor popular seatood when Use these recommendations

responsible seatood choices. for our ocean by making You can make a difference

farming practices. destructive fishing and are in trouble due to Many of the fish we enjoy

Your Choices Matter

info@heartofwellness.org 205 Clark Place SE Tumwater, WA 98501 (360) 570-0401







use your guide: 1. Cut along outer black line 2. Fold on grey lines

7