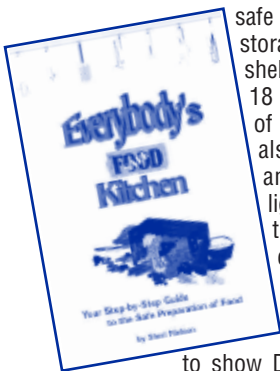


Everybody's Foodsafe Kitchen: Your Step by Step Guide to the Safe Preparation of Food by Shari Nielson

This book is formatted to be used as a reference manual. It includes a section on the safe preparation and storage of fish and shellfish as well as 18 other categories of food. The author also uses 'myth' and 'fact' highlights to enlighten the reader concerning modern truths about food safety and uses fun graphics to show Do's and Don't's.



Purchase online at www.amazon.com



Staying in the loop... Increased Stroke Risk

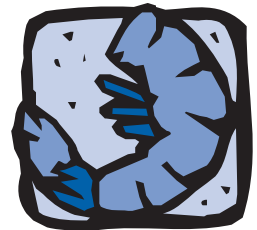
Type 2 diabetes has long been associated with an increased risk of stroke, but until recently a connection between stroke and type 1 diabetes had not been established. Now a 17-year study of 23,751 patients with type 1 diabetes has found that the risk of stroke is 5 times greater among men between 20 and 39 years of age and 7 times greater among women in that age group. Published in *Stroke*, the study author says that its findings "emphasize the vital need to identify and treat known cardiovascular risk factors in young people with diabetes."

-Pharmacy Times March 2003



Patients with Diabetes are at Increased Risk for *Vibrio vulnificus* Infection from Raw or Undercooked Seafood

Judy Meadows, R.Ph., FASCP, CPCP
Registered Pharmacist, Fellow in the American Society of Consultant Pharmacists and Consultant Pharmacist Certificate Program
Mooreville, Indiana



A food poisoning type of bacteria, called *Vibrio vulnificus* may be present in raw molluscan shellfish, such as clams, oysters, whole scallops, and mussels. When the food is eaten raw or not thoroughly cooked, the bacteria can cause a potentially fatal type of food poisoning in patients with certain immune system compromises.

The bacteria may be present on initial harvesting, but may multiply significantly during storage of the seafood. Estimates by the Food and Drug Administration (FDA) have suggested that 5 to 10 percent of all oysters may contain *Vibrio vulnificus*. In 1999, 75 cases of *Vibrio vulnificus* infection were reported to the Centers for Disease Control (CDC) and 31 of these cases or 41 percent ended in death. Texas reported 5 deaths of 10 patients infected with *Vibrio vulnificus* for a 135 day period of 2000. Thorough cooking kills the bacteria and properly cooked seafood should not be a cause for alarm.

Skin injuries such as cuts or scrapes could permit entry of the bacteria to the system if exposed to *Vibrio vulnificus* containing salt water.

Symptoms

Symptoms of *Vibrio vulnificus* infection are pain in the abdomen, stomach pain, diarrhea, nausea, severe weakness, vomiting, skin rash, skin blisters, bullous skin lesions, fever, and chills. Patients who are at increased risk for this infection may progress to high fever, hypotension, shock and skin blisters. *Vibrio vulnificus* can cause death within 48 hours. Symptoms usually develop within 16 to 38 hours of ingestion.

Who is at risk?

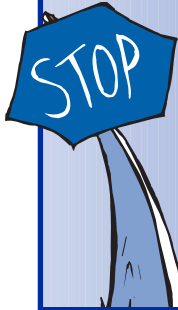
The risk of infection with *Vibrio vulnificus* is not limited to patients with diabetes. Patients who have iron overload disease (hemochromatosis), thalassemia (a type of anemia), decreased gastric acid, history of stomach surgery, history of chronic alcohol consumption, liver disease, chronic kidney disease, or inflammatory bowel disease (IBD) are also at increased risk for infection. Some medications that may cause decreases in stomach acid are antacids, omeprazole, lansoprazole, esomeprazole, pantoprazole, ranitidine, nizatidine, famotidine, or cimetidine. Immunosuppressive therapy or illnesses that make a patient immunocompromized, such as AIDS or cancer also can make a patient more vulnerable to this infection. Immunosuppressive therapy is not limited to chemotherapy, but also includes steroids such as prednisone given orally or fluticasone, betamethasone, and other types of inhalers to treat chronic conditions such as arthritis, chronic obstructive pulmonary disease (COPD), asthma and other conditions.

