List of materials

- 1. **Three case scenarios** which include an adult male, pregnant woman, and mother discussing her pre-teen son's health status after a new patient visit.
- 2. Check list items (Use for all case) Scoring guide suitable for use in all three cases.
- 3. **Nutrition checklist** such as described in: Hark L, Deen D Jr. Taking a nutrition history: a practical approach for family physicians. Am Fam Physician. 1999 Mar 15;59(6):1521-8, 1531-2. Describes key elements pertaining to the case that should be included.
- 4. **Doorway information** for each case (contained in a single document) describing the patient and what will be required of the examinee's integration with the patient.
- 5. **Informational handout** with a list of resources for patients and health professionals as well as general principles for preparing fish for safer eating. Many of the references are specific to Michigan.

Checklist for Eating Fish Standardized Patient Case

1. Asks about recreational fish consumption including type of fish, location caught and frequency.

Scoring

- a) Asks about fish consumption, type and frequency. (Half point)
- b) If also asked about location. (One point)
- 2. Asks about store bought fish consumption including type of fish and frequency

Scoring

Examinee must ask about bought fish consumption as well as type and frequency to receive credit (One point).

3. Asks about fish oil consumption, amount and frequency.

Scoring

Examinee must ask about consumption, amount e.g., how many pills and how often to receive credit (One point).

Patient Counseling Issues Addressed (One point for each item addressed)

Maximizing benefits and minimizing risks of eating store bought fish.

- 4. Recommend two fish servings a week.
- 5. *Definite* Reduce risk of complications of cardiovascular disease in those with known coronary heart disease
- 6. *Likely* Reduce occurrence of cardiovascular disease in those currently without coronary heart disease.

Minimize risks

7. Children or woman of child bearing age avoid eating mackerel, marlin, orange roughy, shark, swordfish, tile fish and Ahi Tuna(light tuna in cans is fine). (One point for addressing the issue and either naming the fish or telling the patient where to get more information)

Maximizing benefits and minimizing risks of eating recreational caught fish

8.	Advise to check fish advisory on contamination in different locations and recommendations on how to prepare fish.
9.	Provide handout with web address or location to get fish advisory where you get fish license.

Nutrition History Checklist

To streamline the case we suggest having the patient hand the examinee a completed nutrition checklist that they filled out in the waiting room. An example can be found in:

Hark L, Deen D Jr. Taking a nutrition history: a practical approach for family physicians. Am Fam Physician. 1999 Mar 15;59(6):1521-8, 1531-2.

Key elements to include on nutrition history checklist for Case #1

- Eat 2-3 meals that include fish caught in local lakes and streams.
- Eat and additional 2 -3 meals of fish from restaurants.

Key elements to include on nutrition history checklist for Case #2

• Eats several meals a week of fish. Mix of store bought fish high that tend to be high in mercury as well as trout from local streams.

Key elements to include on nutrition history checklist for Case #3

• Eats large amount of locally caught fish. Staple in diet Wide variety of species.

Doorway Information

Patient Name: Karl Stutes

Reason for visit: Meet the new physician and have a BP check.

Your Task:

You are a doctor practicing in this busy clinic. You have been assigned to meet with this new patient, and obtain a detailed history of the patient's diet. You will have up to 15 min in which to accomplish this.

Case # 1 - Adult Male

Karl Stutes is a man in his late fifties (58). He lives with his wife of 30 years, Helena; and they have lived in town since they married. Karl has been going to see the same physician close to 30 years, and is now seeking a new physician as his old physician has retired. He is here today to meet his new physician and get to know him/her and to also have his BP taken. Karl has had arthritis and borderline hypertension for the past 5-6 years. His BP is always just on the border, so he gets it checked periodically. He heard that fish oil can be helpful for both these issues and takes one capsule two or three times / day for several years.

Karl is still working for an Engineering firm – forty miles from where he lives. His main job is designing widgets for the car industry. Karl eats out for lunch several times a week. He especially likes to go to the Long John Silver's or Red Lobster for fish entrées or fish sandwiches. Usually the kind of fish is Cod or Ocean Perch.

Karl has one brother - Johan, who lives nearby. He and his brother share the same passion of fishing in their spare time. They meet to go fishing on the weekends and take fishing vacations during the summer months. They like to fish for carp, catfish, and rock bass and eat what they catch and to load the freezer to get them through the winter months. Depending on the weather, the brothers do participate in some ice fishing in the winter.

Karl and his wife eat fish 2-3 times / week with rice and a vegetable or fish tacos and a salad. They don't eat much beef or pork.

Caffeine - 2 cups of coffee each am

Alcohol – occasional Beer or shot of Vodka

Prescription Meds – None. Occasional Tylenol for a headache.

Immunizations – up to date.

Karl's wife has never worked outside the home, they have two daughters who are 23 and 25. No grandchildren.

Doorway Information

Patient Name: Lisa Laney

Reason for visit: First visit to the OB doctor

Your Task:

You are a Year II OB resident. You need to meet the patient and obtain a detailed history of the patient's diet.

You will have up to 15 min in which to accomplish this.

Case #2 – Pregnant women age 25 -30

Lisa Laney is 26 years old, and has recently found out that she and her husband Sam, of 5 years, are going to have a baby in approx 7 months. This is her first visit to the OB doctor.

Lisa and Sam love to go fishing. They both grew up in the northern part of Michigan where they fished with parents and grandparents all the time. This was part of their upbringing to eat the fish that they caught.

They have recently moved to the area so that Sam could attend law school. Lisa found a position with a marketing firm. For recreation they still like to go fly-fishing for trout. There are several good trout streams within a 40 mile radius of where they live.