Individuals who do not have any of these conditions and are otherwise healthy usually are not affected. If a healthy person becomes infected, the condition is



Mark Your Calendar!
Upcoming Meetings

**American Association of
Diabetes Educators**
30th Annual Meeting & Expo
◆ August 6-9, 2003
Salt Lake City, UT



Stop by and visit us at
Paddock's Booth
#1725!



The WebMaster

Website Options For Inquiring Minds

Find more articles on
Vibrio vulnificus at:

"Bad Bug Book"

U.S. Food and Drug Administration
Center for Food Safety & Applied
Nutrition: Program Areas
www.cfsan.fda.gov

"Beware of Oysters"

Diabetes Self Management
March/April 2002 Issue
www.diabetesselfmanagement.com

Share your Story

Share your GLUTOSE 15™ story with us
on-line at: www.paddocklabs.com
or mail to:

Paddock Laboratories
Attn. DiabeteSource™
3940 Quebec Ave. N.
Minneapolis, MN 55427

We would love to share your success stories with other educators. Sharing is caring and caring saves lives.



DiabeteSource Authors Wanted:
Submit items of interest
for upcoming issues to:
Paddock Laboratories, Inc.
Fax: (763) 546-4842 or e-mail:
diabetsource@paddocklabs.com

DiabeteSource is a trademark of:



3940 Quebec Avenue North ◆ Minneapolis, MN 55427
Phone: (800) 328-5113 ◆ www.paddocklabs.com

usually mild, of a short duration, and does not progress to the seriousness that patients with diabetes and people who are immunocompromized face. The risk for people with these conditions may be greater than 200 times that of a healthy individual.

How to limit potential problems with *Vibrio vulnificus*

Cold seafood should be kept at 40° F or less and hot seafood should be kept at 140° F or more. Live mollusks should not be stored in water, but may be stored in the refrigerator covered with a clean, damp cloth. Since these are alive, they should not be stored in sealed, airtight containers.

Cook seafood thoroughly. Boil or simmer shucked oysters for a minimum of 3 minutes, fry at 375° F for a minimum of 10 minutes, broil for a minimum of 3 minutes with the oysters not more than 3 inches from the heat source, or bake for a minimum of 10 minutes at 450° F.

Oysters or clams that are not shelled should be boiled for 3 to 5 minutes after the shells pop open. If the oysters or clams are not shelled and are to be steamed, bring a pan of water to steaming, add the shells, and steam 9 minutes after the shells open. If the shells do not open during the cooking process, they should be discarded.

Do not store fish for more than 2 days after it is purchased from a reliable source. If purchasing mollusks in the shell, they should be alive. When these sea creatures are alive, their shells should be tightly closed or if exposed to ice or motion, such as tapping, they should close. Another means of determining if the mollusk is fresh is to press on the shells with your fingers in opposite directions. The shells should not move if the shellfish is fresh. Throw away any shellfish that have broken or cracked shells. Other indicators of seafood freshness are lack of freezer burn, bright pink or red gills, skin or scales which adhere tightly, and skin or scales that are not slimy. Fresh fish should not be brown or dry, but should be moist. The eyes of fresh fish should be bright and clear.

Cooked seafood should never be mixed with uncooked seafood and should never be returned to the container or package that it was stored in prior to cooking. Consuming alcohol in combination with raw seafood does not destroy the bacteria.

Conclusion

People with diabetes and others at risk for infection with *Vibrio vulnificus* should avoid raw oysters and similar foods. Food that has been properly cooked does not pose a health threat. People at risk should wear gloves if preparing oysters, clams, or other seafood. People with open cuts or sores should not expose the sores to seawater until the areas are healed. If an individual suspects they may be experiencing a *Vibrio vulnificus* infection, they should seek immediate medical attention. The physician should be informed of previous saltwater contact and/or seafood consumption.

Sources for Additional Information

- American Liver Foundation, 1-800-465-4837, www.liverfoundation.org
- FDA Seafood Safety Hotline 1-888-723-3366
- Florida Department of Business and Professional Regulation, www.hospitalityeducation.org
- FDA: www.cfsan.fda.gov
- [http:// hgic.clemson.edu/factsheets/HGIC3663.htm](http://hgic.clemson.edu/factsheets/HGIC3663.htm)
- www.emedicine.com/derm/topic847.htm

GLUTOSE 15™

ONE TUBE • ONE TWIST • ONE 15 GRAM DOSE