They love to eat fresh trout, and are able to get Orange Roughy or Swordfish from the local grocery as well as eating canned tuna for sandwiches in their lunch. They do eat fresh organic beef and pork that is raised by a friend, but only once / week.

They both eat a lot of vegetables and fruits in their diets as well. Salads go great with fish.

Lisa has decreased her intake of caffeine to one cup of coffee or cola / day.

Lisa does not drink any alcohol anymore since finding out about being pregnant. (She didn't drink much before anyway).

Lisa does not take any prescription meds. She does take a Pre-Natal Vitamin with iron on the advice of her regular family doctor.

Lisa and Sam are very excited to be having a baby and are anxious to do everything right to have a healthy pregnancy and baby.

Doorway Information

Patient Name: Monica Jones (son Jacob in the waiting room)

Reason for visit: Recently moved to town and is seeking a new pediatrician

for her son.

Your Task:

You are the new pediatrician in the clinic and have been assigned to this new patient and his mother. You need to talk with the mother Monica about Jacob, and find out about the child and his diet history.

You will have up to 15 min in which to accomplish this.

Case #3 – Female in mid-thirties with 11 year old son.

Monica Jones and her family have just moved to the Area from Upper Peninsula of Michigan due to a job change for her husband Larry (he works within the helicopter industry). Most of Monica's extended family and her husband Larry's family is from Northern Michigan as well. Monica's mother passed away about 8 years ago, so Monica's father moved with them to spend the winter. He still has his cabin in the in Northern Michigan for the other seasons.

Monica has brought her 11-year old son in to meet the new pediatrician and have a physical before spring sports begin. Jacob would like to try baseball. Monica has left Jacob in the waiting room playing a video game, while she meets the new doctor. Monica's son Jacob is a happy well-adjusted child and before moving, spent a good deal of time fishing with his Grandpa Joe. This is also one of the reasons for his grandpa to move with the family, so that he could take his grandson ice-fishing this winter.

Jacob and his grandpa have fished together almost every weekend and he has spent his summer vacations fishing the inland lakes of Michigan. They fish for all kinds of fish – blue gills, trout, bass, crappy, perch, whitefish and even smelt dipping in the early spring. His Grandpa Joe has taught Jacob not only to catch the fish, but to also clean, cook and eat all the fish that they catch. It is staple for the family.

Jacob is the right height and weight for his age. He is a good eater and doesn't get much "junk" food or pop. He has cake or candy for special occasions, and the family rarely eats at fast food places except when traveling. He drinks lots of milk- at least 4 glasses/day.

Jacob does not take any prescription medications. He is up-to-date on all his immunizations. He has made several new friends in the neighborhood and at school. He is not allergic to anything that Monica knows of.

Eating Fish Maximizing Benefits & Minimizing Risks

Funding - Great Lakes Restoration Initiative EPA GL-00E00461

Resources for Patients

EPA Fish Advisories

http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/advisories_index.cfm

FDA Mercury in Fish and Shellfish - Consumer Guide

http://www.fda.gov/Food/ResourcesForYou/Consumers/ucm110591.htm

MDCH Guidelines for Eating Michigan Fish and Wild Game

http://www.michigan.gov/mdch/0,1607,7-132-54783 54784 54785---,00.html

Michigan 2010 Fish Advisory - Recreational Caught Fish

http://www.michigan.gov/documents/FishAdvisory03 67354 7.pdf

Statewide Mercury Advisory –Recreational Caught fish

http://www.michigan.gov/documents/mdch/Statewide Mercury Advisory Fact Sheet 2010-07 327066 7.pdf

Mercury Advisory - Store Caught Fish - Consumer Guide

http://www.michigan.gov/documents/family fish 166020 7.pdf

Evaluation of Contaminants of Fish Oils

www.edf.org/page.cfm?tagID=16536

Resources for Health Professionals

Layie, CJ, Milani RV, Mehra MR, Ventura HO. Omega-3 Polyunsaturated Fatty Acids and Cardiovascular Diseases. J Am Coll Cardiol 2009; 54: 585-594

Association of Reproductive Health Professionals

http://www.arhp.org/publications-and-resources/clinical-proceedings/RHE

Fish Facts for Health Professional: Methylmercury Exposure and Health Effects and Four web based modules www.fish-facts.org

Short Dietary History Forms

www.aafp.org/afp/990315ap/1521.html Am J Prev Med 2011; 40(1):67-71

Division of Occupational and Environmental Medicine Michigan State University www.oem.msu.edu/fish.aspx

(Revised 3-25-11)

General Principles of Preparing Fish Safely

- 1. Trimming and Cooking
- Cut off all the fat.
- Remove or poke holes in the fish's skin before cooking. This will help the fat and chemicals drain off the fish.
- Bake, broil or grill the fish on a rack. Throw away the drippings.
- Do not eat the guts, head, skin, bones or dark fatty areas.
- Do not re-use the oil that was used to deep or pan fry fish.
- 2. Eat fish from different places such as the grocery store, restaurants, rivers and lakes.
- 3. **Eat smaller, younger fish.** Bigger and older fish have had more time to collect more chemicals in their bodies.
- 4. Don't eat fatty fish like carp and catfish from polluted waters. Most chemicals (except for mercury) collect in the fat. Buy catfish from your grocery store instead.
- 5. Mercury stays in the filet of the fish and cannot be cut or cooked away. Use the guides to choose fish that are low in mercury.

Do not eat any of the internal organs of any fish from any water body (example: liver).

(Michigan Department of Community Health)